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INTRODUCTION

1. Purpose

The purpose of this handbook is to give Air Force T2 personnel, especially individuals new to this field, the practical "how to" information they need do their jobs. Throughout, emphasis is on how to initiate and execute T2 agreements to enable productive T2-related activities. The handbook is intended to be a living document, capable of being rapidly updated in response to ongoing changes in the larger surrounding political, economic, legal, and regulatory environments. The goal is to develop a comprehensive T2 handbook for the Air Force T2 community, then to keep it continuously updated. Users are encouraged to provide suggestions to help improve the handbook.

2. Technology Transfer (T2)

Technology transfer is difficult to define concisely due to the different types of participating organizations, their differing motivations and objectives, and the diverse mechanisms they use to achieve this process. A short but comprehensive definition follows:

Technology transfer is the process of sharing, developing, or transmitting ideas, data, information, and technology between government agencies, industry, and academia.

Federal agencies, industry, and educational institutions each have different perspectives on technology transfer. This T2 handbook reflects the perspective of the Air Force and more generally that of the Department of Defense (DoD).

3. How T2 Helps the Air Force

There are many practical reasons why the Air Force engages in technology transfer. In general, T2 helps the

Air Force achieve its mission by enabling it to leverage the innovative skills, resources, and capabilities of non-government entities, principally industry and academia. For example, T2 enables the Air Force to jointly develop critically needed new technology in collaboration with businesses and universities; transfer its inventions to industry for final development and manufacture; and develop, recruit, and diversify its scientific and professional workforce by collaborating with colleges and universities.

The Air Force has a comprehensive suite of T2 mechanisms to enable partnering with industry and academia. Key mechanisms include cooperative research and development agreements (CRADAs) and various types of license agreements. CRADAs are the primary means by which Air Force and industry or university researchers jointly develop new technology. License agreements (including patent and software licenses) enable companies to transform Air Force inventions into new products that support the defense mission and also benefit the U.S. economy.

Other important T2 mechanisms are education partnership agreements (EPAs), which enable a broad spectrum of productive interactions with educational institutions; information transfer agreements (ITAs), which allow the Air Force to share government-developed software with non-DoD entities; material transfer agreements (MTAs) for sharing of material samples with non-Air Force partners; partnership intermediary agreements (PIAs) to enlist the services of state, local government, or non-profit entities to help establish T2 agreements with industry; and commercial test agreements (CTAs), under which the Air Force can use its unique facilities to test materials, equipment, models, software, or other items for

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outside parties, usually for an appropriate fee. Each of these mechanisms has its specific purposes and each provides benefits to both the Air Force and the external partner.

T2 leverages industry's expertise in developing and maturing technologies. While the majority of basic research in the United States is conducted at universities and federal labs, most of the Nation's applied research and development is conducted by industry. T2 harnesses industry's advanced development expertise to get Air Force inventions into the hands of the U.S. warfighter in a timely way.

T2 also provides a cost-effective way to develop new technology for Air Force use. Basic research accounts for only a small percentage of the total development cost of a new military product. When the Air Force makes this initial investment in its own labs, then transfers the innovations, its industry partners cover the bulk of the development expense. Furthermore, unless Air Force inventions are transferred to industry, they are not likely to be put to operational use. The Air Force is not in the business of manufacturing equipment, weapons, and supplies. Instead, it needs to transfer its inventions to industry for conversion into new products that the U.S. military can procure.

T2 lowers the cost and improves the supply chain for military products that also have civilian applications. Often, the commercial market for "dual use" technologies is larger and more constant than the military market. Commercial sales resulting from T2 create economies of scale that reduce the Air Force's procurement costs. In addition, ongoing commercial sales help sustain the defense industrial base and ensure a more reliable supply of the military versions of these products. They also ensure ongoing development of the new technologies.

Finally, T2 frequently engages innovative, agile

companies that are not traditional defense contractors. Most Air Force licensing partners are small or medium-sized businesses that have not previously interacted with the Air Force. Many are highly innovative and entrepreneurial. Their capabilities greatly enhance the Air Force research enterprise and strengthen the overall U.S. defense mission.

4. Requirement for Technology Transfer

In addition to the compelling mission-related reasons for the Air Force to engage in T2, there also is a *legal obligation*. Federal agencies are required by law (15 USC §3710) to attempt to transfer their inventions to industry "to ensure the full use of the results of the Nation's Federal investment in research and development." This mandate obliges all federal labs to establish dedicated T2 offices and personnel, makes T2 the responsibility of every lab scientist and engineer, and requires federal agencies to annually report their T2 metrics to the Office of Management and Budget (OMB) as part of their annual budget submission. Additional legislation (10 USC §2514) specifically directs DoD to attempt to transfer its inventions to the U.S. industrial base.

Complementing these seminal laws are nearly forty years of federal legislation, executive orders, and Presidential memoranda as well as DoD's own directives, memoranda, instructions, and other issuances. In particular, DoD Directive 5535.3 and Instruction 5535.8 direct the T2 mandate within the Department of Defense. Per Instruction 5535.8:

"T2 activities shall be an integral element of the DoD national security mission, a high-priority role in all DoD acquisition programs, and recognized as a key activity of the DoD laboratories... Commercial availability of DoD-developed technologies can be expected to lower the costs of acquiring military equipment by providing the opportunity to take advantage of economies of

scale and buy from a larger commercial industrial base."

Within the Air Force, the key T2-implementing document is Air Force Instruction 61-301, dated 16 September 2019 (see Appendix). Per this instruction:

"Air Force technology transfer activities are key components of the Air Force contribution to the Department of Defense's (DoD) national security mission. This mission requires the best possible use of national scientific and technical capabilities and a strong industrial base to meet the Air Force's and the Nation's needs. Air Force technology transfer activities promote the best possible use of national scientific and technical capabilities by improving the quality of the defense laboratories, increasing their ability to effectively and efficiently perform their designated missions, and by using their taxpayer-funded infrastructure to support private sector activities in the areas of air, space, and cyberspace.

5. Air Force T2 Outcomes and Impacts

Despite limited Air Force funding provided for T2, the results from this activity have been impressive. Between 2000 and 2017, Air Force Activities established 226 license agreements to transfer new Air Force inventions to industry. In addition, during this same time period, the Air Force lab system executed approximately 1,800 CRADAs to enable collaborative R&D with the private sector. Collectively, these T2 activities have had *substantial impacts* on the national defense mission and U.S. economy.

TechLink's economic impact study in 2018 of the 226 Air Force license agreements active during the 2000-2017 period revealed \$603 million in sales of new products and services resulting from to these

agreements, including around \$245 million in confirmed sales to the U.S. military. Overall, these agreements generated approximately \$1.5 billion in total economic impacts and created over 6,800 jobs. The economic impact from Air Force license agreements has grown significantly in recent years: from around \$276 million in total economic impact in 2012 to \$1.5 billion by 2018.

TechLink's pilot study of the economic impact of CRADAs executed since 2000 at a the 711th Human Performance Wing revealed sales of new CRADArelated technologies of around \$856 million, with more than a quarter of these sales to the U.S. military. Overall, these sales generated approximately \$2.2 billion in total economic impacts and created approximately 10,860 jobs. These impacts resulted from only 201 of the over 2,000 total CRADAs established by the Air Force during the 2000-2019 period. They also generated many other benefits for the Air Force, including reduced cost of new technology development and acquisition; infusion of innovation and specialized expertise from the private sector; and expansion of the defense industrial base to include many highly innovative small technology companies that are not traditional defense contractors.

6. Examples of Air Force T2 Success

The following technologies developed in Air Force Activities have been successfully transferred to industry and converted into products that support the U.S. defense mission and benefit the national economy:

 A computer program called MODTRAN® used worldwide by government agencies, industry, and educational institutions to remove distorting atmospheric effects from satellite and other remotely sensed images of the earth (from the Air Force Research Laboratory, Space Vehicles Directorate)

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- A unique spatial processor that minimizes interference and enhances speech clarity in multi-talker communication systems, widely used for mission-critical operations by Air Force and NASA, including battlefield and spaceflight missions (Air Force Research Laboratory, 711th Human Performance Wing)
- A geospatial application for smartphones called ATAK (CivTAK is the civilian version) that displays an interactive layered map showing the location of team members and other critical positions, and enables informationsharing from multiple communication sources— used throughout the U.S. military as well as by first responders, law enforcement, and the recreational industry (from the Air Force Research Laboratory, Information Directorate)
- An innovative design for safer, user-friendly welding carts that eliminates common workplace hazards and improves worker productivity, now widely used in DoD

maintenance and fabrication shops as well as within the aerospace industry (from the 30th Operations Support Squadron's Training Device Design and Engineering Center at Vandenburg AFB)

7. Conclusion

In sum, T2 enables the Air Force to develop and move new technologies into the marketplace and battlespace. It directly supports the Air Force mission by strengthening its R&D enterprise and by providing timely and cost-effective delivery of advanced capabilities to the U.S. warfighter. Additionally, it spurs economic growth, creates jobs, and contributes to the Nation's technological competitiveness.

8. Appendix

Air Force Instruction 61-301 – The Domestic Technology
Transfer Process and the Offices of Research and
Technology Applications, Cooperative Research and
Development Agreements

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What does an ORTA do?

1. ORTAs at a Glance

What's an ORTA?

"ORTA" is the acronym for Office of Research and Technology Applications. This is the office within each federal laboratory that serves as the focal point for that lab's technology transfer (T2) activities. By association, the term "ORTA" also is commonly used to refer to the director of this office.

Purpose.

ORTAs administer and manage the T2 function for labs throughout the federal government. The overriding purpose of Air Force ORTAs is to develop collaborative interactions with industry, academia, and other government entities to benefit the U.S. defense mission and economy.

What Happens.

ORTAs establish T2 agreements that help the Air Force achieve its mission and T2 mandate by leveraging the innovative skills, resources, and capabilities of nonfederal entities, principally industry and academia. Among other things, these T2 agreements enable the Air Force to jointly develop critically needed new technology; expand the defense industrial base by engaging innovative, agile companies that are not traditional defense contractors; transfer its inventions to industry for final development and manufacture; and develop, recruit, and diversify its scientific workforce by collaborating with K-12 schools, colleges, and universities. Air Force ORTAs have a comprehensive toolbox of T2 mechanisms available to achieve their objectives.

Legal Basis.

Offices of Research and Technology Applications were created by the first major T2 legislation in the United States, the Stevenson-Wydler Technology Innovation Act of 1980 (PL 96-480). Through this legislation, Congress mandated that "It is the continuing responsibility of the Federal Government to ensure the full use of the results of the Nation's Federal investment in research and development. To this end... Each Federal laboratory shall establish an Office of Research and Technology Applications..." to perform that lab's technology transfer functions.

Primary ORTA Functions

- Establish, administer, and report all T2 processes and activities for their lab.
- Assess lab resources, technologies, and inventions for potential commercial applications.
- Publicize opportunities for industry and other non-federal entities to partner with their lab.
- Establish T2 agreements with capable non-federal partners, including license agreements to transfer Air Force inventions to industry for conversion into dual-use commercial and military products.
- Manage their lab's patents and other intellectual property (IP).
- Monitor and report their T2 metrics, achievements, and success stories.
- Provide education and training in IP protection and T2 to their lab's scientists and engineers (S&Es).

WHAT DOES AN ORTA DO?

2. Overview

A. General Information

Offices of Research and Technology Applications (ORTAs) are the essential focal point for collaborations between federal labs and the outside world. They promote their lab's technologies, expertise, capabilities, and facilities in order to attract non-federal partners for research and development (R&D) and T2 partnerships. This function is multifaceted. Among other things, it requires these offices to serve as information brokers, liaisons to industry and academia, deal makers, and contract administrators.

However, the term "ORTAs" commonly refers not only to the T2 offices but also to the heads of these offices. It even is sometimes applied collectively to all the T2 personnel in the office. This handbook uses the term to indicate both the offices and their leaders.

The Stevenson-Wydler Technology Innovation Act of 1980 (PL 96-480), which launched the modern U.S. technology transfer system, directed that every federal laboratory establish an "Office of Research and Technology Applications" to lead the T2 activities at that lab. This legislation originated in significant part from concern over the loss of national economic competitiveness to competitors in Asia and Europe. At the time, rising imports of foreign automobiles and consumer electronics were viewed with increasing apprehension by U.S. policymakers. In particular, Japan, as a result of its strong government-industry alliances and technology innovations, was seen as a major threat to U.S. industry. The Stevenson-Wydler Act was the first major legislative act to counter this threat. Its stated purpose was "To promote United States technological innovation for the achievement of national economic, environmental, and social goals..."

The legislation (now codified as (15 USC §3710) required every lab with 200 or more full-time equivalent (FTE) S&Es or other technical personnel to dedicate at

least one FTE employee to staff the new ORTA and to adequately fund it to support the lab's T2 function. The stated functions of this office included (1) assessing lab R&D projects for potential commercial applications; (2) disseminating information on federally owned or developed products, processes, and services with potential use by state and local governments and industry; (3) cooperating with organizations such as the National Technical Information Service (NTIS) and Federal Laboratory Consortium for Technology Transfer (FLC) to connect the lab's R&D resources with potential non-federal users; (4) providing technical assistance to state and local governments; and (5) participating in appropriate regional, state, and local programs to promote technology transfer.

The concept of technology transfer was relatively new when the Stevenson-Wydler Act was passed. In fact, there were relatively few tools in the T2 toolbox at that time. Later in 1980, the Bayh-Dole Act (PL 96-517) would authorize federal agencies to apply for patents on federal lab inventions and to grant nonexclusive, exclusive, or partially exclusive licenses to non-federal entities for these inventions. In 1986, the Federal Technology Transfer Act would enable federal labs to enter into Cooperative Research and Development Agreements (CRADAs). Subsequent legislation has broadened and refined the authority of federal labs to engage in T2, and has progressively added more tools to the ORTA's toolbox.

The FLC produces a book that contains all of the relevant laws. It's commonly called the "Green Book" (the cover is green) and can be downloaded at www.federallabs.org. The FLC also offers a print version for those who prefer that format. The laws and regulations covered in the Green Book establish the playing field for technology transfer—what you can and cannot do. It's important for ORTAs to understand these laws and regulations as well as the relevant DoD and Air

Force executive orders, directives, and instructions. However, ORTAs don't need a law degree to do their job. The lab's legal office provides the necessary legal expertise. Note: ORTAs can be audited or inspected based on anything that is in Air Force Instruction 61-301 (Appendix I).

B. Primary ORTA Responsibilities

Air Force ORTAs serve as the focal point for their Activity's T2 collaborations with industry, academia, and other government entities. This is a multifaceted operation. It requires these offices to serve as information brokers, liaisons to industry and academia, deal makers, and contract administrators. ORTA functions can vary by Air Force Activity, depending on the type and extent of the organization's activities, the specific expertise of the ORTA staff, and management objectives. However, all ORTAs have the following primary responsibilities:

• Establish, administer, and report T2 processes and activities. The ORTA is central office for all of the Activity's technology transfer activities. This office is responsible for devising and implementing an effective T2 program. This involves developing T2 strategies that are well suited to the Activity's R&D capabilities, assets, and resources. Next, it involves executing these strategies and adjusting them, as necessary, to improve their outcomes. Finally, it involves contributing to the Air Force T3 Program's annual plan, which discusses how T2 requirements and responsibilities were addressed during the previous year and identifies activities planned for the year ahead. Fulfilling this function involves understanding the priorities of the Activity's senior management and R&D program leaders and devising or revising T2 program objectives as necessary.

· Assess Activity resources, technologies, and inventions for potential commercial applications. The ORTA needs to maintain an up-to-date inventory of the Activity's R&D programs, technologies, inventions, facilities, and capabilities. It also needs to continuously evaluate which of these assets would be of potential interest to businesses—either directly or via collaborations with non-profit partners such as trade associations or academic institutions. Assets determined to have potential commercial interest should be prioritized. Most Air Force Activities are nationally prominent in specialized R&D areas. Assets in these areas should be prioritized; however, other lab assets also may be attractive to industry.

Fulfilling this assessment function involves having frequent contact with the Activity's R&D program leaders and continuous interactions with the Activity's S&Es. S&Es are often one of the best sources of information about the commercial potential of the Activity's R&D assets.

Provide education and training in IP protection and T2 to the Activity's S&Es. A continual challenge for all federal lab ORTAs is engaging their S&Es in the T2 process. S&Es tend to be highly focused on their research projects and impatient with activities that they consider to be a distraction. Many regard the ORTA emphasis on collaborations and commercialization as extraneous to the Air Force mission. ORTAs need to educate S&Es on how T2 actually helps the Air Force to achieve its mission. For example, CRADAs enable AF Activities to leverage the innovative skills, resources, and capabilities

- of companies and academia for development of critically needed technology. And license agreements enable the Activity to transfer its inventions to industry for conversion into new products that DoD can procure to benefit the U.S. warfighter. As part of this education, S&Es need to learn the essential role of intellectual property protection, including the use of non-disclosure agreements, material transfer agreements, and patent applications. More specifically, they need to be trained in how to recognize potential inventions and draft effective invention disclosures using Air Force Form 1279, Disclosure and Record of Invention. The AF T3 Program and TechLink have a series of training videos that are specifically designed for S&Es—to help educate them on the importance of T2 and provide training in IP protection. These are a useful resource to help ORTAs fulfill their education and training responsibility.
- Publicize opportunities for industry and other non-federal entities to partner with the Activity. Once the Activity's assets have been assessed for commercial potential, the ORTA needs to selectively communicate this information to the outside world. Specifically, it needs to publicize the various opportunities to partner with the Activity, including opportunities to co-develop new technology with the Activity under CRADAs, commercialize the Activity's inventions through license agreements, gain access to world-class facilities using commercial test agreements (CTAs), or help develop, recruit, and diversify the AF workforce through education partnership agreements (EPAs). The ORTA has a range of options to publicize these opportunities. They include issuing

- press releases; posting the opportunities on relevant websites, such as those maintained by the Activity, the AF T3 Program, the FLC, and TechLink, the Air Force's national partnership intermediary (PIA); attending trade shows, particularly along with S&Es; participating in regional, state, or local economic development initiatives; posting ads in industry journals; and engaging the services of TechLink or other PIAs to directly market the Activity's partnering opportunities to industry. Through experience, the ORTA will learn how to effectively adjust these T2 marketing efforts to its available resources.
- Establish T2 agreements with capable non-federal entities. The ORTA's essential purpose is to establish legal agreements that enable technology transfer. ORTAs were created by federal legislation in 1980 for this purpose, and it remains their primary function today. T2 agreements enable Air Force Activities to accomplish their mission and fulfill their T2 mandate by leveraging the capabilities of industry, educational institutions, state and local governments, and non-profit associations. Other parts of this AF T2 Handbook provide comprehensive information on the various T2 mechanisms available to ORTAs, along with the processes ORTAs should follow in using these mechanisms. All agreements require the ORTA to screen prospective non-federal partners for eligibility for the selected T2 mechanism and to ensure they are qualified. The ORTA also negotiates all T2 agreements for the Activity, in coordination with the Activity's legal office. In addition, most T2 agreements require review by the legal office to ensure legal sufficiency and compliance

WHAT DOES AN ORTA DO?

with applicable statutes, regulations, executive orders, directives, and instructions. CRADAs and license agreements also require the legal office to approve all sections pertaining to IP rights.

- Manage Activity patents and other intellectual property. An essential ORTA responsibility is serving as the custodian of the Activity's intellectual property. This involves obtaining invention disclosures from S&Es; following up with the Activity's legal office to obtain patent protection for inventions; confirming that licensing fees and royalties are paid in a timely way by licensees; and proactively ensuring that maintenance fees are paid for all patents that have been licensed so they do not lapse. Fulfilling this IP custodian function requires continuous interactions with AF T3 Program managers and the Activity's legal office.
- Monitor and report T2 metrics, achievements, and success stories. Similar to the IP manager role above, an essential ORTA responsibility is monitoring and publicizing the Activity's T2 accomplishments. This includes keeping a running tally of the numbers and types of new T2 agreements established each fiscal year; the status (active or expired) of existing T2 agreements; the number of invention disclosures, patent applications, and issued patents; and the amount and disposition of licensing income. This is information that the Activity is required to gather and report annually. These metrics also provide a quantitative way for ORTAs to monitor and attempt to improve their performance. ORTAs should proactively seek opportunities to publicize successful T2 projects through

press releases, postings on websites, and use of social media. This publicity will help elevate the profile of T2 at the Activity, achieve recognition for the S&Es, provide publicity for the business or other T2 collaborator, and help attract other potential T2 partners.

C. Main ORTA Activities

ORTAs need to perform many different activities to fulfill their primary responsibilities and achieve their T2 mission. Most of these activities fall into five major categories, defined by the key action words: *Create, Network, Educate, Negotiate, and Communicate*.

- Create. ORTAs need to create a continuously evolving strategy for their Activity's T2 function. To accomplish this, they need to maintain ongoing discussions with their Activity's management regarding what these leaders want to accomplish through technology transfer. It is very important to get this input so that the ORTA doesn't expend time and effort on activities that are out of sync with the expectations and priorities of the Activity's senior leaders. It's also important for ORTAs to understand what resources they will have available to work with to execute the Activity's T2 strategy and achieve its objectives. These discussions with senior leaders should revolve around a number of strategic questions:
 - To what extent should our Activity prioritize getting invention disclosures and patents to protect our inventions, followed by establishing license agreements to transfer these inventions to industry?
 - To what extent should we focus on R&D collaborations through CRADAs and other T2 mechanisms?
 - How important is it for our Activity to ensure

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full facility utilization? What is the level of reimbursement that we need to receive under commercial test agreements?

- Would you like our Activity to share software and or other technical information with non-federal parties under appropriate T2 agreements?
- How important is it for us to engage with the local community?
- Would you like us to focus on education outreach and assistance to schools (under education partnership agreements) to assist with workforce recruitment or to foster community support?
- What resources do we have to work with to achieve our Activity's T2 goals?
- What's the potential for increasing the FTE level of the T2 office, assuming increased success?
- Are there funds available to hire consultants (for example, for market studies) to increase our Activity's licensing metrics?
- Is there TDY funding for T2 personnel to attend trainings, trade shows, and other strategically important events?

Answers to these questions, and insights gained during subsequent discussions, will enable ORTAs to create a T2 strategy customized to the needs and priorities of their Activity. They can then create the necessary plans, procedures, and activities to implement this T2 strategy. It's important to include only essential personnel in this creation process. Including non-essential personnel will only bog down the process. Keep it streamlined!

There are several important considerations when creating plans, procedures, and activities. These include

access to tools to help simplify the T2 process. For example, many ORTAs have IP management software to automate gathering invention disclosures, tracking IP through the patenting process, and managing the subsequent patents and license agreements. If your Activity decides to focus on patenting and licensing, you should try to access an IP management program (some are open source) or see if your IT people can create one for your Activity.

ORTAs should consider creating improved T2 tools and applying existing T2 mechanisms in creative new ways. They also should think about ways to streamline T2 processes so that developing agreements and accomplishing other T2 functions causes the least amount of work for the organization. Some of these activities are more applicable to seasoned ORTAs. However, newer ORTAs should keep these ideas in mind, so they can identify opportunities for improvement and growth along the way.

• Network. Networking is another key ORTA activity. ORTAs should network continuously with others to develop valuable contacts and help achieve their Activity's T2 goals. This includes networking both inside and outside their Activities, with both public and private sector entities. These include Activity S&Es, other ORTAs, federal T2 consortia, businesses, trade associations, economic development organizations, and partnership intermediaries. ORTAs need to continuously network for several reasons: to remain up to date on R&D projects, inventions, and other technical developments within their Activity; to learn new ways to conduct T2, improve their office's activities, and remain current with the state-of-the-art in their profession; to promote their Activity's T2 opportunities to companies and entrepreneurs; and to

develop rapport with economic development organizations and PIAs that can assist them in attracting businesses for T2 agreements.

There are many opportunities for ORTAs to network with S&Es in their Activity. Attending both formal and informal technical presentations is one way. Another is personally visiting each of your Activity's research groups to learn about their R&D projects and the resulting innovations. Don't underestimate the willingness of S&Es to share their activities with you if they understand that you are genuinely interested. You need to find out what they are working on and if they need assistance in finding potential collaborators or developing a T2 project. You will also need to keep asking them about potential inventions—they often forget to file invention disclosures and you will need to keep reminding them. Once you have their invention disclosures, you will need to keep in touch with these S&Es while you are interacting with your Activity's patent attorneys, to ensure the attorneys get everything they need to file the associated patent applications.

There are also many opportunities to network with others in the T2 profession.

This includes other Air Force ORTAs, ORTAs at other DoD and federal agency labs, and T2 professionals in universities and industry. The Air Force and DoD T2 communities hold annual meetings that enable ORTAs to both learn and meet others that can assist them.

The FLC holds regional and national meetings annually. AUTM (originally the acronym for the Association of University Technology Managers but now the leading international

organization for T2 professionals in not only academia but also in non-profit research centers, medical centers, industry, and government) also holds regional and national meetings. Finally, the Licensing Executives Society (LES), which primarily represents industry but also has an active federal government T2 component, holds regional and national meetings. Attending LES meetings can be an effective way to meet potential T2 partners in major corporations.

Keep in mind that anything T2-related that your Activity wants to achieve has probably already been done by someone else. Other T2 professionals can provide examples of agreements and discuss lessons learned that may be helpful. If your T2 ideas are completely new, then more experienced ORTAs can help you think through the best way to structure agreements to achieve your goals.

If you are not good at networking, there are some tactics that can help you meet people. At the FLC national meeting, look for people who are on the Executive Board. You can find a list of the current Board members on the FLC website, https://www.federallabs.org/ about/organization/executive-board. Also, you can ask FLC staff at check-in to point out Board members. Introduce yourself to these FLC leaders. Once you mention you are new to T2, they will start talking and introduce you to others—it's part of their role on the Board. The FLC regional meetings, in particular, provide an easy way to get to know other federal lab ORTAs in your region. These regional meetings are smaller, and you will have more occasions to network

because the entire group is together for the whole meeting. Although other federal agencies may differ in how they conduct T2, you may be able to adapt some of their ideas to your organization. Getting to know other T2 professionals will make your job much easier. People are always more willing to help someone they know, as opposed to someone who is cold-calling them.

ORTAs also need to network with industry as much as possible in an attempt to find qualified, motivated T2 partners. This is more difficult and challenging than networking with Activity personnel and the T2 community. Finding private-sector T2 partners can seem like finding the proverbial "needle in a haystack." Selective participation in local gatherings of technology companies or specialized trade shows aligned with your Activity's R&D strengths may be worth a try. The best approach, however, is probably to network with outside-the-fence organizations that can help you develop connections with potential industry partners. For example, economic development organizations in your local ecosystem, as well as state and local government organizations, may be able to help you connect with potential collaborators. These organizations periodically hold industry outreach events that are easily accessible and may be worthwhile to attend. They also may be able to help you access state or local resources that can strengthen your T2 collaborations.

Don't overlook networking with TechLink and your local PIA, if you have one. PIAs are T2 facilitators and can serve as force multipliers for your networking activities, in addition

to providing other forms of T2 assistance. They can help your Activity market its T2 opportunities and connect with potential T2 collaborators, whether R&D partners or licensees. They can also help you conduct due diligence to ensure that these potential collaborators are legitimate and have the resources necessary to accomplish their role. In addition, PIAs can provide training or assistance to companies (especially small businesses) to help them understand T2 agreements. Finally, they can facilitate your discussions during the negotiation process, to ensure that these negotiations have successful outcomes for both parties.

Educate. If you are a new ORTA, the Air Force T3 Program will help educate and train you. Subsequently, this T2 educator function becomes your responsibility. ORTAs are responsible for educating and training others in their Activity on all T2-related matters. Fortunately, you're not necessarily on your own, as there are usually others you can ask for help. This includes more-experienced Air Force ORTAs, and also personnel at TechLink, the Air Force's national PIA. ORTAs should definitely ask one of their Activity's experienced lawyers to attend their training sessions—particularly if their Activity is new to T2. These lawyers can not only address legal questions, but also provide backup expertise to help answer the many other T2-related questions that might arise.

Educating and training the S&E workforce is one of the ORTA's most important tasks. In order for the Activity to benefit from technology transfer, S&Es need to understand

how IP protection and T2 helps the Air Force to achieve its mission. More specifically, S&Es need to have a basic understanding of what can be achieved through each of the main T2 mechanisms—CRADAs, EPAs, commercial test agreements, information transfer agreements, and license agreements (patent, software, invention, trademark, and commercial evaluation). It's important to provide T2 training to your Activity's S&Es every couple of years, given the continuous turnover in this workforce.

S&Es need to understand the critical role of intellectual property protection, including the use of non-disclosure agreements, material transfer agreements, and patent applications. More specifically, they need to be trained in how to recognize potential inventions and draft effective invention disclosures using Air Force Form 1279, Disclosure and Record of Invention. The AF T3 Program and TechLink have a series of training videos that are specifically designed to help educate S&Es on the importance of the T2 process and to provide training in IP protection.

S&Es also need to learn how the T2 process can benefit them personally and professionally. For example, being listed as an inventor on patents can help advance their careers. Patents are a universally recognized measure of research productivity and excellence, and also testify to the novel and useful nature of an S&E's work. As such, they can help S&Es to justify promotions. In addition, if the patented inventions are subsequently commercialized by industry, S&Es can take pride in seeing the fruits of their labor put to practical use by the

American public or U.S. military. Another benefit is financial. Many labs offer monetary incentives to S&Es for invention disclosures and issued patents. And, should their invention be licensed, inventors are entitled to the first \$2,000 and at least 20 percent of licensing royalties received by the Air Force (excluding patent reimbursement costs). These royalty payments can be substantial. Federal law now allows DoD inventors to receive up to \$500,000 a year in licensing revenues.

In addition to providing formal training, the ORTA needs to meet one-on-one with S&Es to discuss potential inventions or T2 opportunities. Some people aren't comfortable asking questions in large groups. Others may need more extensive personal assistance in developing T2 collaborations.

ORTAs also need to educate their Activity's senior managers in how T2 helps the Air Force to achieve its mission. Some of this education is very basic. Lab leaders who need to approve and/or sign T2 agreements may have no real understanding of them. As a result, they may need individualized training so they can ask specific questions and feel comfortable signing these agreements. Whenever a new person takes over a leadership role in the Activity that will require him or her to approve T2 agreements, the ORTA should arrange a meeting to determine what level of T2 training they may need, then arrange to provide that training.

In addition to people within the Activity, ORTAs may need to educate potential nonfederal collaborators—whether in business,

academia, state or local government, or the non-profit world. This will differ from the T2 education provided to Air Force personnel; it will be less specific and in-depth. Its purpose is primarily to make non-federal entities aware of what can be accomplished using the different T2 mechanisms, and to ensure they understand the general rules of engaging in T2 with the federal government. Many large corporations and universities are very familiar with CRADAs and license agreements. However, small businesses frequently have little or no understanding of T2 and usually don't have staff lawyers to help them. TechLink or a local PIA such as the Wright Brothers Institute (Dayton, OH), the Griffiss Institute (Rome, NY), or New Mexico Tech (Albuquerque, NM) may be able to assist in educating the small business or other prospective T2 partner.

• Negotiate. Negotiation is one of the primary tasks of an ORTA. Virtually all T2 agreements require some level of negotiation, and ORTAs are responsible for undertaking this task. Once again, you are not on you own. Air Force lawyers can play an important role in the negotiations. In fact, some of the issues you will encounter require your lawyers to take the lead. This is particularly the case if the outside party wants to change any of the language in the standard T2 agreement.

Your starting position should be that normally no changes can be made to the legal language in an agreement. If the outside party insists on changes, the Air Force attorneys will need to review these changes and advise you of their legal implications. Sometimes,

lawyers for the outside party want to change the equivalent of "happy" to "glad," and such changes are not a big deal. Your attorneys will tell you if the requested changes are acceptable. The outside party may have a valid argument, but it's important that any contract changes protect the Air Force. Any time the outside party plans to include its lawyers in a phone call, you should make sure that your lawyers are also on the line. The outside party may be very persuasive or insistent. You may need your lawyers to explain why the Air Force cannot accept the requested changes.

The negotiation task for many T2 agreements (including most CRADAs and EPAs) begins with your Activity's technical point of contacts (TPOCs) explaining what they want from the agreement. Some organizations prefer to have the TPOC send a written description stating who they want to work with and what they want to accomplish. The ORTA then prepares the appropriate T2 agreement based on that input. Other organizations start with a brief verbal discussion to ensure that the right mechanism is selected and then the ORTA sends the TPOC the appropriate model agreement and asks him or her to create a draft. If the TPOC has previously had other T2 agreements of this type, they will know what to do and will probably provide quality input. If they haven't, then the quality of their input may not be adequate and will require additional work. Sometimes, you will need to spend a lot of time coaching the TPOC to ensure that the T2 agreement accurately describes the objectives and the necessary tasks.

Negotiations will be different for each type of agreement. You should expect quite a bit of back and forth between you, the outside party, and Air Force attorneys. You'll want to make sure you're paying attention to what your organization wants from the agreement. When involved parties start requesting revisions, it can be easy to lose sight of the ultimate goal. After all changes have been made, you'll want to reread the entire document to ensure that it actually supports the goal and that the Air Force is getting what it wants. There are classes and workshops you can take to improve your negotiation skills. Check with your Activity's training focal point.

Negotiations for licenses are different than for other T2 agreements. Most of the language in license agreements is standard and driven by statutes. Usually the only variables are the specific terms and conditions, such as the royalty rates, upfront fees, and deadlines. Negotiating these may seem intimidating. However, TechLink can assist throughout the negotiation process. It has facilitated nearly 800 license agreements for DoD labs over the past 20 years. TechLink personnel have comprehensive information on typical financial terms in Air Force and other DoD license agreements for various levels of exclusivity and different fields of use. They can usually provide all the assistance you need. TechLink can also assist the potential licensee to ensure they are providing complete and accurate information to your Activity to enable you to make a decision on their license application. (See the Patent Licensing Agreement [PLA] module in this Air Force T2 Handbook.)

The most important part of negotiation is ensuring that you are establishing a "win-win" T2 agreement that benefits both the Air Force and the outside party. It is important that you protect your Activity's intellectual property and other assets. However, you also have a legal requirement to promote technology transfer. The most successful T2 agreements are those that benefit both parties. Don't be afraid to ask for help if you need it. The Air Force attorneys, the AF T3 Program, TechLink, and other ORTAs are available to provide assistance or tell you what has worked well in similar situations.

Communicate. Communicating is a final essential ORTA activity. ORTAs need to constantly communicate with key individuals and communities—both inside and outside the Air Force. Within the Air Force, you need to keep your Activity's senior managers updated on progress toward the Activity's established T2 goals, including significant outcomes and the numbers of T2 metrics achieved. These outcomes and metrics also need to be communicated to the Air Force T3 Program. You may need to revisit your T2 strategy if the T2 numbers achieved are trending away from the Activity goals. It could be that these T2 goals are unrealistic or not well-aligned with the Activity's R&D strengths. If so, these goals will need to be adjusted. It's also important to keep your senior management and the Air Force T3 Program informed of any problems that have emerged, in case you need their assistance in resolving these problems.

The best way to communicate with your Activity's S&Es—besides conducting one-on-

one visits—is to walk around the buildings, go to their staff meetings, or find them wherever they are and strike up a conversation. A good time to catch S&Es is right after training sessions that your office presents. Ask them how their research is progressing, if they have developed any new software, whether their research has resulted in a significant advancement over existing technology, if they need help deciding if they have produced an invention, whether they would like assistance drafting an invention disclosure, whether they want to establish an R&D collaboration, and so on. At the very least, you want to ensure the S&Es know who you are and that you aspire to help them accomplish their mission.

ORTAs also need to communicate with industry in order to find qualified, motivated T2 partners. The vast number of potential private-sector partners throughout the country presents a daunting challenge. One promising strategy is leveraging your interactions with outside economic development organizations, state and local government entities, and PIAs. They can help you find and screen potential T2 partners. However, perhaps the most effective communication strategy is through the use of social media, including Facebook, Twitter, and LinkedIn. Strategic use of social media offers a low-cost and potentially highly effective way for Air Force Activities to market their various T2 opportunities, including CRADAs, licenses, and commercial test agreements. Implementing this strategy usually requires ORTAs to either invest time in learning how to use social media or hire someone who has this expertise. Sometimes, however, Activities have marketing or public affairs personnel

who can help with this communication task.

A key part of communicating the value of T2 is developing and disseminating T2 success stories. "Success" can be defined in various ways. Many T2 success stories focus simply on the establishment of new T2 agreements and the potential outcomes of these agreements. Others focus on innovative new T2 approaches or agreements with unusual, non-traditional partners. Others are retrospective and focus on the outcomes of previously established T2 partnerships. These success stories can be compelling if they are able to include elements of general human interest—for example, the fact that the T2 agreement resulted in human lives saved or assisted, impressive cost savings to the U.S. military, or the substantial growth of a local company.

Success stories educate readers on T2's possibilities. This can help attract potential T2 collaborators. Through effective use of social media. T2 success stories can reach impressively large numbers of potential T2 partners (including small businesses and entrepreneurs) that the Activity never could have reached any other way. In addition to attracting new partners, T2 success stories can effectively raise the visibility of the Activity and the profile of T2 within that Activity. For this reason, it is very important to disseminate these T2 success stories to the Activity's senior management as well as to your network of economic development organizations and state and local government agencies. Think creatively about these success stories. The subject can be anything will help raise the profile of your T2 program

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and keep people interested and supportive.

If you are intimidated by the thought of writing success stories, there are people that can help. Contact the Air Force T3 Program and ask about available resources. This office is always seeking to promote AF T2 and usually has staff members or contractors that can help write T2 success stories. TechLink may be able to help write success stories involving T2 agreements that they helped establish. Keep in mind that all success stories must be cleared for public release—even if they are just being posted on Facebook or Twitter. Check with your local Public Affairs office to ensure you are following the latest rules regarding release. Anything you want posted on the Air Force T2 Facebook page or on the Air Force T2 Twitter feed should be sent to Abby Boggs in AFRL/SB at abby.boggs@us.af. mil.

In conclusion, Air Force ORTAs are the focal point for their Activity's T2 collaborations with outside parties. Their overriding purpose is to develop T2 partnerships with industry, academia, and other government entities in order to benefit the U.S. defense mission and economy. This requires them to fulfill the following primary responsibilities: oversee their Activity's T2 processes and activities; assess Activity assets for potential commercial applications; provide T2 education and training to their S&Es; publicize their Activity's T2 opportunities to the outside world; establish T2 agreements with external partners; manage their Activity's patents and other IP; and report their T2 metrics, publicizing success stories.

To fulfill these responsibilities, ORTAs perform **five major activities**: creating, networking, educating, negotiating, and communicating. ORTAs need to create

a continuously evolving T2 strategy with associated plans, procedures, and activities—all customized to their Activity's needs and priorities. They need to continuously *network* with others, both to remain up-to-date on developments within their Activity and the T2 profession and to promote their Activity's T2 opportunities to potential outside partners. ORTAs need to *educate* S&Es and Activity managers on T2-related matters, and also educate potential outside partners on T2 opportunities and procedures. They need to negotiate T2 agreements that benefit both the Air Force and the outside collaborator, ensuring compliance with all applicable laws, regulations, and guidelines.

Finally, ORTAs need to *communicate*. To achieve their T2 mission, they need to constantly communicate with S&Es, Activity managers, the Air Force T3 Program, industry, academia, PIAs, economic development organizations, and relevant state and local government entities. They also need to communicate the results of their T2 activities. Within the Air Force, they need to convey these results to their Activity managers and the Air Force T3 Program. This includes the T2 metrics achieved, other significant outcomes, and T2 success stories. ORTAs also need to publicize these success stories to the outside world—both to help attract potential T2 partners and to promote the importance of their Activity's R&D activities.

Appendix II provides a checklist to help new ORTAs get oriented and begin to become established as T2 professionals.

3. Appendices

I. Air Force Instruction 61-301 – The Domestic Technology Transfer Process and the Offices of Research and Technology Applications, Cooperative Research and Development Agreements

II. New ORTA Checklist

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CRADAs

1. CRADAs at a Glance What is a CRADA?

"CRADA" is the commonly used acronym for a Cooperative Research and Development Agreement. CRADAs are legal agreements used to establish research collaborations between Air Force (AF) scientists and engineers (S&Es) and other parties—most commonly private-sector companies but also universities, industry associations, and other organizations. Foreign entities are even eligible, as long as they are non-government entities. CRADAs are one of the most versatile and commonly used tools in the Air Force technology transfer (T2) toolkit.

Purpose

From the Air Force perspective, the basic purpose of a CRADA is to develop or evaluate new technology that meets Air Force requirements and helps it to achieve its mission.

What Happens?

Under a CRADA, the Air Force Activity and CRADA partner can provide or share personnel, services, facilities, equipment, intellectual property (IP), and other resources. The Air Force cannot provide funding to a non-federal partner. However, CRADA partners can provide funding to the Air Force—for example, to reimburse the cost of equipment use. CRADAs provide a protected environment in which the parties can share technical expertise, ideas, information, and technology.

Legal Basis

The Federal Technology Transfer Act of 1986 (PL 99-502) gave federal labs the authority to enter into R&D collaborations with public, private, and nonprofit organizations. CRADAs are a unique contractual vehicle—not a procurement contract,

grant, or cooperative agreement. Because they are not a procurement contract, they are not subject to the Federal Acquisition Regulations (FAR). Air Force Activities can choose their CRADA partners without the open competition necessary for establishing FAR-based contracts.

CRADA Benefits to Air Force Activities:

- Enable the Air Force to leverage outside resources and expertise to defray the costs and accelerate the development of new technology to meet critical Air Force needs.
- Enable the Air Force to evaluate state-ofthe-art private-sector technology and help modify this technology to meet Air Force requirements.
- Protect existing Air Force IP and provide the mechanism for protection of new IP resulting from the cooperative research project.

CRADA Benefits to Companies:

- Enable companies to leverage their R&D efforts and develop new technology with Air Force expertise, equipment, materials, and other resources in a protected environment.
- Enable companies to have their technology evaluated by the Air Force and receive feedback on desired features or improvements for Air Force applications.
- Protect existing company IP and provide a means to acquire new IP.
- Enable companies to develop a longterm relationship with the Air Force that could potentially lead to future contracting opportunities.

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2. Introduction

A. General Information

The Federal Technology Transfer Act of 1986 (PL 99-502) establishing CRADAs gave federal laboratories the authority to enter into R&D collaborations with public, private, and nonprofit organizations. Congress's intent was to promote the development of new technologies and their transfer to the marketplace to help ensure national technological competitiveness. CRADAs are a unique contractual vehicle and are distinctively different from a procurement contract, grant, or cooperative agreement. Because they are not a procurement contract, they are not subject to the Federal Acquisition Regulations (FAR) and do not require open competition.

CRADAs are authorized under 15 USC §3710a and implemented through Air Force Policy Directive (AFPD) 61-3 and Air Force Instruction (AFI) 61-301. They are legally binding contracts, but because they are not FAR-based contracts, no appropriated funding can be transferred to a collaborator unless it is another federal lab. CRADAs may not be used to circumvent the statutory and regulatory requirements of federal procurement laws. Any agreement under which the AF Activity intends to transfer funding needs to be handled by a warranted Contracting Officer. The Air Force Activity entering into a CRADA can provide personnel, services, and use of property and can accept, retain, and use funds, personnel, services, and property from the collaborator.

The provision in 15 USC §3710a(b)(3)(A) enabling the Air Force to accept, retain, and use funds provides an exception to the Miscellaneous Receipts Act, 31 USC §3302b. The Miscellaneous Receipts Act states that "an official/agent of the government receiving money for the government from any source shall deposit the money in the treasury as soon as practicable." It is meant to ensure that government activities aren't augmenting

their budgets without Congressional approval. This CRADA exception is important as it allows the Air Force Activity to use money received to offset the costs of tasks performed under the CRADA. Funds received under a CRADA fall within the category of reimbursable budget authority, so you must check with your Finance Office to ensure that there is availability under the organization's reimbursable budget authority to accept the funds.

The CRADA number is based on the "Julian day" of the division chief's signature, using the following format: fiscal year designation; day of the year; Air Force Activity acronym; and CRADA number on that day. An example of a CRADA number in Julian day format is 19-232-RQ-01, in which 19 is the fiscal year; 232 is the 232nd day of the year, or August 20; RQ is the acronym for the Air Force Activity—the Aerospace Systems Directorate, in this case; and 01 indicates that this was the first CRADA executed by that Air Force Activity on that date. The CRADA number at the end is necessary in case you have multiple agreements signed on the same day. In that case, each agreement will be numbered -01, -02, -03, etc. (Note: There are several "day of the year" calendars or look-up tables available on the Internet for example, see https://www.esrl.noaa.gov/gmd/grad/ neu brew/Calendar.jsp).

CRADAs involving classified information or data that require the use of a DD-254 must have a CRADA number assigned before the CRADA is signed, as the DD 254 must have an agreement number on it for processing. In that case, pick a number for the Julian date, such as the date the request is made. If you pick a date in the future, you will need to remember that you assigned the number to a CRADA already and must use "-02" for the serial number; otherwise you could end up with two CRADAs with the same number and DTTIS won't let you enter them with the same number.

B. Collaborators

Collaborators can be practically any organization or individual that is not debarred or excluded from doing business with the government. You can check the following website to see if potential collaborators are debarred: https://www.sam.gov/SAM/ Select "SEARCH RECORDS" on the home page then type in the proposed collaborator's name, DUNS number, or CAGE code. Entities with "Exclusion" listed in purple are debarred. Federal employees can register at this site to gain access to FOUO information that is not publicly available.

The CRADA statute (15 USC §3710a) and Executive Order 12591 ("Facilitating Access Science to and Technology") list the following as potential collaborators: other Federal Agencies; units of State or local government, industrial organizations (including corporations, partnerships, limited partnerships, and industrial development organizations); public and private foundations; nonprofit organizations (including universities); or other persons. CRADA partners can include foreign corporations and universities. However, AFI 61-301 (dated 16 September 2019) expressly prohibits entering into CRADAs with foreign governments—either directly or indirectly. Agreements with foreign governments should be handled separately through SAF/IA as Project Agreements or Data Exchange Agreements. Any CRADAs with foreign organizations must follow the procedures for Non-Domestic CRADAs identified below in Section 6.

Because CRADAs are not FAR-based contracts, Air Force Activities have the authority to choose their CRADA partners without advertising CRADA opportunities or holding an open competition. However, in order to ensure fairness and an even playing field, you must avoid being arbitrary or biased in selecting CRADA collaborators. You also need to provide equal access to CRADA opportunities with your Activity and

ensure that all CRADA collaborators are working under the same basic set of terms and conditions.

Collaborators need to be able to make a significant intellectual or technical contribution to the research project, and funding provided by the collaborator should be used only to defray the cost of the project, not as a general funding mechanism. You must ensure that there are no conflicts of interest in any CRADA. For example, Air Force S&Es involved in the CRADA cannot have personal financial interests that would be affected by the proposed CRADA. Conflicts of interest—actual or apparent—must be addressed in the CRADA review and approval process. Your Activity's legal counsel can provide the necessary guidance or all of these legal issues.

Resources to help your Activity find capable collaborators include TechLink, DoD's national partnership intermediary for T2, and local partnership intermediaries such as:

- the Wright Brothers Institute in Dayton, OH, which assists the AFRL directorates at Wright-Patterson AFB, OH;
- the Griffiss Institute in Rome, NY, which supports the nearby AFRL Information Directorate;
- New Mexico Tech, which assists the AFRL Directed Energy and Space Vehicles directorates at Kirtland AFB, NM; and
- 4. the Doolittle Institute in Niceville, FL, which supports the AFRL Munitions Directorate at Eglin AFB, FL.

C. Benefits

There are many benefits to using CRADAs. General benefits include leveraging the resources and expertise of other parties in order to defray the costs of new technology development; accessing and evaluating

new technologies being developed by companies; advancing the state-of-the-art in existing technologies; and accelerating the process of technology development and transition.

To help overcome concerns about confidentiality, CRADAs provide a protected environment in which the CRADA parties can share technical expertise, ideas, information, and technology with each other without fear of public disclosure. Information from CRADA projects is protected from disclosure under the Freedom of Information Act (FOIA) for up to five years. There are also strong protections for existing intellectual property and clear-cut mechanisms for allocation and management of new IP.

Collaborator or Air Force IP existing at the initiation date of the CRADA continues to belong exclusively to the existing owner. Collaborator inventions under the CRADA belong exclusively to the collaborator, although the Air Force obtains a non-exclusive, irrevocable, paid-up, royalty-free license to practice this invention or to have it practiced throughout the world by or on its behalf. The collaborator gets a similar non-exclusive license to all Air Force inventions under the CRADA and can request an exclusive license, which will ordinarily be granted on reasonable terms. The collaborator and the Air Force jointly own new joint inventions; however, the Air Force may license its share to the collaborator for reasonable compensation. The opportunity to acquire new IP through participation in a CRADA is intended to be attractive to industry and a way to encourage collaborations with the Air Force.

CRADAs enable companies to have their technology evaluated by the Air Force and receive feedback on desired features or improvements to address Air Force requirements. They also provide an opportunity for the CRADA partners to develop valuable long-term relationships. At the termination of CRADAs, Air Force Activities can provide sole-source contracts to

private-sector CRADA partners if they can justify the uniqueness of the company's technology or expertise. Air Force Activities should keep track of their CRADA success stories and make sure they get publicized. This will help ensure that Activity leaders and senior management are aware of the many benefits associated with using CRADAs.

3. What's in a CRADA?

The **Air Force Model CRADA** (see Appendix II) has three sections: Section I – Standard Terms and Conditions; Section II – Joint Work Plan; and Section III – Signatures. ORTAs should familiarize themselves with the Model CRADA's structure and terms before attempting to establish CRADAs.

Section I in the Model CRADA should only be modified if it is absolutely necessary. Section II will require the most effort to develop, as it is the section that completely describes the work to be accomplished under the CRADA. People who sign the agreement in Section III are committing their organization's resources and need to be fully aware of their legal obligations.

The Model CRADA's three sections are explained below. The color-highlighted sections in the Model CRADA indicate where specific inputs are needed. To help guide ORTAs in the drafting of CRADAs, each of the CRADA sections is summarized and the required inputs are indicated in bold text. Throughout, comments and caveats are provided, to help ensure successful development of a new CRADA. One initial note of caution: When developing a CRADA, the automatic formatting in the document can provide challenges. Be careful if you delete items as this can cause the entire document to reformat and create nonsensical numbering systems, particularly in the Joint Work Plan.

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Cover Page

On the cover page, enter the official names of both the Air Force Activity and the collaborator, and also the title of the CRADA project. That same title should be repeated at the top of the Work Plan to prevent any confusion.

A. Section I – Standard Terms and Conditions Article 1 – Preamble

The Preamble states the Authority under which the Air Force Activity is allowed to enter into the CRADA. **Enter the name and addresses of the collaborator and the Air Force Activity.** Throughout the rest of the CRADA, they will be referred to simply as the "Collaborator" and "Air Force Activity."

Article 2 - Definitions

This section defines the terms that are used in the CRADA. Any time these words are used, they should be italicized to show they have a specific legal definition. Most are easy to understand. There are some definitions that collaborators frequently attempt to change, such as *Background Technology and Special Purpose License*. Make sure to do a "Compare Documents" routine (even if Track Changes is activated), so that you can confirm that nothing was changed. If you discover changes, your first response should be to attempt to get the definitions restored to the original language. If the collaborator persists, then review the changes with your attorney and either develop an argument against these changes or agree to accept them (recognizing that many changes have no legal significance).

Article 3 – Financial Considerations

This is the section where you will define payments (if any) that the collaborator will be making to the Air Force Activity. If neither party is providing funding, the blue-highlighted sections in Article 3 can be deleted. The expenses for which each party will be responsible will be covered in the Joint Work Plan. Alternatively, if the collaborator will be providing funding to the Air Force

Activity, delete the default Article 3.1 clause and use the blue-highlighted text, adapting it as appropriate. In this case, the ORTA needs to enter the dollar amount of the initial payment and the FAS address for this payment. The schedule for subsequent payments is included in the Joint Work Plan.

As stated above in the "General Information" section, CRADA income falls under the category of Reimbursable Budget Authority. Your Finance Office has to request a reimbursable budget each fiscal year, which determines how much reimbursable income your organization is allowed to accept. You need to check with the Finance Office to ensure that they can accept the CRADA income. CRADA income checks should always be sent to the Finance Office, as it has the exclusive authority to set up the appropriate accounts and deposit these checks. Deposited funds take on the "color of money" of the account in which they are deposited and have a limited "shelf life." They will be available for use only until the end of the fiscal year in which the account (into which the funds are deposited) expires for new obligations.

For example, AFRL money is usually two-year money. So, if a CRADA check is deposited in one fiscal year, it can be used through the end of the following fiscal year. Your Finance Office can explain the rules for the account in which the money is deposited. If not spent before the expiration date, remaining funds will be transferred to the U.S. Treasury. Each DFAS location determines how the checks should be made payable. For instance, payments that come to RQ-East (at Wright-Patterson AFB) are made payable to DSSN3801-DY, but payments to RQ-West (Edwards AFB) are made payable to the U.S. Treasury. Check with your Finance Office for correct information for your Activity.

The Air Force is not required to be reimbursed for efforts under a CRADA. 15 USC §3710a(d)(1) states that the Government, through its laboratories, can

provide "personnel, services, facilities, equipment, intellectual property, or other resources with or without reimbursement..." (italics added for emphasis). In many cases, Air Force Activities do not request reimbursement, either because of the high value of the resources that the non-Air Force CRADA partner is bringing to the collaboration, or because the expected value of the CRADA project to the Air Force mission.

It is important to understand how a CRADA differs financially from a Commercial Test Agreement (CTA), which is governed by 10 USC §2539b(a)(3). Under a CTA, the Air Force is generally reimbursed for direct and indirect costs (unless the director waives those costs), and must return any unused portion of the funding provided. In a CRADA, we can request reimbursement for whatever we think is a fair amount—it does not have to cover all the direct and indirect costs (although it can). Also, you don't have to return unused funds (although you can). If a CRADA collaborator pays for tests that you don't complete, then you should definitely return the funding.

However, if there is other funding left over after you complete the CRADA tasks, there is no requirement to return that funding. The Finance Office is the best resource to help you establish a cost estimate for either a CRADA or CTA. This office can provide information on labor rates for civilian and military personnel, as well as other cost information. Some of the CRADA items for which you can request reimbursement are testing, salaries of civilians, military or contractor personnel involved in the effort, materials, travel, and equipment purchases.

You need to pay attention to the source of the funding. If the original source of the funding is another U.S. government agency, that money should ordinarily be MIPR'd directly to your organization from the other agency. It is important to obtain legal advice when receiving funds that originated from another federal

source, to avoid a potential fiscal law violation.

Article 4 – Invention Disclosures and Patents

This section covers how inventions that occur during the course of the CRADA are handled—both inventions made solely by one of the parties as well those conceived jointly. Inventions that are conceived solely by employees of either the Air Force or the collaborator are solely owned by that inventing party; however, the other party is entitled to a "paid up, royalty-free, irrevocable, non-exclusive license" to practice the invention upon request. A single-page form is used for this Confirmatory License. Use the template in the Model CRADA provided in Appendix II (see Appendix A to Section II – Joint Work Plan). There are two options for handling joint inventions. One of the parties can assign its interest to the other party. Or, the two parties can negotiate a Joint Ownership Agreement (JOA) to define their respective rights and responsibilities.

ORTAs should educate S&Es working under a CRADA to make note of any new information, technology, or inventions generated by the CRADA. This is very important. S&Es need to notify the ORTA and servicing patent attorneys to make sure that the Air Force's rights to the technology are protected. They should not attempt to make a determination on their own as to who owns the invention.

Article 4 also covers the rights of third parties, meaning anyone else involved in the research effort who is not a signatory to the agreement. This includes onsite support contractors at Air Force facilities. On-site contractors have certain clauses in their contracts that give them first right to file on any inventions that involve their employees, but we give that same right to our CRADA collaborator. You need to pay attention to the role that support contractors may have in the CRADA effort and make sure all parties are aware of the others' rights.

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Article 5 - Copyright Protection

This section addresses the handling of copyrightable works created under the CRADA. It basically pertains to works created by the non-federal collaborator or collaborative works where the government contribution cannot be separated out. U.S. copyright law states that anything created by U.S. government employees is not subject to copyright protection in the United States. CRADA collaborators are under the obligation to obtain the rights to copyrightable works created under the CRADA and to grant to the government a special purpose license for all published copyrighted works.

Article 6 – Background Technology and Protected Information

Background Technology is defined in Article 2.12 as specified technology that was brought to the CRADA by either party, "consisting of privileged or restricted information or intellectual property protected by trade secret or described in a patent, patent application or copyrighted work." Neither party has rights to the other's background technology except to be able to use it for the purposes described in the Work Plan. However, the Air Force does obtain rights to technology developed under the agreement, so it is extremely important to differentiate between what was brought into the CRADA, as opposed to what was developed under the CRADA. All background technology and protected information must be marked as such. Neither party is liable for release of background technology or protected information if it is unmarked. The parties have 30 days to reduce information that is disclosed orally or visually to writing or other tangible form. All information is considered protected information during that 30-day period, but to continue to be treated as protected information beyond that period, it must be appropriately marked.

There is also a clause in Article 6 that defines how information to which the Air Force Activity is granted a

Special Purpose License should be described if used in future U.S. government procurements. The special purpose license converts to Government Purpose Rights (GPR) so that contracting personnel will be able to easily identify the government's rights in the information. "Special purpose license" isn't a term that Air Force contracting personnel are always familiar with, but it is essentially the same as GPR. Be prepared to reassure your collaborator that the GPR does not automatically convert to "Unlimited Rights." Sometimes they are convinced it will convert automatically and may be concerned the government could give away valuable information to their competitors.

Article 7 - Term of Agreement

Modifications and Termination. This section is fairly straightforward. It defines the difference between modifications (changes *within* scope) and amendments (changes *outside* the scope), and explains the processes for handling these two types of changes to the CRADA agreement. It also describes how to terminate the agreement. CRADAs can't be modified after their expiration or termination, so it is important to monitor the expiration date of active agreements.

Article 8 – Disputes

This section explains the process for resolving disputes that may occur. Fortunately, this rarely happens. The process outlined in this section is very reasonable. This is particularly true because either party can still seek relief in federal court. This section should not be changed.

Article 9 - Representations

In this section, the Air Force activity is affirmatively stating that the work performed in the CRADA is consistent with the mission of the laboratory, that the person signing it is authorized to do so, and that they are fully complying with the CRADA statute. The collaborator is attesting to its corporate status, including whether or not it is a small business or a

foreign-owned or foreign-controlled entity. It also is affirming that the person signing has the authority to commit the organization and its resources, as well as to assign all inventions or copyrights made under the CRADA. Finally, the collaborator is stating that it is not debarred or suspended from doing business with the Government.

In Article 9.2.1, the ORTA needs to enter the corporate status of the collaborator and the state where it is incorporated; indicate whether it is a "small business" (as defined by the U.S. Small Business Administration); and indicate whether it is foreign-owned or a subsidiary of a foreign-owned entity, in which case the country of ownership needs to be entered. If someone besides the ORTA is drafting the agreement (such as the lead S&E), then the ORTA needs to confirm that the information in Article 9.2.1 is correct.

As explained in 2B above, you can check to see if the collaborator is debarred by consulting https://www.sam.gov/SAM/. In accordance with Executive Order 12591, if the collaborator is incorporated in the United States but is foreign owned or controlled, you must coordinate with and obtain approval from the U.S. Trade Representative. If the collaborator is a foreign entity (not incorporated in the United States), then you will need to follow the Non-Domestic CRADA process outlined in Section 6 below.

Article 10 - Liability and Limitations

This section covers property, both real or tangible property or equipment as well as intellectual property. If you are loaning equipment to the collaborator, then you need to make sure that your equipment custodians are aware of where the equipment is going and for how long. Don't wait until after the CRADA is signed, because there may be additional steps required by the equipment custodians. All equipment loaned out under the CRADA must be returned to the Air Force Activity on or before the CRADA expiration date. You should

also inform the equipment custodians whenever the collaborator is lending equipment to the Air Force, to prevent the situation in which they notice the equipment in your Activity, see it doesn't have a label, and try to tag it as U.S. government property.

Article 11 - General Terms and Conditions

There are many clauses in Article 11, so you should familiarize yourself with this section. Most of the clauses are self-explanatory. A few comments on this section follow.

Any sort of public announcement about the CRADA must be coordinated between the parties, and each party must be given prior opportunity to review the announcement. The collaborator needs to ensure that its background technology or protected information is not included. The Air Force Activity needs to ensure that information in the announcement is suitable for public release and does not contain export-controlled. classified, or other sensitive information. Press releases and any information that has a government author listed must be routed through Public Affairs for approval. Publications that are solely written by collaborator personnel do not have to go to Public Affairs for approval, but they still must be reviewed by the Air Force Activity. All publications must state that the work was conducted under a Cooperative Research and Development Agreement between the parties.

Paragraph 11.5.2 is sometimes confusing because people don't understand what circumstance would prevent someone from being able to review a proposed publication. This situation arises when the Air Force wants to use information from the CRADA in a future procurement. We have to give the collaborator a chance to review the information, but cannot legally provide a copy of the procurement announcement or document in advance (it's a violation of the Procurement Integrity Act). However, we can provide a summary of the CRADA information that we intend to use, without

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explicitly telling the collaborator about the upcoming procurement. If they don't object in writing, then assent can safely be assumed after 90 days.

The Governing Law (11.6) in all circumstances will be the laws applicable to the federal government—we don't recognize state laws. The only time this is an issue is if we are dealing with a state university or other state entity, as they are required to abide by state law, which sometimes limits what they can do. However, when a state organization contracts with the federal government, it normally must submit to the jurisdiction of federal law. In some cases, in which the CRADA involving a state entity is of high priority to the Air Force, Air Force attorneys may agree to eliminate this clause, to overcome the legal impasse between state and federal law.

Another important article is 11.12 regarding Controlled Information. This article basically means that export-controlled or controlled unclassified information must be protected and that nothing in the CRADA exempts anyone from any law controlling the release of that information. If the data or technology being shared under the agreement is export-controlled, you need to make sure the company is approved to receive it. You can ask it to send you a copy of its DD 2345 or check on the following website: https://public.logisticsinformationservice.dla.mil/jcp/search.aspx

There are two different options addressing Classified Information (Article 11.13). The default clause is used if there is no classified information to be shared or generated; the blue-highlighted text is used if there is classified information to be shared or generated. The ORTA needs to select the relevant text and delete the text that is not relevant. If the CRADA does involve classified information, you must prepare and attach a DD 254 to the agreement. DD 254s are prepared and coordinated per the normal procedures identified by your Security Office. DD 254s are normally signed

by a Contracting Officer. However, since Contracting Officers do not handle CRADAs, the DD 254 is typically signed by the same person who signs the CRADA.

Article 11.14 on Records covers the required record keeping. A complete record must be kept of the CRADA, and all correspondence related to it, in an "Official File." This file should include, besides the agreement itself, the legal review, all modifications or amendments, and documentation on background technology and protected information. The Air Force Activity has people who manage official files and create rules for how long they are kept and what is retireable. We generally include official files with files that will be retired. The S&Es do not need to have a separate case file for each CRADA. CRADAs can be filed as part of an existing in-house case file, or in another case file that relates to the work to be accomplished under the CRADA.

Article 12 - Notices

This section identifies the contact information for each party for both formal notices and technical matters. The ORTA needs to enter the names, addresses, phone numbers, and email addresses for the collaborator and the Air Force Activity for both formal notices and technical matters. The collaborator needs to determine who it wants to list as its representatives in this section. The ORTA is always listed as the Air Force Activity's representative for formal notices, and the Technical Point of Contact (TPOC) is listed as the representative for technical matters.

B. Section II - Joint Work Plan

In practical terms, the Joint Work Plan is the most important part of the CRADA. It defines the scope of work that will be conducted under the agreement and the respective commitment of resources (equipment, services, facilities, personnel, etc.) to be provided by each party.

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The Joint Work Plan must be developed jointly with the collaborator, as both parties have to approve it. The ORTA or S&E who is drafting the Joint Work Plan needs to **enter the title**, which should be identical to the title used on the CRADA cover page. Subsequently, he or she needs to **insert CRADA-specific text for each of the sections in the Joint Work Plan, following the instructions in that section**.

The defined terms such as "Air Force Activity" and "Collaborator" should be used throughout the work plan. It's especially important to not use general terms like "AFRL" or "Air Force" unless you are referring to something that absolutely relates to those organizations, such as "AFRL Strategic Plan" or "Air Force users and acquisition communities." All acronyms should be defined at first use, even if you think they are common acronyms.

The questions in the model Work Plan are meant as a guide. You do not need to answer all of them specifically; they are just there to help you think through what you want to accomplish and why and how you are doing it. Many CRADAs involve third parties, which should be fully identified in Article C ("Other Participants"), but if a CRADA potentially involves more than one collaborator, consult with your legal counsel. There are a variety of ways to structure the agreement, each with its own advantages and disadvantages. You can have more than one federal government partner, but the question of whose Model CRADA you use will be an issue. It's easier if two Air Force organizations will be partnering with a collaborator. One of the organizations will be designated as lead, all participating divisions (or organizations) will sign, and finally, the lead organization's approving official will sign.

Most of the Joint Work Plan sections in the Air Force Model CRADA are self-explanatory and the instructions on how to complete these sections are clear. The following comments may help clarify some of the instructions.

Article A - Project Description

The project description is intended to introduce the project and serve as an overview of the collaborative effort. It's similar to an abstract for a technical paper or the executive summary of a report.

Article B - Objectives

In this section, you describe the CRADA project's objectives. What are the parties hoping to achieve through this collaboration? What technology is being transferred or shared? What are the benefits to the Air Force and the collaborator? And, what is the estimated value of the contributions from each party for each of the major budget categories? While the estimated value of the contributions from both parties are expressed in monetary terms, it should be understood that these are estimates and are not auditable.

Article C – Parties and Other Participants

This section describes the relationship of the parties to each other and to any other participants. It is important to clearly but briefly describe how the collaboration discussion started, to demonstrate that a CRADA project is legitimate and does not conflict with FAR-based contracting procedures. Examples: "Collaborator has been working on the XX technology for the past eight years and approached Air Force Activity to see if it would be able to test the technology in its unique facilities and provide recommendations on potential improvements." Or, "Air Force Activity personnel heard a presentation by Collaborator on the XX technology and started a discussion on its potential utility to the Air Force, which then resulted in the proposed collaboration."

If there are other participants, they need to be identified so that each party clearly understands who will have access to data or other information developed under the agreement. If the other participants are working under a contract, then you should include the contract number. Both parties should ensure that the list of "Other Participants" is complete so that additional notifications are not necessary after the CRADA is signed. Also, providing complete lists allows the other party to object to a particular participant. It's much better to have all issues addressed up front than have to deal with them after the CRADA is signed.

Article D - Technical Tasks

The Technical Tasks section is by far the most important part of the Work Plan. It's where you and your collaborator define the tasks that each party will be responsible for performing under the CRADA. This section should be complete and "stand alone," meaning that it does not rely on language in the background section. Describe everything you expect each party to do under the CRADA. You need to be specific. This section should tell the whole story of who is delivering what to whom, who is analyzing or testing what, etc. Example: "Air Force Activity will perform tests in the Air Force Activity's XX facility on a test article provided by the Collaborator in specified condition, and Air Force Activity and Collaborator S&Es will analyze the test results to determine improvements needed for military and commercial applications."

Article E - Intellectual Property

This is the section where both parties are required to list all of the background technology that each is bringing into the agreement. This includes all background technology—such as patents, patent applications, technical data, and software code—developed prior to the agreement. People sometimes assume this section is only important for collaborators. However, it is vitally important for both parties. You need to list everything: trade secrets, patents, proprietary information, etc. The background technology should be defined with enough specificity that it can be identified at the end

of the CRADA. This section also identifies the standard markings that should be used to designate background technology. It's REALLY important that all background technology be identified and marked. Each party has the right to use the background technology provided by the other party during the course of the CRADA. However, it loses this right at the CRADA end date. Also, both parties have rights to information developed under the CRADA, so it is critical that background technology be differentiated from what was developed under the CRADA. Air Force personnel also should be instructed or reminded not to accept any information from the collaborator unless it is appropriately marked. As stated in Section I Article 6 of this Handbook, neither party is liable for release of unmarked information. If it is marked, then it must be handled appropriately.

Article F - Deliverables

Identify any deliverables in this section, including property and equipment being provided and the required reports. The description of property and equipment should include the date of purchase or approximate age as well as the estimated value of the item(s). If Air Force property or equipment is being loaned to the collaborator, you need to make sure your equipment custodians have been notified and can provide any paperwork that is necessary to document the location of the equipment. You will also need to identify who is paying for transportation or other expenses, and when the transfer will occur. It is a good idea to notify your equipment custodians if any equipment is being loaned to the Air Force Activity, so they don't try to slap a "government property" label on it. If no equipment is being loaned by either party, then the statement that is provided in the Model CRADA should be used.

You should also clearly define the reports required under the agreement. The reporting instructions in the Model CRADA are explicit and should be followed

carefully. The Model CRADA provided in Appendix II includes a detailed Annual Report Template [see Appendix B to Section II – Joint Work Plan], which should be included in the CRADA. If there are other deliverables, such as software or data, these should be listed in Section F.5.

Article G - Milestones

Generally speaking, the milestones should directly relate to the Technical Tasks (Article D) in the Joint Work Plan. Each milestone should be listed along with the date or other relative timeframe on which the milestone should be completed. It's best to write the date in relation to the "effective date" of the CRADA, so you don't have to worry about when it is signed. For example, Milestone 1: Test Article delivered to the Air Force Activity...30 days after the effective date of the CRADA. Be sure to confirm that none of the milestone dates is scheduled to take place after the expiration date of the CRADA.

Following the Milestones article, Section II of the Model CRADA includes two appendices.

Appendix A provides the template for a Confirmatory License. As previously indicated, inventions under the CRADA that are conceived solely by employees of either the Air Force or the collaborator are solely owned by that inventing party. However, upon request, the other party is entitled to a "paid up, royalty-free, irrevocable, non-exclusive license" to practice the invention. The one-page Confirmatory License template is used to grant this license.

Appendix B provides the template for the Annual Report. It is important that Air Force Activities monitor their active CRADAs to ensure accountability and the productive use of valuable S&E time and lab resources. The Annual Report is the primary mechanism for this purpose. ORTAs need to ensure that these Annual Reports provide the requested information and that

they are submitted by TPOCs in a timely way.

C. Section III - Signatures

Section III, the Signatures page, is where the term or duration of the CRADA is specified. The ORTA or individual drafting the CRADA needs to **enter the expiration date of the agreement**. This is usually expressed in the number of months after the CRADA's effective date—for example, 12, 36, or 60 months. CRADA terms can be whatever is reasonable for the effort, although the milestones need to support the length. If the parties want to establish a five-year CRADA, but only have milestones to support a three-year effort, you should either reduce the term to match the milestones or get the parties to expand the milestones section. CRADAs can always be extended later if the schedule slips, encounters delays, or the parties want to undertake additional work.

The ORTA needs to enter the names, titles, and email addresses of the duly authorized representatives for both the collaborator and the Air Force Activity, and also the name and title of the Reviewing Official . The only people who can sign CRADAs who are the "duly authorized representatives" who have the authority to legally obligate the Air Force and the collaborator. The signature authority in each organization is delegated at a certain level, and cannot be further delegated to a lower level. Signature authority is usually at the division chief level; branch chiefs and S&Es are not usually authorized to sign CRADAs. If the agreement is signed by someone other an authorized individual, it is not a valid agreement. (Any Air Force employee who signs a CRADA without being authorized has accepted personal responsibility and liability, since he/she can't bind the Air Force—a situation to be avoided!)

The agreement normally takes effect on the date of the last signature, which is that of the Reviewing Official in the Air Force. However, there is a provision in the law that states if the Reviewing Official does not take any action within 30 business days of the signature by the Air Force's duly authorized representative, then it becomes effective without his/her signature.

The Reviewing Official usually either approves the CRADA, disapproves it, or requires it to be modified. However, the law also implies that he/she can waive review: Per 15 USC 3710a(b)(5)(A), "If the head of the agency or his designee DESIRES an opportunity to disapprove or require the modification of any such agreement..." (caps used for emphasis). If the Reviewing Official chooses to waive review, the organization should have him/her sign a letter stating that he/she is waiving his/her reviewing authority except for certain circumstances, such as for agreements that do not have legal sufficiency or those the ORTA feels he/ she should see. A sample waiver letter is provided in Appendix III to this CRADA module. If the reviewing official does review the agreement and disapproves it, then a letter must be provided as to the reasons for disapproval. The CRADA can be signed either with an electronic signature or handwritten signature. It doesn't matter if one person signs one way, and the others sign a different way.

4. Limited Purpose CRADAs

There are two "limited purpose" CRADAs used for special situations: A Non-Disclosure Agreement (NDA) and a Material Transfer Agreement (MTA). Both are shorter versions of the standard CRADA. Because they are actually CRADAs, you can insert any of the clauses from the standard CRADA into them if the circumstances warrant doing so. For instance, normally MTAs have a "no funds transferred" clause. However, if you have a situation where it is appropriate to use an MTA and you want to be reimbursed, you can copy the alternate funding clause from the standard CRADA and use it in the MTA.

A. Non-Disclosure Agreement (NDA)

NDAs allows us to explore CRADA possibilities with potential collaborators while protecting Air Force sensitive information and intellectual property (IP) in the process. They normally should not extend beyond one year. Exceptions should be coordinated with your servicing attorney. NDAs may not be legally necessary if the Air Force Activity is discussing CRADA opportunities that are centered around IP from the potential collaborator: 18 USC §1905 requires all government employees to protect company proprietary information that is disclosed to them, and provides for extremely serious consequences (employment termination and fine and/or imprisonment) if that information is released. However, many companies insist on an NDA, as that is an industry norm.

B. Material Transfer Agreement (MTA)

MTAs are used to allow either the Air Force Activity or collaborator to provide material to the other party for experimental testing and analysis. For example, a collaborator might wish to have the Air Force Activity test its alternative fuel, or the Air Force Activity might wish to have a collaborator test a ceramic material in its industrial processes. There are two different versions of the MTA, depending on which party will be conducting the testing, the Air Force Activity or the collaborator. The party conducting the testing and analysis shares the results and/or test data back to the other party. MTAs are used in cases where no additional collaboration its intended after the material testing, and where the other party is interested in using the test results for its own purposes on a confidential basis. MTAs differ in two key ways from Commercial Test Agreements (CTAs), which are used when the Air Force Activity provides testing services at an appropriate fee: (1) under a CTA, the Air Force does not have the right to use the test results and simply delivers those results to the collaborator; and (2) the collaborator always pays for the Air Force for testing (with rare exceptions) under a CTA, whereas

payment is usually not required under an MTA.

5. The CRADA Process

The first step in the CRADA process is identifying the opportunity for collaboration and deciding if a CRADA is the appropriate collaboration mechanism, rather than a limited purpose CRADA, CTA, or some other T2 mechanism (see Section 7 below, "When to Use What: CRADA or ...?"). If a CRADA is the right mechanism, the Air Force S&E can start developing the draft. In some organizations, the S&E creates the draft agreement using the questions in the Joint Work Plan template (Section II in the Model CRADA) as a guide. In other organizations, the S&E fills out a worksheet that provides information to the ORTA and the ORTA actually drafts the CRADA. The S&E needs to work closely with the collaborator on the development of the Joint Work Plan, as they both have to agree on the tasks. See CRADA Roles and Responsibilities in Appendix V.

Once there is a good CRADA draft, it should be reviewed by the ORTA for completeness and identification of any issues that need to be addressed. After the ORTA agrees that the draft CRADA is in good shape, it should be sent to the collaborator for review. When the collaborator returns it with proposed changes (or in rare cases, no changes), then it should be sent to the servicing legal counsel for review. The lawyers will review any changes proposed by the collaborator, provide advice on issues you may have overlooked, and let you know if it is legally sufficient. Negotiations can go back and forth for an extended period until the parties agree. A basic rule of thumb is that the larger the company you are negotiating with, the longer the negotiations will take.

Keep in mind that, while it is important to have the lawyers review the agreement and provide an opinion, they are not the decision makers. You can send a CRADA to the Reviewing Official that the lawyers think is not legally sufficient, as long as you include their legal opinion with the CRADA document. If it's a clear violation of law, that is one thing—it should be stopped. However, if a lawyer simply believes that the CRADA project is too risky or not a good idea for some other reason, then it is up to the Reviewing Official to determine whether to approve it. He/she is the official who is obligating the Air Force. This is a rare occurrence, as most of the CRADAs will have legal sufficiency. Just remember that you must include the memo or email from the attorney detailing the reasons why they don't think the CRADA should be signed, so that the Reviewing Official has full knowledge of the potential issues and the opportunity to ask questions, prior to making a decision.

As soon as everyone agrees, it is time for signatures. The CRADA is emailed to the collaborator for signature. Once the collaborator signs it (either handwritten or electronic signature), he/she returns a signed PDF copy to the ORTA, who distributes it within the Air Force Activity for approval. Sometimes the collaborator sends it to the S&E. In that case, the S&E can forward the CRADA for approval (at least in some organizations). Air Force ORTAs usually prepare an electronic Staff Summary Sheet and attach the CRADA. A typical routing will be S&E, branch chief, and division chief prior to the CRADA being submitted to the Reviewing Official (if that person has not waived his or her review). After the CRADA is fully executed, with all necessary approvals and signatures, the ORTA assigns a CRADA number and sends it back to the collaborator and the S&E.

As previously mentioned, the CRADA number is based on the Julian date of the division chief's signature, using the following format: fiscal year designation; day of the year; Air Force Activity acronym; and CRADA number on that day. An example is 19-65-RI-02, in which 19 is the fiscal year, 65 is the 65th day of the year; RI is

the acronym for the Information Directorate, and 02 indicates that this was the second CRADA executed by RI that day. For the day of the year, see https://www.esrl.noaa.gov/gmd/grad/neubrew/Calendar.jsp).

The ORTA needs to enter the CRADA information into DTTIS. If the collaborator has not had any previous agreements with DoD, you will need to request a source code from DTIC using this email address: dtic.belvoir.ecm.mbx.sources@mail.mil. You need to provide the name and address for the company for which you are requesting a source code. You also need to fill in the information in the database as completely as possible because AFRL/SB uses the information to respond to requests and to help prepare the TEO when he/she has meetings with companies, elected officials, and other stakeholders.

To assist in development of a CRADA, a complete checklist is provided in Appendix I.

6. Non-Domestic CRADAs

Establishing a CRADA with a foreign entity requires a different and lengthier process. AFI 61-301 allows Air Force Commanders and Directors to enter into CRADAs with various types of foreign entities "except directly or indirectly with foreign governments." Eligible foreign non-government entities include universities, research institutions, companies, industry groups, and individuals. Executive Order 12591 states that the rationale for such CRADAs is to "ensure that the United States benefits from and fully exploits scientific research and technology developed abroad."

CRADAs with foreign non-government entities are referred to as "non-domestic CRADAs." Establishing these foreign CRADAs requires extra steps because of heightened concerns about national security, intellectual property, export control, and compliance with foreign policy and international agreements. These

extra steps include providing a detailed explanation of why the collaborator is a better choice for the project than potential domestic collaborators, careful consideration of whether the involved technology is export-controlled, and approval of the U.S. Trade Representative (USTR). CRADAs with companies that are incorporated in the United States but that are foreign-owned or foreign-controlled are handled under the normal CRADA process. However, they require coordination with, and approval from, the USTR.

There is a clearly defined and rigorous procedure for developing and gaining approval for non-domestic CRADAs. This procedure involves significant higherlevel oversight. The non-domestic CRADA process is depicted in the flow chart in Appendix IV. To initiate a non-domestic CRADA, the Air Force Activity's ORTA first identifies the need for this agreement in consultation with the involved S&E(s). As part of this process, the ORTA determines the status of the proposed foreign collaborator and ensures that it is neither a foreign government entity nor controlled by a foreign government entity. It then prepares a "Non-Domestic CRADA Summary Sheet" (template provided in Appendix IV to this CRADA module). SAF/ International Affairs can advise on the development of this document, as needed. In addition, the ORTA fills out an AFMC Form 191 "Foreign Disclosure Procurement Decision Worksheet" (template provided in Appendix IV; fillable template available online: https://static.epublishing.af.mil/production/1/afmc/form/afmc191/ afmc191.pdf).

Next, the ORTA sends the AFMC Form 191 and CRADA summary sheet to the installation's Foreign Disclosure Officer (FDO) for review. At the same time, it sends the CRADA summary sheet to the USTR for review. (The Air Force Activity should consult with SAF/International Affairs for the USTR's current POCs and procedures.)

These offices consider, in compliance with Executive Order 12591, whether the foreign country in question allows U.S. government agencies, organizations, or persons to enter into CRADAs and license agreements on a comparable or reciprocal basis. They also consider whether this foreign country has policies to protect U.S. intellectual property; and—when the proposed CRADA work involves data, technologies, or products subject under U.S. law to national security export controls—whether it has adequate measures to prevent transfer of strategic technology to prohibited destinations.

Assuming approval to proceed from both the FDO and the USTR, the ORTA and S&E(s) prepare a draft CRADA with associated workplan. Next, the ORTA prepares a non-domestic CRADA Request Memorandum and submits it for signature to the appropriate Division Chief at the Air Force Activity. When this memo is signed, the ORTA sends it along with the entire non-domestic CRADA documentation package to the SAF/International Affairs, Armaments Cooperation Division (SAF/IAPQ). This documentation package includes:

- 1. The signed Request Memorandum supporting the non-domestic CRADA.
- 2. The CRADA Summary Sheet.
- 3. The draft CRADA with workplan.
- 4. A memorandum or email from the USTR attesting that there are no objections to this non-domestic CRADA.
- A statement signed by the local FDO identifying the work under the proposed nondomestic CRADA as either public domain or export controlled.

On receiving a non-domestic CRADA package, SAF/IAPQ first reviews it for sufficiency, then routes it for additional review through the relevant HQ USAF offices. At a minimum, SAF/IAPD will review the package to ensure compliance with national disclosure policy and

export control regulations; SAF/AQ will review it to ensure consistency with Air Force science, technology, and acquisition policies; SAF/GCQ will make sure it complies with U.S. laws, regulations, and policies; and the appropriate SAF/IAR regional division will ensure compliance with existing international agreements. During this HQ USAF review process, SAF/IAPQ respond to questions and comments as necessary. If there are no stated objections by the reviewing HQ offices, SAF/IAPQ sends a memorandum to the proposing Air Force Activity authorizing it to proceed with negotiation on the CRADA.

Upon receiving this authorization, the Air Force Activity negotiates the CRADA terms and conditions with the prospective foreign partner. Assuming these negotiations are successful, the Air Force Activity submits the signed CRADA to SAF/IAPQ within twenty days of the execution date. If, for any reason, the CRADA is not executed, the Air Force Activity notifies SAF/IAPQ of this fact as soon as possible.

7. When to Use What: CRADA or ...?

It is important to use the appropriate T2 mechanism. Some situations that might seem to warrant a standard CRADA could be better handled with a limited purpose CRADA—an NDA or MTA. Alternatively, instead of a CRADA, a Commercial Test Agreement (CTA), Education Partnership Agreement (EPA), or Information Transfer Agreement (ITA) might be more appropriate. Here are some scenarios and considerations to help you determine which T2 mechanism to use.

Testing

 If the Air Force Activity is an active participant in a project involving testing, if that project has the potential to result in the creation of new intellectual property, and if there will be subsequent collaboration in the use of the test data, use a CRADA.

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- If the Air Force Activity is an active participant in a project involving testing, if that project has the potential to result in the creation of new intellectual property, and if there will not be any subsequent collaboration in the use of the test data (although the Air Force would like to use the test data for its own purposes), use an MTA.
- If the Air Force Activity provides or operates
 the test facility but has no active collaboration
 involving use of the resulting test data, and if the
 Air Force Activity is charging a fee, and if there
 is unlikely to be any new intellectual property
 created, use a Commercial Test Agreement.
 - CTAs are not designed to deal with new intellectual property. If the potential exists for IP development, then you will need to use either a standard CRADA or MTA. If the collaborator wants to use a CTA and keep the test data confidential, then you will have to restructure the work plan to reduce the potential for IP creation.
 - You cannot use CTA funds to modify or enhance your facility, even if the collaborator agrees to finance the facility's expansion or modification (DODI 5535.11, Enclosure 2, paragraph 2(c)(1)). This is meant to prevent circumvention of the MILCON process. If you have a compelling reason why a modification or expansion would make sense and why it would be impractical or not in the Air Force's best interests to restore the facility to its original condition after the testing, then you need to check with OSD to see if you can get a waiver to enable you to use CTA funds. If you can't get a waiver and still want to modify the facility, then use a CRADA.

- If the Air Force Activity provides or operates the test facility but is not charging a fee, and/or if the Air Force wants to own or use the test data, use a Material Transfer Agreement.
 - You can use an MTA and add the "financial considerations" clause to accept funds under the MTA if this agreement works better than a CTA for the testing. A CTA requires the Air Force's direct costs to be paid, unless waived by the Activity director. The Activity may also be reimbursed for indirect costs. An MTA can be used for whatever seems appropriate.
 - MTAs can be used to cover testing by either party. We can provide an article for testing to a collaborator, or the collaborator can provide the test article to the Air Force Activity for testing. Your Activity should have MTA versions to cover each situation. Note: the collaborator can pay us for the testing, but the Air Force cannot pay the collaborator.

Use of Facility by Contractor for Commercial Purposes

If your Air Force Activity has an on-site contactor that operates your facility and wants to use your facility for commercial projects, and assuming there is availability, you can enter into a "Facility CRADA." A Facility CRADA provides conditions under which the on-site contractor can use the facility to conduct work for others. The conditions include prior approval by the Air Force Activity for each task, a percentage of the fee being paid to the Air Force Activity for wear and tear and facility maintenance, and the Air Force Activity receiving a copy of all test data generated.

Sabbaticals

If a non-Air Force professor is doing a sabbatical with the Air Force Activity, use an Education Partnership Agreement. Make sure that the EPA or the amendment covering the sabbatical has an IP clause that will define ownership and processing of joint IP, in case any is created. If the Air Force Activity is sending an Air Force S&E on sabbatical to an educational institution, you will need to use a CRADA, as this activity is not allowed under an EPA.

Software

See the separate Software Module in the T2 Handbook

8. CRADAs and SBIR

CRADAs can be used to help support current and former SBIR recipients. However, caution should be used to ensure you are adhering to all the contract rules that apply to SBIRs. Make sure you coordinate the CRADA with the SBIR focal point for the agency that owns the SBIR, or at least coordinate with your local SBIR program manager to make sure you aren't violating any rules.

Using a CRADA can help bridge the gap between technology development and commercialization. Here are some typical scenarios:

- If you are conducting tests for the SBIR company under a CRADA, and not charging them, then there are really no issues. But check anyway.
 The SBIR focal point may want to review the agreement to ensure the company isn't getting paid by a third party for tests they are getting for free from the Air Force.
- If you are charging the SBIR company, then
 the amount should be withheld from the SBIR
 funding agency and MIPR'd to your organization.
 Or, if your organization is the SBIR funding
 agency, then the funds should be withheld from

- the SBIR contract award and transferred directly to the branch in your Activity that is doing the work.
- If you are conducting tests that were initially included in the SBIR contract, but weren't completed for whatever reason, then you need to make sure the contract is completely closed out prior to signing the CRADA. If the tasks were listed in the contract, and the contract is still open, then the SBIR company could possibly come back to the Air Force and insist on being paid—despite the fact that the work was performed under a CRADA.
- Typically, any prototypes developed under an SBIR are deliverables to the Air Force. CRADAs are a great way to lend these prototypes back to the SBIR company so that they can continue to develop the technology. The Air Force has to "accept" the deliverable in order to close out the contract, so make sure you work with the Contracting Officer for the SBIR on the acceptance and close out to see if the prototype can be "accepted" without having to ship it back and forth between the company and Air Force. Small businesses don't have unlimited funds to pay for unnecessary shipping costs.

9. CRADA Appendices

- I. CRADA Checklist
- II. Air Force Model CRADA
- III. Sample Waiver Letter
- IV. Non-Domestic CRADA Process Flow Chart,
 Summary Sheet, and AFMC Form 191
- V. <u>CRADA Roles and Responsibilities</u>





1. PLAs at a Glance What's a PLA?

"PLA" stands for Patent License Agreement. PLAs are the primary technology transfer (T2) mechanism by which the inventions developed and patented by DoD labs are transferred to the private sector. A PLA is a contract that gives the licensee (usually a forprofit corporation) the right to make, use, and sell the patented invention.

Purpose.

From the DoD perspective, the purpose of PLAs is to enable full productive use of DoD inventions. By licensing these inventions to industry, they can be developed into new products and services. This helps support the defense mission, stimulates the U.S. economy, increases national technological competitiveness, and benefits the American public.

What Happens.

Under a PLA, the Air Force Activity transfers to the licensing entity the rights to make, use, and sell patented Air Force inventions in exchange for the payment of fees and royalties. Ownership of the patent remains with the Air Force.

Legal Basis.

The Bayh-Dole Act of 1980 (PL 96-517) authorized federal agencies to "apply for, obtain, and maintain patents" for federal government inventions and "grant nonexclusive, exclusive, or partially exclusive licenses" for its patented and unpatented inventions.

How PLAs Benefit the Air Force:

- Enable Air Force inventions to be converted into new products and services that the Air Force can procure to support the defense mission.
- Provide a cost-effective way to get new technology to the U.S. warfighter by leveraging private-sector capital and capabilities in final development of Air Force inventions.
- Enable the Air Force to expand its industrial base to innovative, non-traditional defense contractors, increasing the timely supply of innovative defense-related products.
- Generate revenues for Air Force Activities licensing their inventions—revenues that support the Air Force's ongoing research and development (R&D) enterprise.

How PLAs Benefit Industry:

- Provide a rapid way to acquire innovative new technology—much faster than developing it in-house.
- Are highly cost-effective, because the federal government is mandated to get its inventions into practical use and is not trying to reap profits from its R&D investments.
- Reduce the risk of new product development—Air Force inventions are already patented and may already have been developed to the working prototype stage.
- Potentially open the door to contracting opportunities for products or services based on the Air Force's in-house inventions.

2. Introduction

A. General Information

Patent license agreements (PLAs) are legally binding contracts that give licensees—usually for-profit corporations—the right to make, use, and sell the federal government's patented inventions. PLAs are the primary means by which DoD labs transfer their patented inventions to the private sector for conversion into new commercial and military products. While not as frequently used as CRADAs (which are ten times more common in the DoD lab system), PLAs are one of the most important tools in the DoD T2 toolbox.

PLAs also are one of the original T2 tools, dating back to landmark legislation in 1980, including both the Stevenson-Wydler Technology Innovation Act (PL 96-480) and the Bayh-Dole Act (PL 96-517). Together, these two acts formed the foundation of the modern technology transfer system in the United States and provided the public law that substantially governs how the federal government continues to conduct T2 today.

The Stevenson-Wydler Act (15 USC §3710), the first major U.S. technology transfer law, established that "It is the continuing responsibility of the Federal Government to ensure the full use of the results of the Nation's Federal investment in research and development. To this end the Federal Government shall strive where appropriate to transfer federally owned or originated technology to State and local governments and to the private sector." This same act required federal labs to establish "Offices of Research and Technology Applications" to carry out this new T2 mandate, and tasked their sponsoring agencies with reporting biennially to the Department of Commerce on their T2 activities and achievements.

The subsequent Bayh-Dole Act provided more specific guidance pertaining to PLAs. It authorized federal agencies to "apply for, obtain, and maintain patents or other forms of protection in the United States and in

foreign countries on inventions in which the Federal Government owns a right, title, or interest" and to "grant nonexclusive, exclusive, or partially exclusive licenses" for its inventions, "royalty-free or for royalties or other consideration...as determined appropriate in the public interest." The body of law established by this 1980 act (35 USC §207-§209) continues to govern federal agency PLAs today. This law is fully reflected in the Code of Federal Regulations, 37 CFR §404 – Licensing of Government-Owned Inventions.

As noted, PLAs can be exclusive, partially exclusive, or non-exclusive, depending on the extent to which they limit the use of the patented invention. PLAs are commonly restricted by field of use, geographic area, or term of the agreement.

Restrictions by field of use are most common. For example, a fully exclusive license for a novel Air Force laser would give the licensee exclusive use of this laser for all commercial applications, without any limitations by field of use, geography, or duration of exclusivity. On the other hand, a partially exclusive license might limit the licensee's commercial use of the laser to a particular field, such as the aerospace industry—or even a segment of this industry, such as space systems, commercial aviation, or unmanned aerial vehicles. Different companies could obtain partially exclusive licenses for other fields of use, such as in the automotive, manufacturing, construction, electronics, or oil and gas industry.

Similarly, a partially exclusive PLA might limit commercial use of the novel Air Force laser to a specific region, such as in the United States, Europe, or Asia (assuming patent coverage outside the U.S.). However, most DoD patents only cover the United States; few labs apply for foreign patents. Exceptions generally involve high-value technologies, such as medical inventions, or technologies in which certain

foreign countries have an internationally prominent manufacturing base—for example, metal processing in Germany or the semiconductor industry in Taiwan. In such cases, DoD labs might seek patent protection in a select number of foreign countries. Finally, in the case of the novel laser, the Air Force might limit the exclusivity to a specific period, such as five years, after which the partially exclusive license would revert to a non-exclusive license.

By contrast, non-exclusive licenses confer no exclusivity and licensees may be subject to significant competition from other licensees. The level of exclusivity for a given invention directly affects the number of potential licensees. Normally, there is only one exclusive license. (Federal labs are authorized to grant co-exclusive licenses to more than one entity; however, this is rare within the DoD lab system.). On the other hand, there can be multiple partially exclusive licenses and a virtually unlimited number of non-exclusive licenses.

The laws governing federal agency PLAs (35 USC §209 and 37 CFR §404) establish a clear preference for non-exclusive PLAs. Prior to granting exclusive or partially exclusive licenses, federal labs are required to give advance notice to the public and to provide adequate opportunity (at least 15 days) for other parties to file written objections. Federal labs are prevented from granting exclusive or partially exclusive licenses unless they can demonstrate that doing so is in the public interest and that the incentive of exclusivity is "reasonable and necessary" to achieve practical application of the government's invention. The level of exclusivity granted cannot be greater than necessary to realize this practical application.

Federal labs also must show that granting exclusivity will not substantially lessen competition or violate federal antitrust laws. In the case of lab inventions covered by foreign patents, federal agencies must show that an exclusive or partially exclusive license enhances the interests of the U.S. government or of "United States industry in foreign commerce."

The federal preference for non-exclusive licenses often conflicts with applications from for-profit entities, which frequently request exclusive or partially exclusive licenses. One major reason is that companies, especially small businesses and start-ups, believe that they need to have exclusive rights to new technology in order to obtain venture capital and angel investments.

On the other hand, more experienced companies and entrepreneurs may appreciate the advantages of obtaining non-exclusive licenses. First, there is no need for a public notice in the Federal Register, enabling them to obtain a non-exclusive license without alerting their competition to this action or even to the existence of the federal government patent. The result is that they can quietly develop new products and jump ahead of their competitors. Second, the financial terms are generally much more favorable and there are fewer hurdles that the federal lab must surmount to justify these non-exclusive agreements, compared to exclusive or partially exclusive PLAs. Third, non-exclusive licensees can further develop the government inventions and obtain patents on these improvements, providing the necessary protection to help block competitors.

Federal labs "normally" must grant PLAs only to applicants that contractually agree that products derived from the government-owned inventions will be "manufactured substantially" in the United States. This condition can be waived in certain cases. Finally, federal labs are required to give first preference, when granting exclusive or partially exclusive licenses, to capable "small business firms"—assuming these small business applicants are as likely as larger firms to bring the inventions to practical application.

B. Benefits

PLAs are the primary means by which Air Force Activities transfer their patented inventions to the private sector for conversion into new military and commercial products. They are one of the most important tools in the DoD T2 toolbox. PLAs support the Air Force mission in a number of important ways and also are an engine for economic development and job creation.

TechLink, DoD's national T2 partnership intermediary, has been conducting economic impact studies of DoD license agreements every three years since 2012. In 2018, it analyzed the Air Force's approximately 225 license agreements that were active during the 2000-2017 period. Licensees reported \$603 million in sales of new products and services resulting directly from the licensed technology (both patented and unpatented). This total included approximately \$245 million in confirmed sales to the U.S. military, representing the Air Force inventions that have transitioned to DoD operational use. Overall, Air Force license agreements generated some \$1.5 billion in total economic impact and created over 6,800 jobs. This economic impact from Air Force licenses has grown significantly in recent years—from around \$276 million in 2012 to \$1.5 billion by 2018.

Major benefits to the Air Force from PLAs

• Enable Air Force inventions to be put to practical use. Unless Air Force inventions are transferred to industry, they are not likely to be put to operational use by the American public or U.S. military. The Air Force is not in the business of manufacturing. It needs to transfer its inventions to industry for conversion into new products and services that can benefit the U.S. economy and also support the defense mission.

- · Provide a cost-effective way to get new technology to the U.S. warfighter. One of the most cost-effective ways that the Air Force can acquire innovative technology is through licensing its own inventions to the private sector. Only a minor part of the cost of a new defense-related product is the cost of developing the initial technology to the patent stage. Through licensing its inventions, the Air Force is able to offload the very substantial costs of transforming earlystage technologies or lab-bench prototypes into new products and services. Through licensing, industry covers the majority of the product development costs. The alternative contracting with a defense contractor for custom design and production of a defense-related product—is usually far more expensive.
- Help ensure the timely supply of innovative defense-related products. Air Force demand for goods and services usually waxes and wanes in direct response to the ebb and flow of military operations. When the U.S. military is the sole customer for a product, DoD needs to engage a defense contractor for a special manufacturing run each time there is a major military operation. This is not only expensive, but also entails long lead times. By patenting and licensing dual-use inventions, the Air Force can develop a reliable supply chain of one or more companies that are manufacturing this product on an ongoing basis for their commercial customers. This increases the likelihood of timely supply for the product when it is needed by the Air Force.

- Enable the Air Force to expand its industrial base to innovative, non-traditional defense contractors. Licensees of Air Force inventions are usually small or mid-sized companies that typically have not had previous interactions with DoD. Many are highly entrepreneurial and innovative. Often, they have capabilities that provide a substantial contribution to the Air Force defense mission. Prior to the PLA, the Air Force likely would not have known of these companies or been able to establish a relationship with them. Licensing can open the door to long-term partnerships with innovative, entrepreneurial, non-traditional partners.
- Generate revenues for the Air Force. Although the federal government's motive in establishing PLAs is to get its inventions into practical application, not to generate profits, most license agreements require an upfront payment and royalties on sales of commercial products. This provides often substantial income that can be used to support the Air Force Activity's ongoing R&D enterprise.

Major benefits to industry from PLAs

Provide a rapid way to acquire innovative new technology. It takes most companies at least three years to develop an inventive concept to the working prototype stage—assuming they have the necessary inventive skills and technical capabilities and that their R&D project is successful. Complex technologies can take significantly longer. It usually is much faster to license already developed technologies than to develop them in-house. Many companies lack inhouse R&D capabilities.

- Are highly cost-effective. All federal labs are mandated by law to attempt to transfer their inventions to the private sector so that they can achieve practical application. Labs are not trying to reap profits from their taxpayer-funded R&D. As a result, licensing terms are usually attractive, involving a relatively modest upfront payment and small running royalties on sales of products or services using the invention. Compared to the oftensubstantial R&D costs of developing new patented inventions in-house, licensing already patented inventions is highly cost-effective.
- Reduce the risk of new product development. Air Force inventions being considered for PLAs already have patent protection and many are fully reduced to practice. This greatly reduces the risk to companies that can use these inventions to develop new products or processes. By licensing already patented technologies, companies can greatly reduce the risk and much of the associated expense of new product development.
- Potentially open the door to contracting opportunities for products or services based on the Air Force's in-house inventions.
 Virtually all of these patented inventions were developed through mission-related research at Air Force Activities. As a result, many of the products or services based on these inventions have the potential to meet critical Air Force needs and could lead to sizeable contract opportunities within the U.S. military.

3. What's in a PLA?

All PLAs granted by the federal government are required to contain certain terms and conditions, including provisions (1) retaining an irrevocable, royalty-free license allowing any federal agency to practice the invention or have it practiced throughout the world by or on behalf of the U.S. government; (2) requiring periodic reports on use of the invention; and (3) allowing the federal agency to terminate the license for certain specific reasons. These include failure of the licensee to achieve practical application; failure to meet requirements for public use; breach of any covenant in the agreement; insolvency of the licensee; and failure to pay royalties. Licensees also are required to achieve practical application of the invention "within a reasonable time..."

This "What's in a PLA?" section examines three model Air Force PLAs—exclusive, partially exclusive, and non-exclusive. These models were developed for the Air Force's "Express Licensing" initiative (discussed further below) for use by all Air Force Activities. Express license agreements are relatively streamlined, compared to some of the older regular license templates in use by individual Air Force Activities. They are used here because they are standardized for all Air Force Activities and because they address the main issues common to all Air Force license agreements.

Each of the three model Air Force PLAs (Appendix IV) contain a Preamble, a "Witnesseth" recital section, seventeen different Articles, and a Signature Page. Some of these sections require customized input for each specific license agreement, and some are standard boilerplate sections that rarely if ever change. To help guide ORTAs in the drafting of PLAs, each of these sections is summarized and the **required inputs are indicated in bold text.**

The first PLA type to be considered is an exclusive PLA,

followed by partially exclusive and non-exclusive PLAs. Most of the comments pertaining to exclusive PLAs also apply to partially exclusive and non-exclusive PLAs. To avoid repetition, only the differences are noted in the subsequent guides to drafting partially exclusive and non-exclusive licenses.

A. Exclusive License Preamble

The name and address of the licensee are entered into the Preamble. The Secretary of the Air Force is the licensor. The licensor is subsequently referred to as the "AIR FORCE" and the company or other entity licensing the technology is referred to simply as the "LICENSEE."

Witnesseth Section

The names of the Air Force inventors are entered in this section, followed by a statement that these inventors have fully assigned their rights to the Air Force. Subsequently, the inventors are referred to simply as the "INVENTORS." Next, this section cites the legal authorities authorizing licensing of government-owned inventions and affirms that granting this license will not substantially lessen competition or be in conflict with antitrust laws. It also states that the licensee wishes to secure an exclusive license.

Next, this section cites the legal authorities that refer to the licensee's development or commercialization plan and confirm that this plan has been submitted. The date of the plan is entered (normally, the date that the application was signed by the applicant). The Air Force attests that it has considered the capabilities of the licensee to achieve practical application of the invention and has found the licensee to be a responsible party and that granting the license would be in the public interest.

The Air Force confirms that it has given advance public notice of this intended exclusive PLA in the

Federal Register and provided adequate opportunity for written objections. The date of the public notice is entered. The remainder of the recitals attest to the Air Force's determination that the public interest will be served by granting this license; exclusive licensing is a "reasonable and necessary incentive" to achieve practical application or public use; the level of exclusivity granted is not greater than reasonably necessary and will not substantially lessen competition or violate antitrust laws; preference was given to small business firms; and that the agreement has considered the "enhancement of interests" of the federal government or U.S. industry in foreign commerce.

The section concludes by stating that the Air Force and licensee are in agreement with the following Articles.

Article 1 - Definitions

The key legal terms used in the agreement are defined in Article 1. ORTAs using this agreement should familiarize themselves with these definitions.

The definition of the "INVENTION" requires entry of the title of the invention disclosure(s), the Air Force docket number(s), the U.S. patent application serial number(s) and filing date(s), and the U.S. patent number(s) and date(s) of issuance. Many PLAs include multiple separate pieces of intellectual property, even extensive suites of patents.

Note that the definition of "FIELD OF USE" in this agreement (clause 1.16) means "all fields." This provides the grant of full exclusivity.

Article 2 - License Grant

This section clearly states the rights that are being granted to the licensee. It consists of standard terms for an exclusive license and should not be changed.

Article 3 - Royalties and Royalty Report

The PLA's financial terms are fully covered in Article 3. ORTAs should enter the upfront nonrefundable license fee that has been negotiated with the licensee. when this payment is due (normally 30 days after the effective date of the agreement), the running royalty rate (for example, 4.0%) on the licensee's gross revenues, the Air Force's share of sublicensing revenues (typically, 50%), the minimum yearly royalty amount (to incentivize the licensee to complete its development or commercialization plan in a timely way and to guarantee at least some ongoing licensing revenue to the Air Force Activity), and when these royalty and sublicensing payments are due (for example, within two months following the end of each agreement year). The "agreement year" is a somewhat tricky concept that is explained in the PLA definitions and needs to be fully understood by both the ORTA and the licensee.

This section lists the name and mail address of the Air Force party to which payments should be made by the licensee. It also provides the website address through which payments can be submitted electronically. In addition, this section explains what is required to be included in the royalty report that the licensee must submit annually. It states that sales to or for the U.S. government are not subject to the payment of royalties, and also that the maximum sales price of invention-related products to the government "shall not exceed the minimum sales price" of these products to any non-government entity.

The final paragraph in this section addresses the steps that the Air Force can take if the licensee fails to make the required timely payments, including sending a written notice requiring all overdue payments to be received by a certain date (for example, a month after the date of the written notice), levying a surcharge on overdue payments, and ultimately terminating the

agreement. If desired, ORTAs can adjust these terms addressing overdue payments by **entering different deadlines and different surcharge amounts**.

Article 4 – Records, Books, and Examination

This section should not be changed.

Article 5 – Term

This section should not be changed. The Effective Date does not need to be entered because it has been defined as the date that the Air Force signs the agreement on the Signature Page.

Article 6 - Licensee Performance

The "Licensee Performance" section should clearly state the terms negotiated between the Air Force Activity and the licensee for commercialization of the Air Force invention. These terms require careful consideration by the Air Force Activity and consultation with the licensee. Terms should draw on the licensee's development or commercialization plan and should be tailored to the specific invention being licensed. Important considerations include how much additional development is required, whether regulatory approvals are needed, the market environment for the technology, and the resources and capabilities of the company. Unlike the proposed terms and milestones provided by the company in its development or commercialization plan, the terms and milestones in this section will be legally binding.

In this section, ORTAs should enter the deadline for achieving practical application of the invention (for example, 20 months after the effective date), product sales to non-U.S. government entities (for example, 36 months), and, if desired, a required threshold level of sales (for example, \$200,000 within sixty months). One of the most important remaining clauses in this section commits the licensee to "substantially manufacture" in the United States the products based on the invention,

per 35 USC §209 and 37 CFR §404. This condition can be waived if "reasonable" efforts to obtain licensees willing to meet this condition have been unsuccessful or if U.S. manufacture is not commercially feasible.

Article 7 - Sublicenses

This section should not be changed.

Article 8 – Patent Marking and Non-Endorsement

This section should not be changed.

Article 9 - Reservation of Rights

This section should not be changed. In accordance with 35 USC §209 and 37 CFR §404, Article 9 retains for the U.S. government an irrevocable, royalty-free license to the licensed technology, allowing any federal agency to practice the invention or to have it practiced by or on behalf of the U.S. government.

Article 10 – Representations and Warranties

This section should not be changed.

Article 11 – Progress Reports

Periodic progress reports are required from all licensees of U.S. government inventions, per 35 USC §209 and 37 CFR §404. These written reports should address efforts to achieve practical application of the Air Force invention and subsequent efforts to make the benefits of the invention accessible to the public. ORTAs should state when the first progress report and subsequent reports are due (for example, two months after the end of the first "license year" and annually thereafter).

Article 12 – Modification and Termination

Normally, this section should not be changed. However, if desired, ORTAs can revise the deadline for payment of all accrued past amounts owed to the Air Force following termination of the agreement (for example, changing the deadline from the two months stated in the model agreement to three months).

Article 13 – Litigation

Normally, this section should not be changed.

Article 14 - Patent Fees

ORTAs should enter the amounts of the annual patent fees and the deadlines for payments in this section, in consultation with their patent counsel. While patent fees are not required by law, it its standard practice to charge these fees to cover the Air Force's patent costs.

Article 15 – Export Controls

This section should not be changed.

Article 16 - General Terms and Provisions

This section should not be changed.

Article 17 - Notices

Enter the names and contact information for the Air Force and licensee key points of contact in this section.

Signature Page

On the Signature Page, ORTAs need to again enter the patent or patent application number(s) and associated date(s) of the invention(s) being licensed by the Air Force and also enter the names and contact information of the duly authorized representative of the licensee and the Air Force Activity. The PLA is now ready for final review and signature.

B. Partially Exclusive License

Usually, an exclusive and a partially exclusive PLA for a given Air Force invention differ only with regard to the fields of use granted by these agreements and the related financial terms. For example, in the model exclusive PLA in Appendix IV, the "FIELD OF USE" defined in Section 1.16 is "all fields," whereas in this same section in the partially exclusive PLA, it is "aerospace." Note: this partially exclusive license could

be even more specific than "aerospace" as to the field of use—for example, by limiting the use to a segment of this industry, such as space systems, commercial aviation, or unmanned aerial vehicles. ORTAs should enter the agreed-upon field of use for the partially exclusive PLA in Section 1.16.

Alternatively, a partially exclusive license might restrict use of the Air Force invention to a specific geographic region. In this case, ORTAs should **enter the agreed-upon geographic area** in Section 1.15, "TERRITORY." If the invention is protected only by a U.S. patent, the stated territory could be a defined region within the United States (including its territories and possessions). However, if the invention also had foreign patent protection, the territory listed could be some combination of the U.S. and foreign countries where this protection prevailed.

The term of most PLAs is from the effective date of the agreement until the expiration date of the patent. However, besides limiting exclusivity by fields of use and geographic area, the Air Force can limit the duration of the exclusivity it offers in the PLA. For example, it might decide to offer a company only five years of exclusivity to the invention, after which the license would revert to a non-exclusive license. This would give the licensee time to establish a new product based on the invention without having to fight off competition; however, it would also enable the Air Force to eventually license the invention to other companies. In this type of partially exclusive PLA, ORTAs should enter the agreed-upon duration of exclusivity in Article 5 ("TERM"), along with a statement that after that date, the license would become non-exclusive.

The financial terms offered by the Air Force usually reflect the extent of the field of use, geographic coverage, or exclusivity period. Exclusive PLAs are typically more expensive than partially exclusive PLAs.

For example, in the model PLAs in Appendix IV, the royalty terms (in Article 3) for the exclusive license are \$4,000 for the nonrefundable license fee, 4.0% for the running royalty, and \$2,500 for the minimum annual royalty. For the partially exclusive license, the comparable terms are \$3,000, 3.0%, and \$1,500. ORTAs should **enter the financial terms negotiated with the licensee** in Article 3 of the partially exclusive PLA.

The required annual patent fees shown in Article 14 in these exclusive and partially exclusive PLAs are identical. However, if there were several partially exclusive PLAs, the Air Force could decide to reduce the annual patent fees for each licensee. ORTAs should enter the patent fees negotiated with the licensee in Article 14 of the partially exclusive PLA.

C. Non-Exclusive License

There are several significant ways that non-exclusive PLAs differ from exclusive and partially exclusive PLAs. The first and most significant way is that non-exclusive PLAs provide no exclusivity. The licensee is only granted the right to "make, have made, use, lease, sell, or otherwise dispose of" products based on the invention. The licensee accepts the risk that the Air Force will license the invention non-exclusively to other parties and that it could face competition in commercialization of this invention.

A second difference is that non-exclusive PLAs normally do not convey a right to "sublicense" the invention to third parties, to enable these third parties to practice the invention, generating revenues for the licensee. The model Air Force non-exclusive PLA provided in Appendix IV contains no mention of sublicenses. However, some Air Force Activities allow sublicensing under non-exclusive PLAs.

Third, non-exclusive PLAs generally require lower license fees and royalties, reflecting the lack of exclusivity. For example, in the model PLAs in Appendix IV, the royalty terms (Article 3) for a non-exclusive license are \$2,000 for the nonrefundable license fee, 2.0% for the running royalty, and \$1,000 for the minimum annual royalty. By contrast, the stated terms for the exclusive license example are \$4,000 for the nonrefundable license fee, 4.0% for the running royalty, and \$2,500 for the minimum annual royalty. The required patent fees are also lower in these examples—\$1,000 annually for a non-exclusive license versus \$1,500 for an exclusive license.

One key way that non-exclusive licenses are increasingly similar to partially exclusive licenses is in having restrictions on the field of use. For example, in both the partially exclusive and non-exclusive PLAs in Appendix IV, the "FIELD OF USE" (Section 1) is listed as "aerospace." It is good practice in a non-exclusive license to limit the field of use to one in which the licensee can realistically achieve "practical application." This enables the Air Force to subsequently license exclusive or partially exclusive rights for other fields of use, to help maximize the invention's benefit to the defense mission and American public.

4. PLA Process

Establishing a PLA requires careful execution of a number of different steps, described in this section. Although these steps are presented sequentially, in reality, many of them need to be undertaken simultaneously. The steps generally fall into six different phases: Marketing, Preliminary, Evaluation, Negotiation, Internal Review, and Execution. Key steps or activities in each of these phases are summarized below. Several different entities are involved in establishing PLAs besides the ORTA, including the S&E inventors, legal office, AFRL/SB, and TechLink or other PIA. Appendix VI lists the roles and responsibilities of each of these entities.

Phase 1 - Marketing

Marketing is an essential prelude to most PLAs. During this phase, the Air Force markets its patented and patent-pending inventions to potential licensees. This may include developing a licensing strategy; issuing press releases featuring select Air Force inventions; creating marketing or technology opportunity sheets ("tech ops") that summarize the features and benefits of these inventions; posting the licensing opportunities on government and affiliated websites, such as techlinkcenter.org; using partnership intermediaries (PIAs) such as TechLink to directly contact companies that would potentially be interested; participating in trade shows to publicize the inventions; and posting ads in industry journals.

Phase 2 – Preliminary

The next phase frequently begins when the Air Force Activity receives an expression of interest from a potential licensee, such as an email or telephone call. An important first step is to confirm with the potential licensee which patent(s), patent applications(s), and/ or other intellectual property they are requesting to include in the license agreement.

Then, ORTAs should immediately conduct research to determine that all of the IP requested is available for licensing and is unencumbered. This involves confirming that all of the inventors (both Air Force and contractors) have assigned their rights to the invention to the Air Force. If any inventor has not yet assigned his/her rights to the Air Force, this assignment needs to happen before the PLA can proceed. If the request is for an exclusive or partially exclusive license and another party (such as a university or other federal agency) shares the title to any of the inventions requested by the prospective licensee, the ORTA needs to confirm that a joint ownership agreement (JOA) is in place with the other party to allow the Air Force to take the lead

on establishing a license agreement.

In addition, the ORTA needs to confirm that none of the patents has expired or lapsed because the Air Force neglected to pay, or elected not to pay, the patent maintenance fees. The ORTA also should confirm that the desired pieces of IP have not previously been exclusively or partially exclusively licensed to another party.

Another essential preliminary step is to confirm the status of the business entity interested in a license—that it is legally registered and in good standing in the state in which it claims to be incorporated. This is usually a quick search conducted through that state's Secretary of State or Department of Commerce website.

The ORTA should fully explain the licensing process to the prospective licensee, including the need for a complete development or commercialization plan. To follow up, it should send the potential licensee the Air Force PLA Application Form (Appendix II) and Commercialization Plan Guideline (Appendix III) to guide it in developing a complete application. This is the time to engage the services of TechLink, if it is not already involved via its technology marketing efforts. TechLink assists DoD labs with all aspects of licensing their technologies (see complete description in Section 5 below). A key part of TechLink assistance is helping prospective licensees to develop complete license applications and commercialization plans, so they fully meet lab requirements. TechLink's services are funded through the annual Air Force budget, so there is no cost to an individual organization for using these services.

This phase ends when all of these internal steps have been completed and the Air Force Activity receives a license application and commercialization plan.

Phase 3 - Evaluation

The legal authorities for federal government licensing, 35 USC §209 and 37 CFR §404, provide clear guidance on how Air Force Activities should evaluate applications for PLAs. The first task is to ensure that the Air Force PLA Application Form is complete and that all of the information requested in the Commercialization Plan Guideline has been provided. The commercialization plan must clearly indicate how the prospective licensee intends to develop and commercialize the Air Force invention. Key pieces of information include the amount and source of capital that the prospective licensee plans to invest to bring the invention to practical application. The commercialization plan also should provide deadlines by which the prospective licensee plans to achieve practical application of the invention, including both sales to the U.S. government (if any) and to non-U.S. government entities. Finally, it must show that the applicant is capable of fulfilling this plan. If any essential information is missing, the ORTA should immediately notify the prospective licensee of the deficiencies and request that these deficiencies be addressed to enable the application to proceed.

The prospective licensee's commercialization plan must satisfy the U.S. manufacturing requirements in federal statute. As earlier noted, federal labs "normally" must grant PLAs only to applicants that contractually agree that products derived from the federally owned inventions will be "manufactured substantially" in the United States. This condition can be waived if "reasonable" efforts to obtain licensees willing to meet this condition have been unsuccessful or if U.S. manufacture is not commercially feasible—for example, because of the relatively high costs of U.S. versus foreign manufacture or because the manufacturing infrastructure and supply chain for that particular technology is located almost exclusively overseas.

Applications requesting exclusive or partially exclusive

PLAs must clearly justify the need for this exclusivity. The applicant's commercialization plan needs to adequately address this issue. Air Force Activities cannot grant exclusive or partially exclusive licenses unless they can demonstrate that doing so is in the public interest and will not substantially lessen competition or violate federal antitrust laws. The level of exclusivity requested must be deemed by the Air Force to be "reasonable and necessary" to achieve practical application of the invention. It cannot be any greater than necessary. If the Air Force invention is covered by foreign patents, the Activity must demonstrate how granting exclusivity enhances the interests of the U.S. government or U.S. industry's competitive position in foreign trade.

As previously noted, federal labs are required to give first preference, when granting exclusive or partially exclusive licenses, to capable "small business firms." If the application requesting exclusivity is from a small business concern, it needs to demonstrate that it is capable of bringing the Air Force invention to practical application in accordance with its commercialization plan. It also needs to show that it is just as likely as a larger firm to achieve this success.

The Air Force Activity should use Small Business Administration (SBA) rules to determine the size category of the business. Normally, the "small business" category is determined by the number of employees—500 or less. However, SBA size standards are keyed to North American Industry Classification System (NAICS) codes. In some industries, the company size for federal government purposes is determined by the company's average annual receipts rather than its number of employees. In other words, a business with fewer than 500 employees but large revenues could be considered a large business, and one with many more than 500 employees might still qualify as a small business. The SBA maintains a "Table of Small Business Size Standards" that is matched to

NAICS codes and is regularly updated, which can be consulted in determining company size.

This evaluation phase is frequently an iterative backand-forth information gathering process. Applicants frequently need to revise their commercialization plans to fully address federal requirements for granting licenses, particularly exclusive and non-exclusive PLAs. Once the ORTA is satisfied with the application, it can initiate the negotiation process.

Phase 4 - Negotiation

During the negotiation phase, the ORTA should have a frank discussion with the prospective licensee about how it plans to commercialize the Air Force invention(s) and the fields of use and level of exclusivity that it needs. Companies and entrepreneurs often request more fields of use and greater exclusivity than they truly need or can realistically use. If these requested fields of use and exclusivity are not actually needed by the licensee, the Air Force is essentially squandering further licensing opportunities for the invention and preventing this invention from achieving its full commercial potential.

ORTAs should explain the extra hurdles the Air Force needs to overcome in order to grant exclusive or partially exclusive licenses (37 CFR §404), including the need for public notice, which can alert competitors to the invention and the licensee's product development efforts. The benefits of non-exclusive licenses also should be explained, including the absence of a public "intent to grant" notice and more favorable financial terms. Also, as with all PLAs, the non-exclusive licensee has the opportunity to obtain patent protection on any improvements that it makes to the Air Force invention.

If ORTAs have not already done so, they should confirm that the final negotiated fields of use and level of exclusivity are available for licensing. Once the fields of use and level of exclusivity issues have been finalized, the ORTA should negotiate the financial terms with the prospective licensee. These terms should reflect the extent of the fields of use and the level of exclusivity. Terms include the upfront licensing fee, royalty percentage, annual minimum royalty amount, annual patent fees, sublicensing terms (if exclusive or partially exclusive PLAs), deadline for achieving practical application, and other financial aspects of licensee performance.

TechLinkregularly assists during the negotiation process as an objective, third-party facilitator. This includes helping labs and prospective licensees determine the necessary levels of exclusivity—full, partial, or non-exclusive—to achieve the licensee's commercial goals and yet protect the interests of federal government. It also includes determining appropriate financial terms based on industry standards and DoD lab experience, including the nearly 800 DoD license agreements that TechLink has facilitated.

Phase 5 - Internal Review

At this point, the ORTA prepares a draft PLA, using the previous "What's in a PLA?" section as a guide and incorporating all of the negotiated terms. It then circulates this PLA draft within the government for review, following the Air Force Activity's established procedures. Each Air Force Activity has its own internal review process, which need to be followed. At a minimum, parties needing to review the draft PLA will include the ORTA and the Activity's legal office.

If the PLA is exclusive or partially exclusive, the ORTA should immediately prepare and submit the required "intent to grant" notice for publication in the Federal Register. If the prospective licensee is a "foreign controlled or influenced" entity, the Air Force Activity must obtain clearance to proceed from the U.S. Trade Representative. This clearance is usually readily

forthcoming if the foreign country has friendly relations with the U.S.

The legal office will review the draft PLA and determine if the PLA is legally sufficient. At this point, the ORTA can assign the PLA a number and send the draft PLA to the licensee for review. If the ORTA has kept the licensee fully informed, this review should proceed smoothly. All of the contentious issues should have previously been resolved. If necessary, the ORTA can answer any remaining questions or address still outstanding issues.

Phase 6 - Execution

Assuming no internal objections to the PLA or challenges from outside parties in response to the "intent to grant" notice (in the case of exclusive or partially exclusive licenses), the licensee can be given the go-ahead to execute the agreement. The licensee's duly authorized representative should be instructed to send a PDF of the signed PLA by email to the ORTA.

When the signed PLA package has been received from the licensee, it should be routed within the Air Force for final approvals and signature, in accordance with the Activity's established process. The Air Force Activity's duly authorized representative will be the final signature.

The ORTA should then email a PDF of the signed PLA to the licensee and retain a copy in a file that should also contain copies of the invention disclosure, the patent application or patent (if issued), the inventor assignment(s), and the "intent to grant" notice. A PDF copy of the PLA should also be sent to the Activity's legal office and AFRL/SB.

The PLA is considered to be in effect as soon as it has been signed by the Air Force's duly authorized representative. The PLA's "effective date" is the date of signing by the Air Force. This execution phase ends as soon as the licensee has paid the negotiated

nonrefundable license fee in accordance with Article 3 in the PLA, usually within 30 days of the agreement's effective date.

Phase 7 - Post Execution

The ORTA is responsible for ensuring compliance with the terms of the license. This includes ensuring that royalties and reports are submitted by the licensee, as required by the license. The ORTA must read the annual reports to verify that the royalty payments are the appropriate amount. In particular, you need to watch out for licensees only sending in minimum royalty payments when their sales show that they should be sending higher amounts.

AFRL/SB is responsible for collecting the royalty payments and processing them for disbursement. AFRL/SB should notify the ORTA when royalty checks are received. The ORTA must ensure that the licensee knows how important it is to ensure that the checks include the PLA number and the organization from which the patent is licensed so that the payments can be processed appropriately. AFRL/SB will prepare a disbursement memo stating the amount to be sent to each inventor (by name), and the amount to be sent to their corresponding organization. The ORTA will have to coordinate on the disbursement memos to verify the money is being sent to the correct inventors and laboratory.

If royalty payments are not being submitted appropriately, then the ORTA should first notify the licensee of the delinquency and provide an opportunity for the licensee to correct the deficiency. If it still does not submit the royalty payments, then the ORTA should notify AFRL/SB and they will begin collection procedures.

5. TechLink Assistance with PLAs

TechLink, the DoD's national T2 partnership intermediary (PIA), has been assisting DoD labs with all aspects of licensing their inventions since 2000. In fact, by the end of 2019, TechLink had helped DoD labs establish nearly 800 license agreements with industry. These license agreements involve over 60 DoD labs. TechLink currently brokers or facilitates over 70 percent of DoD PLAs, including more than 90 percent of Air Force PLAs and invention licenses. Its services are funded through a line item in the annual Air Force budget.

As part of its licensing assistance, TechLink manages the only public-access, continuously updated database of all active DoD patents issued since the year 2000, accessible at *techlinkcenter.org*. Companies and entrepreneurs seeking licensing opportunities can search this database by keywords, technology area, and DoD lab. This database serves as the platform for TechLink's nationwide marketing of DoD inventions.

Specifically, TechLink assistance to Air Force Activities includes:

- Helping develop effective marketing and licensing strategies for their inventions
- Conducting focused national marketing of Air Force inventions
- Identifying qualified companies and entrepreneurs interested in licensing these inventions
- Helping companies and entrepreneurs with their license applications and commercialization plans, to ensure that they fully meet Air Force requirements
- Helping Air Force Activities establish appropriate financial terms based on industry standards and historic DoD lab experience
- Helping Air Force Activities and prospective

- licensees determine the necessary levels of exclusivity—full, partial, or non-exclusive—to maximize the benefits of Air Force inventions to the defense mission and American public
- Helping Air Force Activities draft license agreements
- Assisting with license negotiations as an objective, third-party facilitator
- Facilitating communications between the Air Force Activity and the prospective licensee throughout the licensing process, to help ensure mutually acceptable agreements and to increase the likelihood of practical application of the Air Force inventions.

6. "Express Licensing"

TechLink has been working closely with Air Force and other DoD labs since 2018 to establish "Express Licensing" to accelerate the overall licensing process. Traditionally, it has typically taken six to nine months to establish a PLA with DoD labs—sometimes up to 12 months. This is regarded by industry as a disincentive to licensing from DoD. The Express Licensing goal is to reduce the licensing process to only a few weeks. By enabling licensing to take place at the "speed of business," more DoD inventions are expected to be licensed and achieve practical application.

Companies and entrepreneurs who search the techlinkcenter.org website for Air Force technologies will discover the many inventions have been approved for Express Licensing. In fact, they can apply a filter to screen out all non-Express Licensing inventions. The patents covering these inventions can be downloaded. In addition, most (the "Featured" inventions) have additional downloadable materials, such as technical papers, peer-reviewed articles, PowerPoint presentations, test data, illustrations of the invention, or marketing sheets.

If a technology of interest is discovered, individuals clicking the Apply button will immediately see prenegotiated financial terms for each available level of exclusivity—non-exclusive, partially exclusive, and exclusive. These terms include the license execution fee, the royalty rate on gross sales, the minimum annual royalty, the sublicensing passthrough royalty rate, and the annual patent fee. Prospective licensees know in advance exactly what the invention will cost for their desired level of exclusivity.

Should they decide to proceed, they can immediately apply online for a PLA. The online application uses the license agreement templates that have been preapproved by the Air Force for each level of exclusivity (those included in Appendix IV). All of these templates meet all statutory requirements for licensing federal inventions. The online application process autopopulates these PLA agreements, which can be downloaded as PDFs. The portal also enables applicants to complete a fully compliant commercialization plan online, which is also downloadable as a PDF. When completed, the Air Force Activity has all the information that it needs to evaluate the license application. The Express Licensing process is customizable to meet the workflow and approval requirements of each individual Air Force Activity, so they can retain their established PLA review procedures.

The Express Licensing process, by consolidating all the information in an easily accessible shared location, accelerates the Air Force Activity's evaluation of the license application and facilitates communications with the applicant. This process is expected to increasingly become more widely used within the Air Force and DoD

lab system. It should enable more Air Force inventions to be licensed and achieve practical application.

7. PLA Appendices

- I. PLA Checklist
- II. Air Force PLA Application Form
- III. Commercialization Plan Guideline
- IV. Model Air Force PLAs Exclusive, Partially Exclusive, and Non-Exclusive

Exclusive

Partially Exclusive

Non-Exclusive

- V. Code of Federal Regulations, 37 CFR §404 Licensing of Government-Owned Inventions
- VI. PLA Roles and Responsibilities

Software Agreements

Software Agreements

1. Software Agreements at a Glance

What are Software Agreements?

"Software agreements," as the term is used here, refers to a set of seven different technology transfer (T2) agreements designed to enable both sharing and licensing of software from the Air Force as well as collaborative development of new software. Some of these agreements are based on traditional T2 mechanisms and others are newer agreements specifically created for transfer of software technology.

Purpose.

From the Air Force perspective, the purpose of establishing software agreements is to:

- fulfill the legal mandate of transferring its software-related developments to non-federal parties to ensure the full use of the nation's federal R&D investment:
- commercialize existing Air Force software to benefit the U.S. military and national economy; and
- collaborate with outside parties to help develop software for Air Force applications.

What Happens.

Using software agreements, the Air Force Activity share software and software documentation with other parties for research and development (R&D) or commercial purposes.

Legal Basis.

Software agreements are based on well-established law, including the following: The Bayh-Dole Act of 1980, which authorized federal agencies to patent inventions

and grant licenses for these inventions; the Federal Technology Transfer Act of 1986, which gave federal labs the authority to enter into R&D collaborations with public, private, and nonprofit organizations; the 2014 National Defense Authorization Act, Section 801, which specifically authorized Department of Defense (DoD) labs to grant licenses to other parties for software and software documentation; and 10 USC §2539b, which enables DoD labs to lend, give, or sell software to other parties.

How Software Agreements Benefit the Air Force:

- Enable Air Force-originated or AF-developed software to be converted into new products and services that the Air Force can procure to support the defense mission.
- Enable the Air Force to leverage outside expertise and resources to defray the costs and expedite the development of new software to meet critical Air Force needs.
- Generate revenues for Air Force labs through licensing of their software inventions.

How Software Agreements Benefit Industry:

- Provide a rapid, cost-effective way to acquire innovative new software—much faster and less expensive than developing it solely inhouse.
- Enable companies to develop innovative new software by collaborating with Air Force experts in a protected environment.
- Enable companies to have their software innovations evaluated by the Air Force and receive feedback on desired features or improvements for Air Force applications.

SOFTWARE AGREEMENTS

2. Overview

A. General Information

The term "software agreements," as used in this handbook, refers to a **set of seven different legally binding agreements** designed to enable transfer, development, and/or commercialization of software-related technologies. All of these agreements are based on well-established T2 legislation. Some are adaptations of traditional T2 mechanisms, such as patent license agreements and CRADAs. Others are newer mechanisms specifically designed for transfer of software, such as open source licenses and information transfer agreements (ITAs). All seven agreement types are important tools in the Air Force T2 toolbox. Software represents a major growth area in technology transfer throughout DoD.

Like all federal T2 mechanisms, the Air Force's software agreements are based on a foundation of landmark legislation passed in 1980, including the Stevenson-Wydler Technology Innovation Act (PL 96-480) and the Bayh-Dole Act (PL 96-517). The Stevenson-Wydler Act (codified in 15 USC §3710) established that "It is the continuing responsibility of the Federal Government to ensure the full use of the results of the Nation's Federal investment in research and development" and mandated that the government "strive where appropriate to transfer federally owned or originated technology to State and local governments and to the private sector." The subsequent Bayh-Dole Act (codified in 35 USC §207) authorized federal agencies to "apply for, obtain, and maintain patents or other forms of protection...on inventions in which the Federal Government owns a right, title, or interest" and to "grant nonexclusive, exclusive, or partially exclusive licenses" for its inventions—either for royalties or royalty-free. Together, these laws establish the foundation for all licensing of federally developed technologies, including software.

To specifically provide for licensing of DoD-developed software, Section 801 was inserted in the 2014 National Defense Authorization Act (PL 113-66). Titled "Enhanced Transfer of Technology Developed at Department of Defense Laboratories," Section 801 authorizes DoD labs to grant nonexclusive, exclusive, or partially exclusive licenses to other parties for computer software and related software documentation developed in those labs. These licenses can either be royalty bearing or royalty free. This section closely resembles 35 USC §207 but is specific to DoD and focused entirely on software. It specifies which software can be licensed, the conditions under which it can be licensed, and the precautions that need to be taken to prevent unauthorized disclosure of ITAR-controlled or classified software.

Sharing of DoD-developed software with other parties is specifically authorized by 10 USC §2539b. This statute allows DoD, when "in the interest of national defense," to "sell, rent, lend, or give samples, drawings, and manufacturing or other information...to any person or entity" and "make available to any person or entity, at an appropriate fee, the services of any government laboratory, center, range, or other testing facility for the testing of materials, equipment, models,

computer software, and other items." This statute provides the legal authority for the Air Force's information transfer agreements (ITAs), which enable AF Activities to share government-developed or government-owned software with non-federal parties while maintaining control of the software. ITAs are designed to control who has access to the subject software packages and what they can do with this software.

The Federal Technology Transfer Act of 1986 (PL 99-502) gave federal labs the authority to enter into cooperative R&D projects with public, private, and nonprofit organizations. Congress's intent was to

promote the development of new technologies and their transfer to the marketplace to help ensure national technological competitiveness. This act enables an Air Force Activity to engage in software-related R&D with non-AF parties in a protected environment. The AF Activity and the CRADA partner can share personnel, services, facilities, equipment, intellectual property, and other resources. While the AF Activity cannot provide funding to a non-federal partner, a CRADA partner can provide funding to the AF Activity—for example, to reimburse the cost of equipment use. Current CRADA legislation is codified in 15 USC §3710a.

B. Types of Software Agreements

growth area in T2 Software represents a major throughout the Air Force and the entire federal government. Multiple T2 agreement types have been created to enable licensing of Air Force-developed software as well as collaborative development of new software. Some of these are based on traditional T2 mechanisms and others are newer agreements specifically created for transfer of software technology. Each of these agreement types has unique characteristics designed to fit different circumstances and T2 objectives. Seven different software agreements are explained in this module. Collectively, these seven agreement types represent an important set of tools in the Air Force T2 toolbox. Summaries of these seven different software agreement types follow:

1) Patent License Agreement (PLA)

PLAs enable licensing of patented Air Force software to other parties, usually to companies for commercial use, in exchange for royalties. PLAs involving software can be exclusive, partially exclusive, or nonexclusive. PLAs are specifically authorized by the Stevenson-Wydler and Bayh-Dole acts (PLs 96-480 and 96-517).

2) Software License as Vendor

This type of agreement is designed for nonexclusive licensing of unpatented software to multiple parties, usually to companies for commercial use, in exchange for royalties. It is used when the Air Force wants to maintain and continue supporting the licensed software package. Software licenses are authorized by the Stevenson-Wydler Act (PL 96-480) and Section 801 of the 2014 National Defense Authorization Act (PL 113-66).

3) Software License to Distributor

This type of agreement is designed for exclusive or partially exclusive licensing of unpatented software to a limited number of distributors, usually in exchange for royalties. It is used when the Air Force wants to offload ongoing technical support of the licensed software package. The licensee(s), usually for-profit businesses, sublicense the software to other parties and are responsible for maintaining and upgrading it. This type of agreement closely resembles the above software license and is similarly authorized by the Stevenson-Wydler Act (PL 96-480) and Section 801 of the 2014 National Defense Authorization Act (PL 113-66).

4) Open Source License

Open source license agreements enable the Air Force Activity to openly share software packages with other parties with few controls or restrictions. Open source licenses are used in cases in which there is no ongoing technical support for the software and the Air Force does not expect royalties. The software cannot contain ITAR-restricted or classified information and must be cleared for public release by the AF Activity's public affairs office. These open source software licenses are authorized by the Stevenson-Wydler Act's mandate (PL 96-480) that the federal government should strive to transfer federally owned or originated

technology to non-federal parties to ensure the full use of the nation's federal R&D investment.

5) Unilateral Open Source License

This variation on the open source software license is used when the Air Force wants to track use of the open source code and know who is using its software package. Unlike the open source software license, the unilateral license requires signatures from recipients of the software and these licensees do not have the right to distribute or redistribute the original Air Force software package. The software cannot contain ITAR-restricted or classified information and must be cleared for public release by the AF Activity's public affairs office. Like general open source licenses, these unilateral licenses are authorized by the Stevenson-Wydler Act (PL 96-480).

6) Information Transfer Agreement (ITA)

ITAs enable the Air Force to share government-developed or government-owned software with non-federal parties while maintaining control of the software. The other parties can use the software and participate in its ongoing development, testing, and evaluation but cannot normally publish or sell the software. ITAs are authorized by 10 USC §2539b.

7) CRADA

CRADAs enable an Air Force Activity to collaborate on software-related R&D with outside parties, such as companies and universities. They allow the Air Force to leverage the expertise and resources of these outside parties, helping to expedite new software development and defray the costs of this development. CRADAs are authorized under 15 USC §3710a. They can include terms to allow the collaborator to become a licensee.

C. Benefits of Software Agreements

Software agreements support the Air Force mission in a number of important ways and also are an engine for economic development and job creation. Benefits from these agreements accrue to both to the Air Force and its T2 partner. Major benefits to each party are summarized below:

Major Benefits to the Air Force from Software Agreements

- Enable Air Force software to be put to practical use. Software agreements enable Air Force software to achieve widespread practical application. Unless Air Force software-related inventions or developments are transferred to industry, they are not likely to achieve broad operational use by the American public or U.S. military. The Air Force is not in the business of developing and selling commercial-grade software. It needs to transfer this software to industry for final development and conversion into new products and services that can benefit the U.S. economy and also support the defense mission. Transferring its software for final development also provides substantial costsavings to the Air Force.
- Enable the Air Force to expedite and reduce the cost of new software development.
 Software agreements enable the Air Force to leverage outside expertise and resources in developing new software to meet critical Air Force needs, which accelerates this development and helps defray its costs.
- Enable the Air Force to expand its industrial and R&D base. Software agreements enable the Air Force to expand its industrial and R&D base to innovative, non-traditional

defense contractors. Air Force software agreement partners are usually small or mid-sized companies that typically have not had previous interactions with DoD. Many are highly entrepreneurial and innovative. Often, they have capabilities that provide a substantial contribution to Air Force development of new software to meet critical Air Force needs.

- Enable the Air Force to evaluate innovative private-sector software. Software CRADAs allow the Air Force to test state-of-the-art software being developed by the commercial sector, evaluate how well this software addresses critical Air Force needs, and provide feedback on desired features or improvements to meet AF requirements.
- Generate revenues for Air Force labs.
 Although the federal government's primary motive in establishing software agreements is to get its software inventions and development into practical application, not to reap profits, software licenses (excepting open source licenses) can generate often substantial initial revenues and ongoing royalties on sales of commercial products. This provides income that can be used to support the Air Force Activity's ongoing R&D enterprise.

Major Benefits to Industry from Software Agreements

 Provide a rapid way to acquire innovative new software. From conception through completion of testing, it takes many months to design and develop a custom software solution—assuming that companies have the necessary inventive and technical skills. Many companies do not have the necessary in-house software development capabilities. It is much faster to license already developed software packages than to develop them inhouse.

- Are highly cost-effective. Air Force labs are mandated by law to attempt to transfer their inventions and innovations to the private sector so that they can achieve practical application. They are not trying to reap profits from their taxpayer-funded R&D. As a result, software licensing terms are usually attractive and open source software is free. Licensing already-developed software is highly costeffective, compared to the often-substantial R&D costs of developing new software inhouse.
- Help companies develop innovative new software. Software agreements, particularly CRADAs, enable companies to enhance their software research and development by collaborating with Air Force experts in a protected environment. These agreements enable the companies to leverage the resources and expertise of teams of AF scientists and engineers (S&Es), accelerating the development process and reducing outof-pocket expenses.
- Enable companies to have their software innovations evaluated by the Air Force.
 Software agreements, particularly CRADAs, establish a protected environment in which companies can work with AF S&Es to jointly test their new software inventions and receive feedback on desired features or improvements for Air Force applications.

SOFTWARE AGREEMENTS

· Potentially open the door to contracting opportunities for products or services based on the Air Force's in-house software inventions and innovations. Virtually all of Air Force software was developed through mission-related research at Air Force labs. As a result, products or services developed from licensing of these software inventions and innovations have the potential to meet critical Air Force needs and could lead to sizeable contract opportunities within the U.S. military. After the termination of the CRADAs, AF Activities can provide sole-source contracts to private-sector CRADA partners if they can justify the uniqueness of the company's technology or expertise.

3. Establishing Software Agreements

A. Determining Which Agreement to Use

Software represents a major growth area within DoD technology transfer and an opportunity for Air Force Offices of Research and Technology Applications (ORTAs) to substantially assist their labs. Many different branches of the Air Force are creating software. It's important for ORTAs to talk to their S&Es to discover what software they have developed and help them figure out what to do with it. Because there are multiple T2 mechanisms for licensing, sharing, or co-developing software, the first step is to ask several key questions. The answers to these questions will help determine the most appropriate mechanism to use. Or, if they indicate that more than one mechanism could be used, then this discovery process will help evaluate the pros and cons of each of these options.

Key questions include:

- Is the software fully developed and usable as is, or does it need further development?
- Would your S&Es like to leverage expertise and assistance from outside parties to further develop the software?
- Is your AF Activity willing to let the software be modified by the licensee or recipient?
- Is the software patentable—i.e., does it contain algorithms that are novel, useful, and non-obvious?
- Is the software cleared for public release?
- Does the software need to be controlled due to ITAR restrictions?
- · Is the software classified?
- Should the software be trademarked?
- Would people be willing to pay to use it—i.e., could it generate royalties?
- Are you willing to provide support to users or licensees?

The S&Es involved in creating the software should be able to answer most of these questions. However, your legal counsel and public affairs office may also need to be involved in the discussion. Table 1 provides a matrix to help you determine which software agreements are possible options, given the answers to the above questions. Once you determine which agreements are possible, you need to think about the business case for what you want to do and discuss that with the involved S&Es. As always, you will want to consult legal counsel to ensure you are selecting the right mechanism for what you want to do.

Table 1. Decision Matrix for Determining Software Agreement Options

	Types of Software Agreements						
	Patent License	Software License as Vendor	Software License to Distributor	Open Source License	Unilateral Open Source License	Information Transfer Agreement	CRADA
Sofware fully developed	х	х	х	х	х	х	х
Software needs further development			х	Х		х	Х
Software can be modified by recipient	Х			Х	х	х	Х
Algorithm novel and non-obvious	Х	х	х	Х	x	х	Х
Software cleared for public release				Х	х		
Software ITAR restricted	х	х				х	х
Software classified	х	х				х	х
Software trademarked	х	х	х			х	х
Royalties desired	х	х	х				x *
No royalties desired				х	х	х	х
Technical support available from Air Force		х				х	х
No technical support available			х	х	х	х	

^{*} Funds can be received by the AF Activity but cannot be distributed to the software developers directly

Regardless of which mechanism you decide to use for a particular software package, it is generally Air Force practice to have consistent terms for any given agreement, to provide all partners with an even playing field. This is particularly true for open source licenses and ITAs. If people want to use your software, they will accept the standard terms. Keeping terms consistent may not seem important. However, if the software in question is innovative and highly useful, dozens of companies may be lining up to acquire it. When you suddenly have 50 agreements to manage, you will appreciate the fact that all of the terms are the same.

In some cases, you may have started using one agreement type, such as an open source license or ITA, then have a company approach you about licensing the software to sell to others. If this is something that seems attractive, you need to sit down and review the business case again with your S&Es and legal counsel to weigh the pros and cons of this offer. In some cases, you could (1) designate the current version as one that your lab would continue to share openly, without providing updates or technical support, and (2) exclusively license an updated or more advanced version. The licensee would then sublicense or sell the advanced version to others, possibly further developing it first. The licensee would subsequently be responsible for ongoing maintenance and support of the software.

There are many possibilities, but you need to make sure that what you want to do makes sense, is consistent with the mission of your organization, and is legal. You should also discuss potential trademarking of the software with your local attorney. A trademark allows your software to always be identified as Air Force property.

B. Drafting the Agreement

To help guide ORTAs in drafting software agreements,

each type of agreement will be examined in greater detail. All of these agreements consist mainly of standard boilerplate language but also require customized input. In the following discussion, the required inputs will be indicated in bold text. The agreement types will be examined in the following order: patent license, software license as vendor, software license to distributor, open source license, unilateral open source license, information transfer agreement, and CRADA.

1) Patent License Agreement (PLA)

Software-related PLAs are one of the least commonly used types of software agreements, because the Air Force patents relatively few software-related innovations. This is also generally true throughout the federal government and industry. Reasons for this include the especially high bar that the U.S. Patent and Trademark Office (USPTO) has set for patenting software and the rapid rate of evolution in the software field, which discourages undertaking the multi-year process of seeking patent protection for software-related inventions.

Although they are relatively uncommon, software-related PLAs are one of the most valuable types of software agreements. Air Force software PLAs have generated many tens of millions of dollars in commercial sales and produced millions of dollars in royalties for the Air Force. If you learn of software in your lab that may be patentable—perhaps through receiving an invention disclosure from an S&E—you should discuss patenting it with your patent attorney.

The module on PLAs elsewhere in this Handbook provides extensive guidance to ORTAs on how to establish this type of agreement. ORTAs should carefully follow those instructions. No special adjustments are necessary because the patented inventions involve software.

SOFTWARE AGREEMENTS

2) Software License as Vendor

Software licenses for either patented or unpatented software, which are authorized by Section 801 of the 2014 National Defense Authorization Act (PL 113-66), can be written in two different ways: (1) Software License as Vendor, for use when the Air Force Activity wants to license a software package nonexclusively to multiple parties and continue maintaining and updating this software. (2) Software License to Distributor, for when the Air Force Activity instead wants to license a software package exclusively or partially exclusively to a limited number of distributors, thereby offloading ongoing technical support of the licensed software. In this latter case, the licensee will handle ongoing maintenance and support of the software package and will sublicense it to others.

The software license in both cases is identical except for language in Section 1.1, the License Grant, concerning the level of exclusivity granted by the Air Force and the licensee's right to sublicense the software to others. In both cases the Air Force Activity will receive royalties from licensing the software package. A notice that the software is available for licensing must be published in the Federal Register or other appropriate venue, such as the TechLink or Federal Laboratory Consortium website. Your legal office will submit this notice with assistance from the ORTA.

The remainder of this section summarizes the key parts of the Software License as Vendor agreement. The template for this agreement is available in Appendix I – Air Force 801 Software License Template. To help guide ORTAs in drafting of this agreement type, each of the sections is summarized and the **required inputs** are indicated in **bold text**.

Preamble (Opening Paragraph)

The opening paragraph defines the parties to the agreement—the "licensee" and "licensor." The licensee

has to verify that it is a valid organization and identify the State in which it is incorporated. The ORTA needs to enter the name, state, and address of the licensee, and also the name and address of the Air Force lab that is licensing the software. The company or other entity licensing the software is subsequently referred to simply as the "LICENSEE," and the Air Force lab is subsequently referred to as the "LICENSOR."

Article 1 – License Rights

Paragraph 1.1 identifies the authority for the agreement as Section 801 of Public Law 113-66 (2014 National Defense Authorization Act) and defines the terms of the license grant—normally a nonexclusive, worldwide, non-transferrable, limited term license for the software package. This is also the section where you identify the software package to be licensed. The ORTA needs to enter the title of the software package and define what it includes (source code, executables, documentation, etc.), which is subsequently referred to as the "Licensed Software." If the software has been trademarked, the ORTA should also include the appropriate trademark symbol after the title (™ or ®). The licensee has to acknowledge the number of copies they are receiving. The ORTA needs to enter the number of copies of the Licensed Software in this section. If there are any limitations to the number of users that the licensee can have, then that should also be disclosed. The ORTA should enter the seat or user limitations in this section.

If the software is subject to copyright protection, the copyright notice needs to be displayed somewhere in the software and software documentation. If the software was developed for the government under contract, the contractor must assign their copyright to the government before the government will be allowed to license. If you haven't discussed options in marking the software as Air Force property, you should

SOFTWARE AGREEMENTS

definitely have that discussion with your attorney. You can't make that decision after it is licensed.

Paragraph 1.2 states that license fees will be required for the Licensed Software and that those fees and other information related to the structuring of the fees will be identified in Attachment A. This section also states how license fees should be paid. The ORTA needs to enter the Air Force lab's FAS payment address. Paragraph 1.3 states that the Licensee cannot transfer any part of the licensed software to anyone else, except as unless the agreement otherwise permits (such as for a Software License to Distributor, in which an exclusive license allowing sublicensees is granted. Paragraph 1.4 is the standard disclaimer of warranty; and 1.5 states that no technical support will be provided and that if any support is needed, then additional charges will be required. Those charges will be identified in Attachment A.

Article 2 – Ownership, Records, and Intellectual Property

In Paragraph 2.1, the Air Force Activity (as Licensor) affirms that it owns the rights to the software in question and can license this software to others. If the software package is covered by patents or patent applications, then the ORTA should **list the associated patents or patent applications associated with the software in this section**. Paragraph 2.2 states that the agreement is only for the software that is defined as Licensed Software and nothing else.

Article 3 - Non-Disclosure

Article 3 provides extensive guidance on how the licensee must handle protected information provided by the Air Force. Paragraph 3.1 states that if information is identified or acknowledged by the Air Force to be protected, it must be maintained in confidence by the licensee. What constitutes "protected information" is

clearly defined. The licensee is prohibited from using, disclosing, or granting the use of such information, except as provided in subsequent paragraphs of Article 3.

Paragraph 3.2 specifies that the licensee must safeguard the Air Force's protected information to at least the same extent as it would to protect comparable information that it owned. It also states that the licensee will not attempt to reverse engineer or disassemble the protected software and will promptly notify the Air Force Activity of any unauthorized disclosure or use of this protected information. Paragraph 3.3 addresses the instances in which the licensee may make disclosures after receiving authorization from the Air Force. Paragraph 3.4 discusses the conditions under which the non-disclosure clause is not applicable. Paragraph 3.5 states that the licensed protected information belongs to the Air Force and will be returned or destroyed within 30 days of the expiration or termination of the agreement. The licensee must provide written certification of its compliance with this clause. Paragraph 3.6 is the standard clause stating that export control laws are applicable and that, if the licensee wants to apply for an export license, it must first obtain written consent from the Air Force Activity. Finally, Paragraph 3.7 identifies the points of contact for each party that are authorized to exchange protected information. The ORTA needs to enter complete contact information, as indicated, for both the Air Force and the licensee.

Article 4 - Term and Termination

Paragraph 4.1 defines the start date ("effective date") of the agreement as the date of the last signature, which will be the Air Force Activity's. The agreement will remain in effect until the end date identified in this paragraph. The ORTA needs to enter either a specific termination date or indicate that it will remain in

effect for a specified duration (for example, for three years following the effective date of the agreement. The licensee can terminate the agreement before the end date upon providing 30 days written notice. The Air Force Activity, however, can only terminate the agreement if the licensee has defaulted on the terms. If it decides to terminate the agreement, the Air Force Activity is required to give written notice to the licensee of the default and can only terminate it if the default is not corrected within 30 days. If the license agreement expires or is terminated, the licensee is still required for an additional 3 years to comply with the terms regarding the protection, use, disclosure, and return of protected information. Paragraph 4.2 states that Articles 1-6 survive expiration or termination of the agreement.

Article 5 - Liability and Indemnification

Paragraphs 5.1 and 5.2 are standard boilerplate clauses addressing liability and indemnification.

Article 6 - General

Paragraph 6.1 specifies how required written communications regarding the agreement must be handled, whether by personal delivery, U.S. mail delivery, courier service, or email. The ORTA needs to enter the contact information specified for the points of contact (POCs) for both the Air Force and the licensee. The ORTA is the appropriate POC for the Air Force Activity. Paragraph 6.2 is a standard clause that addresses how disputes will be resolved and stating that the agreement will be governed by U.S. federal law. Paragraph 6.3 states that assignment is not allowed without written consent of the other party. If either party attempts to assign it without consent, then the assignment is null and void. Paragraphs 6.4, 6.5, and 6.6 are standard legal clauses. Finally, Paragraph 6.7 explains the valid ways the agreement may be signed.

Attachment A - Fees and Other Consideration

Attachment A covers the financial terms of the agreements, including the fee amounts, the payment schedule, how payments should be remitted to the Air Force, and details of technical support that the Air Force will provide, if appropriate.

3) Software License to Distributor

As previously indicated, the Software License to Distributor is identical to the Software License as Vendor except for language in Section 1.1, the License Grant, concerning the level of exclusivity granted by the Air Force and the licensee's right to sublicense the software to others. The Software License as Vendor agreement is used when the Air Force Activity wants to license a software package nonexclusively to multiple parties. The Software License to Distributor is used instead when the Air Force Activity instead wants to license a software package exclusively or partially exclusively to a limited number of distributors thereby offloading ongoing technical support of the licensed software. In this latter case, the licensee handles ongoing maintenance and support of the software package and sublicenses it to others.

If the Air Force Activity decides to license the software to a distributor, the ORTA should modify the language in Section 1.1 to state that the LICENSOR grants to the LICENSEE an exclusive or partially exclusive license to the specified software and associated documentation, including the right to relicense or sublicense the software to others. The specific language should be developed in consultation with the Air Force Activity's legal counsel. In the case of an exclusive license, the software is licensed to a single distributor. In a partially exclusive license, it is licensed to two or more distributors. Partially exclusive licenses can be granted for specific fields of use. For example, an Air Force Activity could license its software to one

distributor for exclusive use in the aerospace industry, to another for use in the oil and gas industry, and so on. Alternatively, the Air Force could license restrict the field of use by geographic region, granting a partially exclusive license to one distributor for use of the software within the United States and another partially exclusive license covering distribution in all other parts of the world.

In all other ways, the ORTAs establishing a Software License to Distributor should follow the guidance provided above in the Software License as Vendor section. Prior to licensing, a public notice of the availability of the software must be published in the Federal Register or other appropriate venue, such as the TechLink or Federal Laboratory Consortium website. Your legal office should submit this notice with assistance from the ORTA.

4) Open Source License

Open Source License agreements are used when the Air Force Activity decides to openly share software packages with other parties without controls or restrictions. They are most often used when there is no ongoing technical support available for the software and the Air Force does not expect royalties. In order for these agreements to be used, the software cannot contain ITAR-restricted or classified information and must be cleared for public release by the AF Activity's public affairs office.

To distribute software using an Open Source License, the software is normally placed on an internet site such as either GitHub or code.gov (the U.S. government's equivalent to GitHub. An Open Source License agreement is attached to the software. This agreement covers the rights of use, reproduction, distribution, modification and redistribution of a particular Air Force software package. It requests that parties wanting to use the software register with an email to the

designated Air Force Activity POC. However, there are no consequences for users if they don't. If your lab requires tracking of use for the open source code, you should use the Unilateral Open Source License instead.

The remainder of this section summarizes the key parts of the Open Source License agreement. The template for this agreement is available in Appendix II – Air Force Open Source License Template. To help guide ORTAs in drafting of this agreement type, each of the sections is summarized and the **required inputs are indicated in bold text.**

Preamble (Opening Paragraph)

The opening paragraph states the purpose of the agreement, identifies the software to be licensed, and provides relevant contact information for the Air Force. The stated purpose of the agreement is to define "the rights of use, reproduction, distribution, modification and redistribution of certain computer software originally released by the Government of the United States of America," as represented by the agency listed below (the Department of the Air Force).

The ORTA needs to enter the designation number and title of the software as well as the email addresses to be used for user registration and for the Air Force POC. The software needs to be clearly identified not only to identify what is subject to the license but also to denote what version is being offered. This helps with tracking purposes and will be important if you want to change to a different licensing mechanism for later versions of the software. The email addresses for user registration and for the POC could either be the same or different. For example, the Air Force developer of the software package might both serve as the POC as well as the person who users should contact to register. On the other hand, if the Air Force Activity expects hundreds of users of the software package in

question, it may want to designate someone else to handle registration and maintain the list of users. This should be someone in the branch of the Air Force Activity that developed the software, not the ORTA or other T2 personnel.

Article 1 - Definitions

Article 1 defines the terms that are used in the Open Source License agreement. These words should be capitalized or italicized throughout the agreement to show that they have been precisely defined for the purposes of the agreement. One key definition is the word "Contributor," which is defined (Article 1.A) as "Government Agency, as the developer of the Original Software, and any entity that makes a Modification." "Modification" is defined (Article 1.F) as "any alteration of, including addition to or deletion from, the substance or structure of either the Original Software or Subject Software, and include derivative works..." In Article 1.G – "Original Software," the ORTA needs to enter the designation number and title of the software used in the opening Preamble paragraph.

Article 2 – Grant of Rights

Article 2 describes the rights that each Contributor grants to every other recipient of the software package. Different rights are granted for contributions that are patented versus those that are not patented. (However, open source software does not normally include patented software, because it usually doesn't make sense to pay the significant costs associated with patenting and then give away the software.) Article 2.A details the rights associated with non-patented contributions; Article 2.B covers the rights associated with software that may be patented. Article 2.D specifies that recipients of either patented or non-patented software can sublicense those same rights under the same terms and conditions of the agreement.

Article 3 – Obligations of Recipient

Article 3 describes the obligations imposed on recipients of Air Force software under the Open Source License agreement. Anyone who distributes or redistributes the software must include a copy of the agreement with the software, and also must make sure that the copyright notice, as described in Article 3.B, is prominently displayed. ORTAs need to enter the year that the software was created. (Copyright protection is inherent at the time of creation of new software. Even though the U.S. government cannot copyright its own software in the United States, other countries may recognize the copyright. In fact, that copyright protection is what the Air Force will rely on in enforcing the open source license, if necessary. The copyright mark puts the public on notice that this software is protected.)

Article 3.C specifies how Contributors must mark any modifications to the software and mentions their obligation to include a file log describing the alterations and dates they were made, to enable other recipients of the software to identify the modification and who made it. Article 3.D states that if a Contributor adds a copyright notice to the software, then recipients cannot remove that copyright notice without the permission of the person who added it. Article 3.E includes the standard "no endorsement" clause that is common in many T2 agreements.

Article 3.F reminds recipients that the Air Force requests notification of who is using the software. If you find that you are not being notified and your Activity really wants that information, then you should probably switch to the Unilateral Open Source License, which requires signatures on the agreement. Article 3.G requires Contributors to affirm that any modification they make represents their original creation (not something they found somewhere else) and that it doesn't violate any other agreements or laws. Article 3.H states that

recipients can offer technical support or warranty (and charge a fee) for the software but they cannot do so on behalf of anyone else, including the Air Force Activity. It also requires them to agree to indemnify all other Contributors for any liabilities incurred. Article 3.I specifies that if a recipient combines the subject software with other software to create a larger software package, this recipient needs to make sure that anyone who receives this new software understands which part of the software is covered by this open source agreement. Article 3.J advises recipients that nothing in the agreement exempts recipients from existing laws, such as export control.

Article 4 – Disclaimer of Warranties and Liabilities; Waiver and Indemnification

Article 4 is the standard disclaimer that commonly appears in USAF T2 agreements.

Article 5 - General Terms

Article 5 consists of clauses that are standard in most USAF T2 agreements, including No Warranty, Waiver and Indemnity, Termination, Severability, Applicable Law, Entire Understanding, and Binding Authority. Termination of this agreement is automatic if the user is noncompliant. However, since the user is not required, but only requested, to notify the Air Force Activity of use of the subject software, there is no way to verify compliance or noncompliance. The ORTA needs to again enter the contact email address of the Air Force POC for this open source software license. This should be the same person listed in the Preamble above. In addition to the standard terms, 5F provides an Air Force Activity contact in case anyone has questions this POC should be the same person as listed in the preamble; it should not be the ORTA. The Open Source License agreement does not require a signature from either party.

5) Unilateral Open Source License

Unilateral Open Source License agreements are another option that the Air Force can use for licensing open source software. This license agreement is very similar to the Open Source License. The primary difference is that the Unilateral Open Source License requires signatures from recipients. It is used when the Air Force wants to track use of the open source code and know who is using its software package. An Air Force representative signs the agreement—both to authorize it as well as to acknowledge that the Air Force Activity is in receipt of the agreement. Another key way that Unilateral Open Source Licenses differ from Open Source Licenses is that they do not give recipients the right to distribute or redistribute the Original Software package. However, a recipient can distribute his or her own modifications of the software as long as these modifications are significant and do not result in an unauthorized distribution of the Original Software package. As with regular Open Source Licenses, the software cannot contain ITAR-restricted or classified information and must be cleared for public release by the AF Activity's public affairs office.

The remainder of this section summarizes the key parts of the Unilateral Open Source License agreement. The template for this agreement is available in Appendix III – Air Force Unilateral Open Source License Template. To help guide ORTAs in drafting of this agreement type, each of the sections is summarized and the **required** inputs are indicated in bold text.

Preamble (Opening Paragraph)

The opening paragraph states the purpose of the agreement, identifies the software to be licensed, and provides relevant contact information for the Air Force. The stated purpose of the agreement is to define "the rights of use, reproduction, distribution, modification and redistribution of certain computer

software" originally released by the U.S. Government, as represented by the Air Force. The ORTA needs to enter the name of the Air Force Activity, followed by the name of the software, its designation number, and the email address of the Air Force POC.

Article 1 – Definitions

Article 1 defines the terms used in the agreement and are the same terms used in the Open Source License. These words should be capitalized or italicized throughout the agreement to show that they have been precisely defined for the purposes of the agreement.

Article 2 - Grant of Rights

Article 2 describes the rights that each Contributor grants to every other recipient of the software package. Different rights are granted for contributions that are patented versus those that are not patented—although open source software does not normally include patented software. Article 2.A details the rights associated with non-patented contributions; Article 2.B covers rights associated with software that may be patented. As earlier noted, a key way that Unilateral Open Source Licenses differ from standard Open Source Licenses is that they do not allow

distribution or re-distribution of the software for either non-patented or patented software. However, as indicated in Article 2.D, recipients can sublicense its rights under the same terms and conditions of the agreement.

Article 3 - Obligations of Recipient

Article 3 describes the obligations imposed on recipients of Air Force software under the Unilateral Open Source License agreement. Article 3.A reiterates that distribution and redistribution are not allowed under the Unilateral License. Article 3.B allows Contributors to make modifications to the software

and distribute those modifications as long as this does not result in an unauthorized distribution of the Original Software. In addition, Contributors cannot make a trivial change to the software and pretend it is a significant modification in an attempt to overcome the no-distribution requirement.

Article 3.C specifies how Contributors must mark any modifications to the software and mentions their obligation to include a file log describing the alterations and dates they were made, to enable other recipients of the software to identify the modification and who made it. Article 3.D states that if a Contributor adds a copyright notice to the software, then recipients cannot remove that copyright notice without the permission of the person who added it. Article 3.E includes the standard "no endorsement" clause that is common in many T2 agreements.

Article 3.F asks recipients to inform the Air Force POC when it has made a modification of the software available and inform the POC how to access that modification. Article 3.G requires Contributors to affirm that any modification they make represents their original creation (not something they found somewhere else) and that it doesn't violate any other agreements or laws. Article 3.H states that recipients can offer technical support or warranty (and charge a fee) for the software but they cannot do so on behalf of anyone else, including the Air Force Activity. It also requires them to agree to indemnify all other Contributors for any liabilities incurred. Article 3.I specifies that if a recipient combines the subject software with other software to create a larger software package, this recipient needs to make sure that anyone who receives this new software understands which part of the software is covered by this open source agreement. Article 3.J notifies recipients that they cannot offer the software or any modification thereof for resale to the U.S. Government without providing certification documentation to the

Contracting Officer before contract award. Article 3.K advises recipients that nothing in the agreement exempts recipients from existing laws, such as export control.

Article 4 – Disclaimer of Warranties and Liabilities; Waiver and Indemnification

Article 4 is the standard disclaimer that commonly appears in USAF T2 agreements.

Article 5 - General Terms

Article 5 consists of clauses that are standard in most USAF T2 agreements, including No Warranty, Waiver and Indemnity, Termination, Severability, Applicable Law, Entire Understanding, and Binding Authority. Termination of this agreement is automatic if the user is noncompliant. However, in order to terminate, the Air Force Activity should notify the licensee after learning of noncompliance and give it 30 days to fix the issue. If the licensee fails to comply, the ORTA should terminate the license in writing. Any sublicenses would survive this termination and would have to be terminated individually by the Air Force. The ORTA needs to again enter the contact email address of the Air Force POC for this open source software license. This should be the same person listed in the Preamble above.

The Unilateral Open Source License is first signed by the recipient and then by the Air Force Activity. The ORTA needs to enter the name, title, and contact information for both the licensee and the Air Force. Once the license is signed by both parties, the Air Force POC can provide the software to the recipient. The Unilateral Open Source License is given a tracking number similar to other USAF agreements, following the Air Force Activity's standard procedures—for example, FY-xxx-ORG-01UL, where FY is the fiscal year it is signed, and ORG is the symbol for the organization. This agreement should then be entered into DTTIS for tracking purposes.

6) Information Transfer Agreement

An Information Transfer Agreement (ITA) is a T2 mechanism that allows the Air Force to share government-developed or government-owned software with non-federal parties outside the organization while maintaining control of the software. You cannot collect royalties under an ITA, so if you want royalties, you need to use a PLA, one of the two types of Software License, or a CRADA. Provisions of the ITA control who has access to the software and what they can do with it. Software that is provided under an ITA cannot normally be sold by the recipient. (Exception: the AFRL Information Directorate uses a modified ITA called an Information Transfer License Agreement that does allow sale of the licensed Air Force software). ITAs also cannot be used as part of a contract proposal unless the ITA partner acknowledges that the Government owns it. There is a Memorandum of Understanding (MOU) version of the ITA that can be used to share software with other Government agencies.

ITAs can be used to share software that is exportcontrolled or classified. If you are sharing software that is export-controlled, you need to ensure that the individual, company, or organization with which you are sharing it is authorized to receive export-controlled information. You can verify this by requesting a copy of their DD2345, which documents their approval to receive export-controlled information. If you are sharing software that contains classified information, then you will have to engage your security office to ensure that the entity that is requesting the software is approved to receive and store classified information. You need to have a DD254 for each non-government organization. The ITA number will need to be identified in advance as that will serve as the contract number on the DD254. In order to use an ITA to share software, the software must have engineering, scientific, or design type functionality. Software such as financial or accounting software does not qualify under the governing statute.

SOFTWARE AGREEMENTS

Article 1 - Preamble

The Preamble states the Authority, 10 USC 2539b(a) (1), under which the AF Activity is allowed to enter into the ITA. The ORTA needs to enter the names and addresses of the Air Force Activity and the Software User. Note that the Software User that should be listed is the entity that is receiving the software under the ITA, not the person who will actually be using it—unless the ITA partner is an individual not associated with a company or other organization. The two ITA parties are subsequently referred to only as the "Air Force Activity" and "Software User" throughout the rest of the ITA. The ORTA also needs to enter the title and a short description of the software package covered by the ITA. This description should include, as appropriate, the executables, source code, associated documentation, etc. The software subsequently is only referred to as the "Software Package."

Article 2 - Definitions

Article 2 includes a short list of the key terms used in the ITA, including "Reviewing Official," "Government," and "Effective Date." The effective date of the ITA is the date of the last signature establishing the ITA, which is the signature of the Air Force's authorized representative. Any time these terms are used in the agreement, they should be italicized to show they have a specific legal definition.

Article 3 – Terms and Conditions for use of Software Package

Article 3 conveys the right to use the software. It also defines what the user can't do, such as: can't sell or disclose or transfer the software package to any other entity without written approval from Air Force Activity (Article 3.2); and also can't rename or merge it without written approval of the Air Force Activity (3.3). Article 3.3 also states that if the Air Force approves merging the software, then terms of the agreement may not apply.

If the software is merged without Air Force approval, then the merged software is still subject to the terms of the agreement. Article 3.4 addresses use of the software package in Government procurement actions and defines the Government's rights to the software as at least "Unlimited Rights." Article 3 includes three optional clauses (3.5, 3.6, 3.7) that can be used at the Air Force Activity's discretion. They define more specific rights to use that can be granted to the ITA partners. If you choose to use options 3.5 and/or 3.6, then you must also include 3.7 so that the Government's rights in any modification or enhancement are defined as "Unlimited Rights."

Article 4 – Support

Article 4 defines the technical support that the Air Force Activity is willing to provide for the ITA-subject software package. It offers a choice of two different clauses (4.1 and 4.2). Both state that the Air Force Activity is not obligated to provide technical support. However, 4.2 also states that the Air Force Activity may choose to provide some limited support via phone or email without charge. You need to pick one or the other. If more extensive assistance is required, then both clauses state that "separate arrangements" must be made to cover the costs of the specified level of technical support. Normally, this would involve establishment of a CRADA to allow the Air Force Activity to recoup the costs of providing the specified support. The ORTA needs to enter the names of the primary and alternate Air Force technical POCs (TPOCs) in

Article 5 - Liability and Limitations

Article 4.3.

This section contains mostly standard language regarding liabilities and limitations. 5.1 states that the software is provided "as is" and the Air Force Activity does not provide any warranty or guarantee associated with it. However, the Air Force Activity does want to

be notified of any errors or problems associated with using the software. Corrections to the software will be made or not at the sole discretion of the Air Force Activity. Articles 5.2 (Damages) and 5.3 (No Waiver of Sovereign Immunity) are standard clauses in Air Force T2 agreements. Article 5.4 is optional and is only added when the software package includes information that is export-controlled.

Article 6 – General Terms and Provisions

Article 6 contains standard clauses that typically appear in Air Force T2 agreements.

Article 7 – Term of Agreement, Modifications, and Termination

Article 7 defines the duration of the ITA, which is determined by the Air Force Activity. It commences on the date of the last executing signature. The ORTA needs to enter the expiration date. You should be consistent with the term or duration of the agreement for each software package. This will allow you to roll out new versions to all users at the same time as the agreements expire—assuming you have updates or modifications. The term can be a standard number of years (for example, 3 or 5 years). Alternatively, you could arrange to have all ITAs for a particular software package expire on the same actual date. Article 7.2 explains how to modify the agreement, should this be necessary. Either party can terminate the agreement. Article 7.3 defines the necessary steps to terminate the agreement. The Software User is required to destroy all copies of the software package at termination and must certify in writing that they have done so.

Article 8 – Notices and Signatures

This section identifies the complete contact information for each party to the ITA. The ORTA needs to enter the names, addresses, phone numbers, and email addresses for the Software User and the Air Force Activity for both formal notices and technical matters. Normally, the ORTA is listed in 8.1.1 as the Air Force representative for formal notices, and one of the TPOCs (identified in Article 4.3) is listed in 8.1.2 as the Air Force representative for technical matters.

The ORTA needs to enter the name of the Air Force Activity in Article 8.2. The only people who can sign ITAs who are the "duly authorized representatives," who have the authority to legally obligate the Air Force and the Software User. The signature authority in each organization is delegated at a certain level, and cannot be further delegated. It is typically a Division Chief. Branch Chiefs and S&Es are not usually authorized to sign ITAs. If the agreement is signed by someone other an authorized individual, it is not a valid agreement. (Any AF employee who signs an ITA without being authorized may be subject to personal responsibility and liability, since he/she can't bind the Air Force—a situation to be avoided.)

The agreement takes effect on the date of the last signature, which is that of the Reviewing Official in the Air Force Activity. The ITA can be signed either with an electronic signature or hand-written signature. It doesn't matter if one person signs one way and the others sign a different way.

If the Air Force Activity plans to widely share the subject software package using multiple ITAs, the first agreement will need to have a full legal review and be signed by the Reviewing Official; however, subsequent ITAs may not need this review if the only change is the names of the involved parties. A signature waiver letter can be provided to the Reviewing Official along with the first ITA, giving this official the option to waive his or her signature for subsequent agreements. If the Reviewing Official signs this signature waiver letter, subsequent ITAs for this software will become effective after signature by the Division Chief or other authorized representative.

SOFTWARE AGREEMENTS

7) Cooperative Research and Development Agreement (CRADA)

If the software in question requires further development, you might want to pursue a CRADA with a capable outside party, such as a company or university, instead of using any of the previously discussed software agreements. This will allow you to leverage the capabilities and resources of the collaborator to expedite the development of this software package and defray the development costs. Terms can be included in the CRADA to allow for licensing the software to the Collaborator. The CRADA module elsewhere in this Handbook provides extensive guidance to ORTAs on how to establish this type of agreement. ORTAs should carefully follow those instructions. No special adjustments are necessary because the collaboration involves software.

4. TechLink Assistance with Software Agreements

TechLink, the DoD's national T2 partnership intermediary (PIA), has been assisting DoD labs with all aspects of licensing their inventions, including software, for over 20 years. In fact, by the end of 2019, TechLink had helped DoD labs establish nearly 800 license agreements with industry. These license agreements involve over 60 DoD labs. TechLink currently brokers or facilitates over 90 percent of Air Force PLAs and invention licenses, many involving software. Its services are funded through a line item in the annual Air Force budget.

As part of its licensing assistance, TechLink manages the only public-access, continuously updated database of all available DoD inventions at techlinkcenter.org. Companies and entrepreneurs seeking licensing opportunities can search this database by keywords, technology area, and DoD lab. This database serves as the platform for TechLink's nationwide marketing of DoD inventions, including software.

Specifically, TechLink assistance to Air Force labs includes:

- Helping develop effective marketing and licensing strategies for their inventions and software
- Conducting focused national marketing of Air Force inventions and selected software to Identify qualified companies and entrepreneurs interested in licensing
- Helping companies and entrepreneurs with their license applications and commercialization plans, to ensure that they fully meet lab requirements
- Helping labs establish appropriate financial terms based on industry standards and historic DoD lab experience
- Facilitating communications between the lab and the prospective licensee throughout the licensing process, to help ensure mutually acceptable agreements and to increase the likelihood of practical application of the Air Force inventions and software.

TechLink has been working closely with Air Force and other DoD labs since 2018 to establish "Express Licensing" to accelerate the overall licensing process. Traditionally, it has typically taken six to nine months to establish a PLA with DoD labs—sometimes up to 12 months. This is regarded by industry as a disincentive to licensing from DoD, particularly for software. The Express Licensing goal is to reduce the licensing process to only a few weeks. By enabling licensing to take place at the "speed of business," more DoD inventions are expected to be licensed and achieve practical application. In fact, using Express Licensing, TechLink has helped to establish more than 150 software license agreements.

Companies and entrepreneurs who search the techlinkcenter.org website for Air Force technologies will discover the many inventions and software packages that have been approved for Express Licensing. If a technology of interest is discovered, individuals clicking the Apply button will immediately see prenegotiated financial terms, if any. Should they decide to proceed, they can immediately apply online for a license agreement. The online application uses the license agreement templates that have been preapproved by the Air Force. The Express Licensing process accelerates the lab's evaluation of the license application and facilitates communications with the applicant.

5. Software Agreement Appendices

- I. Air Force 801 Software License Template
- II. Air Force Open Source License Template
- III. Air Force Unilateral Open Source License Template
- IV. Air Force Information Transfer Agreement



EPAs

1. EPAs at a Glance

What is an EPA?

"EPA" is the commonly used acronym for an Education Partnership Agreement. EPAs are technology transfer (T2) agreements between defense laboratories and educational institutions to promote the study of science, math, and engineering at all levels. Eligible educational institutions include K-12 schools, colleges, universities, and other nonprofit institutions located in the United States or its territories. EPAs represent a versatile T2 tool, enabling many kinds of educational and research-focused collaborations. Within DoD, the Air Force (AF) has pioneered the use of EPAs and employed them extensively, often in creative ways.

Purpose.

EPAs were created to help increase national technological and economic competitiveness by promoting increased interactions between defense labs and educational institutions. From the Air Force perspective, EPAs help cultivate, recruit, and diversify the AF workforce; help develop critically needed new technology; harness outside assistance with technology transfer and commercialization; enhance an Air Force Activity's visibility and image in the community; and achieve other important goals.

What Happens.

Under an EPA, the Air Force Activity and educational partner can provide or share personnel, equipment, scientific information, and other resources—but not funds.

Legal Basis.

The National Defense Authorization Act for Fiscal Year 1991 (PL101-510) gave defense lab directors the authority

to enter into "education partnership agreements" with educational institutions at all levels for a broad range of activities.

EPA Benefits to Air Force Activities:

- Help the AF to cultivate and attract highly qualified new S&Es and diversify its workforce.
- Assist in the development of new technology to meet critical Air Force needs by engaging the assistance of faculty and students.
- Increase the potential for transfer and commercialization of Air Force technology.
- Increase awareness of the Air Force as a national engine of innovation.
- Enhance the Air Force Activity's image and visibility in the community, state, and nation.

EPA Benefits to Educational Institutions

- Increase student interest in science, technology, engineering, and math (STEM) fields.
- Enable access to valuable scientific equipment, through either loan or donation, as well as to highly qualified Air Force S&Es to teach or mentor students.
- Provide faculty sabbatical opportunities and student internships at Air Force Activities.
- Enable students and faculty to gain substantial hands-on experience working on Air Force research or technology-related projects.
- Open the door to career opportunities for students within the DoD laboratory system.

2. Introduction

A. General Information

Education Partnership Agreements (EPAs) are authorized under 10 USC §2194 and implemented through AFI 61-301. The purpose is to allow the director of a defense laboratory to enter into an agreement with educational institutions in the United States to encourage and enhance study at all levels of education in select disciplines. Legislation enabling EPAs was passed in the National Defense Authorization Act for Fiscal Year 1991 and codified into Public Law 101-510 on November 5, 1990. The overriding purpose was to promote national technological and economic competitiveness by encouraging increased interactions between defense labs and the nation's educational system.

The law defines a "defense laboratory" as a laboratory, product center, test center, depot, training and educational organization, or operational command within the Department of Defense. In short, virtually any Air Force Activity can use EPAs to engage in projects, partnerships, or other collaborations with schools at all levels. Signature authority is directly delegated to the defense laboratories under DOD Instruction 5535.08.

B. Educational Institutions

Educational institutions eligible to become EPA partners are K-12 schools, colleges, universities, and any other nonprofit institutions "dedicated to improving science, mathematics, business, law, technology transfer or transition or engineering education." However, these educational institutions must be in the United States or U.S. territories or possessions, which include Puerto Rico, the Northern Mariana Islands, American Samoa, Guam, the U.S. Virgin Islands, and another eleven islands. Only for-profit or foreign educational institutions are excluded from becoming EPA partners.

The law specifies that priority in establishing EPAs

should be given to historically black colleges and universities (HBCUs) and minority institutions (MIs). While other schools are certainly eligible, you should seek opportunities to engage HBCUs and MIs. A list of HBCUs can be obtained at https://sites.ed.gov/whhbcu/one-hundred-and-five-historically-black-colleges-and-universities/ Minority institutions include Hispanic-Serving Institutions, Tribal Colleges and Universities, Native American Non-Tribal Universities, Alaskan-Native or Native-Hawaiian Serving Institutions, and Asian American- and Native American Pacific Islander-Serving Institutions. A complete list of all minority institutions, including HBCUs, can be found at: https://www2.ed.gov/about/offices/list/ocr/edlite-minorityinst-list-tab.html

The law also states that you should give a priority to institutions serving women and other groups that are traditionally involved in engineering and science professions in disproportionately low numbers. However, virtually all institutions have women and minority students enrolled and/or are open to those students. As a result, you can work with any educational institution that meets the primary eligibility criteria at the start of this section.

C. Authorized Activities

The following activities are explicitly authorized under 10 USC §2194 (refer to the law for the precise language):

- 1. Loaning Air Force equipment to the educational institution for any purpose or duration that the Air Force Activity director considers appropriate.
- 2. Donating or transferring surplus equipment, including computers or scientific equipment commonly used by educational institutions, as deemed appropriate by the Air Force Activity director. (Note that the law grants an exception to other laws regarding disposition of government property; however, you still need to

coordinate this equipment donation or transfer with the equipment custodian.)

- 3. Making Air Force personnel available to teach science courses or assist in the development of science courses and materials.
- 4. Providing sabbatical opportunities for faculty and internship opportunities for students at the Air Force Activity.

5. Involving faculty and students in research, technology transfer, or technology transition projects with the Air Force Activity.

- 6. Cooperating with the educational institution in developing a program under which students receive academic credit for working on research, technology transfer, or technology transition projects with the Air Force Activity.
- 7. Providing academic and career advice and assistance to students.

D. Benefits

EPAs are a valuable T2 tool, enabling a variety of productive interactions between the Air Force and educational institutions and offering numerous benefits to two parties. Because of this, EPAs are one of the Air Force's most commonly used T2 mechanisms.

Major benefits from EPAs to the Air Force include the following. They enable the agency to engage faculty and students in defense-related research projects to help develop critically needed new technology for Air Force applications. In addition, they enable the Air Force to leverage specialized technical expertise in departments and programs at select colleges and universities. For example, an Air Force Activity developing lasers for space communications could use an EPA to establish a long-term collaboration with

photonics experts at the University of Arizona, which has one of the world's leading centers for photonics and optics research. EPAs also enable the Air Force to develop and recruit its future workforce through STEM outreach and student internships; diversify its workforce by targeting HBCUs and MIs with STEM outreach and student internship opportunities; use law and business students to help protect, transfer, and commercialize Air Force technology; engage Air Force S&Es in diverse STEM outreach efforts; achieve productive uses of surplus scientific equipment; help increase awareness of cutting-edge Air Force technology; and enhance the Air Force's visibility and image in the community.

Educational institutions derive significant reciprocal benefits from EPAs. For example, EPAs enable educational institutions to acquire valuable scientific equipment for research and teaching purposes—either on loan or through permanent donation from the Air Force. They also enable students and faculty to gain substantial practical hands-on experience working on research or technology-related projects with Air Force Activities. Under EPAs, students can benefit from valuable internships at Air Force Activities internship experiences that can lead directly to career opportunities in the DoD lab system. Similarly, faculty can benefit from sabbatical opportunities at Air Force Activities. Under EPAs, educational institutions can gain access to highly qualified Air Force S&Es to teach or help develop STEM courses, or to tutor or mentor students. More generally, EPAs can help educational institutions to promote student interest in STEM fields.

E. Examples of EPA Activities

Many of the activities commonly undertaken by the Air Force under EPAs are literally those enumerated in Section C above—for example, loaning or donating equipment, teaching science courses, providing sabbaticals and internships, and undertaking research

projects with university faculty and students. However, EPAs can be used to enable many other less-obvious but valuable activities with educational institutions. The following are examples:

- Market assessments of Air Force patents by university business students to facilitate technology transfer and commercialization.
- Prior art searches by law school students to assist Air Force attorneys in drafting patent applications.
- Summer internships for HBCU or MI students at Air Force Activities in advanced STEM areas, as part of a diversity initiative.
- Summer internships at Air Force Activities for graduate students in new or developing career fields (e.g., hypersonics) as part of a workforce development initiative.
- Strategic partnerships with select university programs or professors in critical research areas (e.g., cybersecurity).
- Donation of surplus aviation or aerospace equipment to a discovery museum.
- Air Force personnel serving as judges or evaluators at middle-school science fairs or university business plan competitions (EPAs only necessary if these events occur during normal work hours).

These are only a few examples. A broad spectrum of collaborations involving educational institutions are authorized under 10 USC §2194 to benefit the Air Force lab system.

3. What's in an EPA?

There are three types of EPAs: a *basic EPA* intended to cover the broad ranges of partnerships possible between the Air Force and educational institutions under EPA authority, and two Limited Purpose EPAs—a *Loan of Equipment EPA* and a *Donation of Equipment*

EPA. This "What's in an EPA?" section examines each of these EPA types in sequence to help guide ORTAs in drafting new EPAs. Appendix I lists the roles and responsibilities of each of the key Air Force personnel involved in establishing EPAs—the technical point of contact (TPOC), ORTA, legal office, and equipment custodian.

A. Basic EPA

The *AFRL basic EPA* model is examined in detail in this section. It consists of fifteen articles. Each of these articles is summarized and the required inputs are indicated in bold text. These required inputs are also indicated in bold text in the model basic EPA in Appendix II.

Title and Header of Agreement

The ORTA needs to enter the official names of both the Air Force component and educational institution in the title, along with the EPA number in the header. This model EPA was developed by AFRL. If the Air Force Activity is an AFRL directorate, only the name of the directorate needs to be inserted. Otherwise, reference to AFRL should be replaced with the entire name of the other Air Force component.

Article I – Preamble

The Preamble introduces the parties participating in the EPA. The names and addresses of the Air Force Activity and the educational institution are entered in this Article. Throughout the remainder of the EPA, the Air Force Activity is referred to simply by its official abbreviation, such as "AFRL/XX." The educational institution is subsequently referred to either by its official name or simply as the "Educational Institution." Collectively, the two parties are referred to as "the Parties." The ORTA should enter the official name, abbreviation, and address of the Air Force Activity as well as the name and address of the educational institution in this section.

EDUCATIONAL PARTNERSHIP AGREEMENTS

Article II – Introduction

The Introduction states the rationale for the EPA partnership and provides basic information on the educational institution. The ORTA should enter the official name of the educational institution and **provide a brief description** of this institution. This brief description is normally provided by the educational partner. However, it can also normally be gleaned from the institution's website. In this section, The ORTA should also enter the official name of the educational institution and state whether it is/is not (select one) a Historically Black College/University or/nor (select one) a Minority Institution. Additionally, enter the official name of the educational institution and state whether it is/is not (select one) an educational institution serving women, members of minority groups, and other groups of individuals who traditionally are involved in the engineering and science professions in disproportionately low numbers. Virtually all institutions qualify under this latter description. This information about the status of the institution is normally provided by the institution. However, if it is not provided, the ORTA should ask about this status so that it can be stated in Article II.

Article III - Objective

This section states the purpose or overall objective of the EPA and summarizes the tasks or activities that will occur. The ORTA should enter the agreed upon objective of the agreement and summarize the specific activities expected to take place. This input will normally be provided by the Air Force S&E who is serving as the point of contact (POC) for the project, following discussions with his or her counterpart in the educational institution. However, in some cases, the ORTA will be spearheading the EPA partnership. The ORTA needs to ensure that the EPA objectives and activities are authorized under the Education Partnership Act, as described in Article IV.

In many cases, the EPA is intended to establish a broad, flexible, long-term partnership between the two parties, without a firm vision of how the partnership will evolve. In this case, the list of expected activities could include most or even potentially all those authorized by law. Including them in this section does not mean that the two parties are required to undertake all of the listed activities. Rather, the list can be interpreted as an aspirational statement of potential EPA activities. On the other hand, many EPAs are intended to be very specific in scope. In this case, the list of intended activities should be highly focused.

Note that the authorized activities listed in Article IV are fairly generic in scope. For example, Sub-article d. reads "Involve faculty and students in defense laboratory research projects." This encompasses a wide range of potential tasks, such as involving law students in doing prior art searches to assist Air Force attorneys in drafting patent applications, or involving HBCU students in research in robotics. The activities listed in Article III should not simply be "copied and pasted" from Article IV. Rather, they should be tailored to reflect the purpose and intended or aspirational activities or this specific partnership.

Article IV – Authority

Article IV cites the Education Partnership Act, 10 USC §2194, and lists the activities authorized under this act. This act is provided in its entirety in Appendix V. The ORTA should either enter the official name of the educational institution or insert "Educational Institution" in the bolded sections in this article.

Article V – Patents and Copyrights

The Patents and Copyrights section explicitly states that the EPA is not expected to result in patentable inventions or copyrightable works. However, it then establishes how inventions or copyrightable works will be handled if they result from the EPA. This section is standard boilerplate and is not subject to change. The ORTA should enter the official name of the educational institution or insert "Educational Institution" in the bolded sections in this article.

EPAs differ from CRADAs primarily because they are not expected to result in intellectual property (IP), including patentable inventions or copyrightable works. If collaborative research is the primary focus of the EPA and the ORTA determines that there is a strong possibility that IP could result from this collaboration, then the parties should establish a CRADA rather than an EPA. CRADAs are specifically designed for collaborative R&D projects between federal labs and non-federal entities, and have much stronger provisions for protection and allocation of IP rights. Another key difference between an EPA and a CRADA is that, under an EPA, the research projects or topics are normally determined solely by the Air Force Activity. If the educational institution wants to participate in developing these research projects, you should use a CRADA.

Article VI - Obligations

The Obligations article explicitly states the responsibilities of each party under the EPA. These include important obligations, such as each party covering the costs of its own participant salaries or travel costs or providing specific facilities or equipment. This section needs focused attention, careful consideration, a comprehensive view of the EPA project, extensive discussion between the parties, and clear declarative statements. It is essential that both EPA parties clearly understand what is expected of them, so there are no misunderstandings. The success of the EPA may depend on how thoroughly and clearly this section is drafted.

The respective responsibilities of the educational institution and the Air Force Activity need to be entered in this section, based on inputs from the POCs within the Air Force Activity and the educational institution. Helpful examples are provided. In addition to these required EPA-specific inputs, this section includes a number of boilerplate clauses that are not subject to change. There are a number of places in this section where ORTAs need to enter the official name of the educational institution or insert "Educational Institution" in the bolded sections.

Article VII – Value of Contributions

In Article VII, the educational institution and the Air Force Activity need to provide estimates of their respective contributions to the EPA. Enter the official name of the educational institution and the estimated dollar value of its contributions to the EPA for each of the listed categories: personnel, facilities, supplies and equipment, other (such as travel), and total. Also enter the estimated dollar value of the Air Force Activity's contributions for each of these categories.

Article VIII - Benefits

In this section, the educational institution and the Air Force Activity each state the benefits that they anticipate from the EPA. This section serves as the rationale for the EPA—the reasons that each party is motivated to enter into the agreement. The POCs for each party should provide this information. The ORTA needs to enter the official name of the educational institution and the name of the state in which it is located, followed by numbered statements regarding the expected value of the EPA to the institution, its faculty, and students. Helpful examples are provided. Enter comparable statements regarding the expected value of the EPA to both the AF Activity and Air Force.

Article IX – Partnership Administration

The Partnership Administration section identifies the specific individuals that will manage the EPA and coordinate its activities. The ORTA needs to enter the requested information for both the Air Force and educational institution (indicated in bold in the model EPA in Appendix II). If the EPA involves the loan or donation of equipment from the Air Force Activity to the educational institution, that loan or donation needs to be documented using the appropriate Equipment or Donation Form and appended to the EPA.

Article X - Liabilities

This section contains a standard disclaimer and is not subject to change.

Article XI - Force Majeure

This section also contains a standard disclaimer and is not subject to change.

Article XII - Deliverables

In Article XII, The ORTA needs to enter all of the required deliverables that have been negotiated between the two parties as part of the EPA project, and also specify when each of these deliverables is due (for example, within 30 days of the termination date of the project).

Deliverables normally include the reports that each party agrees to provide to the other party. Deliverables beside reports could include testing results, other types of technical data, drawings, samples, models, or prototypes. As noted in the Air Force model basic EPA, if equipment is donated by the Air Force, the educational institution is required to submit a report that documents that the equipment has been used to enhance student learning. It is important to be specific about when these deliverables are due.

Article XIII - Risk of Loss

Article XIII focuses on government-owned equipment loaned to the educational institution and basically specifies that the institution is responsible for insuring, repairing, and returning the equipment in good working condition. The ORTA should enter the name of the educational institution and the official abbreviation of the Air Force Activity in the appropriate places as well as the deadline for return of the equipment.

Article XIV – Period of Agreement

Article XIV specifies the duration or term of the EPA and provides provisions for either party to terminate the agreement at an earlier date or to request a modification or extension. The ORTA should enter the number of months duration of the EPA period following the date of the final signature establishing the agreement (12, 36, and 60 months are typical EPA periods). Also, enter the number of days prior to the end of the agreement that either party can terminate it by providing written notice. Finally, enter the official abbreviation of the Activity.

Article XV - Signatures

Article XV, the final article, is the section for the signatures of the authorized representatives of each organization. The ORTA needs to enter the name of the educational institution, the official abbreviation of the Air Force Activity, and the names and titles of the officials who will sign for each party. The EPA can be signed and dated with either hand-written or electronic signatures, both of which are valid.

B. Limited Purpose EPA - Loan of Equipment

The ORTA should use the *Loan of Equipment EPA* when the only purpose of the EPA is to lend equipment to the educational institution. This is a short and straightforward agreement that does not require negotiation. The agreement establishes that the

equipment is to be used to encourage and enhance the study of science, math, and engineering; that it is being provided free of charge to the educational institution, in "as is" condition; and that the institution is responsible for its operation and maintenance. In addition, it states that each party is responsible for its own costs. The educational institution is responsible for all costs associated with the shipment and transportation of the equipment to the institution, including packaging. However, the Air Force Activity is responsible for covering the costs associated with the return of the equipment.

This Loan of Equipment EPA requires only minimal inputs by the ORTA. All of these required inputs are indicated in **blue highlights** in the model Loan of Equipment EPA in Appendix III.

The ORTA needs to enter the official names of both the Air Force component and educational institution on the cover page, along with the EPA number. It should also enter the names, addresses, and contact information of the two parties on the top of the first page.

In the "Purpose of this Agreement" section (Article 1), the ORTA needs to again enter the names of the Air Force component and educational institution. The "Loan of Equipment" section (Article 3) specifies that a list of the loaned equipment be included in Appendix A. The ORTA needs to compile a list of the referenced equipment and append it to the agreement as Appendix A. If the educational institution has submitted a proposal for this equipment loan, the ORTA should select the clause, "in accordance with Partner's proposal (Appendix B)" and include this proposal as Appendix B. The alternative is to select the "as determined by the Director of Component" as the rationale for the equipment loan. The "Term of Agreement" section (Article 9) requires the ORTA to

enter the duration of the equipment loan and indicate the start and end dates of this period. Finally, in the signature section following Article 12, the ORTA should enter the names and titles of the officials who will sign the EPA.

Outside of the inputs indicated above, the Loan of Equipment EPA consists of standard boilerplate clauses that are not normally subject to alteration. Article 6 can create some issues for state universities as they are required to follow state law, which can be different from federal law. If the educational institution has an issue with Article 6, consult your servicing attorney for alternate language.

After the EPA is in effect, the ORTA can amend the list of the equipment in Appendix A to allow some equipment to be returned early or to add additional equipment to the list. As part of the EPA close-out process, the ORTA should ensure that all of the equipment is returned to the Activity within 30 days following the expiration date, as is specified in the agreement.

Any time an Equipment Loan EPA is being established, it is very important for the ORTA to notify the equipment custodian at the Activity, who is responsible for tracking the location and condition of the equipment. He or she needs to know if the equipment is leaving the base, where it is going, and for how long.

C. Limited Purpose EPA – Donation of Equipment
The ORTA should use the *Donation of Equipment EPA* when the only purpose of the EPA is to document
the permanent transfer of equipment (including
computers) to the educational institution. This
agreement is similar to the Equipment Loan EPA and
requires similar inputs. All of these required inputs are
indicated in **blue highlights** in the model Donation of
Equipment EPA in Appendix IV.

The ORTA needs to enter the official names of both the Air Force component and educational institution on the cover page, along with the EPA number. It should also enter the names, addresses, and contact information of the two parties on the top of the first page.

In the "Purpose of this Agreement" section (Article 1), the ORTA needs to again enter the names of the Air Force component and educational institution. The "Terms and Conditions" section (Article 3) specifies that a list of the donated equipment be included in Appendix A. The ORTA needs to compile a list of this equipment and append it to the agreement as Appendix A. It also needs to obtain the educational institution's proposal for how it intends to use the equipment, and append it as Appendix B. This appendix documents how this donated equipment will "encourage and enhance the study of mathematics and science or ... the conduct of technical and scientific education and research activities."

Article 8 can create some issues for state universities as they are required to follow state law, which can be different from federal law. If the educational institution has an issue with Article 8, consult your servicing attorney for alternate language.

The "Term of Agreement" section (Article 11) requires the ORTA to enter the start and end date of the agreement. The title to the equipment will officially transfer on the last day of the agreement. Finally, in the signature section following Article 14, the ORTA should enter the names and titles of the officials who will sign the EPA.

Any time an Equipment Donation EPA is being established, it is essential that the ORTA notify the Activity's equipment custodian. This person needs to know when the equipment is leaving the base in order to remove the items from the list of accountable equipment.

4. EPA Process and Checklist

Several key Air Force personnel besides the ORTA are involved in establishing EPAs. As previously noted, Appendix I lists the roles and responsibilities of each of these Air Force personnel—the technical point of contact (TPOC), ORTA, legal office, and equipment custodian.

The **first step** in establishing an EPA is to *determine the purpose of the agreement*. This purpose will determine which of the three model EPAs should be used. The basic EPA template should be used if the EPA's purpose is broad and multi-faceted, covering at least two of the activities authorized under 10 USC §2194. On the other hand, if the purpose is solely to loan or donate equipment to the educational institution, then the ORTA should use the appropriate limited purpose model agreement—either the Equipment Loan or Equipment Donation EPA.

To determine this purpose, the ORTA should discuss the prospective EPA with the POCs from the Activity and institution who are proposing this project. What do they hope to achieve? This conversation will provide the opportunity to educate these parties about what is possible under an EPA and possibly to suggest other activities for consideration. The ORTA needs to make sure that what the parties envision is best achieved using an EPA. If the purpose is primarily to enable collaborative research, they should probably establish a CRADA rather than an EPA. This is essential if there is a substantial possibility that inventions or copyrightable works could result from this collaborative research.

The **second step** is to *gather the necessary inputs to* establish the EPA from the POCs in the Air Force and educational institution. For the **basic EPA**, a checklist of these essential inputs includes:

 a brief description of the educational institution and determinations about its status as a

Historically Black College/University, Minority Institution, or educational institution serving women, members of minority groups, and other groups that are traditionally underrepresented in the engineering and science professions;

- a statement about the objectives of the EPA, referencing the specific activities to be undertaken that are authorized under 10 USC §2194;
- lists of the respective responsibilities for the educational institution and the Air Force, addressing which party is covering which participant salaries or travel costs, providing specific facilities or equipment, or assuming responsibility for other aspects of the collaboration;
- estimates as to the value of contributions, in cash or in-kind, for the educational institution and the Air Force, in each of the categories listed in the model agreement;
- statements about the specific benefits of the EPA to both the educational institution and the Air Force;
- a list of all equipment that the Air Force will loan or donate to the educational institution, if relevant;
- 7. a statement or list of the deliverables (reports, test data, drawings, samples, models, etc.) that have been negotiated between the two parties, with information on when each of these deliverables is due;
- 8. the names and titles of the officials who will be signing for both the educational institution and the Air Force Activity.

For **Equipment Loan or Equipment Donation EPAs**, the necessary inputs include the names, addresses, and contact information for both parties, a list of the equipment, a proposal from the educational institution (optional for loans, mandatory for donations), the term of the agreement, and the names and titles of the officials who will sign for each party.

The **third step** is to draft the EPA, using the correct model agreement as a starting template. This requires careful line-by-line review of the agreement, entering the appropriate information or inputs indicated both in the instructions above and in the model agreements in the Appendices.

The **fourth step** involves review of the draft EPA. At a minimum, this draft should be reviewed by the ORTA, the AF Activity POC, and the educational institution. New ORTAs should ensure that all draft EPAs are also reviewed by the legal office. However, as experience is gained, legal review for the short form Equipment Loan and Donation EPAs at some Activities may be waived as long as there no changes to the EPA boilerplate sections. Finally, the Activity's equipment custodian should be sent a copy of the draft EPA if it involves loan or donation of equipment. He or she is responsible for tracking the location and disposition of the equipment, and needs to know if it is leaving the base, where it is going, and for how long.

The **final step** involves signing and execution of the agreement. Normally, the final version of the EPA is emailed to the educational institution for signature. Once its authorized official signs (by either handwritten or electronic signature), it returns a signed PDF copy to the ORTA, who distributes it within the Air Force Activity for final approval and signature.

Each Air Force Activity has its own approval process. Also, signature levels may vary by Activity for EPAs. The Equipment Loan and Equipment Donation EPAs

need to be signed by the Activity director, as the law states that the director has to make the determination that the loan or donation is appropriate. In some Air Force Activities, basic EPAs also need to be signed by the director: however, subsequent addendums to the EPA can be signed at a lower level.

A typical EPA finalization process is the following: the ORTA prepares an electronic Staff Summary Sheet and attaches the EPA, then routes the package to the AF POC, branch chief, and division chief for approval, then to the AF authorized representative (always the Activity director for Equipment Loan and Equipment Donation EPAs) for final approval and signature. After the EPA is fully executed, with all necessary approvals and signatures, the ORTA assigns an EPA number to the agreement and sends electronic copies to the educational institution and the Air Force POC.

5. EPA Appendices

- I. EPA Roles and Responsibilities
- II. Model AFRL Basic EPA
- III. Model Limited Purpose EPA: Loan of Equipment
- IV. Model Limited Purpose EPA: Donation of Equipment
- V. Education Partnership Act, 10 USC §2194

EDUCATIONAL PARTNERSHIP AGREEMENTS





1. CTAs at a Glance

What's a CTA?

"CTA" is the acronym for Commercial Test Agreement. A CTA is a contractual mechanism under which a Department of Defense (DoD) laboratory makes its testing facilities and services available to an outside party for an appropriate fee.

Purpose.

CTAs were created to promote research and development (R&D) within the commercial sector of the U.S. economy using DoD's unique research facilities. The rationale is that it is in the Nation's interest to promote development of a strong technology and industrial base in order to maintain military superiority. In addition, enabling industry to access these taxpayerfunded facilities when they are not being used by DoD helps ensure their full, productive use and benefits the U.S. economy.

What Happens.

Under a CTA, the Air Force (AF) Activity enables outside parties, usually businesses, to access the infrastructure (including both equipment and trained personnel) in its laboratories, centers, ranges, and other facilities for testing of materials, equipment, models, computer software, and other items. This activity is conducted when the facilities are not being otherwise used by the Air Force for its own mission-related R&D. The AF is normally reimbursed for the direct and indirect costs of the CTA project. The data generated from the testing is owned by the outside party and the AF cannot release this data to other parties without written permission.

Legal Basis.

Commercial Test Agreements are authorized under 10 USC §2539b(a)(3) and are implemented through DoD Instruction (DODI) 5535.11 and Air Force Instruction (AFI) 61-301.

How CTAs Benefit the Air Force

- Enable the AF Activity to keep its laboratory or facility fully operational while offsetting some of the costs.
- Increase awareness of the AF Activity as a unique R&D resource for businesses that are developing new technology.
- Enhance the image and visibility of the AF Activity within the community, region, and nation.

How CTAs Benefit Industry

- Enable companies to gain access to unique R&D facilities and expertise for testing of new commercial or defense-related technology or products.
- Are highly cost-effective, because the fees charged include only the actual direct and indirect costs—the Air Force, unlike private industry, is not trying to generate a profit.
- Companies fully own the test data generated under the CTA; the Air Force cannot release this test data to other parties without their permission.

2. Introduction

A. General Information

Commercial test agreements (CTAs) are contractual mechanisms under which DoD labs make their testing facilities and services available to outside parties for appropriate fees. CTAs were authorized under the National Defense Authorization Act (NDAA) for Fiscal Year 1994, with the authorizing language codified in 10 USC §2539b(a)(3). 10 USC §2539b(a)(3) allows an Air Force Activity or other DoD lab to "make available to any person or entity, at an appropriate fee, the services of any government laboratory, center, range, or other testing facility for the testing of materials, equipment, models, computer software, and other items..."

Congressional intent in the 1994 NDAA was to make taxpayer-funded infrastructure in DoD laboratories available to support private-sector R&D, especially defense-related R&D. This reflected the intent in the earlier 1980 Stevenson-Wydler Act (PL 96-480), codified in 15 USC §3710, which established that "It is the continuing responsibility of the Federal Government to ensure the full use of the results of the Nation's Federal investment in research and development." Enabling industry to access DoD's unique taxpayer-funded facilities (when they are not being used by DoD) helps ensure their full, productive use and also benefits the U.S. economy. In addition, CTAs help promote development of a strong technology and industrial base, which is essential in order to sustain U.S. military superiority. CTAs within the Air Force are implemented through DODI 5535.11 and AFI 61-301.

If an outside party—a Customer—wants an Air Force Activity to conduct testing, it must provide written certification that the testing requested does not constitute undue competition with the private sector. This can simply be an email requesting the testing and stating that commercial services to conduct that testing are not available.

The Air Force Activity needs to verify that the testing will not involve an expansion of the capabilities and capacities of the Air Force laboratory or facility, even if the Customer agrees to finance the expansion. (Note: This is not a requirement of the law—it is a DoD requirement expressed in DODI 5535.11, 2c(1). However, there is also language in that same instruction (3b(1)) that states that the cost charged to the Customer can include capital improvement costs.) In any case, an AF Activity should not use CTAs to generate income in order to bypass the MILCON process. If an expansion is something that would normally require you to use the MILCON process, then you need to use that process. Changes can be made to a facility or lab to accommodate the testing, but they (currently) can't involve permanent changes. The Customer is required to provide funding to restore the facility or lab to its original configuration.

Usually, if testing requires an expansion of the facility that is permanent in nature, the T2 mechanism is switched from a CTA to a CRADA. However, the Customer needs to understand that, under a CRADA, the test data would not remain proprietary and the Air Force would be able to use that data as specified in the agreement. One of the key benefits of the CTA for the Customer is that the data generated from the testing is owned by the Customer and the Air Force Activity cannot release the data outside the government without that Customer's written permission.

CTA testing for outside parties is always conducted on a non-interference basis—the government's mission always takes priority over any Customer requests. If a critical mission requirement surfaces at any time during the CTA period, the CTA-related testing may need to be halted or delayed. The laboratory or facility director will make the decision on priority and scheduling of tests; it does not have to be made by the ORTA or Air Force Activity Approving Official.

Before agreeing to conduct testing for an outside party under a CTA, the AF Activity should assess the following:

- (1) The current and future use of the laboratory or facility;
- (2) The potential for damage to the facility or equipment from the CTA testing and the potential impact on future AF needs;
- (3) The potential for future requests for similar testing from other companies and the AF Activity's capacity to handle those additional test requests. If you set a precedent, you must attempt to be fair to other companies who may need similar tests.

B. Fees

Appropriate fees, consistent with DoD 7000.14-R, should be charged to all outside parties for providing testing services under a CTA. Fees may include all direct and indirect costs; however, they cannot exceed the full cost of the testing. No profit can be made from a CTA, so any money left over after all activities are complete must be returned to the Customer. Less than full-cost recovery may be acceptable if the approving official determines it to be in the best interests of the government. Indirect costs may be waived at the discretion of the Approving Official, but all direct costs must be recovered. The fees must be provided up front, after signature but prior to start of the testing activities, unless there is a particular reason why incremental payments would be more appropriate for example, for certain CTA projects, utility costs, technician requirements, or other costs may be difficult to estimate prior to the start of the project. The fees must be provided by cashier's check, certified check, bank money order, electronic funds transfer, or postal money order. It is preferred that the funds be collected via electronic funds transfer (EFT), but that may not be

possible. It depends on whether your organization has a deposit account set up to accept EFT payments.

Guidance for full-cost recovery is provided in Chapter 14, Volume 11 A of DoD 7000.14-R for most AF Activities capable of providing test services. Major ranges, test facilities, and bases should use Chapter 12, Volume 11A of DoD 7000.1-R. Working Capital Funds (WCF) facilities should use Volume 11B of DoD 7000.14-R. The fees for WCF facilities should be the standard (stabilized) price. Labor rates for personnel and other standard costs can be provided by Finance Office personnel for all other activities. Fees are usually set as rates rather than fixed dollar amounts in order to adjust for changes in cost to the government.

Fees generated by CTAs may be retained by the Air Force Activity and credited to the appropriate account to disperse the fees. Normally, a separate work order or funding line would be established for the CTA, in which the fee payments would be deposited and disbursed as appropriate.

Provisions in 10 USC §2539b(a)3 enabling the Air Force to charge an appropriate fee for services, and 10 USC §2539b(d) allowing the fees to be credited to the appropriations or other funds of the AF Activity, provide an exception to the Miscellaneous Receipts Act, 31 USC §3302b. The Miscellaneous Receipts Act states that "an official/agent of the government receiving money for the government from any source shall deposit the money in the treasury as soon as practicable." This is intended to ensure that government entities aren't augmenting their budgets without Congressional approval. This exception is important as it allows the AF Activity to use money received to offset the costs of tasks performed under the CTA. Funds received under a CTA fall within the category of reimbursable budget authority, so you must check with your Finance Office to ensure that there is availability under the organization's

reimbursable budget authority to accept the funds. The reimbursable budget authority is a budget that is established in advance of the fiscal year that identifies the amount of money the organization anticipates receiving from outside sources for that fiscal year.

It is important to understand how a CTA differs financially from a CRADA. Under a CTA, the Air Force is generally reimbursed for direct and indirect costs (unless the director waives those costs), and must return to the Customer any unused portion of the funding provided. In a CRADA, we can request reimbursement for whatever we think is a fair amount-it does not have to cover all the direct and indirect costs (although it can) and you do NOT have to return unused funds (although you can). If a CRADA collaborator pays for tests that you don't complete, you should definitely return the funding. However, if there is other funding left over after you complete the CRADA tasks, there is no requirement to return that funding. Also, CRADA funding can be used to make permanent alterations to a facility. By contrast, in a CTA, the funding cannot be used to make permanent changes.

Calculation of the fees can include, as appropriate, the following:

- 1. Direct costs: Utilities; contractor support; salaries of government personnel, to include management and supervisory as well as technical personnel (but only if the management and supervisory personnel are actually involved in the CTA project); materials and supplies; hazardous waste disposal; and other miscellaneous direct costs from the project.
- Indirect costs: Escrow for repairs if the CTA project results in damage to facilities

or equipment; the cost of modifying the facility or laboratory for the tests; the cost of restoring the facility or laboratory to its original configuration; environmental impact assessments; safety assessments; and other indirect costs from the project.

C. Benefits

CTAs are a valuable T2 mechanism tool, enabling a variety of productive interactions between the Air Force and participating companies and offering important benefits to two parties. For some AF Activities, they are one of the most frequently used T2 mechanisms.

Major benefits to the Air Force from CTAs include the following: They enable AF Activities to keep their laboratories, facilities, and testing equipment fully operational. In many cases, AF Activities possess valuable testing facilities and equipment critical to their mission that are infrequently used. Through the use of CTAs, they can help cover technician salaries, maintenance costs, and other continuous expenses to keep these facilities and equipment mission-ready. CTAs also enable the AF Activity to comply with their legal obligations, including 15 USC §3710, which states that "It is the continuing responsibility of the Federal Government to ensure the full use of the results of the Nation's Federal investment in research and development."

Besides helping to keep facilities and equipment fully operational and productive, CTAs also are an important way that AF Activities can build strong political support and ensure ongoing funding for their operations. They enable Activities to increase outside awareness of their unique R&D assets and capabilities and promote their availability as a valuable R&D resource for companies that are developing new technology. And they increase the visibility and enhance the image of AF Activities within their communities, regions, states, and the nation.

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CTAs also provide major benefits to industry. Very few companies, even the many of the largest corporations, possess the wealth of testing facilities and equipment available within the Air Force. CTAs enable companies to gain access to these unique Air Force's R&D assets, including highly experienced AF personnel, for testing of new commercial or defense-related technology or products. Generally, such testing facilities, equipment, and services are not available within the private sector. CTAs are also highly cost-effective. While companies are required to pay for the testing services provided under a CTA, the fees charged include only the actual direct and indirect costs. Unlike private industry, the Air Force is not trying to generate a profit. Finally, CTAs enable companies that are developing new technology or products to maintain the confidentiality of their activities and the proprietary nature of the test data. Under the CTA, they wholly own the test data. The Air Force cannot release this test data to other parties without their permission.

3. What's in a CTA?

The Air Force Model Commercial Test Agreement (see Appendix I) has a boilerplate section and three appendices. Appendix A is the Work Statement, Appendix B is the Air Force Activity's Statement of Capability, and Appendix C covers the Rates and Fees. There are only a couple of places in the boilerplate where the ORTA needs to insert information. Most of the effort required to establish a CTA involves developing the information for Appendices A, B, and C.

Appendix II summarizes the roles and responsibilities of the various Air Force entities who need to be involved in developing and managing a CTA: the technical point of contact (TPOC), ORTA, legal group, and financial group. To help guide ORTAs in the drafting of CTAs, each of the sections is summarized below and the required inputs are indicated in bold text. These

required inputs are also highlighted in blue text in the Air Force Model CTA in Appendix I.

A. Main Section

Title

The ORTA needs to enter the name and abbreviation of the Air Force Activity and the name of the Customer in the CTA title at the top of the first page of the CTA. The model CTA was developed by AFRL for use by its directorates. If another Air Force Activity is involved, the name and abbreviation of that component should be inserted to replace the AFRL-specific text. The ORTA also needs to enter the CTA Number in the header on the first page of the Main Section.

Article 1 – Preamble

The Preamble states the Authority under which the AF Activity is allowed to enter into the CTA. The ORTA needs to enter the names and location of the AF Activity and the Customer in this section. Throughout the rest of the CTA, they will be referred to only as the "Customer" and the "Air Force Activity. The "Witnesseth" section of the Preamble positively affirms requirements from the law and DODI 5535.11. It states that the AF Activity desires to provide the testing to the Customer, has determined that the tests will not interfere with the mission or conduct of any Government-related testing, that the work is in the interests of national defense, and that it does not involve the expansion of the capabilities of the facility or laboratory even if the Customer is willing to pay for this expansion. This section also states that the Customer has affirmed that the testing will not constitute undue competition with the private sector.

Article 2 - Definitions

The key legal terms used in the CTA are defined in Article 2. Any time these words are used, they should be italicized to show they have a specific legal definition. These definitions are easy to understand and should not cause any issues during negotiations.

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Article 3 - Work Statement

This section simply states that the CTA Statement of Work is described in Appendix A. This appendix details the testing that is to be conducted, the responsibilities of each party, and the procedures for requesting tests.

Article 4 - Statement of Capability

Article 4, the Statement of Capability, summarizes what is included in Appendix B: a description of the AF Activity's technical capability; the specific technical approach to be followed; the detailed costs, including the Not-to-Exceed (NTE) cost; other support the AF Activity may provide; a description of reporting requirements; and any special conditions related to the testing.

Article 5 - Cost Reimbursement

Article 5 states that the Customer is responsible for all costs incurred in the subject testing and refers to the cost analysis and NTE cost estimate that are provided in Appendix B. The cost estimates require careful consideration. If you overestimate the cost of the testing, you will have to return any unused funds when the work is complete. On the other hand, if you underestimate the cost, you will need to notify the Customer of the need for additional funds at the point during the testing period when the initial estimate is about to be exceeded.

An NTE cost estimate must be provided in Appendix B so that the Customer knows the anticipated costs. This is the amount that must be received prior to the start of any work. Unless there are different provisions identified in Appendix A, the AF Activity must provide written notice to the Customer within 10 days, or as soon as possible, that the NTE cost estimate will be exceeded. This notice must include a revised estimate of the NTE cost to complete the testing services and a due date for receipt of the additional funds. Assuming

the Customer agrees to the additional funding, then the CTA must be formally modified according to the procedures in paragraph 7.2. The AF Activity is required to stop work if no additional funding is received.

In Article 5.5, you need to identify how the Customer should address payment checks and where the checks are to be sent. The ORTA needs to enter the name and/or number of the account as well as the address of this account. All checks are sent to the Finance Office for your organization, and a copy is to be sent to the AF Activity point of contact listed in paragraph 13.2. The CTA number must be included on every check. It's important to emphasize that detail to the Customer, because finance personnel need to know the T2 agreement to which they should credit the payment. Most AF Activities have numerous active T2 agreements and it is easy for payments to be credited to the wrong account. Article 5.7 reiterates that all money must be received prior to the start of activities, including the initial NTE cost and any additional payments. Excess funding must be returned at the end of the agreement, since you are not allowed to make a profit from a CTA.

Article 6 – Confidentiality of Test Results

Article 6 affirms that the test results are confidential and must not be disclosed outside of the Government without written permission from the Customer.

Article 7 – Term, Modification, Extension, and Termination

Article 7 is straightforward. The ORTA needs to insert the expiration date of the agreement. This can be expressed as "XX months after Effective Date" if you don't want to pick a specific date. Modifications must be signed by both parties. If you want to add additional tests or repeat tests, or need to modify the NTE amount, you will need to prepare a written description of the

change and have both parties sign it. If you need an example of what a modification should look like, you can contact your legal office or the AF T3 office for assistance.

Termination by either party requires a 30-day notice. The Customer will be responsible for all costs incurred to that point as well as any other costs associated with disassembly and return of the facility or laboratory to its original configuration. However, if the AF Activity terminates, it is not liable for any costs. If the AF Activity has to terminate or delay testing due to national security or other mission-related reasons, it also is not liable for costs incurred by the Customer. The AF Activity still has to notify the Customer in writing if it is terminating, interrupting, or delaying the testing.

Article 8 – Disputes

Article 8 explains the process for resolving disputes that may arise. Fortunately, this rarely happens. If it does, either party can always seek relief in federal court.

In this section, the Customer attests to its corporate

Article 9 – Representations and Warranties

status, including whether or not it is a small business or a foreign-owned or foreign-controlled entity. It also affirms that the person signing the agreement has the authority to commit the organization and its resources to the terms described in the CTA. The ORTA needs to enter the state in which the Customer is incorporated. The AF activity affirmatively states that the person signing the CTA is authorized to do so, and that the AF Activity will only terminate, delay, or cancel the testing for good cause associated with mission requirements or national security concerns.

Article 10 - Liability

Article 10 states the AF Activity does not warranty the

testing and is not liable for any damage. Of note, in Article 10.2, is the statement that the Customer is not allowed to bring any person who is not an employee of the company onto Government property. If for some reason this should be necessary, the Customer needs to ask the AF Activity to grant access and it is solely up to AF Activity to make that decision.

Article 11 – Mishap Investigations

This section describes the kind of investigations that may take place if a mishap should occur during the testing. The important distinction here is that there are two different Air Force Instructions that cover investigations. If there is a mishap involving loss, damage, or destruction of the test article or facility, then the investigation is conducted following guidance in AFI 91-204 and the results will NOT be released to the Customer. On the other hand, investigations conducted per AFI 51-503 may be released to the Customer. A safety assessment is usually conducted prior to the start of any new testing, so your local safety personnel can provide more information as to what triggers which review.

Article 12 – General Terms and Conditions

There are many clauses in Article 12, so you should familiarize yourself with this section. Most of the clauses are self-explanatory. A few comments on this section follow.

Per Article 12.1, if you anticipate the need for removal of toxic, hazardous, or solid waste, then the party responsible for the removal needs to be identified in Appendix A. If the AF Activity will be responsible for this removal, then you need to remember to account for any costs associated with this in the NTE cost estimate.

The Customer has the right to inspect the AF Activity's facility or laboratory that is identified in Appendix A prior to testing. This is why you need to be specific in

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the identification of the facility (name, location, Bldg. number, etc.) in Appendix A so that the Customer doesn't ask to see other facilities not associated with the testing.

Any sort of public announcement about the CTA must be coordinated between the parties, and each party must be given prior opportunity to review the announcement. Press releases and any information that has a government author listed must be routed through Public Affairs for approval. It is important to ensure that the Customer understands that the testing does not constitute an endorsement of its product by the AF Activity or any other part of the Government and they cannot imply or state that it does.

The Governing Law (Article 12.6) in all circumstances will be the laws applicable to the federal government—the Air Force doesn't recognize state laws.

Another important article (Article 12.10) covers Controlled Information. This article basically means that export-controlled or controlled unclassified information must be protected and that nothing in the CTA exempts anyone from any law controlling the release of that information.

Article 13 - Notices

Article 13 identifies the contact information for each party for both formal notices and technical matters. The ORTA needs to enter the names, addresses, phone numbers, and email addresses for the Air Force Activity and the Customer for both formal notices and technical matters. Normally, the ORTA is listed in 13.1 as the Air Force representative for formal notices, and the TPOC is listed as the Air Force representative for technical matters. Technical correspondence should always be sent to the TPOC. The TPOC listed in 13.2 is also defined as the Test Agency Representative in Article 2.1.

Signature Section

The signature section immediately follows Article 13.2. The only people who can sign CTAs who are the "duly authorized representatives" who have the authority to legally obligate the Air Force and the Customer. The ORTA needs to **enter the names and titles of the duly authorized representatives** for both the AF Activity and the Customer. The Customer signs first, then the Air Force. The AF Division Chief signs first, then the CTA is approved by the Director of the AF Activity.

B. Appendix A – Work Statement

Appendix A, the Work Statement, is the key part of the CTA—the section where the actual testing procedure is described. The ORTA needs to **enter the CTA Number** in the header on the first page of the Appendix A.

You should provide as much detail as necessary when developing the Work Statement. This section needs to contain enough detail so that both the Customer and AF Activity fully understand the tests that will be undertaken, how they will be accomplished, and who is responsible for conducting these tests. This appendix also must contain procedures for submitting the test requests, per Article 3.2. The procedures should include information regarding the format for these requests as well as how they should be submitted. There is very little information in the model CTA regarding the Work Statement and how it should be written or what should be included. The following is a sample format that can be used. It is provided only as a guide and should be modified as necessary.

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Sample Work Statement

"Title"

- Description of effort. Describe the overall nature and scope of the testing that will be performed.
 What is the purpose or goal of the tests? What are they intended to demonstrate?
- Identification of the testing facilities. Identify the specific laboratory/laboratory, facility/facilities, and/or major equipment that will be used for the testing. Be specific: identify the specific location where the testing will take place, such as the building number, lab number, room number, etc.
- 3. Tests to be conducted. List all of the tests. Be precise about the type of tests and the number of tests that will be conducted. If there are specific parameters to be met, such as temperatures, pressures, etc., they should be identified, especially if there are different conditions that must be met for different tests. Identify the test schedule—when will they start, in what order should they be undertaken?
- Decision points. Are there decision points that would dictate stopping the tests if the initial results don't meet certain standards? If so, identify them.
- 5. Procedures for requesting tests. Define the format to be used for requesting additional tests or for substitution of tests.

C. Appendix B - Statement of Capability

Appendix B, while titled "Statement of Capability," also includes other important information. The ORTA needs to enter the CTA Number in the header on the first page of the Appendix B.

Article 4 in the main section of the CTA summarizes what is required in Appendix B: a description of the AF Activity's technical capability; the specific technical approach to be followed; a breakdown of the costs; other support the AF Activity may provide; a description of reporting requirements; and any special conditions related to the testing.

The detailed breakdown of costs is the most important part of Appendix B. This includes all the costs associated with the tests and provides a Not-to-Exceed (NTE) cost estimate. The Customer needs to understand what the total project will cost as well as what they are actually paying for. The direct and indirect costs need to be specifically identified. It is very important that the AF Activity carefully consider every CTA-related activity that will have a cost. This includes the personnel time to set up and take down the testing equipment, conduct environmental impact and safety assessments, seek approvals, and generate reports. It also includes utility costs and other expenses, such as disposal costs for hazardous waste, if any. Because each CTA project has its own specific technical requirements, it also has its own project-specific costs that need to be identified in Appendix B. There is no specific format for this appendix identified in the model CTA. The following sample may be useful:

Appendix B

Air Force Activity's Statement of Capability

- 1. Description of the facility or lab
- 2. Technical approach to tests
- 3. Description of costs
 - a. Direct costs
 - i. Labor costs for tests
 - ii. Materials or supplies
 - iii. Utilities
 - iv. Hazardous waste disposal
 - v. Other
 - b. Indirect costs
 - i. Costs for modifying the testing facility (if necessary)
 - ii. Cost to restore the facility to its original configuration at completion (if necessary)
 - iii. Environmental impact assessment
 - iv. Safety assessment
 - v. Other
- 4. Not-to-Exceed (NTE) cost estimate
- 5. Reporting requirements
- 6. Special conditions related to testing

D. Appendix C - Rate and Fees

In Appendix C, you list the labor rates provided by your AF Activity's finance personnel. The ORTA needs to enter the CTA Number in the header on the first page of the Appendix C.

The labor rates can change by fiscal year, so if the project duration is two fiscal years, you will need to ensure you account for increased labor rate changes in the second year in your cost estimate. The rates are based on grade or rank, so make sure you know the specific hours that will be required for each grade or rank of the personnel who will be performing the testing. If you are using contractor support, the program manager for the contract can provide the labor rates for the contractors. A suggested format for Appendix C follows.

Appendix C Rates and Fees

- 1. Labor rates
 - a. Civilian
 - i. Grade "X"
 - ii. Grade "XX"
 - iii. Etc.
 - b. Military
 - i. Rank
 - ii. Rank
 - iii. Etc.
 - c. Contractor

Break out by specific personnel pay grades if available

- 2. Utilities
 - a. Electric
 - b. Water
 - c. Other, as appropriate

4. CTA Appendices

- I. Air Force Model CTA
- II. CTA Roles and Responsibilities

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PARTNERSHIP INTERMEDIARY AGREEMENTS

PIAs

1. PIAs at a Glance

What's a PIA?

"PIA" is the acronym for a Partnership Intermediary Agreement. A PIA is a unique mechanism to enable a long-term partnership between a federal government laboratory and a state government, local government, or affiliated non-profit entity to facilitate technology transfer to non-federal entities and the transition of essential technologies back to the federal government. The term "PIA" also commonly refers to the partnership intermediary itself.

Purpose.

PIA legislation was created primarily to encourage national economic growth through technology transfer (T2) and commercialization of technology developed in federal government labs. The rationale was that government labs could be more successful at T2 by harnessing outside expertise residing in state or local government entities—entities focused on assisting small businesses, who could serve as independent, objective T2 brokers.

What Happens.

Under a PIA, the Air Force (AF) can provide funding to enable the partnership intermediary to assist it in establishing appropriate partnerships with non-federal entities.

Legal Basis.

Two different authorities enable Air Force components to establish PIAs: 15 USC §3715 and 10 USC §2368. The first authority, 15 USC §3715, authorizes any federal lab to establish PIAs. The second authority, 10 USC §2368, is specific to DoD Centers for Science, Technology,

and Engineering Partnership. Within the Air Force, the Air Force Research Laboratory (AFRL) is the only designated Center and, consequently, is the only AF Activity that can use 10 USC §2368.

Partnership Intermediary Benefits to Air Force Activities

- Function as "force multipliers" for AF Activities for technology transfer and transition (T3).
- Conduct focused marketing to businesses, academic institutions, and other non-federal entities of Air Force technologies, capabilities, facilities, and partnering opportunities.
- Identify qualified potential partners and introduce them to AF Activities.
- Help establish successful T3 agreements by facilitating productive communications between AF Activities and non-federal parties during the negotiation process.

Partnership Intermediary Benefits to Industry

- Help companies and other non-federal entities discover AF technology-related solutions and partnering opportunities.
- Explain these partnering opportunities as well as AF Activity requirements and expectations.
- Assist potential T2 partners in evaluating licensable AF technologies for their intended applications.
- Help develop viable license applications, commercialization plans, CRADA scopes of work (SOWs), and applications for other T3 projects.

2. Introduction

A. General Information

Partnership Intermediary Agreements (PIAs) are a unique mechanism to enable a long-term partnership between a defense (or other federal government) laboratory and a state government, local government, or affiliated non-profit entity to facilitate technology transfer and transition (T3) with businesses, academia, and other non-federal organizations. However, the term "PIA" also is commonly used to designate the non-federal entity that results from such an agreement—the partnership intermediary itself. This handbook uses the term "PIA" to indicate both the agreement and the resulting partnership intermediary.

Because all PIAs are non-profit entities, they are able to function as independent, objective brokers and facilitators of T3 partnerships. PIAs can conduct focused marketing of Air Force Activity technologies, capabilities, facilities, and partnering opportunities, introduce qualified partners to AF Activities, and help establish T3 and other partnerships with industry. Essentially, they function as "force multipliers" for Air Force ORTAs. Conversely, PIAs help businesses, entrepreneurs, and other non-federal entities find Air Force technology-related solutions and partnering opportunities, explain AF requirements, quide prospective partners through the T3 process, and help establish licensing agreements, CRADAs, EPAs, commercial test agreements, and other types of partnerships with the Air Force.

PIAs are authorized under both 15 USC §3715 and 10 USC §2368 (Appendix I and II). The first authority, 15 USC §3715, authorizes any federal lab to establish PIAs. This authority originated with the National Defense Authorization Act for Fiscal Year 1991, which was codified into Public Law 101-510 on November 5, 1990.

The second PIA authority, 10 USC §2368, is specific

to DoD and was established much more recently. The base legislation in 2015 created Centers for Science, Technology, and Engineering Partnership from DoD's existing "science and technology reinvention laboratories." Subsection (f) was added as an amendment in the National Defense Authorization Act for Fiscal Year 2019 and authorized these Centers to establish PIAs. Within the Air Force, AFRL is the only designated Center for Science, Technology, and Engineering Partnership. Consequently, it is the only AF Activity that can use 10 USC §2368 to establish a PIA.

As previously noted, the original PIA authority, 15 USC §3715, was not specific to defense labs. However, DoD was the first to embrace this T2 mechanism and has employed it far more extensively than any other federal entity. Drawing on DoD's example, the U.S. Department of Agriculture and Department of Veterans Affairs have more recently made limited use of this authority. Within DoD, the Air Force has been the pioneer and leader in establishing PIAs to assist with technology transfer.

In the mid-1990s, the Air Force began using outside organizations as T2 facilitators, which functioned like partnership intermediaries. However, these were established using mechanisms other than 15 USC §3715. DoD's first official PIA (using 15 USC §3715) was established in 1999, when the Air Force and Montana State University (MSU) signed an agreement designating TechLink as a PIA. TechLink's continuous mission has been to help DoD's nationwide lab system increase its license and other T2 agreements with industry by marketing DoD inventions and partnering opportunities. Based on its success, TechLink became a line item in the DoD budget in FY 2004. Since then, it has functioned as DoD's national PIA for technology transfer and has helped to transfer well over 1,000 DoD lab inventions to industry through license agreements.

MilTech is DoD's national PIA for technology transition, and also is based at MSU in Bozeman. MilTech was created in 2004 to provide manufacturing assistance to DoD's small business T2 partners. In 2008, it became an Air Force PIA with a DoD-wide mission. Today, MilTech is funded primarily by DoD programs to help DoD labs and technology companies develop new technology for U.S. warfighter use. MilTech has successfully completed over 200 projects that have helped accelerate technology transfer and transition and improve the design and cost-effectiveness of military products. Many of the new technologies are now in DoD operational use. These projects have involved over 60 different DoD labs and programs.

In addition to these two national PIAs, the DoD has approximately 25 regional PIAs that assist one or more specific DoD labs by facilitating partnerships between these labs and businesses and educational institutions. These partnerships are usually concentrated within the lab's home state or region. Long-established Air Force examples include: (1) the Wright Brothers Institute in Dayton, OH, which assists the Air Force Research Laboratory (AFRL) directorates at Wright-Patterson AFB by marketing AFRL lab opportunities to local and regional businesses, forming partnerships, and providing off-site facilities for meetings with industry; (2) the Griffiss Institute, which supports the nearby AFRL Information Directorate in Rome, NY, by facilitating partnerships between AFRL, universities, and industry to develop solutions to critical national security problems and help grow the technology sector in upstate New York; and (3) AFRL NM/NM Tech which assists the AFRL Directed Energy and Space Vehicles directorates at Kirtland AFB in Albuquerque, NM, by facilitating partnerships with academia and industry to promote innovation, technology commercialization, and STEM activities in New Mexico. (Brief profiles of the Air Force's PIAs are provided on the Air Force T3 Program website at https://www.aft3.af.mil/PIAs/.)

Comparison of PIA Authorities 15 USC §3715 and 10 USC §2368

The original authority, 15 USC §3715, gave federal lab directors the authority to enter into a contract or memorandum of understanding (MOU) with a "partnership intermediary" to perform services for the federal lab to increase its "likelihood of success in the conduct of cooperative or joint activities" with small business firms or educational institutions. The statute also allows federal labs to "pay the Federal costs" of the partnership intermediary using funds available to support their technology transfer function. This legislation became an amendment to the Stevenson-Wydler Technology Innovation Act of 1980 (15 USC §3701).

The second authority, 10 USC §2368, mirrors 15 USC §3715 to a significant extent. It enables a Center director to enter into a contract, MOU, or other agreement with a partnership intermediary "that provides for the partnership intermediary to perform services for the Department of Defense that increase the likelihood of success in the conduct of cooperative or joint activities of the Center with industry or academic institutions."

Both authorities define in similar ways the organizations that are eligible to become partnership intermediaries. To paraphrase, these organizations must be state or local government agencies, or non-profit entities owned by or directly affiliated with state or local government agencies, that assist, counsel, advise, evaluate, or otherwise cooperate with industry or educational institutions that need or can make productive use of technology-related assistance from the defense lab or center. Businesses and non-profit organizations that are not owned by or directly affiliated with state or local government agencies are not eligible to become PIAs under either of these authorities.

Despite their similarities, **15 USC §3715 and 10 USC §2368 differ in several significant ways**. These include the following:

- Federal entities that can establish PIAs. The original authority, 15 USC §3715, authorizes any federal lab to establish PIAs. By contrast, the second authority, 10 USC §2368, is specific to DoD. Furthermore, only DoD Centers for Science, Technology, and Engineering Partnership (formerly known as "science and technology reinvention laboratories") are allowed establish PIAs using 10 USC §2368. Within the Air Force, AFRL is the only designated Center for Science, Technology, and Engineering Partnership. Consequently, it is the only AF Activity eligible to use 10 USC §2368 to establish a PIA. All other AF Activities must use 15 USC §3715.
- Size of businesses eligible for PIA assistance. When referring to cooperative or joint activities between defense labs and industry that can be mediated by PIAs, 15 USC §3715 focuses exclusively on "small business firms." By contrast, 10 USC §2368 omits any reference to business size and, consequently, establishes no limit on the size of the industrial or commercial entity eligible for assistance by a partnership intermediary.
- Educational institutions eligible for PIA assistance. The original PIA authority, 15 USC §3715, is highly explicit regarding the educational institutions eligible for cooperative or joint activities mediated by a PIA, classifying them as "institutions of higher education as defined in section 1141(a) of title 20, or educational institutions within the meaning of section 2194 of title 10." By contrast, 10 USC §2368 refers to "academic institutions" but

provides no limitations on the educational entities eligible for assistance by the partnership intermediary.

B. PIA Eligibility

The two different PIA authorities, 15 USC §3715 and 10 USC §2368, are nearly identical in how they define the organizations that are eligible to become partnership intermediaries:

15 USC §3715:

"For purposes of this section, the term 'partnership intermediary' means an agency of a State or local government, or a nonprofit entity owned in whole or in part by, chartered by, funded in whole or in part by, or operated in whole or in part by or on behalf of a State or local government, that assists, counsels, advises, evaluates, or otherwise cooperates with small business firms, institutions of higher education..., or educational institutions...that need or can make demonstrably productive use of technology-related assistance from a Federal laboratory..."

10 USC §2368:

"In this subsection, the term 'partnership intermediary' means an agency of a State or local government, or a nonprofit entity owned in whole or in part by, chartered by, funded in whole or in part by, or operated in whole or in part by or on behalf of a State or local government, that assists, counsels, advises, evaluates, or otherwise cooperates with industry or academic institutions that need or can make demonstrably productive use of technology-related assistance from a Center."

Using either of these authorities, there are **two key criteria** for determining if an organization is eligible to become a PIA:

1) Corporate Status: The organization cannot be a for-profit business. Drawing on the statutes above, the Air Force PIA Guidance Memorandum (see

Appendix I) specifies that the organization must be either "(1) a state government or local government agency; (2) a non-profit entity owned, operated, or funded in whole or in part by, or on behalf of, a state or local government; or (3) a non-profit entity chartered by a state or local government." It cannot be an independent non-profit entity for example, a stand-alone non-profit corporation created for the purpose of serving as a PIA. Per the Air Force PIA Guidance memo, the non-profit "must show a nexus to a state or local government. This nexus may consist of legislative sponsorship and/or (partial) funding, a defined state or local role in its operations, even if limited, or some form of government action demonstrating the organization is authorized to work on behalf of a state or local government" (see Appendix I). Because of the diverse and often complicated ways that a nonprofit could have adequate nexus to a state or local government to qualify for a PIA, the AF Activity should consult with its contracting officer and legal counsel in its determination on this matter.

2) Economic Development **Mission:** The organization also must have an economic development mission. This requirement is explicit in the text of both PIA authorities, which define the eligible state or local government agency, or affiliated non-profit entity, as one that "assists, counsels, advises, evaluates, or otherwise cooperates" with businesses or educational institutions. This mission could include developing STEM-related partnerships, because the ultimate purpose of promoting STEM is to increase the nation's technological competitiveness to ensure a vibrant economy. A state or local government agency or affiliated non-profit would not be eligible if undertaking PIA activities was unrelated to that organization's mission—for example, if its motivation was simply to generate income for other

purposes. A PIA is not a FAR-based contract and a partnership intermediary is not a contractor to a federal lab.

The intent of the original PIA legislation was to enable partnerships between federal labs and state or local government agencies in order to assist both partners with their respective missions: technology transfer in the case of the federal lab, and economic development in the case of the state or local government. The motivating concept was that the PIA, by assisting the federal lab with technology transfer, would be helping foster economic development. For example, if the PIA at New Mexico Tech (a state university) helped a local high-tech company in Albuquerque to license an innovative technology from AFRL's Space Vehicles directorate, and that technology enabled a successful aerospace product—leading to the rapid growth of the company and general economic development—the result would be achieving the respective missions of both the Air Force and the state of New Mexico.

C. PIA Purpose and Activities

The stated purpose of a PIA under both authorities is "to perform services" for the federal laboratory "that increase the likelihood of success in the conduct of cooperative or joint activities" of that laboratory with businesses or educational institutions. Neither PIA authority provides any specific detail on the services that may be performed by partnership intermediaries. To provide further direction, the Air Force PIA Guidance Memorandum (Appendix I) helpfully identifies a range of possible PIA services:

- Providing consulting, strategic planning, military and technology assessments;
- Facilitating transfer of technologies from the Air Force to businesses;
- Evaluating patents and patent applications

to identify the most viable candidates for licensing to industry;

- Marketing Air Force technologies to potential industry licensees;
- Providing support and assistance for media/ legislative interactions;
- Working with small business and regional economies interested in commercializing federal technology;
- Arranging technical conferences, workshops and seminars; and
- Identifying companies with innovative technologies, which match Air Force operational needs.

An essential key to understanding appropriate activities under a PIA is embodied in this mechanism's title: "Partnership Intermediary Agreement." Partnership intermediaries serve as "intermediaries" between the federal lab and the outside world. In addition, they broker or facilitate "partnerships" between the lab and industry, academia, or other non-federal partners. They do not themselves conduct technical research and development (R&D) for the lab or directly commercialize federally developed technologies. In addition, they legally cannot be used to serve as a pass-through to provide funding to for-profit entities or to avoid or circumvent FAR-based contracting requirements. For example, they cannot procure goods or services for the lab or provide technical R&D services, which would legally need to be obtained through normal procurement channels.

D. Benefits

Extensive use of PIAs distinguishes DoD from all other federal agencies and has been a key factor behind DoD's T2's success. Within DoD, the Air Force has been the pioneer and leader in employing PIAs to

assist with technology transfer. PIAs are a valuable tool in the Air Force T2 toolbox. Because all PIAs are non-profit entities, they are able to function as independent, objective T2 brokers and facilitators. This is one of the key factors behind their effectiveness.

Major benefits to the Air Force from using PIAs include the following: PIAs are able to conduct focused marketing of Air Force Activity technologies, capabilities, facilities, and partnering opportunities to industry and academia. They can screen businesses, entrepreneurs, and educational institutions and introduce qualified potential partners to AF Activities. Subsequently, they can facilitate productive communications between AF Activities and the non-federal parties during the negotiation process and help establish successful T3 agreements and other partnerships. Essentially, they function as "force multipliers" for Air Force ORTAs.

PIA authority 10 USC §2368 identifies a range of objectives that the "public-private partnerships" are intended to help accomplish for the DoD lab. All can be considered potential benefits to the Air Force from use of PIAs:

- To maximize use of a Center's capacity.
- To reduce or eliminate DoD's cost of ownership of a Center.
- To reduce DoD's costs of science, technology, and engineering activities.
- To leverage private-sector investment in Center research and equipment recapitalization.
- To promote commercial business activities drawing on the Center's core capabilities.
- To foster cooperation and technology transfer between DoD, academia, private industry, and state and local governments.
- To help the Center access, outside of DoD,

AIR FORCE TECH TRANSFER HANDBOOK

- technically skilled personnel, innovative methods, and capabilities in order to effectively and efficiently achieve DoD's defense mission.
- To achieve the specific purposes of an extensive list of technology transfer and other authorities. These include intergovernmental personnel assignments; education partnership agreements; testing services; sale, rent, loan, or donation of samples, drawings, technical information, and materials; licensing of federally owned inventions; cooperative research and development agreements; partnership intermediary agreements; and various grants and cooperative agreements that help achieve the goals of the Stevenson-Wydler Technology Innovation Act of 1980.

Conversely, PIAs provide many benefits to the non-federal partners. They can help businesses, entrepreneurs, and other non-federal entities find AF technology-related solutions and partnering opportunities. They can explain these opportunities as well as AF Activity requirements and expectations. Next, they can help potential T2 partners evaluate licensable AF technologies—for example, by helping them obtain technical data or material samples, or by conducting market research. Subsequently, they can help companies develop viable license applications, commercialization plans, CRADA SOWs, and applications for other T2 projects, including commercial test agreements (CTAs). Likewise, they can help educational institutions to develop applications for education partnership agreements (EPAs). Throughout the entire process, they can facilitate communications with the AF Activities to help ensure mutually acceptable T2 agreements and other types of partnerships.

3. PIA Process

There are relatively few Air Force partnership intermediaries. Each PIA to date has resulted from a more-or-less unique and individualized process. To help address this situation, the Air Force (SAF/AQC and SAF/GC) issued a guidance memorandum on October 10, 2019 to establish "a common Air Force interpretation governing the use of partnership intermediary agreements" (see Appendix). This memo summarizes the rationale for using PIAs, provides important background information, discusses types of PIAs, lists the kind of services they can perform, addresses competition requirements, and discusses the need for Air Force Activities to maintain an arms-length relationship with the PIA organizations ("Partnership Intermediary personnel are not Air Force employees").

Regarding competition requirements, the memo notes that there is no legal guidance on whether the Competition in Contracting Act (CICA, 10 USC §2304) applies to PIAs, and also no laws that expressly exempt PIAs from competition. It also notes that PIA contracts resemble procurement contracts in consisting of a written agreement, use of appropriated funds, and the purchase of services. Consequently, it advises Air Force Activities to observe CICA and "compete PIAs to the maximum extent practicable." It also notes that Activities can establish unfunded PIAs using MOUs, which do not use appropriated funds and are not subject to CICA.

Because the Air Force currently does not have a standard process for establishing PIAs, Activities desiring to initiate a PIA should first contact the Air Force T3 Office to receive up-to-date guidance. This office can provide examples of relevant PIA contracts or MOUs. The following are general steps that should be followed in forming a PIA:

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- Determine the PIA authority that will be used to establish the PIA—15 USC §3715 or 10 USC §2368
- Determine whether the PIA will receive AF Activity funding, which will determine the contractual mechanism that needs to be used—a PIA contract versus an MOU
- If intending to use an MOU (for an unfunded PIA), confirm the eligibility of the non-federal organization to become a PIA
- If intending to fund the PIA organization, determine the source and amount of Air Force funding available for PIA activities
- Determine the specific activities to be undertaken by the PIA, and draft the PIA SOW
- If intending to fund the PIA organization, develop and post a request for proposals (RFP)
- Evaluate the responses to the RFP, and confirm the eligibility of the non-federal organization selected through the RFP process to become a PIA
- Draft the PIA contract or MOU, using examples provided by the Air Force T3 Office for guidance
- Obtain internal Activity approval for the PIA draft contract or MOU, then obtain approval from the non-federal partner and obtain signatures.

4. PIA Appendices

- I. 15 USC §3715 Use of Partnership Intermediaries
- II. 10 USC §2368 Centers for Science, Technology, and Engineering Partnership
- III. Air Force PIA Guidance Memorandum

Appendicies

CRADA APPENDICIES

CRADA Checklist

Air Force Model CRADA 5.2

Sample Waiver Letter

Non-Domestic CRADAs

CRADA Roles and Responsibilites

CRADA Checklist

This CRADA checklist summarizes the essential steps that an ORTA needs to take to establish a CRADA. This checklist is compartmentalized into the different phases of the CRADA process: Initiation, Development, Negotiation, CRADA Signature Process, and CRADA Post-Signature Management.

Preliminary

- □ Determine that a standard CRADA is the appropriate mechanism—versus a limited purpose CRADA (NDA or MTA), a Commercial Test Agreement (CTA), Education Partnership Agreement (EPA), Information Transfer Agreement (ITA), or other T2 agreement.
- □ Determine that the proposed Collaborator is a domestic rather than foreign entity. If foreign, follow the process summarized in Section 6 in the CRADA module ("Non-Domestic CRADAs"). This process is detailed in the flow chart in Appendix IV to the module, which also contains the Non-Domestic CRADA Summary Sheet and Foreign Disclosure Procurement Decision Worksheet (AFMC Form 191).
- ☐ Ensure that the CRADA technical point of contact (TPOC) understands his or her responsibilities, including helping develop the CRADA content and assisting the ORTA in establishing the CRADA; overseeing the technical work plan; maintaining the CRADA file; and notifying the ORTA if any tasks can't be completed or amendments are needed, if any inventions occurred, and of other CRADA results.

AIR FORCE TECH TRANSFER HANDBOOK

CRADA Development

Obtain all inputs from the AF TPOC and Collaborator needed to draft the CRADA—those indicated in the color-highlighted areas on the cover page and in Sections I-III of the Air Force Model CRADA (available in Appendix II in the CRADA module).
Ensure that Section II – Joint Work Plan fully answers the following questions (obtaining additional information as necessary from the AF TPOC and Collaborator):
Are the objectives of the CRADA project fully and clearly stated?
Do the stated objectives meet the statutory requirement of the Federal Technology Transfer Act, "to transfer federally owned or originated technology to State and local governments and to the private sector"? (Note, this requirement is satisfied by the AF Activity showing that it is making an intellectual contribution to the CRADA project.)
Are the benefits to both the AF Activity and Collaborator fully and clearly stated?
Has the background relationship between the CRADA parties, and the reason they are partnering with each other, been explained in a way to make clear that the AF Activity is not providing an unfair competitive advantage to the Collaborator or establishing a sole source for future procurement actions?
Have all other participants in the CRADA project (contractors, subcontractors, and other R&D entities) been identified?
Have the technical tasks that will be undertaken by both the AF Activity and Collaborator been identified and clearly stated?
Is the Background Technology that both the AF Activity and Collaborator are bringing to the CRADA project been completely identified and documented?
Have the CRADA parties been informed that any other privileged or proprietary information not qualifying as Background Technology must be clearly marked?
Will either the AF Activity or Collaborator be loaning any property or equipment to the other party? If so, have the following steps been taken?
The AF equipment custodian has been notified.
If the AF Activity is loaning property or equipment, the paperwork for this loan been prepared.
Have the type and frequency of reports been determined and have the parties responsible for writing the reports been identified?
Are there any other deliverables, and have these been clearly identified? Have the milestones for the CRADA project been clearly identified, and are these adequate to support the stated term of the CRADA and consistent with its expiration date?
Ensure that all inputs have been entered in the appropriate color-highlighted areas on the cover page and in Sections I-III of the Air Force Model CRADA, including the expiration date and the names, titles, and email addresses of the AF Activity and Collaborator representatives who are duly authorized to sign the CRADA

CRADA CHECKLIST - APPENDIX I

CR	ADA Negotiation
	The AF TPOC and Collaborator counterpart have both agreed to the technical content in the draft CRADA.
	The legal review of the draft CRADA has been completed by both the Collaborator and the AF Activity.
	All technical and legal issues have been resolved.
	A memo or email addressing the legal sufficiency of the CRADA has been received from the AF Activity attorney.
CR	ADA Signature Process
	The CRADA has been emailed to the Collaborator for signature.
	The Collaborator has signed, dated, and returned the CRADA to the AF Activity.
	The CRADA has been approved by all required parties in the AF Activity (such as the TPOC, branch chief, and division chief) following the Activity's established CRADA review process.
	The Reviewing Official has approved the CRADA or waived his or her review.
	If the Reviewing Official has disapproved the CRADA, a letter has been sent to the Collaborator with an explanation for disapproval.
	If the Reviewing Official has requested changes to the CRADA, the changes have been made and the CRADA has been re-reviewed and re-signed by both the Collaborator and the AF Activity, then approved by the Reviewing Official
CR	ADA Post-Signature Management
	The CRADA number has been assigned and added to the CRADA document.
	A fully executed copy of the CRADA with CRADA number on the document has been emailed to all responsible parties.
	The AF TPOC has been reminded of all responsibilities regarding the CRADA, including keeping a record of all CRADA documents and documenting all new information, technology, and inventions resulting from the CRADA.
	All required information about the CRADA has been entered into DTTIS.
	CRADA success stories have been documented and publicized.

CRADA CHECKLIST - APPENDIX I



UNITED STATES AIR FORCE

COOPERATIVE RESEARCH AND DEVELOPMENT AGREEMENT (CRADA)

between

<<AIR FORCE ACTIVITY>>

and

<<COLLABORATOR>>

"Title"

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SECTION I: STANDARD TERMS AND CONDITIONS

ARTICLE 1—PREAMBLE

- 1.1. This Cooperative Research and Development Agreement ("Agreement") for performing the work described in the Joint Work Plan is entered into under the authority of the Federal Technology Transfer Act of 1986, as amended and codified at 15 U.S.C. § 3710a, and pursuant to Air Force Policy Directive 61-3, Domestic Technology Transfer (20 May 2013) and Air Force Instruction 61-302, Cooperative Research and Development Agreements (30 May 2001) by and between <<Collaborator>> ("Collaborator"), located at <<Address of Collaborator>>, and the United States of America as represented by the Department of the Air Force, acting through <<Air Force Activity>>, ("Air Force Activity"), located at <<Address of Air Force Activity>>.
- 1.2. This *Agreement* is binding on *Air Force Activity* and *Collaborator* according to the terms and conditions set forth as follows.

ARTICLE 2—DEFINITIONS

As used in this *Agreement*, the following terms have the following meanings and such meanings will be applicable to both the singular and plural forms of the terms.

- 2.1. "Reviewing Official" means the final authority of the Department of the Air Force for this Agreement, identified in Section III, Signatures, below the signatures of the parties.
- 2.2. "Effective Date" is the date this Agreement, including any Amendment thereto, is signed by the appropriate Air Force Activity official after having been signed by the appropriate Collaborator official unless the Reviewing Official disapproves of or requires modification to this Agreement within thirty (30) Days of the date signed by Air Force Activity. The Effective Date of any Modification is the date signed by the appropriate Air Force Activity official after having been signed by the appropriate Collaborator official.
- 2.3. "Government" means the Government of the United States of America including any agency or agencies thereof.
- 2.4. "*Invention*" means any invention or discovery which is or may be patentable or otherwise protected under Title 35 of the United States Code or any novel variety of plant which is or may be protected under the *Plant Variety Protection Act* (7 U.S.C. § 2321 *et seq*). See 35 U.S.C. § 201(d) and 15 U.S.C. § 3703(7).
- 2.5. "Created" when used in relation to any copyrightable work means the work is fixed in any tangible medium of expression for the first time. See 17 U.S.C. § 101.
- 2.6. "Made" when used in relation to any *Invention* means the conception or first actual reduction to practice of such *Invention*. See 35 U.S.C. § 201(g).
- 2.7. "Joint Work Plan" (Section II) describes the purpose and scope of this Agreement and assigns obligations and responsibilities among the parties. The Joint Work Plan specifically details any Background Technology brought to this Agreement; any property, equipment, maintenance, service, or other support to be provided; and any reports, products, or other deliverables expected

to be produced or provided as a result of the collaborative activities under this *Agreement*. To the extent any provision of the *Joint Work Plan*, including any attachment thereto, conflicts with any provision in Section I: *Standard Terms and Conditions*, such provision in Section I: *Standard Terms and Conditions*, shall control.

- 2.8. "Under this Collaboration" means work performed by Air Force Activity or Collaborator employees in furtherance of their obligations or responsibilities described in the Joint Work Plan.
- 2.9. "Collaborator Restricted Information" is privileged or confidential information developed in whole or in part by Collaborator Under this Collaboration which embodies trade secrets or which is confidential technical, business or financial information, provided such information is identified as such by labels or markings designating the information as proprietary. Collaborator Restricted Information does not include information which is generally known or is available from another source without obligations concerning its confidentiality, or is described in an issued patent, published patent application, or published copyrighted work.
- 2.10. "Restricted Access Information" is information developed solely by Air Force Activity Under this Collaboration that would be a trade secret or commercial or financial information that is privileged or confidential if the information had been obtained from a non-Federal party participating in a CRADA. The term, "confidential," as used throughout this Agreement, refers to the customary definition and should not be confused with the level of classification for national security information. Restricted Access Information does not include information which is generally known or is available from another source without obligations concerning its confidentiality, or is described in an issued patent, published patent application, or published copyrighted work.
- 2.11. "Protected Information" is any information developed Under this Collaboration, including both Collaborator Restricted Information and Restricted Access Information.
- 2.12. "Background Technology" is specified technology brought to this Agreement by either party consisting of privileged or restricted information or intellectual property protected by trade secret or described in a patent, patent application or copyrighted work. All Background Technology must be Made, Created or otherwise developed prior to the Effective Date of this Agreement, or if added under a Modification or Amendment, prior to the effective date of such Modification or Amendment. All Background Technology is specifically identified as such in the Joint Work Plan, along with the marking requirements and, if applicable, terms for delivery, storage and disposition of such Background Technology. Background Technology does not include oral or visual information not fixed in a tangible form.
- 2.13. "Special Purpose License" means a nonexclusive, nontransferable, irrevocable, worldwide, royalty-free and paid-up license to Air Force Activity to use, modify, reproduce, release, perform, display, or disclose technology, technical data, or copyrighted works, in whole or in part, within the Government without restriction, and to release or disclose outside the Government and authorize persons to whom release or disclosure has been made, to use, modify, reproduce, release, perform, display, or disclose such technology or information for Government purposes. The Special Purpose License includes the rights to use, modify, reproduce, release, perform, display, or disclose technology, technical data, or copyrighted works for competitive procurement, but it does not include the rights to use, modify, reproduce, release, perform, display, or disclose for commercial purposes or authorize others to do so.

- 2.14. "Confirmatory License" refers to a single-page document submitted by Collaborator to Air Force Activity documenting Government's license rights to, and power to inspect and make copies of patent applications filed on, an Invention Made Under this Collaboration and owned by Collaborator. The Air Force Activity will record the Confirmatory License at the United States Patent and Trademark Office. See Appendix A, Section II: Joint Work Plan.
- 2.15. "Alternative Dispute Resolution" (ADR) means any procedure in which the parties agree to use a third-party neutral to resolve issues in controversy, including, for example, mediation, non-binding arbitration, or facilitation. ADR does not include binding arbitration.
- 2.16. "Official File" refers to the official Government record of this Agreement, maintained by Air Force Activity and accessible by the Office of Research and Technology Applications (ORTA) specified as the Air Force Activity POC in Article 12—"Notices," and which includes, at minimum, an accounting of all funds and equipment provided under this Agreement, all Modifications or Amendments thereto, all Formal Notices submitted under paragraph 12.1, and each report specified in Article F—"Deliverables."
- 2.17. "Days" refer to calendar days unless specified otherwise.

ARTICLE 3—FINANCIAL CONSIDERATIONS

- 3.1. **Expenses**. Except as otherwise stated in the *Joint Work Plan*, each party shall bear its own expenses in the performance of work *Under this Collaboration*.
- 3.1. [Alternate] Expenses. The *Collaborator* will pay *Air Force Activity* \$X US within thirty (30) *Days* after the *Effective Date*. Subsequent payments will be paid as detailed in Section II: *Joint Work Plan*.
 - 3.1.1. **Payments**. Except as provided for in paragraph 3.2, payments by *Collaborator* to *Air Force Activity* under this Article shall be made payable to <<Air Force Activity FAS>> and mailed to the following address:

Address for payment

- 3.1.2. **Federal Funding**. Unless specified otherwise in Section II: *Joint Work Plan*, *Collaborator* certifies that no funds provided to *Air Force Activity* under this *Agreement* were originally received by *Collaborator* under a *Government* funding agreement. [If this statement is not true, consult the ORTA for guidance.]
- 3.1.3. **Notice to Accompany Payments**. Payments shall reference this *Agreement* by USAF CRADA Number and by the names of the parties and shall state the purpose of the payments. A copy of the payment documents shall also be sent by ordinary mail to the address shown for formal notices in Article 12—"*Notices*."
- 3.2. **Royalty Payments**. Royalty or other income from intellectual property will be paid in accordance with any separate license agreement hereafter entered into by the parties pursuant to Article 4—"*Invention Disclosures & Patents*" or Article 5—"*Copyright Protection*."

ARTICLE 4—INVENTION DISCLOSURES & PATENTS

4.1. **Disclosure of** *Inventions*. Each party must report to the other party, in writing, each *Invention Made Under this Collaboration*, within six (6) months after the *Invention* is *Made* unless

a written request for an extension of time to provide such a report has been approved by the other party. Such requests shall not be unreasonably refused.

- 4.2. Rights and Licensing of *Inventions Made Under this Collaboration*.
 - 4.2.1. **Sole** *Inventions*. Each party will separately own any *Invention Made Under this Collaboration* solely by its respective employees.
 - 4.2.1.1. **License to** *Air Force Activity*. The *Collaborator* will grant to *Air Force Activity* a paid-up, royalty-free, irrevocable, non-exclusive license to practice, or have practiced for or on behalf of *Government*, any *Invention Made Under this Collaboration* solely by *Collaborator* employees. The *Collaborator* will promptly provide a *Confirmatory License* upon request by *Air Force Activity* for any *Invention Made Under this Collaboration* that is owned by *Collaborator*.
 - 4.2.1.2. **License to** *Collaborator*. The *Air Force Activity* will grant to *Collaborator* a paid-up, royalty-free, irrevocable, non-exclusive license to practice any *Invention Made Under this Collaboration* solely by *Air Force Activity* employees. The *Air Force Activity* will promptly provide a *Confirmatory License* upon request by *Collaborator* for any *Invention Made Under this Collaboration* that is owned by *Air Force Activity*.
 - 4.2.1.3. **Option for** *Collaborator* **to Obtain Exclusive License**. The *Collaborator* will have the option to choose an exclusive license for a pre-negotiated field of use at a reasonable royalty rate, subject to the conditions set forth in 15 U.S.C. § 3710a(b)(1), for any *Invention Made Under this Collaboration* solely by *Air Force Activity* employees.
 - 4.2.1.3.1. The *Collaborator* must exercise the option to obtain an exclusive license for an *Invention Made Under this Collaboration* within six (6) months of the filing of a patent application on such *Invention*. The *Collaborator* may request such time be extended as necessary to understand the nature of the *Invention* and to permit sufficient time to determine the potential value thereof, which request will not be unreasonably refused by *Air Force Activity*. Any such extensions approved by *Air Force Activity* must be in writing.
 - 4.2.1.3.2. The *Collaborator* shall have the right of enforcement under chapter 29 of Title 35, United States Code, for an exclusive license entered into under this paragraph.
 - 4.2.2. **Joint Inventions**. An Invention Made Under this Collaboration jointly by Air Force Activity employees and Collaborator employees ("Joint Invention") will be jointly owned by both parties.
 - 4.2.2.1. *Collaborator* Election. The *Collaborator* shall promptly elect whether to grant title of its ownership interest in a *Joint Invention* to *Air Force Activity*, subject to a non-exclusive, irrevocable, paid-up, royalty-free license to practice the *Invention* from *Air Force Activity* to *Collaborator*.
 - 4.2.2.2. **Assignment**. If *Collaborator* appropriately files a patent application on a *Joint Invention*, *Air Force Activity* may, at its discretion, assign title in that *Invention* to *Collaborator*, subject to the conditions set forth in 15 U.S.C. § 3710a(b)(1).

4.2.2.3. **Joint Ownership Agreement**. The *Air Force Activity* will promptly provide a draft Joint Ownership Agreement to *Collaborator* for each *Joint Invention* in which the parties do not agree to consolidate ownership in accordance with paragraphs 4.2.2.1 or 4.2.2.2. The Joint Ownership Agreement will define rights and responsibilities among the parties for each such *Joint Invention*. The *Collaborator* will be responsible for all patent preparation and prosecution under the *Joint Ownership Agreement*.

4.2.3. General Terms.

- 4.2.3.1. **Copies of Patent Applications**. The party filing any patent application on any *Invention Made Under this Collaboration*, including provisional and international filings, must provide a copy thereof to the other party within thirty (30) *Days* of filing such application.
- 4.2.3.2. **Cooperation**. The party not filing, prosecuting, or administering any patent application or patent under this Article will fully cooperate with the party filing, prosecuting, or administering the application or patent in promptly executing all necessary documents and obtaining cooperation of its employees in executing such documents related to such application or patent.
- 4.2.3.3. **Patent Expenses**. The party filing an application on any *Joint Invention* is responsible for all patent application preparation and filing expenses, issuance, post issuance, and patent maintenance fees associated with that application while this *Agreement* is in effect, unless otherwise agreed to under a Patent License Agreement or Joint Ownership Agreement.
- 4.2.3.4. Collaborator Rights to Employee *Inventions*. The *Collaborator* shall ensure that it obtains rights to all *Inventions Made* by one or more of its employees *Under this Collaboration*.
- 4.3. **Licensing Other Federally Owned** *Inventions*. The *Collaborator* may submit an application for license in accordance with 37 C.F.R. 404.8 for any federally owned *Invention* for which a patent application was filed before the signing of this *Agreement* that is directly within the scope of the work specified in the *Joint Work Plan*. The royalty rate, field of use, and other terms and conditions shall be set forth in a separate license agreement and shall be negotiated promptly and in good faith.
- 4.4. **Federal Regulations**. All licenses granted to *Collaborator* under this Article shall ordinarily be subject to Title 37, Code of Federal Regulations, Part 404, *Licensing of Government-Owned Inventions*.
- 4.5. **Participation of Third Parties.** Except as specified in paragraph 4.5.1, either party intending to use the support of any contractor or third party not identified in the *Joint Work Plan* to perform any of its obligations *Under this Collaboration* shall provide written notice to the other party at least thirty (30) *Days* in advance of any involvement of such contractor or third party with activities *Under this Collaboration*. If the party receiving such notice objects at any time to the use or involvement of such contractor or third party, the party providing such notice will not utilize or promptly cease utilizing the services of such contractor or third party to perform its obligations *Under this Collaboration*.

- 4.5.1. Third Party Support of Air Force Activity. The Air Force Activity may use the support and research services of support contractors, such as Advisory and Assistance Services (A&AS) contractors, in performing its roles or obligations described in the Joint Work Plan. Every other contractor or third party assisting Air Force Activity in performing its roles or obligations described in the Joint Work Plan must be listed in paragraph C.2, along with the specific obligation or service each such party is expected to provide.
- 4.5.2. **Support Contractor Inventions**. The *Collaborator* acknowledges that invention rights under the Bayh-Dole Act, 35 U.S.C. § 200 *et seq.*, or the applicable patent rights clause under the Federal Acquisition Regulation (FAR) or the Defense Federal Acquisition Regulation Supplement (DFARS) governing any such contract, or both, may conflict with the terms in this Article. In such cases, *Collaborator's* rights or options in such inventions under this Article will take precedence over any such rights of the contractor in accordance with 35 U.S.C. § 210(e). See also 48 C.F.R. 27.303(b)(7).
- 4.5.3. **Third Party Support of** *Collaborator*. No information, material, equipment, or other resources provided by *Collaborator* under this *Agreement*, originating from any contractor or third party, shall have any restriction whatsoever on further use, release or disclosure beyond that specified in this *Agreement*, except as specifically identified, including a detailed description of any such limitations, in the *Joint Work Plan*. Any agreement with a third party to provide support to *Collaborator* for participation under this *Agreement* shall contain terms consistent with this provision and which are at least sufficient to provide *Air Force Activity* all rights anticipated under this *Agreement* as if *Collaborator* was providing the support itself. The *Collaborator* shall provide a copy of any such third party support agreement to *Air Force Activity* within thirty (30) *Days* of the execution of this *Agreement* or the third party support agreement, whichever is later.

ARTICLE 5—COPYRIGHT PROTECTION

- 5.1. **Ownership of Copyrighted Works**. The *Collaborator* shall ensure that it obtains rights to all copyrightable works *Created* by one or more employees *Under this Collaboration*. The *Collaborator* shall own the copyright in all works copyrightable under Title 17, United States Code, *Created* solely by *Collaborator* employees *Under this Collaborator* or, subject to the rights of third parties under paragraph 4.5, *Created* in part by *Collaborator* employees *Under this Collaboration*.
- 5.2. License in Published Copyrighted Works. The Collaborator hereby grants in advance to Government a Special Purpose License in all published copyrighted works Created Under this Collaboration. The Collaborator will prominently mark each such published copyrighted work with the words: "This work was created in the performance of a Cooperative Research and Development Agreement [CRADA No.] with the Department of the Air Force. The Government of the United States has certain rights to use this work."
- 5.3. **Copies of Published Copyrighted Works**. The *Collaborator* must furnish to *Air Force Activity*, at no cost to *Air Force Activity*, one copy of each published copyrighted work *Created* in whole or in part by *Collaborator Under this Collaboration*. The *Collaborator* is not required to provide a copy of any such work that is only published electronically if the publication is accessible without cost to *Air Force Activity*.

ARTICLE 6—BACKGROUND TECHNOLOGY AND PROTECTED INFORMATION

- 6.1. **Disclosure of Oral and Visual Information**. Information disclosed orally or visually, if identified as information that is to be protected under this *Agreement* at the time of disclosure, will be deemed *Protected Information* under this *Agreement* for thirty (30) *Days* and thereafter if, within thirty (30) *Days* after such oral or visual disclosure, such information is reduced to writing or otherwise affixed in tangible form, and properly marked in accordance with Article 2—"Definitions" and the *Joint Work Plan*, and submitted to the other party.
- 6.2. **Disclosure and Use of** *Background Technology*. All *Background Technology* provided to the other party must be specifically identified in the *Joint Work Plan*.
 - 6.2.1. Unless otherwise expressly provided in the Joint Work Plan, Background Technology may only be disclosed to those having a need for the information in connection with their duties Under this Collaboration. The party designating Background Technology in the Joint Work Plan hereby grants a royalty-free license to the other party to this Agreement to use all such Background Technology for the purpose of performing its obligations Under this Collaboration. Subject to paragraph 6.2.2, and unless specifically stated otherwise in the Joint Work Plan, the receiving party will have no rights (other than for performing work Under this Collaboration) in such Background Technology regardless of whether it is improved, refined or otherwise further developed Under this Collaboration.
 - 6.2.2. The party designating *Background Technology* in the *Joint Work Plan* agrees to offer the other party on reasonable terms, to be negotiated under separate agreement, the non-exclusive right to further use all such *Background Technology* after the expiration or termination of this *Agreement* in negotiated fields of use, to include at least all fields or technologies described in the *Joint Work Plan*. This offer shall be made available to the other party for six (6) months from the expiration or termination of this agreement.
- 6.3. **Computer Software and Computer Software Documentation**. All computer software and computer software documentation *Made*, *Created* or developed *Under this Collaboration* by *Collaborator* shall be treated as *Collaborator Restricted Information* for purposes of determining rights in such computer software and computer software documentation.
- 6.4. **Collaborator Restricted Information**. The Collaborator grants a Special Purpose License to Air Force Activity in all Collaborator Restricted Information.
- 6.5. **Restricted Access Information**. All Restricted Access Information may be exempt from release under the Freedom of Information Act for a period of five (5) years as provided for at 15 U.S.C. § 3710a(c)(7)(B), during which time Collaborator may only use or disclose Restricted Access Information in confidence, or authorize others to use or disclose Restricted Access Information in confidence.
- 6.6. Marking of Background Technology and Protected Information. All Background Technology and Protected Information will be conspicuously marked as such and will reference this CRADA by number (see Figures 1&2, paragraph E.4 of the Joint Work Plan). Neither party will be liable for the release of unmarked Background Technology or Protected Information. The party receiving properly labeled Background Technology or Protected Information must comply with all appropriate requirements governing the treatment of such information as described in the Joint Work Plan. The receipt or acceptance of improperly or inaccurately marked information shall not adversely affect the rights of the party receiving such information.

6.7. **Future Use of Information and Technology in** *Government* **Procurement**. Any copyrightable work or *Collaborator Restricted Information* to which *Air Force Activity* receives a *Special Purpose License* under this *Agreement* shall be prominently marked with "Government Purpose Rights," as defined under 48 C.F.R. 252.227-7013(a)(13) & 7014(a)(12), or other notice clearly indicating *Government* has at least such rights, when delivered to any party under a federal procurement contract—other than a supplier or support contractor—after the *Effective Date* of this *Agreement* (see Figure 3, paragraph E.4). Under no circumstances shall the mere marking or labeling of such information or technology in accordance with this Article imply that such "Government Purpose Rights" license will automatically change to an "Unlimited Rights" or other license at any time. *See* 10 U.S.C. § 2320.

ARTICLE 7—TERM OF AGREEMENT, MODIFICATIONS & TERMINATION

- 7.1. **Term of** *Agreement*. This *Agreement* commences on the *Effective Date* of this *Agreement* and shall terminate at the expiration date indicated above the signatures in Section III: *Signatures*, unless both parties hereto agree in writing to extend it further in accordance with paragraph 7.2 or 7.3. Expiration of this *Agreement* shall not affect the rights and obligations of the parties accrued prior to expiration. This *Agreement* may not be modified after its expiration or termination.
- 7.2. **Modifications**. Any change or extension within the scope of this *Agreement* as authorized by the *Reviewing Official* may be made by *Modification*, which shall be entered into by mutual written agreement signed by the parties' representatives authorized to execute this *Agreement*. Each *Modification* will be attached hereto, a copy of which must be made available to the *Reviewing Official* within thirty (30) *Days* after each such *Modification* is signed by both parties.
- 7.3. **Amendments**. Any change outside the scope of this *Agreement* may be made by *Amendment*, which shall be entered into by mutual written agreement signed by the parties' representatives authorized to execute this *Agreement* and submitted to the *Reviewing Official*. Each *Amendment* will be attached hereto.
- 7.4. **Termination**. Either party may terminate this *Agreement* for any reason upon delivery of written notice to the other party. The written notice shall specify an effective termination date at least thirty (30) *Days* after receipt by the other party. Termination of this *Agreement* shall not affect the rights and obligations of the parties accrued prior to the effective date of termination of this *Agreement*. In the event of termination by either party, each party shall be responsible for its own costs incurred through the effective date of termination, as well as its own costs incurred after the effective date of termination and which are unrelated to the termination. If *Air Force Activity* terminates this *Agreement* strictly for mission requirements or national security purposes, it shall not be liable to *Collaborator* or its contractors or subcontractors for any costs resulting from or related to the termination, including, but not limited to, consequential damages or any other costs.

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ARTICLE 8—DISPUTES

- 8.1. **Resolution of Disputes**. All disputes arising out of or related to this *Agreement* will be resolved in accordance with this Article. The parties agree to use reasonable efforts to reach a fair settlement of any dispute. Resolution attempts must be documented and maintained in the *Official File*. Pending the resolution of any informal or formal dispute process, work under this *Agreement* not subject to dispute may continue.
- 8.2. **Informal Resolution**. The parties agree to make a good faith attempt to informally resolve all disputes arising out of this *Agreement* among themselves before pursuing the formal dispute resolution process.
- 8.3. Alternative Dispute Resolution Process. In accordance with Department of Defense Instruction 5145.05, Alternative Dispute Resolution (ADR) and Conflict Management (27 May 2016) and Air Force Policy Directive 51-12, Alternative Dispute Resolution (9 January 2003), the parties should use ADR as an alternative to litigation or formal proceedings to the maximum extent practicable and appropriate. Either party may submit a written request for ADR to the other party any time prior to the submission of a request for a formal decision by the *Reviewing Official*. ADR may be used for all or a portion of the issue in controversy. The Air Force Activity shall, within sixty (60) Days of receiving or submitting a request for ADR, identify in writing a third-party neutral suitable for the requested ADR process and provide an estimate or cost basis for the process. In identifying such third-party neutral, Air Force Activity shall, with the assistance of the Air Force General Counsel (SAF/GC), make use of existing *Government* ADR resources to avoid unnecessary expenditure of time and money. The party in receipt of a request for ADR may provide a written rejection of the requested ADR process, which must include a detailed description of why the requested ADR process is not appropriate. Failure to provide such rejection to the other party within thirty (30) Days of the identification of a third-party neutral shall be deemed as an acceptance of the requested ADR process.
- 8.4. **Formal Decision by** *Reviewing Official*. If informal efforts to resolve disputes are unsuccessful, either party may request a formal decision by the *Reviewing Official*. The *Reviewing Official* must, within sixty (60) *Days* of receipt of the request for decision, issue a formal decision to the parties in writing. The decision of the *Reviewing Official* shall be binding on the parties unless appealed in accordance with paragraph 8.5.
- 8.5. **Final Agency Decision**. Either party may appeal the formal decision by the *Reviewing Official* by submitting a request for a final agency decision, along with a complete documentation of the dispute process, to the Office of the Secretary of the Air Force General Counsel for Acquisition (SAF/GCQ) within six (6) months of the issuance of the formal decision by the *Reviewing Official*. The Office of the Assistant Secretary of the Air Force for Acquisition (SAF/AQR) shall promptly notify the parties of the final agency decision in writing. The decision of SAF/AQR or designee shall be final and conclusive and shall be binding on the parties. Nothing in this *Agreement* may be interpreted to deny or limit the right of the parties to thereafter seek relief in federal court.

ARTICLE 9—REPRESENTATIONS

9.1. *Air Force Activity*. The *Air Force Activity* hereby represents to *Collaborator* as follows:

- 9.1.1. **Mission**. The performance of the activities specified by this *Agreement* is consistent with the mission of *Air Force Activity*.
- 9.1.2. **Authority**. The *Air Force Activity* has obtained, prior to the execution of this *Agreement*, all prior reviews and approvals required by law or regulation. The *Air Force Activity* officials signing and executing this *Agreement* have the requisite authority to do so.
- 9.1.3. **Statutory Compliance**. The *Air Force Activity*, prior to entering into this *Agreement*, has: (1) given special consideration to entering into CRADAs with small business firms and consortia involving small business firms; (2) given preference to business units located in the United States which agree that products embodying an *Invention Made Under this Collaboration* or produced through the use of such *Invention* will be manufactured substantially in the United States; and (3) taken into consideration, in the event this *Agreement* is made with an industrial organization or other person subject to the control of a foreign company or government, whether or not such foreign government permits United States agencies, organizations, or other persons to enter into CRADAs and licensing agreements with such foreign country.
- 9.2. *Collaborator*. The *Collaborator* hereby represents to *Air Force Activity* as follows:
 - 9.2.1. **Corporate Organization**. The *Collaborator*, as of the date hereof, is a <corporation>> duly organized, validly existing and in good standing under the laws of the State of <<State>>. The *Collaborator* is <<not>> a Small Business, as defined by the Small Business Administration. The *Collaborator* is <<not>> a foreign owned or a subsidiary of a foreign owned entity. [If foreign owned, indicate the country of ownership.]
 - 9.2.2. **Statement of Ownership**. The *Collaborator* has the right to assignment of all *Inventions Made* and copyrightable works *Created* by its employees *Under this Collaboration*.
 - 9.2.3. **Authority**. The *Collaborator* official executing this *Agreement* has the requisite authority to enter into this *Agreement* and *Collaborator* is authorized to perform according to the terms hereof.
 - 9.2.4. **Infringement**. The *Collaborator* will not knowingly, without appropriate authorization and consent, infringe any third-party's intellectual property rights in the performance of work *Under this Collaboration*. The *Collaborator* will immediately notify *Air Force Activity* of any potential infringement involving work *Under this Collaboration* upon receipt of a notice of infringement or after otherwise becoming aware of any possible infringement of a third party's intellectual property.
 - 9.2.5. **Lawful Compliance**. The *Collaborator* will perform all activities under this *Agreement* in compliance with all applicable laws, regulations and policies.
 - 9.2.6. **Certification**. Neither *Collaborator* nor any of its principals are currently debarred, suspended, proposed for debarment, declared ineligible, or otherwise excluded from participating in transactions with *Government*, the Department of Defense, or the United States Air Force. The *Collaborator* will promptly notify *Air Force Activity* if such status changes during this *Agreement*.

ARTICLE 10—LIABILITY AND LIMITATIONS

- 10.1. **Property**. No real or tangible property or equipment may be furnished to the other party unless specifically identified in the *Joint Work Plan*.
 - 10.1.1. All such property and equipment identified in the *Joint Work Plan* is furnished "AS IS" and the parties make NO EXPRESS OR IMPLIED WARRANTY OF ANY KIND, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, for any property or equipment furnished under this *Agreement*.
 - 10.1.2. All *Government* property and equipment furnished to *Collaborator* under this *Agreement* must be returned to *Air Force Activity* on or before the termination or expiration of this *Agreement*. The *Collaborator* shall immediately return or provide immediate access to any *Government* property or equipment provided to it under this *Agreement* that is deemed essential for national security or mission needs at the absolute discretion of the *Reviewing Official*. The unauthorized use of *Government* property can subject a person to fines, imprisonment, or both, under 18 U.S.C. § 641.
 - 10.1.3. The party that has received property or equipment from the other party under this *Agreement* assumes the risk of, and shall be responsible for, any loss of such property or equipment upon its return, or failure to return when due, to the party providing the property or equipment. All property and equipment provided to the receiving party, unless otherwise specified in the *Joint Work Plan*, shall be returned in the same condition in which it was received, reasonable wear and tear excepted.
- 10.2. **Intellectual Property**. The parties make NO EXPRESS OR IMPLIED WARRANTY AS TO ANY MATTER WHATSOEVER, including the conditions of the research or any *Invention* or other intellectual property, or product, whether tangible or intangible, provided, *Made*, *Created* or developed *Under this Collaboration*, or the merchantability, or fitness for a particular purpose of the research or any *Invention* or other intellectual property, or product. The parties further make no warranty that the use of any *Invention* or other intellectual property or product provided, contributed, *Made*, *Created* or developed *Under this Collaboration* will not infringe any other United States or foreign patent or other intellectual property right.
- 10.3. **DAMAGES**. IN NO EVENT WILL EITHER PARTY BE LIABLE TO THE OTHER PARTY FOR PUNITIVE, EXEMPLARY, OR CONSEQUENTIAL DAMAGES.
- 10.4. **No Waiver of Sovereign Immunity**. Notwithstanding any provision to the contrary, *Collaborator* understands and agrees that *Government* will not be liable to any party to this *Agreement*, whether directly or by way of contribution or indemnity, for any claim made by any person or other entity for personal injury or death or for property damage or loss, arising in any way from this *Agreement*, including, but not limited to, the later use, sale, or other disposition of research and technical developments, whether by resulting products or otherwise, whether *Made*, *Created*, or developed *Under this Collaboration* or contributed by either party pursuant to this *Agreement*, except as provided under the Federal Tort Claims Act (28 U.S.C. § 2671 *et seq.*) or other federal law where sovereign immunity has been explicitly waived.

ARTICLE 11—GENERAL TERMS & PROVISIONS

11.1. **Disposal of Toxic or Other Waste**. The *Collaborator* is responsible for either the removal and disposal from *Air Force Activity* premises of any additional toxic and hazardous materials and wastes over and above amounts or different from types which would be produced during

operations of *Air Force Activity* facilities in the absence of this *Agreement* or for the costs associated with such additional removal or disposal, if any. The *Collaborator* must obtain, at its own expense, all necessary permits and licenses as required by local, state, and Federal law and regulation, and will effect such removal and disposal in a lawful and environmentally responsible manner.

- 11.2. **Force Majeure**. Neither party will be in breach of this *Agreement* for any failure of performance caused by any event beyond its reasonable control and not caused by the fault or negligence of that party. In the event such a force majeure event occurs, the party unable to perform must promptly notify the other party, and in good faith maintain such part performance as is reasonably possible, and resume full performance as soon as is reasonably practicable.
- 11.3. **Relationship of the Parties**. The parties to this *Agreement* and their employees are independent contractors and are not agents of each other, joint venturers, partners, or joint parties to a formal business organization of any kind. Neither party is authorized or empowered to act on behalf of the other with regard to any contract, warranty, or representation as to any matter, nor will either party be bound by the acts or conduct of the other. Each party will maintain sole and exclusive control over its own personnel and operations.
- 11.4. **Publicity/Non-Endorsement**. Any public announcement of this *Agreement* must be coordinated between *Collaborator*, *Air Force Activity* and the public affairs office supporting *Air Force Activity*. By entering into this *Agreement*, neither *Air Force Activity* nor the *Government* directly or indirectly endorses any product or service provided, or to be provided, by *Collaborator*, its successors, assignees, or licensees. The *Collaborator* may not in any way imply that this *Agreement* is an endorsement of *Collaborator* or any such product or service.
- 11.5. **Publication or Public Disclosure**. The parties agree to confer and consult with each other prior to publication or other public disclosure of information obtained from, or results derived from, collaborative activities *Under this Collaboration* to ensure that no *Background Technology*, *Protected Information*, military critical technology, classified information, export controlled, or other controlled or sensitive information is inappropriately released.
 - 11.5.1. Each party shall provide a complete copy of any such proposed publication or public disclosure to the other party as soon as practicable, subject to the limitations under paragraph 11.5.2, to allow the other party to submit objections to such publication or disclosure and to take suitable steps to secure appropriate protection in a timely manner.
 - 11.5.2. Where submission of a complete copy of the proposed publication or disclosure is limited by law or regulation or where such submission is impractical, the party proposing such publication or disclosure shall provide a summary or description of the relevant information subject to publication or disclosure. Such summary or description shall be as reasonably complete as possible to allow the party to assess the need to protect sensitive information.
 - 11.5.3. Neither party may proceed with such publication or public disclosure within thirty (30) *Days* of providing a copy, summary, or description of such publication or public disclosure under paragraph 11.5.1 or 11.5.2, without the express written consent of the other party.
 - 11.5.4. Failure to object to such proposed publication or disclosure within ninety (90) *Days* after such proposed publication or disclosure was received from the other party, or prior to the actual publication or public disclosure, subject to paragraph 11.5.3, whichever is earlier, shall constitute implied assent to such publication or disclosure.

- 11.5.5. In all cases, a party proposing to publish or publicly disclose information obtained from the other party that is marked with a restriction limiting the distribution of such information, may not proceed with such publication or public disclosure without the express written consent of the other party.
- 11.5.6. Under no circumstances shall any review or assent of a proposed publication relieve the publishing party of its obligations under Executive Order 13526, "Classified National Security Information," the Arms Export Control Act, or the Export Administration Act.
- 11.5.7. Subject to the restrictions under paragraph 11.4, any such publication or other public disclosure of work or results *Under this Collaboration* must, unless waived by the other party in writing, include a statement to the effect that the project or effort was made in the performance of a Cooperative Research and Development Agreement with the other party to this *Agreement*.
- 11.6. **Governing Law**. The construction, validity, performance and effect of this *Agreement* will be governed, for all purposes, by the laws applicable to *Government*.
- 11.7. **Waiver of Rights**. Any waiver must be in writing and provided to all other parties. Failure to insist upon strict performance of any of the terms and conditions hereof, or failure or delay to exercise any rights provided herein or by law, will not be deemed a waiver of any rights of any party hereto.
- 11.8. **Entire Agreement**. This *Agreement* represents the entire agreement of the parties and is the complete and exclusive statement of their agreement.
- 11.9. **Severability**. The illegality or invalidity of any provision of this *Agreement* will not impair, affect, or invalidate the other provisions of this *Agreement*.
- 11.10. **Survivability**. All rights and responsibilities incurred under Section I: *Standard Terms and Conditions*, and Article E—*Intellectual Property*, shall survive the expiration or termination of this *Agreement*.
- 11.11. **Assignment**. Neither this *Agreement* nor any rights or obligations of either party hereunder may be assigned or otherwise transferred by either party without the prior written consent of the other party.
- 11.12. **Controlled Information**. The parties understand that information and materials provided pursuant to or resulting from this *Agreement* may be export controlled or unclassified sensitive and protected by law, executive order, or regulation. Nothing in this *Agreement* may be construed to permit any disclosure in violation of these restrictions.
- 11.13. **Classified Information**. No classified information will be submitted, received, discussed, or otherwise transferred between the parties under this *Agreement*.
- 11.13. [Alternate] Classified Information. All access by Collaborator to classified information shall be in accordance with DoD 5220.22-M, National Industrial Security Program Operating Manual, and determined at the absolute discretion of Air Force Activity. The Collaborator shall sign and comply with DD Form 441, Department of Defense Security Agreement, and DD Form 254, Department of Defense Contract Security Classification Specification. DD Form 254 shall be attached prior to beginning any work effort specified in the Joint Work Plan involving classified information. All classified information accessed by Collaborator, as well as appropriate justification for such access, must be identified in Article D of the Joint Work Plan. The

Collaborator shall further comply with all Special Access Program (SAP) and Sensitive Compartmented Information (SCI) directives, manuals, and other guidelines determined to be appropriate by Air Force Activity. Details of these arrangements shall be annotated in the attached DD Form 254.

- 11.14. **Records**. The *Air Force Activity* will maintain a complete record of this *Agreement* in the *Official File*. This record will include, for example, a signed copy of this *Agreement*, legal review, all *Modifications*, *Amendments* and attachments thereto, an archive of all *Background Technology* and *Protected Information* provided by either party—which shall be used solely for the purpose of documenting *Air Force Activity's* obligations under this *Agreement*—and all formal notices received by or delivered to *Collaborator* under Article 12—"*Notices*," in accordance with 15 U.S.C. § 3710a(c)(6).
- 11.15. **No Human or Animal Research**. No work performed *Under this Collaboration* will involve human or animal subjects. Absolutely no human or animal research or testing is authorized under this *Agreement* or any *Modification* thereto.
- 11.16. **Implementation of Operations Security (OPSEC) by** *Air Force Activity.* General OPSEC procedures, policies and awareness are required in an effort to reduce program vulnerability to adversary effort to collect and exploit critical information. OPSEC shall be applied as a protective measure throughout the life cycle of this *Agreement*.

ARTICLE 12—NOTICES

Notices specified in this *Agreement* must be addressed and sent as follows:

12.1. **Formal Notices**. Send formal notices under this *Agreement*, including copyright, invention and patent correspondence, by prepaid, certified U.S. Mail, or by electronic mail with a non-automated confirmation receipt by receiving party (note: If receiving party requires a "wet signature," that party should not provide confirmation to the sender but should instead indicate the need for an original document), to:

CollaboratorAir Force ActivityAttn: <<Collaborator POC>>Attn: <<ORTA POC>><< Collaborator Address-Line1>><<ORTA Address-Line1>><< Collaborator Address-Line2>><<ORTA Address-Line2>><< Collaborator City, State, Zip>><<ORTA City, State, Zip>>Phone:Phone:Email:Email:

12.2. **Technical Matters.** Send informal correspondence on technical matters to the Technical Point of Contact (TPOC), designated below, by U.S. Mail or electronic mail to:

CollaboratorAir Force ActivityAttn: << Collaborator-TPOC>>Attn: <<AFA-TPOC>><< Collaborator-TPOC Address-Line1>><<AFA-TPOC Address-Line1>><< Collaborator-TPOC Address-Line2>><<AFA-TPOC Address-Line2>><< Collaborator-TPOC City, State, Zip>><<AFA-TPOC City, State, Zip>>Phone:Phone:Email:Email:

SECTION II: JOINT WORK PLAN

"Title"

ARTICLE A—PROJECT DESCRIPTION

A.1. **Executive Summary.** [Provide a brief overview, abstract, or executive summary of the proposed collaboration in a single paragraph.]

ARTICLE B—OBJECTIVES

- B.1. **Nature of Collaboration and CRADA Objectives**. [Describe the overall nature and objectives of the collaboration (i.e., what are the parties planning to do, what question are they trying to answer, and what do they hope to achieve?) Explain the problem or question to be investigated and describe the RDT&E anticipated during the collaboration.) This paragraph should answer the question: if everything goes as planned and the work is successful, what will this *Agreement* achieve?]
- B.2. **Technology Transfer**. [Describe the objective of the *Agreement* in terms that show it meets the statutory requirement of the *Federal Technology Transfer Act* that is, that it serves "to transfer federally owned or originated technology to State and local governments and to the private sector."]
- **B.3.** Benefit to Air Force Mission.
 - B.3.1. **Description of Benefit to** *Air Force Activity*. [Describe the objective of the *Agreement* in qualitative terms that show it serves the Air Force mission. Answer the question, "What does the Air Force get out of this *Agreement*?" The activities under this *Agreement* must be directed "toward the conduct of specified research or development efforts which are consistent with the missions of the laboratory."]
 - B.3.2. **Estimated Benefit to** *Air Force Activity*. [Provide an estimate of the benefit to *Air Force Activity* in both tangible and intangible terms. Use quantitative terms, if possible (e.g., dollars saved, hours of labor saved, etc.). If the benefit is achieving a capability that can't be done alone, describe the benefit and define how much it's worth or explain why it's important. If the benefit is intangible—such as helping to shape the future workforce or building improved relationships, or if it is otherwise impossible to estimate, merely list or describe the benefits.]
- B.4. Benefit to Collaborator.
 - B.4.1. **Description of Benefit to** *Collaborator*. [Describe the objective from *Collaborator's* perspective. How does it benefit *Collaborator*?]
 - B.4.2. Estimated Benefit to Collaborator. [Provide estimate of benefit to Collaborator.]
- B.5. **Estimated Value of Contributions**. In contrast to an estimate of the benefits received, provide an estimate of all resources committed by each party in support of this collaboration.
- B.4.1 **Estimated Contributions by** *Air Force Activity*. The *Air Force Activity* estimates the following contributions toward this CRADA effort:

TOTAL	\$ N	
(6) Other Resources	\$ n	
(5) Intellectual Property	\$ n	
(4) Supplies and Equipment	\$ n	
(3) Facilities	\$ n	
(2) Services	\$ n	
(1) Personnel / Labor	\$ n	

B.4.2 **Estimated Contributions by** *Collaborator*. The *Collaborator* estimates the following contributions toward this CRADA effort:

TOTAL	\$ N	
(6) Other Resources	\$ n	
(5) Intellectual Property	\$ n	
(4) Supplies and Equipment	\$ n	
(3) Facilities	\$ n	
(2) Services	\$ n	
(1) Personnel / Labor	\$ n	

ARTICLE C—PARTIES AND OTHER PARTICIPANTS

- C.1. **Relationship of Parties**. [Explain how this relationship between *Air Force Activity* and *Collaborator* developed and why the parties are partnering with each other. It should be clear that *Air Force Activity* is not: (1) providing an unfair competitive advantage to *Collaborator*; (2) unduly competing with the private sector; or (3) establishing a sole source for future procurement needs. See DoDI 5535.8, Enclosure 2.]
- C.2. **Other Participants**. [Provide the name and address of business entities, if any, that may contribute to the R&D effort under this *Agreement*. Provide the role(s) that each participant will have. Identify whether the other participant(s) is foreign owned or controlled.] [Examples of other participants include suppliers and sub-contractors, R&D partners, etc.]

ARTICLE D—TECHNICAL TASKS

[NOTE: This Article is the "heart" of the CRADA – this section should clearly describe the work to be performed by both parties.]

- D.1. **Air Force Activity**. [Describe the specific tasks *Air Force Activity* will perform under this *Agreement*. The manpower and other resources that will be called upon to accomplish the tasks should be defined with specificity.]
- D.2. **Collaborator**. [Describe the specific tasks *Collaborator* will perform under this Agreement.]

ARTICLE E—INTELLECTUAL PROPERTY

- E.1. **Background Technology**. A designation of relevant *Background Technology*, if any, each party brings to this *Agreement* is listed below, along with a detailed description or appropriate citation (e.g., patent number, software version, etc) for each item and the type of intellectual property protection that applies (e.g., trade secret, copyright, patent or patent application, etc). No *Background Technology* may be added after the *Effective Date* except by *Modification* or *Amendment*.
 - E.1.1. Air Force Activity Background Technology. [Document or state "None".]
 - E.1.2. *Collaborator Background Technology.* [Document or state "None".]
- E.2. **No Effect on Rights of** *Background Technology*. Except as provided in paragraph 6.2, the designation of technology as *Background Technology* does not create or establish any rights in *Background Technology*. Nothing in this *Agreement* shall be construed to otherwise alter or affect any rights of either party to any technology listed as *Background Technology* that exist or are modified outside this *Agreement*.
- E.3. **Other Privileged or Proprietary Information**. Privileged or proprietary information (e.g., commercial or financial information developed prior to this *Agreement* but not qualifying as *Background Technology*), should be conspicuously marked with the appropriate legend (e.g., "Proprietary Information") when provided to the other party. The receiving party shall protect such information with at least the same care as it would protect its own trade secret information (or information that would be a trade secret if originating from a non-federal party).

E.4. Standard Markings.

E.4.1. *Background Technology*. All *Background Technology* will be identified as such with a marking. For example:

[PARTY NAME] - BACKGROUND TECHNOLOGY

The right to use, modify, reproduce, release, perform, display, disclose or dispose of information revealed herein is restricted in accordance with CRADA No. FY-###-LAB-##.

This information shall be protected in accordance with 15 U.S.C. § 3710a(c)(7). Any information subject to this legend may only be reproduced or disclosed if authorized under that agreement and every such reproduction or disclosure must also be prominently marked with this legend.

If you are not permitted to receive this information under that agreement, you must immediately return it to an authorized representative.

Figure 1: Marking of Background Technology

E.4.2. *Protected Information*. All *Protected Information* will be identified as such with a marking. For example:

[PARTY NAME] – PROTECTED INFORMATION

The right to use, modify, reproduce, release, perform, display, disclose or dispose of information revealed herein is restricted in accordance with CRADA No. FY-###-LAB-##.

This information shall be protected in accordance with 15 U.S.C. § 3710a(c)(7). Any information subject to this legend may only be reproduced or disclosed if authorized under that agreement and every such reproduction or disclosure must also be prominently marked with this legend.

If you are not permitted to receive this information under that agreement, you must immediately return it to an authorized representative.

Figure 2: Marking of Protected Information

E.4.3. **Future Use of Information subject to** *Special Purpose License*. Use of information developed or *Created Under this Collaboration* and subject to a *Special Purpose License* in a future *Government* procurement, in accordance with paragraph 6.8, will be identified as such with a marking. For example:

GOVERNMENT PURPOSE RIGHTS

CRADA No. [FY-###-LAB-##]

[Collaborator Name]

[Collaborator Address]

Expiration Date: NONE

Figure 3: Marking of information subject to *Special Purpose License* in future *Government* procurement

ARTICLE F—DELIVERABLES

F.1. **Property and Equipment**. No real or tangible property or equipment will be furnished by either party *Under this Collaboration*. [Otherwise, describe all property and equipment to be furnished under the CRADA and establish, for each item, the date of purchase or approximate age of the item, approximate value, who will be responsible for the transportation/cost of furnishing the item, when it will be transferred and when it will be returned and who is responsible for returning the item, if applicable.]

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- F.2. **Annual and Interim Reports**. The *Air Force Activity* is responsible for ensuring an annual, interim, or final report for this *Agreement* is completed at least once per year (a sample template for an annual report is included in Appendix B). The annual report should be completed with the input of both parties and should include: a summary of activities, issues, and accomplishments; a listing of objectives met, technology developed, and benefits received; and a decision to continue the *Agreement*, based on a finding that the *Agreement* is of mutual benefit and is expected to continue to be beneficial to both parties, or a decision to terminate the *Agreement*. All reports shall explicitly state whether any *Invention* was *Made* by either party under this *Agreement* and, if so, identify each such *Invention*. [Identify any other reports, if any, that will be provided describing the results of the CRADA, including the format, who will produce them, and when they will be delivered.]
- F.3. **Final Report**. The final report for this *Agreement* will be completed jointly by *Air Force Activity and Collaborator* and will be completed by the last day of the month following the month of termination or expiration of this *Agreement*.
- F.4. **Delivery of Reports**. All reports to be delivered under this *Agreement* shall be delivered to the individuals specified in Article 12—"*Notices*" and maintained in the *Official File*.
- F.5. **Other Deliverables**. [Identify technical data, computer software, equipment, and all other property or products expected to be provided to the other party under this *Agreement*.]

ARTICLE G—MILESTONES. [Give the dates for specific milestones within the term of the CRADA on which each party is expected to complete its tasks. These milestones must be consistent with the expiration date indicated in Section III.]

APPENDIX A:CONFIRMATORY LICENSE

Cooperative Research and Development Agreement (CRADA) No.: Licensor (Collaborator): [Name/Address/E-mail] **Licensee (Air Force Activity):** [Name/Address/E-mail] The invention identified below was developed under the referenced CRADA with the United States of America, Department of the Air Force. This confirmatory license documents the paid-up, royalty free, irrevocable, non-exclusive license to practice or have practiced for or on behalf of the Government of the United States of America ("Government"), and hereby grants to Government the irrevocable power to inspect and make copies of the patent application identified below. Title of Invention: Name of Inventor(s): Serial No.: **Patent Application Filing Date:** I certify that I am a duly authorized representative of Licensor. Date [Name] [Title] [Address]

[Phone/E-mail]

APPENDIX B:ANNUAL REPORT TEMPLATE

[Air Force Activity]
[Collaborator]
[Title]

CRADA Annual Report

[Start Date] — [End Date]

The CRADA between Air Force Activity and Collaborator was executed on [CRADA Effective Date] for a term of [term] months. All milestones have been met and the projects specified in the Joint Work Plan have been proceeding as planned. The parties consider the CRADA to be a successful collaboration.

1. Funds. During the past year, what payments, if any, were provided by Collaborator to Air Force Activity, and when were they received? Specify the total funds received under the CRADA to date.

Payments received by Air Force:

- (1) \$ n on [date 1st payment received].
- (2) \$ m on [date 2nd payment received].

Total funds received by Air Force in [Report Year]: \$ N.

Total funds received by Air Force under the CRADA to date: \$ M.

2. Equipment. During the past year, what equipment or material was provided under the CRADA by either party, and when was it transferred?

No equipment was provided by either party during the past year.

[Or provide list of equipment]

3. Inventions. During the past year, identify any inventions made under the CRADA, and when they were reported to the other party.

None.

[Or provide list of Inventions]

4. Technology Transfer. Identify the benefits of Technology Transfer to the Air Force during the past year (check all that apply):

☐ Provided Air Force with a new capability	☐ Developed new technology
☐ Reduced Air Force manpower requirements	☐ Improved technology or software
☐ Saved Air Force resources	☐ Assisted in the development of the

	TOTAL	\$	N	
	(6) Other Resources	\$	n	
	(5) Intellectual Property	\$	n	
	(4) Supplies and Equipment	\$	n	
	(3) Facilities	\$	n	
	(2) Services	\$	n	
	(1) Personnel / Labor	\$	n	
b. Ti	ne Air Force Activity contributions:			
	TOTAL	\$	N	
	(7) Funds	\$	n	
	(6) Other Resources	\$	n	
	(5) Intellectual Property	\$	n	
	(4) Supplies and Equipment	\$	n	
	(3) Facilities	\$	n	
	(2) Services	\$	n	
	(1) Personnel / Labor	\$	n	
a. Tl	ne Collaborator contributions:			
	nated Value of Contributions. During the nate value of their contributions under		<u> </u>	
	Increased Manufacturing Readiness I	Level (MRI	۵)	
	Facilitated investment strategy		☐ Facilitated commercializat	ion
	Developed relationship in S&T comm	nunity	Lever (TRL) of Technolog	у
	Developed relationship in local comm	nunity	☐ Increased Technology Rea Level (TRL) of Technolog	
	(other than manpower)		future workforce	

6. Description of Activities. [Provide a detailed description of the activities completed under the CRADA during the past year. Include any completed milestones.]

7. Issues / Areas of Concern. [Describe any significant problems or issues.]

8. Recommendation . We recommend of time is anticipated at this point.	mend the CRADA effort continue to	expiration. No extension
	Signature of Air Force Activity TPOC	Date

SECTION III: SIGNATURES

- **I.** Expiration. This Agreement expires <<number of months>> <<(N)>> months from the Effective Date unless duly modified in accordance with Article 7—"Term of Agreement, Modifications & Termination," and attached hereto.
- **II. IN WITNESS WHEREOF**, the parties with signature authority have executed this *Agreement* in duplicate, or authorized electronic format, through their duly authorized representatives as follows:

Collaborator		Air Force Activity	
< <name>></name>		< <name>></name>	
< <title>></td><td colspan=3><<Title>></td></tr><tr><td><< Email Address >></td><td></td><td><< Email Address >></td><td>></td></tr><tr><td>Signature</td><td>Date</td><td>Signature</td><td>
Date</td></tr><tr><th>Air Force Activity's sign</th><th>-</th><th>pprove or require modifica</th><th>rty (30) <i>Days</i> of the date of tion of this <i>Agreement</i>.</th></tr><tr><td><math>\Box</math> This <i>Agreeme</i></td><td>nt is hereby DISAI</td><td>PPROVED.*</td><td></td></tr><tr><td><math>\square</math> This <i>Agreeme</i></td><td>nt REQUIRES MO</td><td>DDIFICATION.*</td><td></td></tr><tr><td>* An explanation is</td><td>s required by law if <math>A</math></td><td>greement is disapproved or re</td><td>equires modification.</td></tr><tr><td>Signatu</td><td>ire</td><td></td><td>
Date</td></tr><tr><td></td><td>Name and Title of</td><td>Reviewing Official</td><td></td></tr></tbody></table></title>			



DEPARTMENT OF THE AIR FORCE AIR FORCE RESEARCH LABORATORY WRIGHT-PATTERSON AIR FORCE BASE OHIO



MEMORANDUM FOR XX DIVISIONS

FROM: AFRL/XX

SUBJECT: Waiver of Review Authority for Cooperative Research and Development

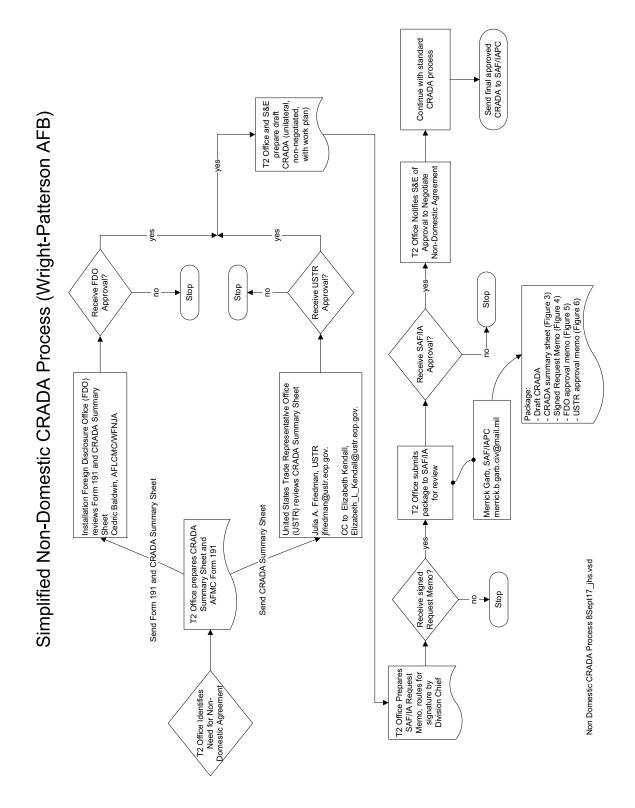
Agreements

- 1. As the reviewing official for all Cooperative Research and Development Agreements (CRADAs), I have the authority under 15 USC § 3710a to request an opportunity to disapprove or require modification of any such agreement entered into by any division of this directorate.
- 2. Effective immediately, I hereby waive this reviewing authority for all CRADAs including Limited Purpose CRADAs such as Material Transfer Agreements as long as the following conditions are met: (1) as is the case for all Technology Transfer agreements, the agreement must be properly coordinated and reviewed by the Office of Research and Technology Applications (ORTA), and (2) the agreement has been deemed legally sufficient by legal counsel. I will continue to exercise my review authority for all CRADAs that the ORTA staff has determined my review is necessary or appropriate, or that have been deemed not legally sufficient by legal counsel. In addition, I will continue to review multiple party CRADAs that are also signed by another federal laboratory outside the directorate.
- 3. Accordingly, a CRADA entered into under authority of 15 USC § 3710a that has been appropriately reviewed and deemed legally sufficient shall be effective on the date signed by the AFRL/XX division chief, after having been signed first by the appropriate Collaborator official.
- 4. Each CRADA shall be assigned a CRADA number by the ORTA after division signature.

<Name>
Director

CC:

AFMCLO/JAZ (or other legal counsel) XX ORTA



Date

International OT or Non-Domestic CRADA Summary Sheet

1.	The identity of the foreign company by name.
2.	The identity of the country of origin of the foreign interests.
3.	Name of technology involved.
4.	A detailed description of why collaborator is the best choice over potential domestic collaborators.
5.	An explanation of the purpose and benefits.
6.	Level of classification of the information involved.
7.	Whether the technology is export controlled.
8.	Whether any foreign persons, industrial organizations, or academic institutions will

be involved in the CRADA or OT at any tier level and the identity of such entities.

Appendix 4 – AFMC Form 191 **Foreign Disclosure Procurement Decision Worksheet**

CLASSIFICATION:		(When filled in)
NOT RELEASABLE TO FOR	REIGN GOVERNME	ENTS, NATIONALS OR THEIR REPRESENTATIVES
FOREIGN DISCLOS	URE PROCU	REMENT DECISION WORKSHEET
	CASE IDEN	NTIFICATION
CASE NUMBER		SHORT TITLE
POTENTIAL FOREIGN PARTICIPANTS		
CITE PROGRAM ELEMENT/TASK/WORK UNIT AND FUNDING	G CATEGORY (i.e.,	6.1; 6.2; 6.3; etc.)
	SECURITY CI	LASSIFICATION
HIGHEST SECURITY CLASSIFICATION OF PROGRAM/CONTR	ACT	
HIGHEST SECURITY CLASSIFICATION OF DATA/EQUIPMENT.	INFORMATION TO	D BE RELEASED
ANTICIPATED SECURITY CLASSIFICATION OF DATA/EQUIPMI PROGRAM/CONTRACT	ENT/INFORMATIO	N TO BE DEVELOPED, GENERATED, OR PRODUCED UNDER
	DESC	RIPTION
LIST ALL TECHNOLOGIES, DATA AND EQUIPMENT TO BE DISC	CLOSED TO A FOR	REIGN PARTICIPANT, AT EACH PHASE IN THE CONTRACT
DESCRIBE SENSITIVITY REPORTANCE OR OPTION ITY OF	U I TECHNOLOGI	ESIDATA/EQUIPMENT LISTED ABOVE AS REQUIRED FOR DISCLOSURE.
best be server in the server of the server o	ALL I LUT HOLOGIS	ENUMERATE REPORTED ABOVE AS REQUIRED FOR DISCUSSING.
DOES ANY OF THE INFORMATION BEAR A CAVEAT LIMITING or Formerly Restricted Data, etc.)? IF YES, SPECIFY.	DISTRIBUTION (NOFORN, Not Releasable to Foreign Nationals, LIMDIS, ORCON, Restricted Data
or running resoluted balls, each of FES, or Eur s.		
IF ANY OF THE INFORMATION OR EQUIPMENT TO BE DISCLO AGENCY (Army, Mary, ARPA, NASA, etc.) IDENTIFY THE INFOR		HE COGNIZANCE OR JOINT COGNIZANCE OF ANOTHER US GOVERNMENT NOV. HAVE ALL PARTIES AGREED TO THE RELEASE?
IS AND OF THE REPORTATION PROPERTY OF A CONTRACTOR	100 00 PF1	ALTO ANNUAL DISTANCE ASSOCIATIV
IS ANY OF THE INFORMATION PROPRIETARY TO A CONTRACT	TOR OR PRIVATE I	INDEVIDUAL 7 IS YES, SPECIFY.
NOT RELEASABLE TO FORE	EIGN GOVERNMEN	NTS, NATIONALS OR THEIR REPRESENTATIVES
AFMC FORM 191, 20080107	PREV	TIOUS EDITION IS OBSOLETE

CLASSIFICATION:

(When filled in)

Appendix 4 – AFMC Form 191 Foreign Disclosure Procurement Decision Worksheet

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(When filled in)

NOT RELEASABLE TO FOREIGN GOVERNMENTS, NATIONALS OR THEIR REPRESENTATIVES					
PLEASE PROVIDE NAMES, OFFICE SYMBOLS, AND PHONE NUMBERS OF OTHER ORGANIZATIONS OR INDIVIDUALS YOU FEEL SHOULD ALSO					
EVALUATE THIS CASE					
			İ		
PROVIDE ANY ADDITIONAL COMMENTS YOU FEEL ARE APPLICA	ABLE TO THIS	DISCLOSURE ACTION			
R	ELEASE REG	COMMENDATION			
REQUESTOR		OFFICE SYMBOL	PHONE		
RECOMMEND FOREIGN PARTICIPATION BE AUTHORIZED (p.	nrovide iustifica	ion below)			
DO NOT RECOMMEND FOREIGN PARTICIPATION BE AUTHOR		,			
JUSTIFICATION/ADDITIONAL INFORMATION	TOZED (provide	Justinoation Selony			
JOSTI IGATIONADDITIONAL INFORMATION					
			1		
FOREIG	GN DISCLOS	URE DETERMINATION			
IDENTIFY THE DDL(s) THAT AUTHORIZES THIS RELEASE. IS THE	E RELEASE RE	COMMENDATION/DECISION BASED UPON REVIEW	OF ENTIRE CONTENT OF		
APPLICABLE DDL?					
FOREIGN PARTICIPATION AUTHORIZED					
FOREIGN PARTICIPATION IS NOT AUTHORIZED					
THIS DISCLOSURE ACTION REQUIRES APPROVAL OR DISAF	PPROVAL FRO	M HQ AFMC OR HIGHER AUTHORITY FOR THE REAS	SON(S) LISTED BELOW.		
RECOMMENDATION/JUSTIFICATION					
			}		
			į		
NAME	SIGNATURE		DATE		
		ERE TO SIGN	-		
	CLICK III	ALE TO BION			

AFMC FORM 191, 20080107

CLASSIFICATION:

(When filled in)

Roles and Responsibilities for CRADAs

Technical POC (TPOC)

- 1. Provide the rationale and necessary inputs for the CRADA to the ORTA
- 2. Serve as the liaison to the Collaborator
- 3. Ensure management support for the agreement
- 4. Support the ORTA during negotiations
- 5. Make changes as required or explain why changes cannot be made
- 6. Conduct tasks identified in the CRADA (after signature)
- 7. Maintain the official file (either stand-alone or as part of another case file)
- 8. Notify the ORTA of any inventions under the CRADA
- 9. Notify the ORTA if either party can't complete the tasks and explain why
- 10. Notify the ORTA if modifications or amendments are needed (including extensions)
- 11. Report the results of the CRADA to the ORTA
- 12. Support development of a success story (if applicable)

ORTA

- 1. Work with the TPOC to develop the CRADA
- 2. Understand what the AF Activity wants from the CRADA
- Conduct necessary coordination if CRADA is with a non-domestic company (see the process for Non-Domestic CRADAs in the CRADA module in the AFT2 Handbook)
- 4. Identify issues with the initial draft CRADA, either resolving or flagging them for legal review
- 5. Coordinate the legal review and work with the TPOC to resolve remaining issues
- 6. Negotiate with the Collaborator
- 7. Coordinate the signature process
- 8. Complete the DTTIS reporting requirement
- 9. Ensure that the TPOC fully understands his/her responsibilities
- 10. Ensure that the AF finance group receives a copy of the CRADA (if money is coming in)

Legal

- 1. Review the CRADA for completeness and adherence to law and AF/DOD guidance
- 2. Identify any issues and provide feedback to the ORTA on legal sufficiency
- 3. Support the ORTA during negotiations with the Collaborator and continue to provide feedback on any potential legal issues

Finance (if necessary)

- 1. Provide input on labor rates and other costs if the CRADA has funds in
- 2. Receive the check from Collaborator and deposit in the appropriate account
- 3. Provide feedback to the TPOC on the status of funds available

PLA APPENDICIES

Air Force PLA Application Form
Air Force Commercial Development Plan Guideline
Air Force EX License Agreement
Air Force Partially EX License Agreement
Air Force Non-EX License Agreement
PLA Roles and Responsibilites

PLA Checklist

PLA Checklist

This PLA checklist summarizes the essential steps that the ORTA needs to take after receiving an initial inquiry from a party interested in licensing an Air Force invention. This checklist is compartmentalized into the different phases of the PLA process: Preliminary, Evaluation, Negotiation, Internal Review, Execution, and Post-Execution.

Pre	eliminary
	Upon initial inquiry, confirm the specific patent(s), patent applications(s), and/or other IP that are being requested by the potential licensee.
	Confirm that the business entity interested in a license is legally registered and in good standing in the state in which it claims to be incorporated.
	Confirm that all patent maintenance fees have been paid and that none of the requested patents has lapsed or expired.
	Confirm that all of the inventors (Air Force and/or contractors) have assigned their rights to the Air Force for the requested IP.
	Confirm that the requested IP is available and has not previously been exclusively or partially exclusively licensed.
	If the request is for an exclusive or non-exclusive license and any of the requested IP is co-owned by another party (such as a university or other federal agency), confirm that a joint ownership agreement (JOA) is in effect to enable the Air Force to take the lead on licensing that IP.
	Explain the licensing process to the prospective licensee, including the need for a complete development or commercialization plan.
	Send the Air Force PLA Application Form and Commercialization Plan Guideline to the prospective licensee to guide it in developing a complete application.

Evaluation

When the prospective licensee has submitted the PLA Application Form and commercialization plan to the Air Force Activity, confirm that the application is complete and that all of the requested information has been provided.
Determine that the prospective licensee is capable of fulfilling its commercialization plan.
Confirm that the prospective licensee has provided deadlines by which it plans to achieve practical application of the invention, including both sales to the U.S. government (if any) and to non-U.S. government entities.
Confirm that the prospective licensee is willing to comply with the "manufacture substantially" in the United States requirement or has adequately justified the need for a waiver to this requirement.
Confirm the requested fields of use and determine that these fields are available.
Confirm the level of exclusivity being requested, explaining the additional requirements for exclusive and partially exclusive licenses.
If the applicant requests an exclusive or partially exclusive PLA, confirm that its commercialization plan clearly justifies the need for exclusivity, including that the requested level of exclusivity is "reasonable and necessary" to achieve practical application of the invention.
If the applicant requests an exclusive or partially exclusive PLA and the Air Force invention is covered by foreign patents, confirm that the applicant's commercialization plan enhances the interests of the U.S. government or of U.S. industry in foreign commerce.
If the applicant requesting an exclusive or partially exclusive PLA claims preference as a "small business firm," confirm this status applying Small Business Administration size guidelines. Also, determine that the small business is as capable of achieving practical application of the Air Force invention as any large businesses that are competing for an exclusive or partially exclusive license.

AIR FORCE TECH TRANSFER HANDBOOK

Ne	egotiation
	Negotiate the scope of the license agreement with the prospective licensee, including the specific fields of use and level of exclusivity.
	Negotiate the financial terms with the prospective licensee, including the upfront licensing fee, royalty percentage, annual minimum royalty amount, annual patent fees, and sublicensing terms (if an exclusive or partially exclusive PLA).
Int	ernal Review
	If the PLA will be exclusive or partially exclusive, arrange for an "intent to grant" notice in the Federal Register or on the TechLink or Federal Laboratory Consortium website.
	Draft the PLA, incorporating all of the negotiated terms, and circulate this draft PLA within the government for review, following your Activity's established protocols. At a minimum, this will involve sending the PLA to the legal office to obtain a review for legal sufficiency and a document number.
	If the prospective licensee is a "foreign controlled or influenced" entity, obtain clearance to proceed with the PLA from the U.S. Trade Representative.
	If your legal office finds the draft PLA to be legally sufficient, send a copy to the prospective licensee for review.

Ex	ecution
	If there are no objections to the PLA within the U.S. government and if no challenges have emerged from the "intent to grant" notice, request that the licensee's duly authorized representative sign and send a signed PDF of the PLA by email to the ORTA.
	When the signed PLA package has been received from the licensee, route it within the Air Force for final approvals and then signature by the Activity's duly authorized representative, in accordance with your Activity's established procedure.
	Enter the PLA number on the signed agreement.
	Return a PDF of the signed PLA to the licensee and save a copy in a file that should also contain copies of the invention disclosure, the patent application or patent (if issued), the inventor assignment(s), and the "intent to grant" notice. Send a copy of the PLA to the Activity's legal office and to the AFRL/SB.
	If the licensee has not paid the negotiated nonrefundable license fee by the deadline stated in the PLA (normally, within 30 days of the agreement's effective date), follow up to request immediate payment.
Ро	st Execution
	Enter the license information in the DTTIS database.
	Ensure that AFRL/SB notifies the ORTA whenever royalty payments or license fees are received.
	Coordinate on disbursal notifications as prepared by AFRL/SB.
	If the licensee is delinquent in sending annual reports or royalty payments, follow up to request immediate payment. If payment is not made, notify AFRL/SB of the delinquent amount so they can initiate collection procedures.

Air Force PLA Application Form

APPLICATION FOR LICENSE TO PRACTICE INVENTION		Return completed appe Phone #: 937-XXX-XX		
PART I. IDENTIFICATION OF INVENTION				
1. AIR FORCE CASE NO. (If Known)				
4. PATENT DATA:				L
U.S. PATENT APPLICATION SE U.S. PATENT NO.	RIAL NO	AND FILIT AND ISSU		
5. SOURCE OF INFORMATION	CONCERNING THE	AVAILABILITY OF A LICEN	SE ON THIS INVENTION	
		PART II. INFORMATION DE	SCRIBING APPLICANT	
6. NAME, ADDRESS, AND TELE COMPANY, PARTNERSHIP, C APPLYING FOR LICENSE				EPHONE NUMBER OF REPRESENTATIVE OF DRRESPONDENCE SHOULD BE SENT
8. APPLICANT'S CITIZENSHIP O	R PLACE OF INCOR	RPORATION	OF PUBLIC LAW 85-536	L BUSINESS FIRM AS DEFINED AT SECTION 2 (15 USC 532) AND IMPLEMENTING ADMINISTRATOR OF THE SMALL BUSINESS YES NO
10. A. IS APPLICANT DIRECTLY OR INDIRECTLY CONTROLLED BY A FOREIGN COMPANY OR GOVERNMENT? YES ☐ NO ☐				T? YES NO
(IF YES, PLEASE IDENTIFY COMPANY OR GOVERNMENT:				
PROGRAMS?				YES □ NO X
11. NATURE AND TYPE OF APPL	ICANT'S BUSINESS	: IDENTIFY PRODUCTS OR S	ERVICES WHICH THE APPLIC	ANT HAS SUCCESSFULLY COMMERCIALIZED
(See attached company proprietary cor	mmercialization plan fo	r details)		
12. APPROXIMATE NUMBER OF	APPLICANT'S EMP	PLOYEES		
13. STATE APPLICANT'S BEST K GOVERNMENT, OR BOTH, O				ED BY PRIVATE INDUSTRY, THE
PART III. PLAN FOR DEVELOPMENT AND/OR MARKETING OF THE INVENTION (Additional pages may be attached.)				

14. DESCRIBE IN DETAIL APPLICANTS PLAN FOR DEVELOPMENT AND/OR MARKETING OF THE INVENTION: (See attached company proprietary commercialization plan for details)	
a. STATE THE TIME, WHICH APPLICANT BELIEVES, WILL BE REQUIRED TO BRING THE INVENTION TO PRACTICAL APPLICATION. INCLUDE MILESTONES AND A TARGET TIME BY WHICH APPLICANT WILL HAVE A COMMERCIAL PRODUCT AVAILABLE TO THE PUBLIC	
(See attached company proprietary commercialization plan for details)	
b. STATE THE NATURE AND AMOUNT OF ANTICIPATED INVESTMENT OF CAPITAL AND OTHER RESOURCES WHICH APPLICANT BELIEVES WILL BE REQUIRED TO MAKE THE INVENTION AVAILABLE TO THE PUBLIC	
(See attached company proprietary commercialization plan for details)	
c. STATE THE APPLICANTS CAPABILITY AND INTENTION TO FULFILL THE PLAN, INCLUDING INFORMATION REGARDING MANUFACTURING (SPECIFY EVERY COUNTRY WHERE PRODUCTS EMBODYING THE INVENTION OR PRODUCED THROUGH THE USE OF THE INVENTION WILL BE MANUFACTURED), MARKETING, FINANCIAL AND TECHNICAL RESOURCES	Ē
(See attached company proprietary commercialization plan for details)	
d. STATE THE FIELDS OF USE FOR WHICH APPLICANT INTENDS TO PRACTICE THE INVENTION	
e. STATE THE GEOGRAPHIC AREAS IN WHICH THE APPLICANT INTENDS TO MANUFACTURE ANY PRODUCTS EMBODYING THE INVENTION AND THE GEOGRAPHIC AREAS WHERE APPLICANT INTENDS TO USE AND/OR SELL THE INVENTION	
f. STATE THE PROJECTED ANNUAL SALES OF THE INVENTION FOR SEVERAL YEARS AFTER THE DATE IT IS TO BE AVAILABLE TO THE PUBLIC	
(See attached company proprietary commercialization plan for details)	
PART IV. OTHER	
15. STATE MINIMUM NUMBER OF YEARS FOR WHICH APPLICANT SEEKS A LICENSE	
Until the expiration of each issued licensed patent 16. IDENTIFY LICENSES PREVIOUSLY GRANTED TO APPLICANT UNDER FEDERALLY-OWNED INVENTIONS	
17. STATE ANY OTHER INFORMATION WHICH THE APPLICANT BELIEVES WILL SUPPORT A DETERMINATION TO GRANT THE LICENSE TO APPLICANT	
18. TYPE OF LICENSE REQUESTED	
□ NONEXCLUSIVE	
□ EXCLUSIVE	
□ PARTIALLY EXCLUSIVE * (Identify limitations)	
*IF AN EXCLUSIVE OR PARTIALLY EXCLUSIVE LICENSE IS REQUESTED, PROVIDE REASONS WHY EXCLUSIVITY IS NECESSARY. (See attached company proprietary commercialization plan for details	
19. SIGNATURE OF APPLICANT OR REPRESENTATIVE OF APPLICANT DATE	_

Commercial Development Plan Guideline

Please provide the following essential information to enable the Air Force to evaluate your license application:

Company profile

- Year established
- State where incorporated
- Corporate structure (e.g., LLC, C Corporation)
- Number of employees
- Size of business, including annual revenue, functional areas of employees
- High-level description of business
- If a start-up company, provide information about the principals and discuss how their prior experience will contribute to the success of the new company (include their resumes)
- Indicate if your company is foreign-owned

Products/services

- Describe your current products, with special emphasis on product lines that are most similar to the proposed licensed invention
- If a start-up, describe the types of products and services that your company plans to provide

Financials

- Disclose your company's revenue and net income for the last three years
- If start-up, estimate the amount of funded needed to launch the business
- If planning to raise outside funding, how much funding is needed until your business is self-sustaining?
- How and where you expect to find investors?
- If some of the investment capital will come from non-U.S. sources, please elaborate

Requested technology for licensing and proposed uses

- List the patents/patent applications you want to license
- Describe in detail the products and services you are planning to offer based on the licensed invention
- If the licensed invention will be part of a larger system, discuss how it fits into the larger system and the approximate percentage of the system that could be attributable to the licensed invention
- Describe the competitive advantages of the proposed licensed invention

Field(s) of use requested for the proposed invention (list all)

- Aerospace industry (example)
- Automotive industry (example)
- Oil and gas industry (example)

Type of license requested

- Non-exclusive, partially exclusive, or fully exclusive
- Duration of license

If a partially or fully exclusive license is requested, explain why this level of exclusivity is necessary

Manufacturing strategies

- Will you be manufacturing products based on the invention in-house or using an outside contractor?
- Describe your company's manufacturing capabilities
- Describe how you will address the legal requirement to "substantially manufacture" in the United
 States the products based on the licensed invention that will be sold in the U.S.

Marketing and sales strategies (discuss for each distinct market segment)

- Provide an overview of the market and market size
- Sales territory?
- Sales strategy, including sales channels (representatives and distributors)?
- Methods for marketing products based on the licensed invention (such as advertisements, conferences, and tradeshows)?

Financial projections of sales (pro forma) of products based on licensed technology (discuss for each distinct market segment)

- Provide a pro forma projection of annual sales for the first 5 years after the first product offering
- Break out your sales projections by sales to the U.S. government, non-U.S. government, and anticipated foreign sales
- Break out anticipated sales by product vs. service
- Provide estimates on the cost of goods sold (CGS), other expenses, and earnings before interest, taxes, depreciation, and amortization (EBIDTA)

Commercialization milestones and schedule (provide for each distinct market segment)

 Provide six to twelve notable milestones (both technical and business) in the process of developing and commercializing the licensed invention, and estimate when these milestones will be achieved

Anticipated resource commitments

- Discuss the financial resources that will be devoted to commercializing the proposed invention, broken out by R&D, sales, marketing, etc.
- Does your company already have the necessary expertise to successfully commercialize this invention?
- If not, discuss the lacking areas of expertise and how you plan to fill these gaps
- Where will the funding come from (internal vs. external sources) to develop and commercialize the proposed invention?

EXCLUSIVE PATENT LICENSE AGREEMENT

DEPARTMENT OF THE AIR FORCE and EXAMPLE COMPANY

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PREAMBLE

This Exclusive Patent License Agreement is made and entered into by and between the Government of the United States of America, as represented by the Secretary of the Air Force (hereinafter called "AIR FORCE"), and Example Company, a Limited Liability Corporation duly organized, validly existing, and in good standing in the State of Montana, having a place of business at 555 Nowhere St., Nowhere, MT, 55555 (hereinafter called "LICENSEE").

WITNESSETH:

WHEREAS, Daniel W. Repperger, Rodney G. Roberts, and Corbin G. Koepke (hereinafter called "INVENTORS") collaborated and made an invention;

WHEREAS, AIR FORCE owns by assignment of an undivided interest, the invention by Daniel W. Repperger, Rodney G. Roberts, and Corbin G. Koepke;

WHEREAS, Title 35, United States Code, Chapter 18, "Patent Rights in Inventions Made with Federal Assistance," (35 U.S.C. §202(e), 207) and Title 37 of the Code of Federal Regulations, Part 404, entitled "Licensing of Government Owned Inventions," set forth the terms and conditions under which licenses of federally owned inventions may be granted;

WHEREAS, Air Force Instruction 51-303 and 61-301 set forth the terms and conditions for licensing of rights in federally owned inventions vested in the Government of the United States in the custody of the Department of the Air Force;

WHEREAS, the above-cited authorities support the proposition that licensing of Government owned inventions will best serve the public interest when such inventions are developed to the point of PRACTICAL APPLICATION and made available to the public in the shortest possible time;

WHEREAS, AIR FORCE has determined that grant of a license will not tend to substantially lessen competition or result in undue concentration in any section of the country in any line of commerce to which the technology to be licensed relates, or to create or maintain other situations inconsistent with the antitrust laws;

WHEREAS, LICENSEE wishes to secure from AIR FORCE, and AIR FORCE wishes to grant to LICENSEE, an Exclusive License in the INVENTION, subject to the terms and conditions herein set forth;

WHEREAS, and in accordance with 35 U.S.C. §209(f), 37 C.F.R. 404.5(a)(1), 37 C.F.R. 404.5(a)(5), and AFI 51-303 (¶13.2), LICENSEE has submitted a plan dated August 28, 2017, to undertake the development, production, marketing, and sublicensing of the INVENTION, as appropriate, and has expressed its intention to carry out this plan upon the granting of this license;

WHEREAS, AIR FORCE has considered the capabilities of LICENSEE to undertake development, production, marketing, and sublicensing, as appropriate, of the INVENTION and has found that LICENSEE is a responsible party for the purpose of negotiating this license on terms and conditions favorable to the public interest and that to grant this license would be in the public interest; and

WHEREAS, AIR FORCE has provided public notice of THIS AGREEMENT, in accordance with 35 U.S.C. §209(e), and in the Federal Register on March 1, 2018, of its intention to grant an

Exclusive Patent License Agreement Page 2 of 14 Exclusive License to LICENSEE with an opportunity to file written objections and AIR FORCE has subsequently determined that:

- (a) The public will be served by the granting of this license in view of LICENSEE intentions, plans, and ability to bring the invention to the point of PRACTICAL APPLICATION or otherwise promote utilization of the INVENTION by the public;
- (b) Exclusive licensing is a reasonable and necessary incentive to call forth the investment capital and expenditures needed to bring the invention to PRACTICAL APPLICATION or otherwise promote utilization of the INVENTION by the public;
- (c) The scope of exclusivity is not greater than reasonably necessary to provide the incentive for bringing the INVENTION to PRACTICAL APPLICATION, as proposed by LICENSEE, or otherwise to promote utilization of the INVENTION by the public;
- (d) The grant of this license will not tend to substantially lessen competition or create or maintain a violation of Federal antitrust laws;
- (e) Preference was given to small business firms submitting plans, said plans being determined to be within the capability of the small business firm and as having equal or greater likelihood to bring the INVENTION to PRACTICAL APPLICATION within a reasonable time (See 35 U.S.C. 202(c) and 37 C.F.R. 404.7(a)(1)(iv)); and
- (f) The enhancement of interests of the Federal Government or United States industry in foreign commerce has been considered. (See generally, 35 U.S.C. §209(a) and 37 C.F.R. 404.7(a)(1)).

NOW, THEREFORE, in accordance with and to the extent provided by the aforementioned authorities and in consideration of the foregoing premises and of the covenants and obligations hereinafter set forth to be well and truly performed, and other good and valuable consideration, AIR FORCE and LICENSEE agree as follows:

ARTICLE 1 – DEFINITIONS

The following definitions shall apply to the defined words where such words are used in THIS AGREEMENT:

- 1.1 "GOVERNMENT" means the Government of the United States.
- 1.2 "INVENTION" means any invention described in the invention disclosure entitled "Quantitative measurements of system complexity" as disclosed in AIR FORCE Docket No. 999 as of the EFFECTIVE DATE and claimed in U.S. Patent Application Serial No. 11/900,137 filed on August 30, 2007, and issued as U.S. Patent No. 8,244,503 on August 14, 2012.
- 1.3 "THIS AGREEMENT" means this written agreement for an Exclusive License of the INVENTION.
- 1.4 "SUBSIDIARY" means a legal entity, or combination of entities that is at least fifty percent (50 %) owned or otherwise controlled by LICENSEE.

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- 1.5 "EFFECTIVE DATE" of THIS AGREEMENT shall be the date of its signing, without modification, by AIR FORCE after signing by LICENSEE.
- 1.6 "ROYALTY BASE PRODUCT" means a product, apparatus, method, or service that would, but for THIS AGREEMENT, infringe at least one in force claim of the INVENTION.
- 1.7 "SUBLICENSE" means any agreement between LICENSEE and a third party, other than a SUBSIDIARY of LICENSEE, to enable such third party to PRACTICE THE INVENTION.
- 1.8 "SUBLICENSEE" means the third party subject to a SUBLICENSE with LICENSEE. For purpose of THIS AGREEMENT, a Distributor of a ROYALTY BASE PRODUCT shall not be included in the definition of SUBLICENSEE unless such Distributor is granted any right to make, have made, use, or have used the INVENTION.
- 1.9 "PRACTICE THE INVENTION" means to make, have made, use, lease, sell, or otherwise dispose of ROYALTY BASE PRODUCT by or for the account of LICENSEE, a SUBSIDIARY, or a SUBLICENSEE.
- 1.10 "GROSS REVENUES" means gross proceeds received by LICENSEE, its SUBSIDIARIES, and SUBLICENSEES resulting from the sale of any ROYALTY BASE PRODUCT in the TERRITORY.
- 1.11 "CALENDAR QUARTER" means any three-month period commencing on 1 January, 1 April, 1 July, or 1 October.
- 1.12 "AGREEMENT YEAR" means four (4) consecutive CALENDAR QUARTERS commencing on an anniversary of the first day of a CALENDAR QUARTER next following the EFFECTIVE DATE of THIS AGREEMENT, except that the first AGREEMENT YEAR shall include that portion of a CALENDAR QUARTER commencing on the EFFECTIVE DATE and the four (4) consecutive CALENDAR QUARTERS thereafter.
- 1.13 "DEVELOPMENT PLAN" means the plan by LICENSEE to undertake the development, manufacture, marketing, and sublicensing of the INVENTION as described in LICENSEE's application for an exclusive license dated August 28, 2017 and in accordance with 35 U.S.C. §§202(e) and 207 and 37 C.F.R. Part 404.
- 1.14 "PRACTICAL APPLICATION" means to manufacture or utilize the INVENTION under such conditions as to establish that its benefits are, to the extent permitted by law or GOVERNMENT regulation, made available to the public on reasonable terms.
- 1.15 "TERRITORY" means the United States of America, its territories and possessions, the District of Columbia, and the Commonwealth of Puerto Rico.
 - 1.16 "FIELD OF USE" means all fields.

ARTICLE 2 – LICENSE GRANT

2.1 AIR FORCE hereby grants to LICENSEE an exclusive license to PRACTICE THE INVENTION within the FIELD OF USE for the TERM set forth in Article 5 of THIS AGREEMENT and subject to the RESERVATION OF RIGHTS in Article 9.

The license granted by THIS AGREEMENT shall extend to SUBSIDIARIES of LICENSEE but shall not be assignable by LICENSEE without prior written approval of AIR FORCE, except to the successor of that part of LICENSEE business to which the INVENTION pertains (See, 37 C.F.R. 404.5(b)(3)).

- 2.2 LICENSEE may grant one or more SUBLICENSES, subject to the written approval of AIR FORCE, which approval shall not be unreasonably withheld, under THIS AGREEMENT as provided in Article 7 of THIS AGREEMENT, on terms and conditions that LICENSEE may arrange and subject to collection of payment of royalties and considerations due.
- 2.3 The license granted by THIS AGREEMENT includes the right of LICENSEE to grant a Distributor the right to sell (but not to make, have made, use or have used) any ROYALTY BASE PRODUCT for or on behalf of LICENSEE.

ARTICLE 3 – ROYALTIES AND ROYALTY REPORT

- 3.1 LICENSEE shall pay to AIR FORCE a first, nonrefundable license fee in the amount of FOUR THOUSAND DOLLARS (\$4,000.00) within thirty (30) days after the EFFECTIVE DATE of THIS AGREEMENT.
- 3.2 Beginning with the EFFECTIVE DATE of THIS AGREEMENT and continuing for the TERM of THIS AGREEMENT, LICENSEE shall pay to AIR FORCE a running royalty of FOUR PERCENT (4.0%) of GROSS REVENUES received by LICENSEE AND ITS SUBSIDIARIES during any AGREEMENT YEAR during the TERM of THIS AGREEMENT.
- 3.3 AIR FORCE's share of all considerations, including royalty and license fees, received by LICENSEE from its SUBLICENSEES under THIS AGREEMENT shall be FIFTY PERCENT (50.0%), paid in accordance with Article 3.5.
 - 3.4 LICENSEE shall pay to AIR FORCE a minimum yearly royalty as follows:

For each AGREEMENT YEAR, LICENSEE shall pay to AIR FORCE a minimum yearly royalty in the amount of TWO THOUSAND FIVE HUNDRED DOLLARS (\$2,500.00).

In the event that running royalties and income due and payable from SUBLICENSES for a preceding AGREEMENT YEAR are less than the minimum yearly royalty, LICENSEE will make up the deficiency of the royalties actually paid to such minimum yearly royalty at the time the running royalties are due at the end of that AGREEMENT YEAR.

3.5 All payments payable according to the paragraphs 3.1 through 3.4 and Article 14 shall be paid annually by LICENSEE to AIR FORCE in U.S. Dollars, within two (2) months following the end of each AGREEMENT YEAR. Payments may be paid by check payable to "Treasurer of the United States," and mailed to:

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AFRL/SB

Attn: Deborah Davis-Brutchen 1864 4th Street, Bldg 15

Wright-Patterson AFB, Ohio 45433

Email: deborah.davis-brutchen@us.af.mil

Or paid electronically via transfer from a savings account or a checking account or by credit card (Discover, MasterCard, Visa, Diners Club International, JCB, Union Pay, and American Express) at:

https://www.pay.gov/paygov/forms/formInstance.html?agencyFormID=43562506.

For electronic and check payments, LICENSEE shall promptly notify all the parties in accordance with Article 17 that payment was submitted and by what method. For electronic payments, please submit confirmation number with notification. AIR FORCE may submit invoices for payments due to LICENSEE through the Department of the Treasury.

- 3.6 LICENSEE shall furnish to AIR FORCE, within two (2) months following the end of each AGREEMENT YEAR, any reports setting forth the number of sales and GROSS REVENUES, including those from SUBLICENSEES, in the previous AGREEMENT YEAR.
- 3.7 Sales to or for the GOVERNMENT shall be discounted by at least the royalty amount set forth in this Article 3 and thus not subject to the payment of royalties set forth in this Article 3, provided that LICENSEE identifies, in the statement required under paragraph 3.6, such sales by GOVERNMENT contract number or other suitable documentation substantiating the reduced price paid. Further, maximum sales price of any ROYALTY BASE PRODUCTS to or for the GOVERNMENT shall not exceed the minimum sales price of the ROYALTY BASE PRODUCTS or its equivalent offered to any other non-government entity.
- 3.8 Should LICENSEE fail to make timely payments in accordance with THIS AGREEMENT, AIR FORCE may put LICENSEE on written notice of such default. LICENSEE may remedy the default by payment of all monies due AIR FORCE within one (1) month of the date of transmission of the written notice, to maintain THIS AGREEMENT in effect. After such time, a surcharge of FIFTY DOLLARS (\$50) or SIX PERCENT (6 %), whichever is greater, shall be assessed per month of default. Should the default not be cured by the end of said month, AIR FORCE has the right to terminate THIS AGREEMENT by giving written notice of termination to LICENSEE, whereupon THIS AGREEMENT becomes terminated. Termination for any reason does not relieve LICENSEE of the obligation to pay past running royalties or other fees accrued prior to the effective date of termination.

ARTICLE 4 – RECORDS, BOOKS, AND EXAMINATION

- LICENSEE agrees to keep for at least six (6) immediately past AGREEMENT YEARS accurate books and records of all expenses and proceeds, including those received from SUBLICENSEES, ROYALTY BASE PRODUCTS sold or disposed of under THIS AGREEMENT, the net sales quantities and applicable GROSS REVENUES, and royalties owed AIR FORCE. Records shall be available to substantiate reduced price paid by GOVERNMENT.
- 4.2 AIR FORCE may, on reasonable notice, through its duly authorized agent or representative, inspect, check, and verify all such books and records either at LICENSEE's place

Revised - 17 Sept 2015 Exclusive Patent License Agreement Page 6 of 14 of business or at another place mutually agreed upon. The Parties shall be responsible for their own expenses with respect to such routine inspections, checks, and verifications.

ARTICLE 5 – TERM

5.1 The TERM of THIS AGREEMENT shall commence on the EFFECTIVE DATE of THIS AGREEMENT and shall continue until expiration, invalidation, or decision of unenforceability is rendered on the last patent issued on the INVENTION.

ARTICLE 6 – LICENSEE PERFORMANCE

- 6.1 In furtherance of THIS AGREEMENT, LICENSEE agrees to perform the following:
- (a) Subject to LICENSEE's right to terminate THIS AGREEMENT in accordance with the provisions of Article 12, LICENSEE, in accordance with the DEVELOPMENT PLAN, will use its best efforts to bring the INVENTION to a point of PRACTICAL APPLICATION within 20 months after EFFECTIVE DATE.
- (b) LICENSEE shall achieve ROYALTY BASE PRODUCT sales to non-GOVERNMENT entity within 20 months of the EFFECTIVE DATE.
- (c) LICENSEE shall achieve ROYALTY BASE PRODUCT annual sales to non-GOVERNMENT entity of at least \$100,000 within sixty (60) months of the EFFECTIVE DATE.
- (d) LICENSEE agrees to report promptly to AIR FORCE any change in its mailing address, name, or company affiliation during the TERM of THIS AGREEMENT and to report promptly its decision to discontinue development of the INVENTION to the point of PRACTICAL APPLICATION or to not make the INVENTION available to the public, or to discontinue making the benefits of the INVENTION.
- (e) LICENSEE agrees that it will require manufacture of any ROYALTY BASE PRODUCT produced through the use of the INVENTION substantially in the United States and that any product, apparatus, method, or service embodying the INVENTION or produced through the use of the INVENTION will be manufactured or performed substantially in the United States as required in 35 U.S.C. §209(b), 37 C.F.R. 404.5(a)(2), and 37 C.F.R. 404.5(b)(8).

ARTICLE 7 – SUBLICENSES

- 7.1 LICENSEE may grant, pursuant to 37 C.F.R. 404.5(b)(4) and AFI 16- 110, and subject to the written approval of AIR FORCE, which approval shall not be unreasonably withheld, one or more SUBLICENSES under THIS AGREEMENT on terms and conditions that LICENSEE may arrange, provided that:
- (a) Each SUBLICENSE shall be in writing and make reference to THIS AGREEMENT and be subject to the terms and conditions of THIS AGREEMENT regarding its TERM, its termination,

Exclusive Patent License Agreement Page 7 of 14 indemnification of AIR FORCE, a prohibition of any use of the name of AIR FORCE or any implied endorsement of SUBLICENSEE by AIR FORCE, and the rights retained by AIR FORCE under Articles 9 and 12 of THIS AGREEMENT;

- (b) Each SUBLICENSE shall include the condition that the SUBLICENSE shall be automatically modified or terminated or expire upon the modification, termination, or expiration of THIS AGREEMENT;
- (c) Before any SUBLICENSE is granted by LICENSEE, the written approval of AIR FORCE shall first be obtained for each SUBLICENSE, such approval not to be unreasonably withheld unless such SUBLICENSEE is a foreign-owned or subsidiary of a foreign-owned entity. A SUBLICENSE with foreign-owned or subsidiary of a foreign-owned entity shall be subject to approval by the Secretary of the Air Force, Armaments Cooperation Division;
- (d) Within one (1) month after the issuance or modification of any SUBLICENSE hereunder, LICENSEE shall furnish AIR FORCE with a true and complete copy of the SUBLICENSE or modification thereof; and
- (e) The granting of any SUBLICENSE by LICENSEE shall in no way relieve LICENSEE from any of the requirements of THIS AGREEMENT.
- (f) In accordance with 37 C.F.R. 404.7(a)(2)(ii), AIR FORCE retains the right to require LICENSEE to grant, and, to the extent it is able, LICENSEE agrees to grant, additional SUBLICENSES to third parties on reasonable terms when necessary to fulfill health, safety, or other needs of the public to the extent such needs are not being reasonably satisfied by LICENSEE, its SUBSIDIARIES, and its SUBLICENSEES.

ARTICLE 8 – PATENT MARKING AND NON-ENDORSEMENT

- 8.1 LICENSEE will ensure that each ROYALTY BASE PRODUCT is marked with the notation "Licensed from the United States of America under U.S. Patent No. 8,244,503."
- 8.2 LICENSEE agrees not to create the appearance that AIR FORCE endorses LICENSEE, its SUBSIDIARY'S, its SUBLICENSEE'S, and/or its Distributor's business or endorses or warrants its products. AIR FORCE is not to be connected directly or impliedly with any advertising or promotional program of LICENSEE, except that LICENSEE may state that it is licensed under THIS AGREEMENT.

ARTICLE 9 – RESERVATION OF RIGHTS

9.1 THIS AGREEMENT is expressly made subject to an irrevocable, royalty-free right of the Government of the United States to practice for governmental purposes and have practiced the INVENTION on behalf of the Government of the United States for governmental purposes and on behalf of any foreign government or international organization pursuant to any existing or future treaty or agreement with the United States, which is in accordance with 35 U.S.C. §209(d)(1) and 37 C.F.R. 404.7(a)(2)(i).

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ARTICLE 10 – REPRESENTATIONS AND WARRANTIES

- 10.1 NEITHER PARTY MAKES ANY REPRESENTATION OR WARRANTY AS TO THE VALIDITY OF ANY PATENT OR PATENT APPLICATION LICENSED UNDER THIS AGREEMENT, OF THE SCOPE OF ANY CLAIM OF ANY SUCH PATENT OR PATENT APPLICATION, OR THAT THE EXERCISE OF THIS AGREEMENT WILL NOT RESULT IN THE INFRINGEMENT OF ANY OTHER UNITED STATES OR FOREIGN PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT. NEITHER PARTY, NOR ITS EMPLOYEES, ASSUMES ANY LIABILITY WHATSOEVER RESULTING FROM THE EXERCISE OF THIS AGREEMENT. OTHER THAN AS MAY BE EXPRESSLY STATED ELSEWHERE IN THIS AGREEMENT, THE PARTIES MAKE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
- 10.2 Nothing relating to the grant of this license, nor the grant itself, shall be construed to confer upon LICENSEE any immunity from or defense under the antitrust laws or from any charge of patent misuse, and the acquisition and use of rights pursuant to THIS AGREEMENT shall not immunize LICENSEE from the operation of State or Federal law by reason of the source of the grant.
- 10.3 Nothing contained in THIS AGREEMENT shall be interpreted to grant to LICENSEE any rights with respect to any invention, patent application, or patent other than the INVENTION.
- The AIR FORCE assumes no obligation to bring or prosecute actions or suits 10.4 against third parties for infringement.
 - 10.5 The AIR FORCE assumes no obligation to furnish any know-how.
- 10.6 Neither Party, nor any of their agents or employees, assumes any liability whatsoever from the exercise of THIS AGREEMENT.
- 10.7 LICENSEE shall agree to defend, indemnify, and hold AIR FORCE harmless from and against all liability, demands, damages, expenses, and losses for death, personal injury, illness, or property damage arising out of the use by LICENSEE or its customers and other transferees of any licensed process, or out of any use, sale, or other disposition of ROYALTY BASE PRODUCTS or its SUBLICENSEE(S).

ARTICLE 11 – PROGRESS REPORTS

11.1 As required by 35 U.S.C. §209(d)(2) and 37 C.F.R. 404.5(b)(6), LICENSEE agrees to submit to AIR FORCE annual written reports on efforts to achieve PRACTICAL APPLICATION of the INVENTION and on its efforts to continue to make the benefits of the INVENTION reasonably accessible to the public. These reports shall contain information within the knowledge of LICENSEE, or which it may acquire under normal business practice, pertaining to efforts expended, including expenditures to date, and other information which AIR FORCE may determine is pertinent to GOVERNMENT licensing activities. LICENSEE agrees to submit the first such report to AIR FORCE in writing within two (2) months after the expiration of the first LICENSE YEAR and subsequent reports annually thereafter.

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11.2 Reports, as provided in Article 11.1 and as submitted pursuant to 37 C.F.R. 404.8(h), and the information they contain, if labeled "PROPRIETARY," shall be treated as privileged and confidential information not subject to disclosure under the Freedom of Information Act (5 U.S.C. §552), for a period of five (5) years from the date of receipt thereof.

ARTICLE 12 – MODIFICATION AND TERMINATION

- 12.1 Subject to 12.3, AIR FORCE may modify or terminate THIS AGREEMENT, in whole or in part pursuant to 35 U.S.C. §209(d)(3) and 37 C.F.R. 404.5(b)(8), if:
- (a) AIR FORCE determines that LICENSEE is not executing the DEVELOPMENT PLAN or obligations under Article 6 and LICENSEE cannot otherwise demonstrate to the satisfaction of AIR FORCE that it, or its SUBLICENCEE(S), can be expected to take within a reasonable time effective steps to achieve PRACTICAL APPLICATION of the INVENTION;
- (b) AIR FORCE determines that such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by LICENSEE, its SUBSIDIARIES, and/or SUBLICENSEES;
- (c) LICENSEE commits a substantial breach of any covenant contained in THIS AGREEMENT;
- (d) LICENSEE has willfully made a false statement or willfully omitted a material fact in the DEVELOPMENT PLAN required by THIS AGREEMENT;
- (e) LICENSEE becomes insolvent or makes any assignment for the benefit of creditors or if a receiver or trustee of LICENSEE property shall be appointed or if a third party files an involuntary petition forcing LICENSEE into bankruptcy;
- (f) LICENSEE intends to file a voluntary petition in bankruptcy. LICENSEE must provide notice to AIR FORCE of such intention at least thirty (30) calendar days prior to filing such petition. Failure to provide such notice shall be deemed a material, pre-petition incurable breach of THIS AGREEMENT; or
- (g) LICENSEE has not paid at least the minimum yearly royalty in accordance with Article 3 or annual patent fee in accordance with Article 14.
- 12.2 Modification may include, but is not limited to, modifying the license grant LICENSEE to limit LICENSEE license to a field of use then being actively engaged in by LICENSEE, or to requiring LICENSEE to grant sublicenses to others for a field of use not then being actively engaged in by LICENSEE.
- 12.3 Before modifying or terminating THIS AGREEMENT for any cause, AIR FORCE shall furnish LICENSEE and each SUBLICENSEE of record, a written notice of its intention to so modify or terminate THIS AGREEMENT, and LICENSEE and a SUBLICENSEE shall be allowed three (3) months after receipt of the notice to remedy any breach of any covenant set forth herein or to show cause why THIS AGREEMENT shall not be modified or terminated. Termination for any reason shall not relieve LICENSEE of the obligation to pay any amounts due under Articles 3, 13, and 14 prior to the effective date of termination.

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- 12.4 LICENSEE may have a right to appeal, in accordance with procedures prescribed by The General Counsel of the Air Force, any decision concerning the interpretation, modification, or termination of THIS AGREEMENT (See 37 C.F.R. 404.11).
- 12.5 LICENSEE may terminate THIS AGREEMENT at any time, for whatever reason, upon written notice sent to AIR FORCE at least one (1) month prior to the effective date of termination, stating LICENSEE's intention to terminate and signed by LICENSEE or its lawful agent. All rights and licenses granted herein shall cease immediately upon the effective date of such termination; and all past amounts due accrued up to the date of termination shall be paid to AIR FORCE within two (2) months from the effective date of termination.

ARTICLE 13 - LITIGATION

- 13.1 During the TERM of THIS AGREEMENT, as provided under Article 5, LICENSEE is empowered pursuant to the provisions of Chapter 29 of Title 35, United States Code, or other statutes:
- (a) to bring suit in its own name or allow SUBLICENSEE(S) to bring suit, at its own expense, and on its own behalf for infringement of presumably valid claims of any patent issued on the INVENTION;
- (b) in any such suit, to enjoin infringement and to collect for its use, damages, profits, and awards of whatever nature recoverable for such infringement; and
- (c) to settle any such suit, provided, however, that AIR FORCE and appropriate U.S. Government authorities shall have a continuing right to intervene in such suit.
- 13.2 Each Party shall notify the other in writing if either Party becomes aware of an infringement or has reasonable cause to believe that there has been an infringement of any patent issued on the INVENTION. Should LICENSEE, or its SUBLICENSEE(S), fail to take action to enforce such patent within one year of notice of infringement, AIR FORCE may elect to take appropriate action on its own to enforce such patent for AIR FORCE'S own benefit.
- 13.3 AIR FORCE shall provide reasonable assistance to LICENSEE and/or its SUBLICENSEES with respect to such actions.
- 13.4 LICENSEE shall pay AIR FORCE FIFTY PERCENT (50 %) of all payments received by or on behalf of LICENSEE as a result of a judgment in or settlement of any such action after deduction of the cost of reasonable expenses, including counsel fees, court costs, and other related expenses, incurred by LICENSEE in taking such action.

ARTICLE 14 – PATENT FEES

14.1 LICENSEE shall pay AIR FORCE annual patent fees in the amount of ONE THOUSAND FIVE HUNDRED DOLLARS (\$1,500.00). The first payment is due within thirty (30) days after the EFFECTIVE DATE of THIS AGREEMENT. All subsequent payments shall be paid annually by LICENSEE to AIR FORCE in U.S. Dollars, within two (2) months following the end of

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each AGREEMENT YEAR. Payment of patent reimbursement fees shall be attached to a cover letter that identifies the particular fee as a patent fee being paid under paragraph 14.1 of THIS AGREEMENT.

All payments payable according to paragraph 3.5.

14.2 All patent maintenance fees shall be paid to the United States Patent and Trademark Office by AIR FORCE at its sole option and discretion.

ARTICLE 15 – EXPORT CONTROLS

15.1 Licensed products and methods under THIS AGREEMENT may be subject to the Arms Export Control Act (22 U.S.C. §2751 et seq.), the Export Administration Act (50 U.S.C. §2401 et seq.), the International Traffic in Arms Regulations (22 C.F.R. Part 120 et seq.), or the Export Administration Regulations (15 C.F.R. Part 700 et seq.). Nothing in THIS AGREEMENT shall be construed to modify or rescind LICENSEE obligations under these and other laws and regulations.

ARTICLE 16 – GENERAL TERMS & PROVISIONS

- 16.1 **Governing Law.** The construction, validity, performance, and effect of THIS AGREEMENT for all purposes shall be governed by the laws applicable to the Government of the United States.
- failure of performance caused by any event beyond its reasonable control and not caused by the fault or negligence of that party. In the event such a force majeure event occurs, the party unable to perform must promptly notify the other party and in good faith maintain such part performance as is reasonably possible and resume full performance as soon as is reasonably possible.
- Relationship of the Parties. The parties to THIS AGREEMENT and their employees are independent contractors and are not agents of each other, joint venturers, partners, or joint parties to a formal business organization of any kind. Neither party is authorized or empowered to act on behalf of the other with regard to any contract, warranty, nor representation as to any matter, and neither party will be bound by the acts or conduct of the other. Each party will maintain sole and exclusive control over its own personnel and operations.
- 16.4 **Entire Agreement.** THIS AGREEMENT represents the entire agreement of the parties and is the complete and exclusive statement of their agreement.
- 16.5 **Severability.** The illegality or invalidity of any provision of THIS AGREEMENT will not impair, affect, or invalidate the other provisions of THIS AGREEMENT.
- 16.6 **Survivability.** All rights and responsibilities incurred under THIS AGREEMENT shall survive the expiration or termination of THIS AGREEMENT.
- 16.7 **Waiver of Rights.** Any waiver must be in writing and provided to all other parties. Failure to insist upon strict performance of any of the terms and conditions hereof, or failure or delay to exercise any rights provided herein or by law, will not be deemed a waiver of any rights of

Exclusive Patent License Agreement Page 12 of 14 any party hereto.

No Waiver of Sovereign Immunity. Notwithstanding any provision to the contrary, LICENSEE understands that GOVERNMENT will not be liable to any party to THIS AGREEMENT, whether directly or by way of contribution or indemnity, for any claim made by any person or other entity for personal injury or death or for property damage or loss, arising in any way from THIS AGREEMENT, including, but not limited to, the later use, sale or other disposition of ROYALTY BASE PRODUCT or research, technical developments, or other products otherwise associated with the INVENTION under THIS AGREEMENT or contributed by either party pursuant to THIS AGREEMENT, except as provided under the Federal Tort Claims Act (28 U.S.C. §2671 et seq.) or other federal law where sovereign immunity has been explicitly waived.

ARTICLE 17 – NOTICES

17.1 All communications, reports, and notices required under THIS AGREEMENT shall be duly given if timely Emailed and hard-copy mailed by courier, and addressed as follows:

If to AIR FORCE

AFRL/TL
Ms. License Contact
555 Lab Lane
Air Forceville, OH
Ph: 555-555-555
Email: contact@af.mil

If to LICENSEE

John Smith Example Company 777 Somewhere St. Somewhere, MT 55556 Ph: 555-555-5555

Email: nobody@nowhere.com

with copies of such correspondence to:

Chief, Intellectual Property Law Division AFMCLO/JAZ 2240 B St.

Bldg. 11, Rm. 232

Wright-Patterson AFB, OH 45433

Ph: 937-255-2838

Email: afmclo.jaz.tech@us.af.mil

and to: AFRL/SB

Attn: Deborah Davis-Brutchen 1864 4th Street, Bldg 15

Wright-Patterson AFB, Ohio 45433

Email: deborah.davis-brutchen@us.af.mil

EXCLUSIVE LICENSE AGREEMENT SIGNATURE PAGE

DEPARTMENT OF THE AIR FORCE and EXAMPLE COMPANY

IN WITNESS WHEREOF, Government of the United States of America as represented by the Secretary of the Air Force ("AIR FORCE") and the Example Company ("LICENSEE") have caused this EXCLUSIVE LICENSE AGREEMENT:

"Quantitative measurements of system complexity" as disclosed in AIR FORCE Docket No. 999 as of the EFFECTIVE DATE and claimed in U.S. Patent Application Serial No. 11/900,137 filed on August 30, 2007, and issued as U.S. Patent No. 8,244,503 on August 14, 2012 to be executed by their duly authorized representatives.

Example Company	AIR FORCE AFRL Test Lab
John Smith	Joe Commander
(Name)	(Name)
Administrator	Lab Commander
(Title)	(Title)
(Signature)	(Signature)
(Date)	(Date)

THIS SIGNATURE PAGE ONLY AUTHORIZED FOR PUBLIC RELEASE AND FOR RECORDATION WITH THE UNITED STATES PATENT AND TRADEMARK OFFICE -

DISTRIBUTION UNLIMITED.

PARTIALLY EXCLUSIVE PATENT LICENSE AGREEMENT

DEPARTMENT OF THE AIR FORCE and EXAMPLE COMPANY

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PREAMBLE

This Partially Exclusive Patent License Agreement is made and entered into by and between the Government of the United States of America, as represented by the Secretary of the Air Force (hereinafter called "AIR FORCE"), and Example Company, a Limited Liability Corporation duly organized, validly existing, and in good standing in the State of Montana, having a place of business at 555 Nowhere St., Nowhere, MT, 55555 (hereinafter called "LICENSEE").

WITNESSETH:

WHEREAS, Daniel W. Repperger, Rodney G. Roberts, and Corbin G. Koepke (hereinafter called "INVENTORS") collaborated and made an invention;

WHEREAS, AIR FORCE owns by assignment of an undivided interest, the invention by Daniel W. Repperger, Rodney G. Roberts, and Corbin G. Koepke;

WHEREAS, Title 35, United States Code, Chapter 18, "Patent Rights in Inventions Made with Federal Assistance," (35 U.S.C. §202(e), 207) and Title 37 of the Code of Federal Regulations, Part 404, entitled "Licensing of Government Owned Inventions," set forth the terms and conditions under which licenses of federally owned inventions may be granted;

WHEREAS, Air Force Instruction 51-303 and 61-301 set forth the terms and conditions for licensing of rights in federally owned inventions vested in the Government of the United States in the custody of the Department of the Air Force;

WHEREAS, the above-cited authorities support the proposition that licensing of Government owned inventions will best serve the public interest when such inventions are developed to the point of PRACTICAL APPLICATION and made available to the public in the shortest possible time;

WHEREAS, AIR FORCE has determined that grant of a license will not tend to substantially lessen competition or result in undue concentration in any section of the country in any line of commerce to which the technology to be licensed relates, or to create or maintain other situations inconsistent with the antitrust laws;

WHEREAS, LICENSEE wishes to secure from AIR FORCE, and AIR FORCE wishes to grant to LICENSEE, a Partially Exclusive License in the INVENTION, subject to the terms and conditions herein set forth:

WHEREAS, and in accordance with 35 U.S.C. §209(f), 37 C.F.R. 404.5(a)(1), 37 C.F.R. 404.5(a)(5), and AFI 51-303 (¶13.2), LICENSEE has submitted a plan dated August 28, 2017, to undertake the development, production, marketing, and sublicensing of the INVENTION, as appropriate, and has expressed its intention to carry out this plan upon the granting of this license;

WHEREAS, AIR FORCE has considered the capabilities of LICENSEE to undertake development, production, marketing, and sublicensing, as appropriate, of the INVENTION and has found that LICENSEE is a responsible party for the purpose of negotiating this license on terms and conditions favorable to the public interest and that to grant this license would be in the public interest; and

WHEREAS, AIR FORCE has provided public notice of THIS AGREEMENT, in accordance with 35 U.S.C. §209(e), and in the Federal Register on March 1, 2018, of its intention to grant

a Partially Exclusive License to LICENSEE with an opportunity to file written objections and AIR FORCE has subsequently determined that:

- (a) The public will be served by the granting of this license in view of LICENSEE intentions, plans, and ability to bring the invention to the point of PRACTICAL APPLICATION or otherwise promote utilization of the INVENTION by the public;
- (b) Partially Exclusive licensing is a reasonable and necessary incentive to call forth the investment capital and expenditures needed to bring the invention to PRACTICAL APPLICATION or otherwise promote utilization of the INVENTION by the public;
- (c) The scope of exclusivity is not greater than reasonably necessary to provide the incentive for bringing the INVENTION to PRACTICAL APPLICATION, as proposed by LICENSEE, or otherwise to promote utilization of the INVENTION by the public;
- (d) The grant of this license will not tend to substantially lessen competition or create or maintain a violation of Federal antitrust laws:
- (e) Preference was given to small business firms submitting plans, said plans being determined to be within the capability of the small business firm and as having equal or greater likelihood to bring the INVENTION to PRACTICAL APPLICATION within a reasonable time (See 35 U.S.C. 202(c) and 37 C.F.R. 404.7(a)(1)(iv)); and
- (f) The enhancement of interests of the Federal Government or United States industry in foreign commerce has been considered. (See generally, 35 U.S.C. §209(a) and 37 C.F.R. 404.7(a)(1)).

NOW, THEREFORE, in accordance with and to the extent provided by the aforementioned authorities and in consideration of the foregoing premises and of the covenants and obligations hereinafter set forth to be well and truly performed, and other good and valuable consideration, AIR FORCE and LICENSEE agree as follows:

ARTICLE 1 – DEFINITIONS

The following definitions shall apply to the defined words where such words are used in THIS AGREEMENT:

- 1.1 "GOVERNMENT" means the Government of the United States.
- 1.2 "INVENTION" means any invention described in the invention disclosure entitled "Quantitative measurements of system complexity" as disclosed in AIR FORCE Docket No. 999 as of the EFFECTIVE DATE and claimed in U.S. Patent Application Serial No. 11/900,137 filed on August 30, 2007, and issued as U.S. Patent No. 8,244,503 on August 14, 2012.
- 1.3 "THIS AGREEMENT" means this written agreement for a Partially Exclusive License of the INVENTION.
- 1.4 "SUBSIDIARY" means a legal entity, or combination of entities that is at least fifty percent (50 %) owned or otherwise controlled by LICENSEE.

Partially Exclusive Patent License Agreement
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- 1.5 "EFFECTIVE DATE" of THIS AGREEMENT shall be the date of its signing, without modification, by AIR FORCE after signing by LICENSEE.
- 1.6 "ROYALTY BASE PRODUCT" means a product, apparatus, method, or service that would, but for THIS AGREEMENT, infringe at least one in force claim of the INVENTION.
- 1.7 "SUBLICENSE" means any agreement between LICENSEE and a third party, other than a SUBSIDIARY of LICENSEE, to enable such third party to PRACTICE THE INVENTION.
- 1.8 "SUBLICENSEE" means the third party subject to a SUBLICENSE with LICENSEE. For purpose of THIS AGREEMENT, a Distributor of a ROYALTY BASE PRODUCT shall not be included in the definition of SUBLICENSEE unless such Distributor is granted any right to make, have made, use, or have used the INVENTION.
- 1.9 "PRACTICE THE INVENTION" means to make, have made, use, lease, sell, or otherwise dispose of ROYALTY BASE PRODUCT by or for the account of LICENSEE, a SUBSIDIARY, or a SUBLICENSEE.
- 1.10 "GROSS REVENUES" means gross proceeds received by LICENSEE, its SUBSIDIARIES, and SUBLICENSEES resulting from the sale of any ROYALTY BASE PRODUCT in the TERRITORY.
- 1.11 "CALENDAR QUARTER" means any three-month period commencing on 1 January, 1 April, 1 July, or 1 October.
- 1.12 "AGREEMENT YEAR" means four (4) consecutive CALENDAR QUARTERS commencing on an anniversary of the first day of a CALENDAR QUARTER next following the EFFECTIVE DATE of THIS AGREEMENT, except that the first AGREEMENT YEAR shall include that portion of a CALENDAR QUARTER commencing on the EFFECTIVE DATE and the four (4) consecutive CALENDAR QUARTERS thereafter.
- 1.13 "DEVELOPMENT PLAN" means the plan by LICENSEE to undertake the development, manufacture, marketing, and sublicensing of the INVENTION as described in LICENSEE's application for a partially exclusive license dated August 28, 2017 and in accordance with 35 U.S.C. §§202(e) and 207 and 37 C.F.R. Part 404.
- 1.14 "PRACTICAL APPLICATION" means to manufacture or utilize the INVENTION under such conditions as to establish that its benefits are, to the extent permitted by law or GOVERNMENT regulation, made available to the public on reasonable terms.
- 1.15 "TERRITORY" means the United States of America, its territories and possessions, the District of Columbia, and the Commonwealth of Puerto Rico.
 - 1.16 "FIELD OF USE" means aerospace.

ARTICLE 2 – LICENSE GRANT

2.1 AIR FORCE hereby grants to LICENSEE a partially exclusive license PRACTICE THE INVENTION within the FIELD OF USE for the TERM set forth in Article ! THIS AGREEMENT and subject to the RESERVATION OF RIGHTS in Article 9.

The license granted by THIS AGREEMENT shall extend to SUBSIDIARIES of LICENSEE shall not be assignable by LICENSEE without prior written approval of AIR FORCE, except to successor of that part of LICENSEE business to which the INVENTION pertains (See, 37 C. 404.5(b)(3)).

- 2.2 LICENSEE may grant one or more SUBLICENSES, subject to the written appropriate of AIR FORCE, which approval shall not be unreasonably withheld, under THIS AGREEMENT provided in Article 7 of THIS AGREEMENT, on terms and conditions that LICENSEE may arra and subject to collection of payment of royalties and considerations due.
- 2.3 The license granted by THIS AGREEMENT includes the right of LICENSEI grant a Distributor the right to sell (but not to make, have made, use or have used) any ROYA BASE PRODUCT for or on behalf of LICENSEE.

ARTICLE 3 – ROYALTIES AND ROYALTY REPORT

- 3.1 LICENSEE shall pay to AIR FORCE a first, nonrefundable license fee the amount of THREE THOUSAND DOLLARS (\$3,000.00) within thirty (30) days after EFFECTIVE DATE of THIS AGREEMENT.
- 3.2 Beginning with the EFFECTIVE DATE of THIS AGREEMENT and continuing the TERM of THIS AGREEMENT, LICENSEE shall pay to AIR FORCE a running royalty of THF PERCENT (3.0%) of GROSS REVENUES received by LICENSEE AND ITS SUBSIDIAR during any AGREEMENT YEAR during the TERM of THIS AGREEMENT.
- 3.3 AIR FORCE's share of all considerations, including royalty and license for received by LICENSEE from its SUBLICENSEES under THIS AGREEMENT shall be FII PERCENT (50.0%), paid in accordance with Article 3.5.
 - 3.4 LICENSEE shall pay to AIR FORCE a minimum yearly royalty as follows:

For each AGREEMENT YEAR, LICENSEE shall pay to AIR FORCE a minimum yearly royalt the amount of ONE THOUSAND FIVE HUNDRED DOLLARS (\$1,500.00).

In the event that running royalties and income due and payable from SUBLICENSES for preceding AGREEMENT YEAR are less than the minimum yearly royalty, LICENSEE will mup the deficiency of the royalties actually paid to such minimum yearly royalty at the time running royalties are due at the end of that AGREEMENT YEAR.

3.5 All payments payable according to the paragraphs 3.1 through 3.4 and Article shall be paid annually by LICENSEE to AIR FORCE in U.S. Dollars, within two (2) months follow the end of each AGREEMENT YEAR. Payments may be paid by check payable to "Treasure the United States," and mailed to:

AFRL/SB

Attn: Patent License Administrator

2275 D Street, B016

Wright-Patterson AFB, Ohio 45433

Or paid electronically via transfer from a savings account or a checking account or by credit card (Discover, MasterCard, Visa, Diners Club International, JCB, Union Pay, and American Express) at:

https://www.pay.gov/paygov/forms/formInstance.html?agencyFormID=43562506.

For electronic and check payments, LICENSEE shall promptly notify all the parties in accordance with Article 17 that payment was submitted and by what method. For electronic payments, please submit confirmation number with notification. AIR FORCE may submit invoices for payments due to LICENSEE through the Department of the Treasury.

- 3.6 LICENSEE shall furnish to AIR FORCE, within two (2) months following the end of each AGREEMENT YEAR, any reports setting forth the number of sales and GROSS REVENUES, including those from SUBLICENSEES, in the previous AGREEMENT YEAR.
- 3.7 Sales to or for the GOVERNMENT shall be discounted by at least the royalty amount set forth in this Article 3 and thus not subject to the payment of royalties set forth in this Article 3, provided that LICENSEE identifies, in the statement required under paragraph 3.6, such sales by GOVERNMENT contract number or other suitable documentation substantiating the reduced price paid. Further, maximum sales price of any ROYALTY BASE PRODUCTS to or for the GOVERNMENT shall not exceed the minimum sales price of the ROYALTY BASE PRODUCTS or its equivalent offered to any other non-government entity.
- 3.8 Should LICENSEE fail to make timely payments in accordance with THIS AGREEMENT, AIR FORCE may put LICENSEE on written notice of such default. LICENSEE may remedy the default by payment of all monies due AIR FORCE within one (1) month of the date of transmission of the written notice, to maintain THIS AGREEMENT in effect. After such time, a surcharge of FIFTY DOLLARS (\$50) or SIX PERCENT (6 %), whichever is greater, shall be assessed per month of default. Should the default not be cured by the end of said month, AIR FORCE has the right to terminate THIS AGREEMENT by giving written notice of termination to LICENSEE, whereupon THIS AGREEMENT becomes terminated. Termination for any reason does not relieve LICENSEE of the obligation to pay past running royalties or other fees accrued prior to the effective date of termination.

ARTICLE 4 – RECORDS, BOOKS, AND EXAMINATION

- 4.1 LICENSEE agrees to keep for at least six (6) immediately past AGREEMENT YEARS accurate books and records of all expenses and proceeds, including those received from SUBLICENSEES, ROYALTY BASE PRODUCTS sold or disposed of under THIS AGREEMENT, the net sales quantities and applicable GROSS REVENUES, and royalties owed AIR FORCE. Records shall be available to substantiate reduced price paid by GOVERNMENT.
- 4.2 AIR FORCE may, on reasonable notice, through its duly authorized agent or representative, inspect, check, and verify all such books and records either at LICENSEE's place of business or at another place mutually agreed upon. The Parties shall be responsible for their

own expenses with respect to such routine inspections, checks, and verifications.

ARTICLE 5 – TERM

5.1 The TERM of THIS AGREEMENT shall commence on the EFFECTIVE DATE of THIS AGREEMENT and shall continue until expiration, invalidation, or decision of unenforceability is rendered on the last patent issued on the INVENTION.

ARTICLE 6 – LICENSEE PERFORMANCE

- 6.1 In furtherance of THIS AGREEMENT, LICENSEE agrees to perform the following:
- (a) Subject to LICENSEE's right to terminate THIS AGREEMENT in accordance with the provisions of Article 12, LICENSEE, in accordance with the DEVELOPMENT PLAN, will use its best efforts to bring the INVENTION to a point of PRACTICAL APPLICATION within 20 months after EFFECTIVE DATE.
- (b) LICENSEE shall achieve ROYALTY BASE PRODUCT sales to non-GOVERNMENT entity within 20 months of the EFFECTIVE DATE.
- (c) LICENSEE shall achieve ROYALTY BASE PRODUCT annual sales to non-GOVERNMENT entity of at least \$100,000 within sixty (60) months of the EFFECTIVE DATE.
- (d) LICENSEE agrees to report promptly to AIR FORCE any change in its mailing address, name, or company affiliation during the TERM of THIS AGREEMENT and to report promptly its decision to discontinue development of the INVENTION to the point of PRACTICAL APPLICATION or to not make the INVENTION available to the public, or to discontinue making the benefits of the INVENTION.
- (e) LICENSEE agrees that it will require manufacture of any ROYALTY BASE PRODUCT produced through the use of the INVENTION substantially in the United States and that any product, apparatus, method, or service embodying the INVENTION or produced through the use of the INVENTION will be manufactured or performed substantially in the United States as required in 35 U.S.C. §209(b), 37 C.F.R. 404.5(a)(2), and 37 C.F.R. 404.5(b)(8).

ARTICLE 7 – SUBLICENSES

- 7.1 LICENSEE may grant, pursuant to 37 C.F.R. 404.5(b)(4) and AFI 16- 110, and subject to the written approval of AIR FORCE, which approval shall not be unreasonably withheld, one or more SUBLICENSES under THIS AGREEMENT on terms and conditions that LICENSEE may arrange, provided that:
- (a) Each SUBLICENSE shall be in writing and make reference to THIS AGREEMENT and be subject to the terms and conditions of THIS AGREEMENT regarding its TERM, its termination, indemnification of AIR FORCE, a prohibition of any use of the name of AIR FORCE or any implied

endorsement of SUBLICENSEE by AIR FORCE, and the rights retained by AIR FORCE under Articles 9 and 12 of THIS AGREEMENT;

- (b) Each SUBLICENSE shall include the condition that the SUBLICENSE shall be automatically modified or terminated or expire upon the modification, termination, or expiration of THIS AGREEMENT;
- (c) Before any SUBLICENSE is granted by LICENSEE, the written approval of AIR FORCE shall first be obtained for each SUBLICENSE, such approval not to be unreasonably withheld unless such SUBLICENSEE is a foreign-owned or subsidiary of a foreign-owned entity. A SUBLICENSE with foreign-owned or subsidiary of a foreign-owned entity shall be subject to approval by the Secretary of the Air Force, Armaments Cooperation Division;
- (d) Within one (1) month after the issuance or modification of any SUBLICENSE hereunder, LICENSEE shall furnish AIR FORCE with a true and complete copy of the SUBLICENSE or modification thereof; and
- (e) The granting of any SUBLICENSE by LICENSEE shall in no way relieve LICENSEE from any of the requirements of THIS AGREEMENT.
- (f) In accordance with 37 C.F.R. 404.7(a)(2)(ii), AIR FORCE retains the right to require LICENSEE to grant, and, to the extent it is able, LICENSEE agrees to grant, additional SUBLICENSES to third parties on reasonable terms when necessary to fulfill health, safety, or other needs of the public to the extent such needs are not being reasonably satisfied by LICENSEE, its SUBSIDIARIES, and its SUBLICENSEES.

ARTICLE 8 – PATENT MARKING AND NON-ENDORSEMENT

- 8.1 LICENSEE will ensure that each ROYALTY BASE PRODUCT is marked with the notation "Licensed from the United States of America under U.S. Patent No. 8,244,503."
- 8.2 LICENSEE agrees not to create the appearance that AIR FORCE endorses LICENSEE, its SUBSIDIARY'S, its SUBLICENSEE'S, and/or its Distributor's business or endorses or warrants its products. AIR FORCE is not to be connected directly or impliedly with any advertising or promotional program of LICENSEE, except that LICENSEE may state that it is licensed under THIS AGREEMENT.

ARTICLE 9 - RESERVATION OF RIGHTS

9.1 THIS AGREEMENT is expressly made subject to an irrevocable, royalty-free right of the Government of the United States to practice for governmental purposes and have practiced the INVENTION on behalf of the Government of the United States for governmental purposes and on behalf of any foreign government or international organization pursuant to any existing or future treaty or agreement with the United States, which is in accordance with 35 U.S.C. §209(d)(1) and 37 C.F.R. 404.7(a)(2)(i).

ARTICLE 10 – REPRESENTATIONS AND WARRANTIES

- 10.1 NEITHER PARTY MAKES ANY REPRESENTATION OR WARRANTY AS TO THE VALIDITY OF ANY PATENT OR PATENT APPLICATION LICENSED UNDER THIS AGREEMENT, OF THE SCOPE OF ANY CLAIM OF ANY SUCH PATENT OR PATENT APPLICATION, OR THAT THE EXERCISE OF THIS AGREEMENT WILL NOT RESULT IN THE INFRINGEMENT OF ANY OTHER UNITED STATES OR FOREIGN PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT. NEITHER PARTY, NOR ITS EMPLOYEES, ASSUMES ANY LIABILITY WHATSOEVER RESULTING FROM THE EXERCISE OF THIS AGREEMENT. OTHER THAN AS MAY BE EXPRESSLY STATED ELSEWHERE IN THIS AGREEMENT, THE PARTIES MAKE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
- Nothing relating to the grant of this license, nor the grant itself, shall be construed to confer upon LICENSEE any immunity from or defense under the antitrust laws or from any charge of patent misuse, and the acquisition and use of rights pursuant to THIS AGREEMENT shall not immunize LICENSEE from the operation of State or Federal law by reason of the source of the grant.
- 10.3 Nothing contained in THIS AGREEMENT shall be interpreted to grant to LICENSEE any rights with respect to any invention, patent application, or patent other than the INVENTION.
- 10.4 The AIR FORCE assumes no obligation to bring or prosecute actions or suits against third parties for infringement.
 - 10.5 The AIR FORCE assumes no obligation to furnish any know-how.
- 10.6 Neither Party, nor any of their agents or employees, assumes any liability whatsoever from the exercise of THIS AGREEMENT.
- 10.7 LICENSEE shall agree to defend, indemnify, and hold AIR FORCE harmless from and against all liability, demands, damages, expenses, and losses for death, personal injury, illness, or property damage arising out of the use by LICENSEE or its customers and other transferees of any licensed process, or out of any use, sale, or other disposition of ROYALTY BASE PRODUCTS or its SUBLICENSEE(S).

ARTICLE 11 – PROGRESS REPORTS

11.1 As required by 35 U.S.C. §209(d)(2) and 37 C.F.R. 404.5(b)(6), LICENSEE agrees to submit to AIR FORCE annual written reports on efforts to achieve PRACTICAL APPLICATION of the INVENTION and on its efforts to continue to make the benefits of the INVENTION reasonably accessible to the public. These reports shall contain information within the knowledge of LICENSEE, or which it may acquire under normal business practice, pertaining to efforts expended, including expenditures to date, and other information which AIR FORCE may determine is pertinent to GOVERNMENT licensing activities. LICENSEE agrees to submit the first such report to AIR FORCE in writing within two (2) months after the expiration of the first LICENSE YEAR and subsequent reports annually thereafter.

11.2 Reports, as provided in Article 11.1 and as submitted pursuant to 37 C.F.R. 404.8(h), and the information they contain, if labeled "PROPRIETARY," shall be treated as privileged and confidential information not subject to disclosure under the Freedom of Information Act (5 U.S.C. §552), for a period of five (5) years from the date of receipt thereof.

ARTICLE 12 – MODIFICATION AND TERMINATION

- 12.1 Subject to 12.3, AIR FORCE may modify or terminate THIS AGREEMENT, in whole or in part pursuant to 35 U.S.C. §209(d)(3) and 37 C.F.R. 404.5(b)(8), if:
- (a) AIR FORCE determines that LICENSEE is not executing the DEVELOPMENT PLAN or obligations under Article 6 and LICENSEE cannot otherwise demonstrate to the satisfaction of AIR FORCE that it, or its SUBLICENCEE(S), can be expected to take within a reasonable time effective steps to achieve PRACTICAL APPLICATION of the INVENTION;
- (b) AIR FORCE determines that such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by LICENSEE, its SUBSIDIARIES, and/or SUBLICENSEES;
- (c) LICENSEE commits a substantial breach of any covenant contained in THIS AGREEMENT;
- (d) LICENSEE has willfully made a false statement or willfully omitted a material fact in the DEVELOPMENT PLAN required by THIS AGREEMENT;
- (e) LICENSEE becomes insolvent or makes any assignment for the benefit of creditors or if a receiver or trustee of LICENSEE property shall be appointed or if a third party files an involuntary petition forcing LICENSEE into bankruptcy;
- (f) LICENSEE intends to file a voluntary petition in bankruptcy. LICENSEE must provide notice to AIR FORCE of such intention at least thirty (30) calendar days prior to filing such petition. Failure to provide such notice shall be deemed a material, pre-petition incurable breach of THIS AGREEMENT; or
- (g) LICENSEE has not paid at least the minimum yearly royalty in accordance with Article 3 or annual patent fee in accordance with Article 14.
- 12.2 Modification may include, but is not limited to, modifying the license grant LICENSEE to limit LICENSEE license to a field of use then being actively engaged in by LICENSEE, or to requiring LICENSEE to grant sublicenses to others for a field of use not then being actively engaged in by LICENSEE.
- 12.3 Before modifying or terminating THIS AGREEMENT for any cause, AIR FORCE shall furnish LICENSEE and each SUBLICENSEE of record, a written notice of its intention to so modify or terminate THIS AGREEMENT, and LICENSEE and a SUBLICENSEE shall be allowed three (3) months after receipt of the notice to remedy any breach of any covenant set forth herein or to show cause why THIS AGREEMENT shall not be modified or terminated. Termination for any reason shall not relieve LICENSEE of the obligation to pay any amounts due under Articles 3, 13, and 14 prior to the effective date of termination.

- 12.4 LICENSEE may have a right to appeal, in accordance with procedures prescribed by The General Counsel of the Air Force, any decision concerning the interpretation, modification, or termination of THIS AGREEMENT (See 37 C.F.R. 404.11).
- 12.5 LICENSEE may terminate THIS AGREEMENT at any time, for whatever reason, upon written notice sent to AIR FORCE at least one (1) month prior to the effective date of termination, stating LICENSEE's intention to terminate and signed by LICENSEE or its lawful agent. All rights and licenses granted herein shall cease immediately upon the effective date of such termination; and all past amounts due accrued up to the date of termination shall be paid to AIR FORCE within two (2) months from the effective date of termination.

ARTICLE 13 – LITIGATION

- 13.1 During the TERM of THIS AGREEMENT, as provided under Article 5, LICENSEE is empowered pursuant to the provisions of Chapter 29 of Title 35, United States Code, or other statutes:
- (a) to bring suit in its own name or allow SUBLICENSEE(S) to bring suit, at its own expense, and on its own behalf for infringement of presumably valid claims of any patent issued on the INVENTION;
- (b) in any such suit, to enjoin infringement and to collect for its use, damages, profits, and awards of whatever nature recoverable for such infringement; and
- (c) to settle any such suit, provided, however, that AIR FORCE and appropriate U.S. Government authorities shall have a continuing right to intervene in such suit.
- 13.2 Each Party shall notify the other in writing if either Party becomes aware of an infringement or has reasonable cause to believe that there has been an infringement of any patent issued on the INVENTION. Should LICENSEE, or its SUBLICENSEE(S), fail to take action to enforce such patent within one year of notice of infringement, AIR FORCE may elect to take appropriate action on its own to enforce such patent for AIR FORCE'S own benefit.
- 13.3 AIR FORCE shall provide reasonable assistance to LICENSEE and/or its SUBLICENSEES with respect to such actions.
- 13.4 LICENSEE shall pay AIR FORCE FIFTY PERCENT (50 %) of all payments received by or on behalf of LICENSEE as a result of a judgment in or settlement of any such action after deduction of the cost of reasonable expenses, including counsel fees, court costs, and other related expenses, incurred by LICENSEE in taking such action.

ARTICLE 14 – PATENT FEES

14.1 LICENSEE shall pay AIR FORCE annual patent fees in the amount of ONE THOUSAND FIVE HUNDRED DOLLARS (\$1,500.00). The first payment is due within thirty (30) days after the EFFECTIVE DATE of THIS AGREEMENT. All subsequent payments shall be paid annually by LICENSEE to AIR FORCE in U.S. Dollars, within two (2) months following the end of

each AGREEMENT YEAR. Payment of patent reimbursement fees shall be attached to a cover letter that identifies the particular fee as a patent fee being paid under paragraph 14.1 of THIS AGREEMENT.

All payments payable according to paragraph 3.5.

14.2 All patent maintenance fees shall be paid to the United States Patent and Trademark Office by AIR FORCE at its sole option and discretion.

ARTICLE 15 – EXPORT CONTROLS

15.1 Licensed products and methods under THIS AGREEMENT may be subject to the Arms Export Control Act (22 U.S.C. §2751 et seq.), the Export Administration Act (50 U.S.C. §2401 et seq.), the International Traffic in Arms Regulations (22 C.F.R. Part 120 et seq.), or the Export Administration Regulations (15 C.F.R. Part 700 et seq.). Nothing in THIS AGREEMENT shall be construed to modify or rescind LICENSEE obligations under these and other laws and regulations.

ARTICLE 16 – GENERAL TERMS & PROVISIONS

- 16.1 **Governing Law.** The construction, validity, performance, and effect of THIS AGREEMENT for all purposes shall be governed by the laws applicable to the Government of the United States.
- failure of performance caused by any event beyond its reasonable control and not caused by the fault or negligence of that party. In the event such a force majeure event occurs, the party unable to perform must promptly notify the other party and in good faith maintain such part performance as is reasonably possible and resume full performance as soon as is reasonably possible.
- 16.3 Relationship of the Parties. The parties to THIS AGREEMENT and their employees are independent contractors and are not agents of each other, joint venturers, partners, or joint parties to a formal business organization of any kind. Neither party is authorized or empowered to act on behalf of the other with regard to any contract, warranty, nor representation as to any matter, and neither party will be bound by the acts or conduct of the other. Each party will maintain sole and exclusive control over its own personnel and operations.
- 16.4 **Entire Agreement.** THIS AGREEMENT represents the entire agreement of the parties and is the complete and exclusive statement of their agreement.
- 16.5 **Severability.** The illegality or invalidity of any provision of THIS AGREEMENT will not impair, affect, or invalidate the other provisions of THIS AGREEMENT.
- 16.6 **Survivability.** All rights and responsibilities incurred under THIS AGREEMENT shall survive the expiration or termination of THIS AGREEMENT.
- 16.7 **Waiver of Rights.** Any waiver must be in writing and provided to all other parties. Failure to insist upon strict performance of any of the terms and conditions hereof, or failure or delay to exercise any rights provided herein or by law, will not be deemed a waiver of any rights of

Partially Exclusive Patent License Agreement
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any party hereto.

No Waiver of Sovereign Immunity. Notwithstanding any provision to the contrary, LICENSEE understands that GOVERNMENT will not be liable to any party to THIS AGREEMENT, whether directly or by way of contribution or indemnity, for any claim made by any person or other entity for personal injury or death or for property damage or loss, arising in any way from THIS AGREEMENT, including, but not limited to, the later use, sale or other disposition of ROYALTY BASE PRODUCT or research, technical developments, or other products otherwise associated with the INVENTION under THIS AGREEMENT or contributed by either party pursuant to THIS AGREEMENT, except as provided under the Federal Tort Claims Act (28 U.S.C. §2671 et seq.) or other federal law where sovereign immunity has been explicitly waived.

ARTICLE 17 – NOTICES

17.1 All communications, reports, and notices required under THIS AGREEMENT shall be duly given if timely Emailed and hard-copy mailed by courier, and addressed as follows:

If to AIR FORCE

AFRL/TL
Ms. License Contact
555 Lab Lane
Air Forceville, OH
Ph: 555-555

Email: contact@af.mil

If to LICENSEE

John Smith Example Company 777 Somewhere St. Somewhere, MT 55556 Ph: 555-555-5555

Email: nobody@nowhere.com

with copies of such correspondence to:

Chief, Intellectual Property Law Division AFMCLO/JAZ 2240 B St. Bldg. 11, Rm. 232

Wright-Patterson AFB, OH 45433

Ph: 937-255-2838

Email: afmclo.jaz.tech@us.af.mil

and to: AFRL/SB

Attn: Abby Boggs 2275 D Street, B016

Wright-Patterson AFB, Ohio 45433

Email: abby.boggs@us.af.mil

PARTIALLY EXCLUSIVE LICENSE AGREEMENT SIGNATURE PAGE

DEPARTMENT OF THE AIR FORCE and EXAMPLE COMPANY

IN WITNESS WHEREOF, Government of the United States of America as represented by the Secretary of the Air Force ("AIR FORCE") and the Example Company ("LICENSEE") have caused this PARTIALLY EXCLUSIVE LICENSE AGREEMENT:

"Quantitative measurements of system complexity" as disclosed in AIR FORCE Docket No. 999 as of the EFFECTIVE DATE and claimed in U.S. Patent Application Serial No. 11/900,137 filed on August 30, 2007, and issued as U.S. Patent No. 8,244,503 on August 14, 2012 to be executed by their duly authorized representatives.

Example Company	AIR FORCE AFRL Test Lab
John Smith	Joe Commander
(Name)	(Name)
Administrator	Lab Commander
(Title)	(Title)
(Signature)	(Signature)
(Date)	(Date)

THIS SIGNATURE PAGE ONLY AUTHORIZED FOR PUBLIC RELEASE AND FOR RECORDATION WITH THE UNITED STATES PATENT AND TRADEMARK OFFICE – DISTRIBUTION UNLIMITED.

NON-EXCLUSIVE LICENSE AGREEMENT

DEPARTMENT OF THE AIR FORCE and EXAMPLE COMPANY

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PREAMBLE

This Non-Exclusive Patent License Agreement is made and entered into by and between the Government of the United States of America as represented by the Secretary of the Air Force (hereinafter called "AIR FORCE"), and Example Company, a Limited Liability Corporation duly organized, validly existing, and in good standing in the State of Montana, having a place of business at 555 Nowhere St., Nowhere, MT, 55555 (hereinafter called "LICENSEE").

WITNESSETH:

WHEREAS, Daniel W. Repperger, Rodney G. Roberts, and Corbin G. Koepke (hereinafter called "INVENTORS") collaborated and made an invention;

WHEREAS, The Government of the United States, as represented by the AIR FORCE, owns by assignment of an undivided interest, the invention by Daniel W. Repperger, Rodney G. Roberts, and Corbin G. Koepke;

WHEREAS, Title 35, United States Code, Chapter 18, "Patent Rights in Inventions Made with Federal Assistance," (35 U.S.C. §202(e), 207) and Title 37 of the Code of Federal Regulations, Part 404, entitled "Licensing of Government Owned Inventions," set forth the terms and conditions under which licenses under federally owned inventions may be granted;

WHEREAS, Air Force Instruction 51-303 and 61-301 set forth the terms and conditions for licensing of rights in federally owned inventions vested in the Government of the United States in the custody of the Department of the Air Force;

WHEREAS, the above-cited authorities support the proposition that licensing of Government owned inventions will best serve the public interest when such inventions are developed to the point of PRACTICAL APPLICATION and made available to the public in the shortest possible time;

WHEREAS, AIR FORCE has determined that grant of this license will not tend to substantially lessen competition or result in undue concentration in any section of the country in any line of commerce to which the technology to be licensed relates, or to create or maintain other situations inconsistent with the antitrust laws;

WHEREAS, LICENSEE wishes to secure from AIR FORCE, and AIR FORCE wishes to grant to LICENSEE, a Non-Exclusive License in the INVENTION, subject to the terms and conditions herein set forth;

WHEREAS, in accordance with 35 U.S.C. §209(f), 37 C.F.R. 404.5(a)(1), 37 C.F.R. 404.5(a)(5), and AFI 51-303 (¶13.2), LICENSEE has submitted a plan dated August 28, 2017, to undertake the development, production, and marketing of the INVENTION, as appropriate, and has expressed its intention to carry out this plan upon the granting of this license; and

WHEREAS. AIR FORCE has considered the capabilities of LICENSEE to undertake development, production, and marketing, as appropriate, of the INVENTION and has found that LICENSEE is a responsible party for the purpose of negotiating this license on terms and conditions favorable to the public interest and that to grant this license would be in the public interest.

NOW, THEREFORE, in accordance with and to the extent provided by the aforementioned authorities and in consideration of the foregoing premises and of the covenants and obligations

3 February 2014 Page 2 of 12 hereinafter set forth to be well and truly performed, and other good and valuable consideration, AIR FORCE and LICENSEE agree as follows:

ARTICLE 1 – DEFINITIONS

The following definitions shall apply to the defined words where such words are used in THIS AGREEMENT:

- 1.01 "GOVERNMENT" means the Government of the United States.
- 1.02 "INVENTION" means any invention described in the invention disclosure "Quantitative measurements of system complexity" as disclosed in AIR FORCE Docket No. 999 as of the EFFECTIVE DATE and claimed in U.S. Patent Application Serial No. 11/900,137 filed on August 30, 2007, and issued as U.S. Patent No. 8,244,503 on August 14, 2012.
- 1.03 "THIS AGREEMENT" means this written agreement for a Non-Exclusive License of the INVENTION.
- 1.04 "SUBSIDIARY" means a legal entity, or combination of entities that is at least fifty percent (50 %) owned or otherwise controlled by LICENSEE.
- 1.05 "EFFECTIVE DATE" of THIS AGREEMENT shall be the date of its signing, without modification, by AIR FORCE after signing by LICENSEE.
- 1.06 "ROYALTY BASE PRODUCT" means a product, apparatus, method, or service that would, but for THIS AGREEMENT, infringe at least one in force claim of the INVENTION.
- 1.07 "PRACTICE THE INVENTION" means to make, have made, use, lease, sell, or otherwise dispose of ROYALTY BASE PRODUCT by or for the account of LICENSEE, or a SUBSIDIARY.
- 1.08 "GROSS REVENUES" means gross proceeds received by LICENSEE and its SUBSIDIARIES for the sale of any ROYALTY BASE PRODUCT in the TERRITORY.
- 1.09 "CALENDAR QUARTER" means any three-month period commencing on 1 January, 1 April, 1 July, or 1 October.
- 1.10 "AGREEMENT YEAR" means four (4) consecutive CALENDAR QUARTERS commencing on an anniversary of the first day of a CALENDAR QUARTER next following the EFFECTIVE DATE of THIS AGREEMENT, except that the first AGREEMENT YEAR shall include that portion of a CALENDAR QUARTER commencing on the EFFECTIVE DATE and the four (4) consecutive CALENDAR QUARTERS thereafter.
- 1.11 "DEVELOPMENT PLAN" means the plan by LICENSEE to undertake the development, manufacture, and marketing of the INVENTION as described in its application for a non-exclusive license dated August 28, 2017 and in accordance with 35 U.S.C. §§202(e) and 207 and 37 C.F.R. Part 404.

- 1.12 "PRACTICAL APPLICATION" means to manufacture or utilize the INVENTION under such conditions as to establish that its benefits are, to the extent permitted by law or GOVERNMENT regulation, made available to the public on reasonable terms.
- 1.13 "TERRITORY" means United States of America, its territories and possessions, the District of Columbia, and the Commonwealth of Puerto Rico.
 - 1.14 "FIELD OF USE" means aerospace.

ARTICLE 2 – <u>LICENSE GRANT</u>

- 2.01 AIR FORCE hereby grants to LICENSEE a Non-Exclusive License to PRACTICE THE INVENTION within the FIELD OF USE for the TERM set forth in Article 5 of THIS AGREEMENT and subject to the limitations and terms contained therein.
- 2.02 The license granted by THIS AGREEMENT shall extend to SUBSIDIARIES of LICENSEE but shall not be assignable by LICENSEE without prior written approval of AIR FORCE, except to the successor of that part of LICENSEE business to which the INVENTION pertains (See, 37 C.F.R. 404.5(b)(3)).
- 2.03 The license granted by THIS AGREEMENT includes the right of LICENSEE to grant a Distributor the right to sell (but not to make, have made, use or have used) any ROYALTY BASE PRODUCT for or on behalf of LICENSEE.

ARTICLE 3 – ROYALTIES AND ROYALTY REPORT

- 3.01 LICENSEE shall pay to AIR FORCE a first, nonrefundable license fee in the amount of TWO THOUSAND DOLLARS (\$2,000.00) within thirty (30) days after the EFFECTIVE DATE of THIS AGREEMENT.
- 3.02 Beginning with the EFFECTIVE DATE of THIS AGREEMENT and continuing for the TERM of THIS AGREEMENT, LICENSEE shall pay to AIR FORCE a running royalty of TWO PERCENT (2.0%) of the GROSS REVENUES of non-GOVERNMENT sales.
 - 3.03 LICENSEE shall pay AIR FORCE a minimum yearly royalty as follows:

For each AGREEMENT YEAR, LICENSEE shall pay to AIR FORCE a minimum yearly royalty in the amount of ONE THOUSAND DOLLARS (\$1,000.00).

In the event that running royalties for a preceding AGREEMENT YEAR is less than the minimum yearly royalty, LICENSEE will make up the deficiency of the royalties actually paid to such minimum yearly royalty at the time the running royalties are due at the end of that AGREEMENT YEAR.

3.04 All payments payable according to the paragraphs 3.01 through 3.03 and Article 13 shall be paid annually by LICENSEE to AIR FORCE in U.S. Dollars, within two (2) months following the end of each AGREEMENT YEAR. Payments may be paid by check payable to "Treasurer of the United States," and mailed to:

AFRL/SB

Attn: Deborah Davis-Brutchen 1864 4th Street, Bldg 15

Wright-Patterson AFB, Ohio 45433

Email: deborah.davis-brutchen@us.af.mil

Or paid electronically via transfer from a savings account or a checking account or by credit card (Discover, MasterCard, Visa, Diners Club International, JCB, Union Pay, and American Express) at:

https://www.pay.gov/paygov/forms/formInstance.html?agencyFormID=43562506.

For electronic and check payments, LICENSEE shall promptly notify all the parties in accordance with Article 17 that payment was submitted and by what method. For electronic payments, please submit confirmation number with notification. AIR FORCE may submit invoices for payments due to LICENSEE through the Department of the Treasury.

- 3.05 LICENSEE shall furnish to AIR FORCE a written statement, within two (2) months following the end of each AGREEMENT YEAR, setting forth the quantity and GROSS REVENUES of all ROYALTY BASE PRODUCTS sold or otherwise disposed of by LICENSEE and its SUBSIDIARIES under THIS AGREEMENT during that AGREEMENT YEAR, and the royalty payment due. A ROYALTY BASE PRODUCT shall be considered sold or otherwise disposed of when billed-out, shipped, or paid for, whichever occurs first. Payment shall accompany the statement. If the royalty being paid is a minimum yearly royalty greater than the royalty actually owed for that AGREEMENT YEAR, the statement shall so state.
- 3.06 Sales to or for the GOVERNMENT shall be discounted by at least the royalty amount set forth in this Article and thus not subject to the payment of royalties set forth therein, provided that LICENSEE identifies in the statement required under Article 3 sales by AIR FORCE contract number or other suitable documentation substantiating the reduced price paid. Further, maximum sales price of any ROYALTY BASE PRODUCTS to or for the GOVERNMENT shall not exceed the minimum sales price of the ROYALTY BASE PRODUCTS or its equivalent offered to any other non-government entity.
- 3.07 Should LICENSEE fail to make timely payments in accordance with THIS AGREEMENT, AIR FORCE may put LICENSEE on written notice of such default. LICENSEE may remedy the default by payment of all monies due AIR FORCE within one (1) month of the date of transmission of the written notice, to maintain THIS AGREEMENT in effect. After such time, a surcharge of FIFTY DOLLARS (\$50) or SIX PERCENT (6 %), whichever is greater, shall be assessed per month of default. Should the default not be cured by the end of said month, AIR FORCE has the right to terminate THIS AGREEMENT by giving written notice of termination to LICENSEE, whereupon THIS AGREEMENT becomes terminated. Termination for any reason does not relieve LICENSEE of the obligation to pay past running royalties or other fees accrued prior to the effective date of termination.

ARTICLE 4 - RECORDS, BOOKS, AND EXAMINATION

4.01 LICENSEE agrees to keep for at least six (6) immediately past AGREEMENT YEARS accurate books and records of all expenses and proceeds received from its ROYALTY BASE PRODUCTS sold or disposed of under THIS AGREEMENT, the net sales quantities and

applicable GROSS REVENUES, and royalties owed AIR FORCE. Records shall be available to substantiate reduced price paid by GOVERNMENT.

4.02 AIR FORCE may, on reasonable notice, through its duly authorized agent or representative, inspect, check, and verify all such books and records either at LICENSEE's place of business or at another place mutually agreed upon. The Parties shall be responsible for their own expenses with the respect to such routine inspections, checks, and verifications.

ARTICLE 5 – TERM

5.01 The TERM of THIS AGREEMENT shall commence on the EFFECTIVE DATE of THIS AGREEMENT and shall continue until expiration, invalidation, or decision of unenforceability is rendered of the last patent issued on the INVENTION.

ARTICLE 6 – LICENSEE PERFORMANCE

- 6.01 In furtherance of THIS AGREEMENT, LICENSEE agrees to perform the following:
- (a) Subject to LICENSEE's right to terminate THIS AGREEMENT in accordance with the provisions of Article 11, LICENSEE, in accordance with the DEVELOPMENT PLAN, will use its best efforts to bring the INVENTION to a point of PRACTICAL APPLICATION within 20 months of the EFFECTIVE DATE.
- (b) LICENSEE shall achieve ROYALTY BASE PRODUCT sales to non-GOVERNMENT entity within 20 months of the EFFECTIVE DATE.
- (c) LICENSEE shall achieve ROYALTY BASE PRODUCT annual sales to non-GOVERNMENT entity of at least \$100,000 within sixty (60) months of the EFFECTIVE DATE.
- (d) LICENSEE agrees to report promptly to AIR FORCE any change in its mailing address, name, or company affiliation during the TERM of THIS AGREEMENT and to report promptly its decision to discontinue development of the INVENTION to the point of PRACTICAL APPLICATION or to not make the INVENTION available to the public, or to discontinue making the benefits of the INVENTION.
- (e) LICENSEE agrees that it will require manufacture of any ROYALTY BASE PRODUCT produced through the use of the INVENTION substantially in the United States and that any product, apparatus, method, or service embodying the INVENTION or produced through the use of the INVENTION will be manufactured or performed substantially in the United States pursuant to 35 U.S.C. §209(b), 37 C.F.R. 404.5(a)(2), and 37 C.F.R. 404.5(b)(8).

ARTICLE 7 – PATENT MARKING AND NON-ENDORSEMENT

7.01 LICENSEE will ensure that each ROYALTY BASE PRODUCT is marked with the notation "Licensed from the United States of America under U.S. Patent No. 8,244,503."

7.02 LICENSEE agrees not to create the appearance that AIR FORCE endorses LICENSEE, its SUBSIDIARY'S and/or its Distributor's business or endorses or warrants its products. AIR FORCE is not to be connected directly or impliedly with any advertising or promotional program of LICENSEE, except that LICENSEE may state that it is licensed under THIS AGREEMENT.

ARTICLE 8 – RESERVATION OF RIGHTS

8.01 THIS AGREEMENT is expressly made subject to an irrevocable, royalty-free right of the Government of the United States to practice for governmental purposes and have practiced the INVENTION on behalf of the Government of the United States for governmental purposes and on behalf of any foreign government or international organization pursuant to any existing or future treaty or agreement with the United States. See 35 U.S.C. §209(d)(1) and 37 C.F.R. 404.7(a)(2)(i).

ARTICLE 9 – REPRESENTATIONS AND WARRANTIES

- 9.01 NEITHER PARTY MAKES ANY REPRESENTATION OR WARRANTY AS TO THE VALIDITY OF ANY PATENT OR PATENT APPLICATION LICENSED UNDER THIS AGREEMENT, OF THE SCOPE OF ANY CLAIM OF ANY SUCH PATENT OR PATENT APPLICATION, OR THAT THE EXERCISE OF THIS AGREEMENT WILL NOT RESULT IN THE INFRINGEMENT OF ANY OTHER UNITED STATES OR FOREIGN PATENT OR OTHER INTELLECTUAL PROPERTY RIGHT. NEITHER PARTY, NOR ITS EMPLOYEES, ASSUMES ANY LIABILITY WHATSOEVER RESULTING FROM THE EXERCISE OF THIS AGREEMENT. OTHER THAN AS MAY BE EXPRESSLY STATED ELSEWHERE IN THIS AGREEMENT, THE PARTIES MAKE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
- 9.02 Nothing relating to the grant of this license, nor the grant itself, shall be construed to confer upon LICENSEE any immunity from or defense under the antitrust laws or from any charge of patent misuse, and the acquisition and use of rights pursuant to THIS AGREEMENT shall not immunize LICENSEE from the operation of State or Federal law by reason of the source of the grant.
- 9.03 Nothing contained in THIS AGREEMENT shall be interpreted to grant to LICENSEE any rights with respect to any invention, patent application, or patent other than the INVENTION.
- 9.04 The AIR FORCE assumes no obligation to bring or prosecute actions or suits against third parties for infringement.
 - 9.05 The AIR FORCE assumes no obligation to furnish any know-how.
- 9.06 Neither Party, nor any of their agents or employees, assumes any liability whatsoever from the exercise of THIS AGREEMENT.
- 9.07 LICENSEE shall agree to defend, indemnify, and hold AIR FORCE harmless from and against all liability, demands, damages, expenses, and losses for death, personal injury,

illness, or property damage arising out of the use by LICENSEE or its customers and other transferees of any licensed process, or out of any use, sale, or other disposition of ROYALTY BASE PRODUCTS.

ARTICLE 10 – PROGRESS REPORTS

10.01 As required by 35 U.S.C. §209(d)(2) and 37 C.F.R. 404.5(b)(6), LICENSEE agrees to submit to AIR FORCE annual written reports on efforts to achieve PRACTICAL APPLICATION of the INVENTION and on its efforts to continue to make the benefits of the INVENTION reasonably accessible to the public. These reports shall contain information within the knowledge of LICENSEE, or which it may acquire under normal business practice, pertaining to efforts expended, including expenditures to date, and other information which AIR FORCE may determine is pertinent to GOVERNMENT licensing activities. LICENSEE agrees to submit the first such report to AIR FORCE in writing within two (2) months after the expiration of the first LICENSE YEAR and subsequent reports annually thereafter. Such reports and the information they contain, if labeled "PROPRIETARY," shall be treated as privileged and confidential information not subject to disclosure under the Freedom of Information Act, for a period of five (5) years from the date of receipt thereof.

ARTICLE 11 – MODIFICATION AND TERMINATION

- 11.01 Subject to 11.03, AIR FORCE may modify or terminate THIS AGREEMENT in whole or in part pursuant to 35 U.S.C. §209(d)(3) and 37 C.F.R. 404.5(b)(8) if:
- (a) AIR FORCE determines that LICENSEE is not executing the DEVELOPMENT PLAN or Article 6 and LICENSEE cannot otherwise demonstrate to the satisfaction of AIR FORCE that it can be expected to take within a reasonable time effective steps to achieve PRACTICAL APPLICATION of the INVENTION;
- (b) AIR FORCE determines that such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by LICENSEE and/or its SUBSIDIARIES;
- (c) LICENSEE commits a substantial breach of any covenant contained in THIS AGREEMENT;
- (d) LICENSEE has willfully made a false statement or willfully omitted a material fact in the DEVELOPMENT PLAN required by THIS AGREEMENT;
- (e) LICENSEE becomes insolvent or makes any assignment for the benefit of creditors or if a receiver or trustee of LICENSEE property shall be appointed or if a third party files an involuntary petition forcing LICENSEE into bankruptcy;
- (f) LICENSEE intends to file a voluntary petition in bankruptcy. LICENSEE must provide notice to AIR FORCE of such intention at least thirty (30) calendar days prior to filing such petition. Failure to provide such notice shall be deemed a material, pre-petition incurable breach of THIS AGREEMENT; or

- (g) LICENSEE has not paid at least the minimum yearly royalty in accordance with Article 3 or annual patent fee in accordance with Article 13.
- 11.02 Modification may include, but is not limited to, modifying the license grant to LICENSEE to limit LICENSEE license to subsets within the fields of use then being actively engaged in by LICENSEE.
- 11.03 Before modifying or terminating THIS AGREEMENT for any cause, AIR FORCE shall furnish LICENSEE, a written notice of its intention to so modify or terminate THIS AGREEMENT, and LICENSEE shall be allowed three (3) months after receipt of the notice to remedy any breach of any covenant set forth herein or to show cause why THIS AGREEMENT shall not be modified or terminated. Termination for any reason shall not relieve LICENSEE of the obligation to pay any amounts due under Article 3 prior to the effective date of termination.
- 11.04 LICENSEE may have a right to appeal, in accordance with procedures prescribed by The General Counsel of the Air Force, any decision concerning the interpretation, modification, or termination of THIS AGREEMENT (See 37 C.F.R. 404.11).
- 11.05 LICENSEE may terminate THIS AGREEMENT at any time, for whatever reason, upon written notice sent to AIR FORCE at least one (1) month prior to the effective date of termination, stating LICENSEE's intention to terminate and signed by LICENSEE or its lawful agent. All rights and licenses granted herein shall cease immediately upon the effective date of such termination; and all past amounts due accrued up to the date of termination shall be paid to AIR FORCE within two (2) months from the effective date of termination.

ARTICLE 12 – LITIGATION

- 12.01 LICENSEE shall notify AIR FORCE if LICENSEE becomes aware of an infringement or has reasonable cause to believe that there has been an infringement of any patent issued on the INVENTION.
- 12.02 During the TERM of THIS AGREEMENT, as provided under Article 5, LICENSEE shall provide reasonable assistance to AIR FORCE in any suit for infringement, or settlement thereof, of presumably valid claims of any patent issued on the INVENTION.

ARTICLE 13 – PATENT FEES

13.01 LICENSEE shall pay to the AIR FORCE annual patent fee of ONE THOUSAND DOLLARS (\$1,000.00). The first payment is due within thirty (30) days after the EFFECTIVE DATE of THIS AGREEMENT. All subsequent payments shall be paid annually by LICENSEE to AIR FORCE in U.S. Dollars, within two (2) months following the end of each AGREEMENT YEAR. Payment of patent fees shall be attached to a cover letter that identifies the particular fee as a patent fee being paid under paragraph 13.01 of THIS AGREEMENT.

All payments payable according to paragraph 3.04.

13.02 All patent maintenance fees shall be paid to the United States Patent and Trademark Office by AIR FORCE at its sole option and discretion.

ARTICLE 14 – GOVERNING LAW

14.01 The construction, validity, performance, and effect of THIS AGREEMENT for all purposes shall be governed by the laws applicable to the Government of the United States.

ARTICLE 15 – EXPORT CONTROLS

15.01 Licensed products and methods under THIS AGREEMENT may be subject to the Arms Export Control Act (22 U.S.C. §2751 et seq.), the Export Administration Act (50 U.S.C. §2401 et seq., the International Traffic in Arms Regulations (22 C.F.R. Part 120 et seq.), or the Export Administration Regulations (15 C.F.R. Part 700 et seq.). Nothing in THIS AGREEMENT shall be construed to modify or rescind LICENSEE obligations under these or any other export control laws and/or regulations.

ARTICLE 16 – GENERAL TERMS & PROVISIONS

- 16.01 Force Majeure. Neither party will be in breach of THIS AGREEMENT for any failure of performance caused by any event beyond its reasonable control and not caused by the fault or negligence of that party. In the event such a force majeure event occurs, the party unable to perform must promptly notify the other party and in good faith maintain such part performance as is reasonably possible and resume full performance as soon as is reasonably possible.
- Relationship of the Parties. The parties to THIS AGREEMENT and their employees are independent contractors and are not agents of each other, joint venturers, partners, or joint parties to a formal business organization of any kind. Neither party is authorized or empowered to act on behalf of the other with regard to any contract, warranty, nor representation as to any matter, and neither party will be bound by the acts or conduct of the other. Each party will maintain sole and exclusive control over its own personnel and operations.
- 16.03 Entire Agreement. THIS AGREEMENT represents the entire agreement of the parties and is the complete and exclusive statement of their agreement.
- 16.04 Severability. The illegality or invalidity of any provision of THIS AGREEMENT will not impair, affect, or invalidate the other provisions of THIS AGREEMENT.
- 16.05 Survivability. All rights and responsibilities incurred under THIS AGREEMENT prior to termination shall survive the expiration or termination of THIS AGREEMENT.
- 16.06 <u>Waiver of Rights.</u> Any waiver of rights under THIS AGREEMENT must be in writing and provided to all other parties. Failure to insist upon strict performance of any of the terms and conditions hereof, or failure or delay to exercise any rights provided herein or by law, will not be deemed a waiver of any rights of any party hereto.
- 16.07 No Waiver of Sovereign Immunity. AIR FORCE will not be liable, whether directly or by way of contribution or indemnity, for any claim made by any person or other entity for personal injury or death or for property damage or loss, arising in any way from THIS AGREEMENT, including, but not limited to, the later use, sale or other disposition of ROYALTY

BASE PRODUCT or research, technical developments, or other products otherwise associated with the INVENTION under THIS AGREEMENT or contributed by either party pursuant to THIS AGREEMENT, except as provided under the Federal Tort Claims Act (28 U.S.C. §2671 et seq.) or other federal law where sovereign immunity has been explicitly waived.

ARTICLE 17 – NOTICES

17.01 All communications, reports, and notices required under THIS AGREEMENT shall be duly given if timely Emailed and hard-copy mailed by courier, and addressed as follows:

If to AIR FORCE

AFRL/TL
Ms. License Contact
555 Lab Lane
Air Forceville, OH
Ph: 555-555-555
Email: contact@af.mil

If to LICENSEE

John Smith Example Company 777 Somewhere St. Somewhere, MT 55556 Ph: 555-555-5555

Email: nobody@nowhere.com

with copies of such correspondence to:

Chief, Intellectual Property Law Division AFMCLO/JAZ 2240 B St. Bldg. 11, Rm. 232

Wright-Patterson AFB, OH 45433

Ph: 937-255-2838

Email: afmclo.jaz.tech@us.af.mil

and to: AFRL/SB

Attn: Deborah Davis-Brutchen 1864 4th Street, Bldg 15

Wright-Patterson AFB, Ohio 45433

Email: deborah.davis-brutchen@us.af.mil

NON-EXCLUSIVE LICENSE AGREEMENT SIGNATURE PAGE

DEPARTMENT OF THE AIR FORCE and EXAMPLE COMPANY

IN WITNESS WHEREOF, Government of the United States of America as represented by the Secretary of the Air Force ("AIR FORCE") and the Example Company ("LICENSEE") have caused this NON-EXCLUSIVE LICENSE AGREEMENT:

"Quantitative measurements of system complexity" as disclosed in AIR FORCE Docket No. 999 as of the EFFECTIVE DATE and claimed in U.S. Patent Application Serial No. 11/900,137 filed on August 30, 2007, and issued as U.S. Patent No. 8,244,503 on August 14, 2012 to be executed by their duly authorized representatives.

Example Company	AIR FORCE AFRL Test Lab
John Smith	Joe Commander
(Name)	(Name)
Administrator	Lab Commander
(Title)	(Title)
(Signature)	(Signature)
(Date)	(Date)

THIS SIGNATURE PAGE ONLY AUTHORIZED FOR PUBLIC RELEASE AND FOR RECORDATION WITH THE UNITED STATES PATENT AND TRADEMARK OFFICE -

DISTRIBUTION UNLIMITED.

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Roles and Responsibilities for PLAs

S&E Inventors

- 1. Keep personal contact information updated per ORTA instructions
- 2. Provide technical support to the ORTA regarding the technology associated with invention or patent
- 3. Provide technical support to the licensee as necessary and permitted by the license
- 4. Support development of a success story (if applicable)

ORTA

- 1. Work with TechLink or other PIA to identify potential licensees
- 2. Ensure the IP requested is available for licensing
- 3. Send the license application and commercialization plan guidelines to the potential licensee
- 4. Draft the PLA after receipt and acceptance of the license application and commercialization plan from the potential licensee
- 5. Ensure all terms in the license agreement are appropriate
- 6. Work with TechLink or other PIA to determine royalty rates, upfront fees, milestones, etc., then negotiate with the potential licensee
- 7. Coordinate legal review of the PLA
- 8. Coordinate the signature process and return a PDF of the signed PLA to the licensee
- 9. Send a PDF of the signed PLA to the Activity's legal office and AFRL/SB
- 10. Complete DTTIS reporting requirement by entering PLA information in the database
- 11. Ensure the upfront fee is received within 30 days after the PLA signed, and notify AFRL/SB if the fee is not received and efforts to collect it are unsuccessful
- 12. Continue to manage the PLA and ensure terms are met
- 13. Collect and review annual reports and ensure proper royalty payments are received
- 14. Ensure the licensee is including the PLA number on all royalty checks
- 15. Coordinate on the disbursal memo with AFRL/SB to ensure inventor(s) are correctly identified
- 16. Notify AFRL/SB if royalties are delinquent so it can initiate collection procedures

Legal

- 1. Review the PLA for completeness and adherence to law and AF/DOD guidance
- 2. Identify any issues and provide feedback to the ORTA on legal sufficiency
- Submit public notice of intent to license if the proposed license is exclusive or partially exclusive

AFRL/SB

- 1. Notify the ORTA when royalty payments are received by electronic deposit or check
- 2. Ensure deposit of the royalty payments in the appropriate account, if payment is by check
- 3. Prepare a disbursal memo identifying the inventor(s) to receive payment, the amount for each inventor, and the amount to be sent to the inventor(s) organization
- 4. Coordinate the disbursal memo with the ORTA
- 5. Initiate collection procedures when notified by the ORTA of delinquent royalty payments

TechLink or other PIA

- 1. Market Air Force inventions and identify qualified potential licensees
- 2. Assist prospective licensee with development of complete license application and commercialization plan, ensuring that they fully meet AF requirements
- 3. Help the ORTA determine appropriate license terms (royalty rates, upfront fees, milestones, etc.)
- 4. Assist the ORTA in determining the necessary level of exclusivity—full, partial, or non-exclusive—for the license
- 5. Support the ORTA and licensee during negotiations by acting as an "honest broker"
- 6. Assist with developing a success story (as appropriate)

SOFTWARE AGREEMENT APPENDICIES

Air Force Information Transfer

Air Force 801 Software License Template V1.0

Air Force Open Source License

Air Force Unilateral Open Source License

U.S. AIR FORCE SECTION 801 SOFTWARE LICENSE AND NON-DISCLOSURE AGREEMENT

This Agreement is entered into between [ENTITY], [a [university/corporation] duly organized, validly existing and in good standing under the laws of the State of [STATE] [if applicable]] ("LICENSEE") whose principal address is [ADDRESS], and the [AIR FORCE LAB] ("LICENSOR"), a United States Federal Government Laboratory of the Department of the Air Force, having a place of business located at [ADDRESS]. LICENSOR and LICENSEE may be referred to herein individually as a "Party" or collectively as the "Parties." In consideration of the mutual covenants set forth below, the sufficiency of which is acknowledged by each Party, the Parties agree as follows:

LICENSE RIGHTS. 1.

1.1 LICENSE GRANT. Under the authority of 1.4 DISCLAIMER. ALL MATERIAL IS PROVIDED Section 801 of Public Law 113-66 (2014 National Defense Authorization Act), LICENSOR hereby grants OR to LICENSEE a non-exclusive, world-wide, nontransferrable, limited term license in and to the following software and software documentation: PARTICULAR PURPOSE, ANY WARRANTIES OF [Software title, if any][TM or ® symbol, if ACCURACY OR COMPLETENESS, OR ANY appropriate in [executable/source] and Software Documentation [describe] (collectively referred to as, "Licensed Software"). receipt of [# copies] copy/copies of the Licensed ANY THIRD PARTY (WHETHER DIRECTLY OR Software. [Describe any seat/user limitations here.] INDIRECTLY). LICENSEE may only use and disclose the Licensed Software as provided in this Agreement. No other rights to the Licensed Software are provided herein.

1.2 LICENSE FEES. In consideration of the License Rights granted in Article 1.1 above, LICENSEE shall pay the License Fees or other consideration for the Licensed Software as set forth on Attachment "A" hereto. All amounts payable hereunder by LICENSEE shall be payable in United States funds without deductions for taxes, assessments, fees, or charges of any kind. Checks shall be made payable to:

[AIR FORCE LAB FAS] [PAYMENT ADDRESS]

1.3 TRANSFERS. Other than as permitted by this Agreement, LICENSEE shall not transfer the Licensed Software, or any portion or derivative thereof, or recorded information, regardless of the form or method of the recording, of a scientific or technical nature (including computer software documentation) related thereto, to any third party without the prior written consent of LICENSOR. LICENSEE shall use the Licensed Software in compliance with all applicable laws, rules and regulations relating to the handling and use of such Licensed Software.

"AS IS" AND WITHOUT ANY REPRESENTATION WARRANTY, **EXPRESS** OR IMPLIED, INCLUDING OF WARRANTIES MER-CHANTABILITY AND/OR FITNESS FOR ANY WARRANTIES THAT THE USE OF THE MATE-RIAL WILL NOT INFRINGE OR VIOLATE ANY LICENSEE acknowledges PATENT OR OTHER PROPRIETARY RIGHTS OF

1.5 SUPPORT

LICENSOR is not obligated to provide technical support for Licensed Software. If LICENSEE requires technical support from LICENSOR, then LICENSE FEES may be adjusted to cover the costs of the specified level of technical support as reflected in Attachment "A".

2. OWNERSHIP, RECORDS, AND INTELLECTUAL PROPERTY

- LICENSOR attests that LICENSOR has a sufficient property interest or right to commercially license the Licensed Software transferred LICENSEE [and that Licensed Software may be additionally be covered by [enter patent/patent application information]].
- 2.2 Except as expressly provided herein, nothing in this Agreement shall by implication, estoppel or otherwise, create in the LICENSEE any right, title, interest, or license in or to the inventions, patents, copyrights, technical data, or other intellectual property of LICENSOR.

3. NON-DISCLOSURE

- 3.1 LICENSEE shall maintain in confidence any information received from LICENSOR that is clearly or (iii) the disclosed information was disclosed to marked/identified as or is acknowledged to be LICENSEE on an unrestricted basis from a source LICENSOR Protected Information. Protected Information is information that would be a trade secret or commercial or financial information that is privileged or confidential if the information had been obtained from a non-Federal party licensing Licensed Software. LICENSEE shall not use, disclose or grant the use of such information, except as provided for in 3.5 this Article 3.
- 3.2 LICENSEE shall use at least the same level of measures to protect LICENSOR's Protected Information as it takes to protect its own Protected Information of like importance. LICENSEE may not copy LICENSOR's Protected Information, or reverse signed by an officer, of its compliance. engineer or disassemble any technology or tangible objects that utilize such Protected Information. The 3.6 Licensed Software is Protected Information of LICEN-SOR. LICENSEE shall promptly notify LICENSOR upon discovery of any unauthorized use or disclosure of the other Party's Protected Information.
- 3.3 LICENSEE may make disclosures to its parent and affiliated companies' employees, officers, directors, agents, service contractor employees, and collaborators who reasonably require such access. Before any such non-Party organizations or individuals granted access to Protected Information, LICENSEE shall notify and obtain the concurrence of Protected Information from the United States. LICENSOR, and LICENSOR may require the non-Party organization/individual to execute a Non-Disclosure Agreement with LICENSOR prior to any as the primary technical point of contact for the such disclosure.
- 3.4 The non-disclosure obligations in Section 3.1 above shall not apply to the extent that (a) LICENSEE is required to disclose information by law, order or regulation of a governmental agency or a court of competent jurisdiction, provided that the LICENSEE provides written notice thereof to LICENSOR prior to any disclosure and sufficient opportunity to object to any such disclosure or to request confidential treatment thereof, or (b) LICENSEE can demonstrate that (i) the disclosed information was public knowledge at the time 4. of such disclosure to LICENSEE, or thereafter became

- without restriction (as shown by its written records) prior to the date of disclosure to LICENSEE hereunder; unrelated to any Party to the Agreement and not under a duty of confidentiality to LICENSOR. LICENSEE shall, at the LICENSOR's request and expense, cooperate with LICENSOR in contesting or limiting requests that may arise under part (a) of this Section 3.4.
- All Protected Information of LICENSOR shall remain the property of LICENSOR and will be returned to LICENSOR or destroyed at its request within thirty (30) days of the expiration or termination of this Agreement. Within thirty (30) days of receiving such a request from LICENSOR, LICENSEE shall comply with the request and provide a written certification,
- LICENSEE shall not disclose Protected Information to any person, nor shall LICENSEE export any Protected Information from the United States, if such disclosure or export would violate the Arms Export Control Act, the International Traffic in Arms Regulation (22 C.F.R. Part 121 et seq.), the Export Administration Act, the Department of Commerce Export Regulation (15 C.F.R. Part 770 et seq.), the DoD Industrial Security Regulation (DOD 5220.22-R), or any other law or regulation of the United States. LICENSEE shall first obtain the written consent of LICENSOR before requesting authority to export
- 3.7 The individuals identified below are designated exchange of Protected Information pursuant to this Agreement:

[AIR FORCE LAB]	[ENTITY]
ATTN: [NAME]	ATTN: [NAME]
[TITLE/DEPT]	[TITLE/DEPT]
[STREET ADDRESS]	[STREET ADDRESS]
[CITY STATE ZIP]	[CITY STATE ZIP]
[PHONE]	[PHONE]
[EMAIL]	[EMAIL]

TERM & TERMINATION.

4.1 The term of this Agreement shall commence on public knowledge, other than as a result of actions of the date of last signature below ("Effective Date"), and LICENSEE in violation hereof; (ii) the disclosed shall continue until [TERMINATION DATE OR information was rightfully known by the LICENSEE **DURATION**]. This Agreement may be terminated by

This Agreement shall be subject to termination at the election of LICENSOR, by written notice to LICENSEE, where there has been a default in the due observance or performance of any material condition or agreement herein covenant. LICENSEE, and such default has continued for a period of thirty (30) days after written notice specifying the same shall have been given to LICENSEE. Notwithstanding the termination or expiration of this Agreement, all obligations incurred by LICENSEE with respect to protection, use, disclosure and return or destruction of Protected Information shall survive and remain in effect for three (3) years from the date the Protected Information was received.

4.2 Expiration or termination of the Agreement shall not relieve the parties of any obligation accruing prior to such expiration or termination. The provisions of Articles 1, 2, 3, 4, 5, and 6 shall survive any expiration or termination of this Agreement.

5. LIABILITY & INDEMNIFICATION

- 5.1 LICENSEE shall be solely liable for all claims and/or damages which may arise from LICENSEE's use, storage or disposal of the Licensed Software under this Agreement.
- 5.2 Notwithstanding any provision to the contrary, LICENSEE understands and agrees that LICENSOR will not be liable to any party to this Agreement, whether directly or by way of contribution or indemnity, for any claim made by any person or other entity for personal injury or death or for property damage or loss, arising in any way from this Agreement, including, but not limited to, the later use, sale, or other disposition of research and technical developments, whether by resulting products or otherwise, arising out of the provision of the Licensed Software, except as provided under the Federal Tort Claims Act (28 U.S.C. § 2671 et seq.) or other federal law where sovereign immunity has been explicitly waived.

6. **GENERAL**

6.1 SUBMISSIONS AND NOTICES. Delivery of all matters required or permitted to be submitted in writing under this Agreement shall be considered timely made if, by the due date, they: (1) have been personally delivered or delivered through U.S. Mail; or, (2) properly addressed and sent via (a) prepaid commercial

LICENSEE upon thirty (30) days prior written notice to LICENSOR. This Agreement shall be subject to non-automatic reply indicating receipt. Each Party termination at the election of LICENSOR, by written notice to LICENSEE, where there has been a default in the due observance or performance of any material other Party. The individuals identified below are covenant, condition or agreement herein by designated as the primary point of contact for receiving notices under this Agreement:

[AIR FORCE LAB]	[ENTITY]
ATTN: [NAME]	ATTN: [NAME]
[TITLE/DEPT]	[TITLE/DEPT]
[STREE ADDRESS]	[STREE ADDRESS]
[CITY STATE ZIP]	[CITY STATE ZIP]
[PHONE]	[PHONE]
[EMAIL]	[EMAIL]

- **6.2 GOVERNING LAW & JURISDICTION.** If a dispute, controversy, or claim between the Parties relating to this Agreement shall arise, the Parties shall first attempt to settle such matter through informal dispute resolution. If any such matter can not be resolved informally, the construction, validity, performance and effect of this Agreement will be governed, for all purposes, by the laws applicable to the Government of the United States.
- **6.3 ASSIGNMENT.** Neither Party shall transfer, delegate, or assign this Agreement or any portion thereof without the other Party's prior written consent. Any attempted assignment by a Party in violation of this Section shall be null-and-void. This Agreement is binding upon and inures to the benefit of the Parties and their respective successors and permitted assigns.
- **6.4 ENTIRE AGREEMENT.** This Agreement (including all exhibits attached hereto) contains the entire agreement between the Parties and supersedes any prior and/or contemporaneous understandings, proposals and agreements, whether written or oral, between the Parties relating to the subject matter of the Agreement. No modification or waiver of this Agreement shall be binding unless made in writing and signed by the Parties to this Agreement. Failure by either Party to enforce any provision of this Agreement will not be deemed a waiver of future enforcement of that or any other provision.
- **6.5 INDEPENDENT CONTRACTORS.** It is expressly agreed that LICENSEE and LICENSOR shall be independent contractors and that the relationship

between the two Parties shall not constitute a partner-ship, joint venture or agency. Neither LICENSEE nor LICENSOR shall have the authority to make any statements, representations or commitments of any kind, or to take any action, which shall be binding on the other, without the prior consent of the Party to do so.

6.6 SEVERABILITY. If any provision or term of this Agreement is held to be invalid by a court of competent jurisdiction, then such provision or term will be enforced to the maximum extent possible so as to affect

the intent of the Parties and the remaining terms of this Agreement will continue in full force and effect.

6.7 SEPARATE COUNTERPARTS AND ELECTRONIC MAIL SIGNATURES. This Agreement may be signed in duplicate originals, or in separate counterparts, which are as effective as if the parties signed a single original. A scanned document containing an original signature (e.g. PDF document) transmitted via electronic mail to the other party is effective as if the original was sent to the other party.

IN WITNESS WHEREOF, the parties have duly executed and delivered the Agreement as of the Effective Date set forth above.

LICENSEE	LICENSOR
[ENTITY]:	[AIR FORCE LAB]:
Signature:	Signature:
Name:	Name:
Title:	Title:
Date:	Date:

ATTACHMENT A

FEES AND OTHER CONSIDERATION

LICENSEE agrees to pay LICENSOR the following fees, on the following schedule:

[PAYMENT TABLE]

Payments shall be remitted as follows:

[DETAILS ON REMITTANCE].

LICENSOR agrees to provide LICENSEE with the following technical support:

[DETAILS ON SUPPORT if any, otherwise remove this section]

USAF OPEN SOURCE AGREEMENT VERSION 1.0

THIS OPEN SOURCE AGREEMENT ("AGREEMENT") DEFINES THE RIGHTS OF USE, REPRODUCTION, DISTRIBUTION, MODIFICATION AND REDISTRIBUTION OF CERTAIN COMPUTER SOFTWARE ORIGINALLY RELEASED BY THE GOVERNMENT OF THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE GOVERNMENT AGENCY LISTED BELOW ("GOVERNMENT AGENCY"). THE GOVERNMENT OF THE UNITED STATES OF AMERICA, AS REPRESENTED BY GOVERNMENT AGENCY, IS AN INTENDED THIRD-PARTY BENEFICIARY OF ALL SUBSEQUENT DISTRIBUTIONS OR REDISTRIBUTIONS OF THE SUBJECT SOFTWARE. ANYONE WHO USES, REPRODUCES, DISTRIBUTES, MODIFIES OR REDISTRIBUTES THE SUBJECT SOFTWARE, AS DEFINED HEREIN, OR ANY PART THEREOF, IS, BY THAT ACTION, ACCEPTING IN FULL THE RESPONSIBILITIES AND OBLIGATIONS CONTAINED IN THIS AGREEMENT.

Government Agency: Department of the Air Force

Government Agency Original Software Designation: XXX-XXX

Government Agency Original Software Title: "Title" {User Registration Requested. Please

E-mail: contact@us.af.mil}

Government Agency Point of Contact for Original Software: Contact

(contact@us.af.mil)

1. DEFINITIONS

- A. "Contributor" means Government Agency, as the developer of the Original Software, and any entity that makes a Modification.
- B. "Covered Patents" mean patent claims licensable by a Contributor that are necessarily infringed by the use or sale of its Modification alone or when combined with the Subject Software.
- C. "Display" means the showing of a copy of the Subject Software, either directly or by means of an image, or any other device.
- D. "Distribution" means conveyance or transfer of the Subject Software, regardless of means, to another.
- E. "Larger Work" means computer software that combines Subject Software, or portions thereof, with software separate from the Subject Software that is not governed by the terms of this Agreement.
- F. "Modification" means any alteration of, including addition to or deletion from, the substance or structure of either the Original Software or Subject Software, and includes derivative works, as that term is defined in the Copyright Statute, 17 U.S.C. § 101. However, the act of including Subject Software as part of a Larger Work does not in and of itself constitute a Modification.
- G. "Original Software" means the computer software first released under this Agreement by Government Agency with Government Agency designation

- <u>same as above</u> and entitled "<u>same as above</u>," including source code, object code and accompanying documentation, if any.
- H. "Recipient" means anyone who acquires the Subject Software under this Agreement, including all Contributors.
- I. "Redistribution" means Distribution of the Subject Software after a Modification has been made.
- J. "Reproduction" means the making of a counterpart, image or copy of the Subject Software.
- K. "Sale" means the exchange of the Subject Software for money or equivalent value.
- L. "Subject Software" means the Original Software, Modifications, or any respective parts thereof.
- M. "Use" means the application or employment of the Subject Software for any purpose.

2. GRANT OF RIGHTS

- A. <u>Under Non-Patent Rights</u>: Subject to the terms and conditions of this Agreement, each Contributor, with respect to its own contribution to the Subject Software, hereby grants to each Recipient a non-exclusive, worldwide, royalty-free license to engage in the following activities pertaining to the Subject Software:
 - 1. Use
 - 2. Distribution
 - 3. Reproduction
 - 4. Modification
 - 5. Redistribution
 - 6. Display
- B. <u>Under Patent Rights</u>: Subject to the terms and conditions of this Agreement, each Contributor, with respect to its own contribution to the Subject Software, hereby grants to each Recipient under Covered Patents a non-exclusive, world-wide, royalty-free license to engage in the following activities pertaining to the Subject Software:
 - 1. Use
 - 2. Distribution
 - 3. Reproduction
 - 4. Sale
 - 5. Offer for Sale
- C. The rights granted under Paragraph B. also apply to the combination of a Contributor's Modification and the Subject Software if, at the time the Modification is added by the Contributor, the addition of such Modification

- causes the combination to be covered by the Covered Patents. It does not apply to any other combinations that include a Modification.
- D. The rights granted in Paragraphs A. and B. allow the Recipient to sublicense those same rights. Such sublicense must be under the same terms and conditions of this Agreement.

3. OBLIGATIONS OF RECIPIENT

- A. Distribution or Redistribution of the Subject Software must be made under this Agreement except for additions covered under paragraph 3H.
 - 1. Whenever a Recipient distributes or redistributes the Subject Software, a copy of this Agreement must be included with each copy of the Subject Software; and
 - 2. If Recipient distributes or redistributes the Subject Software in any form other than source code, Recipient must also make the source code freely available, and must provide with each copy of the Subject Software information on how to obtain the source code in a reasonable manner on or through a medium customarily used for software exchange.
- B. Each Recipient must ensure that the following copyright notice appears prominently in the Subject Software:
 - Copyright © Year Government of the United States of America, as represented by the Secretary of the Air Force. No copyright is claimed in the United States under Title 17, U. S. Code. All Other Rights Reserved.
- C. Each Contributor must characterize its alteration of the Subject Software as a Modification and must identify itself as the originator of its Modification in a manner that reasonably allows subsequent Recipients to identify the originator of the Modification. In fulfillment of these requirements, Contributor must include a file (e.g., a change log file) that describes the alterations made and the date of the alterations, identifies Contributor as originator of the alterations, and consents to characterization of the alterations as a Modification, for example, by including a statement that the Modification is derived, directly or indirectly, from Original Software provided by Government Agency. Once consent is granted, it may not thereafter be revoked.
- D. A Contributor may add its own copyright notice to the Subject Software. Once a copyright notice has been added to the Subject Software, a Recipient may not remove it without the express permission of the Contributor who added the notice.

- E. A Recipient may not make any representation in the Subject Software or in any promotional, advertising or other material that may be construed as an endorsement by Government Agency or by any prior Recipient of any product or service provided by Recipient, or that may seek to obtain commercial advantage by the fact of Government Agency's or a prior Recipient's participation in this Agreement.
- F. In an effort to track usage and maintain accurate records of the Subject Software, each Recipient, upon receipt of the Subject Software, is requested to provide Government Agency, by e-mail to the Government Agency Point of Contact listed in clause 5.F., the following information: First and Last Name; Email Address; and Affiliation. Recipient's name and personal information shall be used for statistical purposes only. Once a Recipient makes a Modification available, it is requested that the Recipient inform Government Agency, by e-mail to the Government Agency Point of Contact listed in clause 5.F., how to access the Modification.
- G. Each Contributor represents that that its Modification is believed to be Contributor's original creation and does not violate any existing agreements, regulations, statutes or rules, and further that Contributor has sufficient rights to grant the rights conveyed by this Agreement.
- H. A Recipient may choose to offer, and to charge a fee for, warranty, support, indemnity and/or liability obligations to one or more other Recipients of the Subject Software. A Recipient may do so, however, only on its own behalf and not on behalf of Government Agency or any other Recipient. Such a Recipient must make it absolutely clear that any such warranty, support, indemnity and/or liability obligation is offered by that Recipient alone. Further, such Recipient agrees to indemnify Government Agency and every other Recipient for any liability incurred by them as a result of warranty, support, indemnity and/or liability offered by such Recipient.
- I. A Recipient may create a Larger Work by combining Subject Software with separate software not governed by the terms of this agreement and distribute the Larger Work as a single product. In such case, the Recipient must make sure Subject Software, or portions thereof, included in the Larger Work is subject to this Agreement.
- J. Notwithstanding any provisions contained herein, Recipient is hereby put on notice that export of any goods or technical data from the United States may require some form of export license from the U.S. Government. Failure to obtain necessary export licenses may result in criminal liability under U.S. laws. Government Agency neither represents that a license shall

not be required nor that, if required, it shall be issued. Nothing granted herein provides any such export license.

- 4. DISCLAIMER OF WARRANTIES AND LIABILITIES; WAIVER AND INDEMNIFICATION
 - A. No Warranty: THE SUBJECT SOFTWARE IS PROVIDED "AS IS" WITHOUT ANY WARRANTY OF ANY KIND, EITHER EXPRESSED, IMPLIED, OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY THAT THE SUBJECT SOFTWARE WILL CONFORM TO SPECIFICATIONS, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR FREEDOM FROM INFRINGEMENT, ANY WARRANTY THAT THE SUBJECT SOFTWARE WILL BE ERROR FREE, OR ANY WARRANTY THAT DOCUMENTATION, IF PROVIDED, WILL CONFORM TO THE SUBJECT SOFTWARE. THIS AGREEMENT DOES NOT, IN ANY MANNER, CONSTITUTE AN ENDORSEMENT BY GOVERNMENT AGENCY OR ANY PRIOR RECIPIENT OF ANY RESULTS, RESULTING DESIGNS, HARDWARE, SOFTWARE PRODUCTS OR ANY OTHER APPLICATIONS RESULTING FROM USE OF THE SUBJECT SOFTWARE. FURTHER, GOVERNMENT AGENCY DISCLAIMS ALL WARRANTIES AND LIABILITIES REGARDING THIRD-PARTY SOFTWARE, IF PRESENT IN THE ORIGINAL SOFTWARE, AND DISTRIBUTES IT "AS IS."
 - В. Waiver and Indemnity: RECIPIENT AGREES TO WAIVE ANY AND ALL CLAIMS AGAINST THE GOVERNMENT OF THE UNITED STATES OF AMERICA, ITS CONTRACTORS AND SUBCONTRACTORS, AS WELL AS ANY PRIOR RECIPIENT. IF RECIPIENT'S USE OF THE SUBJECT SOFTWARE RESULTS IN ANY LIABILITIES, DEMANDS, DAMAGES, EXPENSES OR LOSSES ARISING FROM SUCH USE, INCLUDING ANY DAMAGES FROM PRODUCTS BASED ON, OR RESULTING FROM, RECIPIENT'S USE OF THE SUBJECT SOFTWARE, RECIPIENT SHALL INDEMNIFY AND HOLD HARMLESS THE GOVERNMENT OF THE UNITED STATES OF AMERICA, ITS CONTRACTORS AND SUBCONTRACTORS, AS WELL AS ANY PRIOR RECIPIENT, TO THE EXTENT PERMITTED BY LAW. RECIPIENT'S SOLE REMEDY FOR ANY SUCH MATTER SHALL BE THE IMMEDIATE, UNILATERAL TERMINATION OF THIS AGREEMENT.

5. GENERAL TERMS

- A. <u>Termination</u>: This Agreement and the rights granted hereunder will terminate automatically if a Recipient fails to comply with these terms and conditions, and fails to cure such noncompliance within thirty (30) days of becoming aware of such noncompliance. Upon termination, a Recipient agrees to immediately cease use and distribution of the Subject Software. All sublicenses to the Subject Software properly granted by the breaching Recipient shall survive any such termination of this Agreement.
- B. <u>Severability</u>: If any provision of this Agreement is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this Agreement.
- C. <u>Applicable Law</u>: This Agreement shall be governed, for all purposes, by the laws applicable to the government of the United States of America, including, but not limited to, determining the validity of this Agreement, the meaning of its provisions and the rights, obligations and remedies of the parties.
- D. <u>Entire Understanding</u>: This Agreement constitutes the entire understanding and agreement of the parties relating to release of the Subject Software and may not be superseded, modified or amended except by further written agreement duly executed by the parties.
- E. <u>Binding Authority</u>: By accepting and using the Subject Software under this Agreement, a Recipient affirms its authority to bind the Recipient to all terms and conditions of this Agreement and that that Recipient hereby agrees to all terms and conditions herein.
- F. <u>Point of Contact</u>: Any Recipient contact with Government Agency is to be directed to the designated representative as follows: <u>Contact</u> (<u>contact@us.af.mil</u>)

UNITED STATES AIR FORCE AGREEMENT FOR FEDERALLY DEVELOPED SOFTWARE:

NAME OF THE SOFTWARE

This Agreement ("Agreement") defines the rights of Use, Reproduction, Distribution, Modification and Redistribution of certain computer software originally released by the Government of the United States of America, as represented by the Department of the Air Force, Organization ("Government Agency"). Anyone who uses, reproduces, distributes, modifies or redistributes the Subject Software, as defined herein, or any part thereof, is, by that action, accepting in full the responsibilities and obligations contained in this Agreement.

Government Agency Original Software:

Title: Software Name

Designation: Software Designation
Point of Contact: POC (poc@us.af.mil)

1. **DEFINITIONS**

- A. "Contributor" means Government Agency, as the developer of the Original Software, and any entity that makes a Modification.
- B. "Covered Patents" mean patent claims licensable by a Contributor that are necessarily infringed by the Use or Sale of its Modification alone or when combined with the Subject Software.
- C. "Display" means the showing of a copy of the Subject Software, either directly or by means of an image, or any other device.
- D. "Distribution" means conveyance or transfer of the Subject Software, regardless of means, to another.
- E. "Larger Work" means computer software that combines Subject Software, or portions thereof, with software separate from the Subject Software that is not governed by the terms of this Agreement.
- F. "Modification" means any alteration of, including addition to or deletion from, the substance or structure of either the Original Software or Subject Software, and includes derivative works, as that term is defined in the Copyright Statute, 17 U.S.C. § 101. However, the act of including Subject Software as part of a Larger Work does not in and of itself constitute a Modification.
- G. "Original Software" means the computer software first released under this Agreement by Government Agency with Government Agency designation above including source code, object code and accompanying documentation, if any.
- H. "Recipient" means anyone who acquires the Subject Software under this Agreement, including all Contributors.
- I. "Redistribution" means Distribution of the Subject Software after a Modification has been made.
- J. "Reproduction" means the making of a counterpart, image or copy of the Subject Software.
- K. "Sale" means the exchange of the Subject Software for money or equivalent value.

- L. "Subject Software" means the Original Software, Modifications, or any respective parts thereof.
- M. "Use" means the application or employment of the Subject Software for any purpose.

2. GRANT OF RIGHTS

- A. <u>Under Non-Patent Rights</u>: Subject to the terms and conditions of this *Agreement*, each *Contributor*, with respect to its own contribution to the *Subject Software*, hereby grants to each *Recipient* a non-exclusive, worldwide, royalty-free license to engage in the following activities pertaining to the *Subject Software*:
- 1. *Use*
- 2. Reproduction
- 3. *Modification*
- 4. Display
- B. <u>Under Patent Rights</u>: Subject to the terms and conditions of this *Agreement*, each *Contributor*, with respect to its own contribution to the *Subject Software*, hereby grants to each *Recipient* under *Covered Patents* a non-exclusive, world-wide, royalty-free license to engage in the following activities pertaining to the *Subject Software*:
- 1. *Use*
- 2. Sale
- 3. Offer for *Sale*
- C. The rights granted under Paragraph B. also apply to the combination of a *Contributor's Modification* and the *Subject Software* if, at the time the *Modification* is added by the *Contributor*, the addition of such *Modification* causes the combination to be covered by the *Covered Patents*. It does not apply to any other combinations that include a *Modification*.
- D. The rights granted in Paragraphs A and B allow the *Recipient* to sublicense those same rights. Such sublicense must be under the same terms and conditions of this *Agreement*.

3. OBLIGATIONS OF RECIPIENT

- A. Recipients are not authorized to Distribute or Redistribute the Original Software under this Agreement.
- B. Each *Contributor* must characterize its alteration of the *Subject Software* as a *Modification* and must identify itself as the originator of its *Modification* in a manner that reasonably allows subsequent *Recipients* to identify the originator of the *Modification*. *Contributor* may *Distribute* these *Modifications* and represent them as their own as long as the *Modification* is not a trivial alteration ultimately resulting in an unauthorized *Distribution* of the *Original Software*.
- C. In fulfillment of the *Modification* requirements, *Contributor* must include a file (e.g., a change log file) that describes the alterations made and the date of the

alterations, identifies *Contributor* as originator of the alterations, and consents to characterization of the alterations as a *Modification*, for example, by including a statement that the *Modification* is derived, directly or indirectly, from *Original Software* provided by *Government Agency*. Once consent is granted, it may not thereafter be revoked.

- D. A *Contributor* may add its own copyright notice to the *Subject Software*. Once a copyright notice has been added to the *Subject Software*, a *Recipient* may not remove it without the express permission of the *Contributor* who added the notice.
- E. A *Recipient* may not make any representation in the *Subject Software* or in any promotional, advertising or other material that may be construed as an endorsement by *Government Agency* or by any prior *Recipient* of any product or service provided by *Recipient*, or that may seek to obtain commercial advantage by the fact of *Government Agency*'s or a prior *Recipient*'s participation in this *Agreement*.
- F. In an effort to track usage and maintain accurate records of the *Subject Software*, once a *Recipient* makes a *Modification* available, it is requested that the *Recipient* inform *Government Agency*, by e-mail to the *Government Agency* Point of Contact listed in clause 5.F., how to access the *Modification*.
- G. Each *Contributor* represents that that its *Modification* is believed to be *Contributor*'s original creation and does not violate any existing *Agreements*, regulations, statutes or rules, and further that *Contributor* has sufficient rights to grant the rights conveyed by this *Agreement*.
- H. A *Recipient* may choose to offer, and to charge a fee for, warranty, support, indemnity and/or liability obligations to one or more other *Recipients* of the *Subject Software*. A *Recipient* may do so, however, only on its own behalf and not on behalf of *Government Agency* or any other *Recipient*. Such a *Recipient* must make it absolutely clear that any such warranty, support, indemnity and/or liability obligation is offered by that *Recipient* alone. Further, such *Recipient* agrees to indemnify *Government Agency* and every other *Recipient* for any liability incurred by them as a result of warranty, support, indemnity and/or liability offered by such *Recipient*.
- I. A Recipient may create a Larger Work by combining Subject Software with separate software not governed by the terms of this Agreement and distribute the Larger Work as a single product. In such case, the Recipient must make sure Subject Software, or portions thereof, included in the Larger Work is subject to this Agreement.
- J. A *Recipient* shall not offer *Subject Software* or any modified version thereof for re*Sale* to the government, in whole or as part or subpart of a government deliverable, without explicitly stating that it is doing so by providing certification documentation (e.g., Section K of the Government Solicitation) to the contracting officer before contract award.
- K. Notwithstanding any provisions contained herein, *Recipient* is hereby put on notice that export of any goods or technical data from the United States may require some

form of export license from the U.S. Government. Failure to obtain necessary export licenses may result in criminal liability under U.S. laws. *Government Agency* neither represents that a license shall not be required nor that, if required, it shall be issued. Nothing granted herein provides any such export license.

- WARRANTIES 4. DISCLAIMER OF AND LIABILITIES; WAIVER AND INDEMNIFICATION A. No Warranty: THE SUBJECT SOFTWARE IS PROVIDED "AS IS" WITHOUT ANY WARRANTY OF ANY KIND, EITHER EXPRESSED, IMPLIED, OR STATUTORY, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTY THAT THE SUBJECT SOFTWARE WILL CONFORM TO SPECIFICATIONS, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR **FROM FREEDOM** INFRINGEMENT, ANY WARRANTY THAT THE SUBJECT SOFTWARE WILL BE ERROR FREE, OR ANY WARRANTY THAT DOCUMENTATION, IF PROVIDED, WILL CONFORM TO THE SUBJECT SOFTWARE. THIS AGREEMENT DOES NOT, IN ANY MANNER, CONSTITUTE AN **ENDORSEMENT** GOVERNMENT AGENCY OR ANY PRIOR RECIPIENT ANY RESULTS. RESULTING DESIGNS. HARDWARE, SOFTWARE PRODUCTS OR ANY OTHER APPLICATIONS RESULTING FROM USE OF **SUBJECT** SOFTWARE. FURTHER. **GOVERNMENT AGENCY DISCLAIMS** WARRANTIES AND LIABILITIES REGARDING THIRD-PARTY SOFTWARE, IF PRESENT IN THE ORIGINAL SOFTWARE, AND DISTRIBUTES IT "AS IS."
- B. Waiver and Indemnity: RECIPIENT AGREES TO WAIVE ANY AND ALL CLAIMS AGAINST THE GOVERNMENT OF THE UNITED STATES OF AMERICA, **CONTRACTORS** AND ITS SUBCONTRACTORS, AS WELL AS ANY PRIOR RECIPIENT. IF RECIPIENT'S USE OF THE SUBJECT SOFTWARE RESULTS IN ANY LIABILITIES, DEMANDS, DAMAGES, EXPENSES OR LOSSES ARISING FROM SUCH USE, INCLUDING ANY DAMAGES FROM PRODUCTS BASED ON, OR RESULTING FROM. RECIPIENT'S USE OF THE **SUBJECT** SOFTWARE, RECIPIENT **SHALL INDEMNIFY** AND HOLD HARMLESS THE GOVERNMENT OF THE UNITED STATES OF **CONTRACTORS** AMERICA, ITS AND SUBCONTRACTORS, AS WELL AS ANY PRIOR RECIPIENT, TO THE EXTENT PERMITTED BY LAW. RECIPIENT'S SOLE REMEDY FOR ANY SUCH **MATTER SHALL** BE THE IMMEDIATE, **TERMINATION THIS** UNILATERAL OF AGREEMENT.

5. GENERAL TERMS

- A. <u>Termination</u>: This *Agreement* and the rights granted hereunder will terminate automatically if a *Recipient* fails to comply with these terms and conditions, and fails to cure such noncompliance within thirty (30) days of becoming aware of such noncompliance. Upon termination, a *Recipient* agrees to immediately cease *Use* and distribution of the *Subject Software*. All sublicenses to the *Subject Software* properly granted by the breaching *Recipient* shall survive any such termination of this *Agreement*.
- B. <u>Severability</u>: If any provision of this *Agreement* is invalid or unenforceable under applicable law, it shall not affect the validity or enforceability of the remainder of the terms of this *Agreement*.
- C. <u>Applicable Law</u>: This *Agreement* shall be governed, for all purposes, by the laws applicable to the government of the United States of America, including, but not limited to, determining the validity of this *Agreement*, the

- meaning of its provisions and the rights, obligations and remedies of the parties.
- D. <u>Entire Understanding</u>: This *Agreement* constitutes the entire understanding and *Agreement* of the parties relating to release of the *Subject Software* and may not be superseded, modified or amended except by further written *Agreement* duly executed by the parties.
- E. <u>Binding Authority</u>: By accepting and using the *Subject Software* under this *Agreement*, a *Recipient* affirms its authority to bind the *Recipient* to all terms and conditions of this *Agreement* and that that *Recipient* hereby agrees to all terms and conditions herein.
- F. <u>Point of Contact</u>: Any *Recipient* contact with *Government Agency* is to be directed to the designated representative as follows: **POC**, (Same as above)

Entered into this day of, 20 For <i>Company</i> :	Accepted and maintained on behalf of <i>Government Agency</i> by:
Signature	Signature
Signature	Signature
Name, Title	Name, Title
Printed Name and Title	Printed Name and Title
E-Mail Address	
E-Mail Address	

INFORMATION TRANSFER AGREEMENT

between

THE UNITED STATES OF AMERICA DEPARTMENT OF THE AIR FORCE AIR FORCE RESEARCH LABORATORY << DIRECTORATE (AFRL/XX)

and

<<SOFTWARE USER>>

ARTICLE 1—Preamble

This Information Transfer Agreement ("Agreement") is made and entered into pursuant to 10 U.S.C. § 2539b(a)(1), as implemented by DoDI 5535.11 by and between the United States of America as represented by the Secretary of the Air Force, acting through the Air Force Research Laboratory, <<DIRECTORATE>> ("Air Force Activity"), located at <<AFRL DIRECTORATE ADDRESS>>, and <<SOFTWARE USER>> ("Software User"), located at <<SOFTWARE USER ADDRESS>>.

WHEREAS, *Air Force Activity* is in possession of certain information (hereinafter referred to as "Software Package"), <<SOFTWARE TITLE AND DESCRIPTION (include as appropriate executables, documentation, source code, etc.>>; and

WHEREAS, *Software User* is desirous of inspecting, reviewing, and using *Software Package* in order to permit *Software User* to evaluate and participate in *Software Package's* continued development, testing, evaluation, and application; and

WHEREAS, Air Force Activity is willing to disclose Software Package to Software User under the terms and conditions specified below.

ARTICLE 2—Definitions

- 2.1. Reviewing Official means the final authority for the Department of the Air Force who is identified in Article 8.
- 2.2. Government means the Government of the United States of America.
- 2.3. *Effective Date* is the date of the last signature of the authorized representatives of the parties designated under Article 8.

ARTICLE 3—Terms and Conditions for use of Software Package

3.1. The *Air Force Activity* hereby grants *Software User* a nonexclusive, nontransferable right to use *Software Package's* name, code, and documentation in accordance with this Article.

- 3.2. The *Software User* shall not publish or permit *Software Package* to be published for profit or in any manner offered for sale. *Software Package* shall not be disclosed or transferred to any entity without prior written approval from *Air Force Activity*.
- 3.3. The Software User shall not rename Software Package or merge Software Package, in whole or in part, with other models or any other software without the prior written approval of Air Force Activity. If deemed in the Government's interest, approval to merge and control all or portions of Software Package as part of another system may be granted and the terms of this Agreement with respect to the Software Package may no longer apply; use of Software Package name to describe the products of such a merged model is not permitted without prior written approval of Air Force Activity. Use of Software Package in a merged work not approved for separate control shall be subject to the terms of this Agreement.
- 3.4. Use of *Software Package* in *Government* Procurement. *Software Package* was developed by or for *Air Force Activity* at *Government* expense. The *Government* has at least "Unlimited Rights," as that term is defined under 48 C.F.R. § 252.227-7013(a)(16) and 48 C.F.R. § 252.227-7014(a)(16), to use, modify, reproduce, release, perform, display, or disclose *Software Package* in whole or in part, in any manner and for any purpose whatsoever, and to have or authorize others to do so.
- 3.5. {Optional Clause} The *Software User's* right to use, modify, reproduce, and enhance *Software Package* under this *Agreement* is for the purpose of further developing *Software Package*.
- 3.6. {Optional Clause} Software User is authorized to design, code, and test modifications to Software Package. Proposals to modify or enhance future releases of the Software Package shall be submitted in writing to Air Force Activity. Future Software Package release requests shall use the Air Force Activity assigned Software User Site name and the controlled model version number on all modified Software Package documentation, data files, and code. All such modifications and enhancements to Software Package shall be reported in writing and source code provided within three months of the next software release of such modification to Air Force Activity.
- 3.7. {Optional Clause} The Software User grants the Government "Unlimited Rights," or rights equivalent thereto, as that term is defined under 48 C.F.R. § 252.227-7013(a)(16) and 48 C.F.R. § 252.227-7014(a)(16), in any modification or enhancements to Software Package during the term of this Agreement. Software User agrees not to assert any proprietary right, claim, or interest against the Government, its officers, agents, employees, or contractors, resulting from modifications or enhancements made to Software Package using IR&D or other private funds.

ARTICLE 4—Support

- 4.1. <u>Technical Support.</u> The *Air Force Activity* is not obligated to provide technical support for *Software Package*. If *Software User* requires technical support from *Air Force Activity*, then separate arrangements must be specified and agreed to in order to ensure appropriate compensation is provided to *Air Force Activity* to cover the costs of the specified level of technical support.
- 4.2. {Alternate Clause} Technical Support. The Air Force Activity is not obligated to provide technical support for the software coved by this Agreement. However, Air Force Activity may choose to provide limited phone and/or e-mail based support free of charge. If

Software User requires additional technical support from Air Force Activity beyond the limited phone and/or e-mail based support, then separate arrangements must be specified and agreed to in order to ensure appropriate compensation is provided to Air Force Activity to cover the costs of the specified level of technical support.

4.3. <u>Technical Contacts.</u> The individuals named below shall serve as	Air Force Activity
Points-of-Contact for Software Package for this Agreement.	
PRIMARY:	
ALTERNATE:	

ARTICLE 5—Liability and Limitations

- **Disclaimer of Warranty.** Each *Software Package* is provided "as is" without any warrant as to its performance, accuracy, or freedom from error, or as to any results generated through its use. Software User assumes the entire risk for any damages in connection with or arising out of the furnishings, performance, or use of Software Package. The Air Force Activity does not warrant that Software Package will meet the Software User's requirements or operate without interruption or error. The Air Force Activity is neither liable nor responsible for maintenance, updating, or correcting any errors in the Software Package provided. The Air Force Activity desires to be notified of any errors or problems detected by Software User associated with Software Package. The Air Force Activity, at its sole discretion, will evaluate the feasibility of correcting any such errors or providing any updates to Software Package.
- **Damages.** In no event will either party be liable to the other party for punitive, exemplary, or consequential damages.
- 5.3. No Waiver of Sovereign Immunity. Notwithstanding any provision to the contrary, Software User understands that Government will not be liable to any party in this Agreement, whether directly or by way of contribution or indemnity, for any claim made by any person or other entity for personal injury or death or for property damage or loss, arising in any way from this Agreement, including, but not limited to, the later use, sale or other disposition of research and technical developments, whether by resulting products or otherwise, whether made or developed under this Agreement or contributed by either party pursuant to this Agreement, except as provided under the Federal Tort Claims Act (28 U.S.C. § 2671 et seq.) or other federal law where sovereign immunity has been explicitly waived.
- 5.4. {Optional} Export Control Warning. WARNING – Software Package contains information whose export is restricted by the Arms Export Control Act (22 U.S.C. § 2751 et seq.) or the Export Administration Act of 1979, as amended (50 U.S.C. App. 2401 et seq.). Violations of these export laws are subject to severe criminal penalties.

ARTICLE 6—General Terms & Provisions

Relationship of the Parties. The parties to this Agreement and their employees are independent contractors and are not agents of each other, joint venturers, partners or joint parties to a formal business organization of any kind. Neither party is authorized or empowered to act on behalf of the other with regard to any contract, warranty or representation as to any matter, and neither party will be bound by the acts or conduct of the other. Each party will maintain sole and exclusive control over its own personnel and operations.

- 6.2. <u>Publicity/Use of Name Endorsement.</u> Any public announcement of this *Agreement* must be coordinated between *Software User*, *Air Force Activity* and the public affairs office supporting *Air Force Activity*. By entering into this *Agreement*, neither *Air Force Activity* nor *Government* directly or indirectly endorses any product or service provided, or to be provided, by *Software User*, its successors, assignees, or licensees. The *Software User* may not in any way imply that this *Agreement* is an endorsement of any such product or service.
- 6.3. Governing Law. The construction, validity, performance and effect of this *Agreement* will be governed, for all purposes, by the laws applicable to *Government*.
- 6.4. <u>Waiver of Rights.</u> Any waiver shall be in writing and provided to the other party. Failure to insist upon strict performance of any of the terms and conditions hereof, or failure to delay to exercise any rights provided herein or by law, shall not be deemed a waiver of any rights of either party.
- 6.5. Entire Agreement. This Agreement represents the entire agreement of the parties and is the complete and exclusive statement of their agreement.
- 6.6. <u>Severability.</u> The illegality or invalidity of any provision of this *Agreement* will not impair, affect or invalidate the other provisions of this *Agreement*.
- 6.7. <u>Assignment.</u> Neither this *Agreement* nor any rights or obligations of either party hereunder may be assigned or otherwise transferred by either party without the prior written consent of the other party.
- 6.8. <u>Mandatory Government Provisions.</u> In accordance with Section 620 of Public Law 108-447, the following provisions are included as required by law.
- 6.8.1. This *Agreement* does not bar disclosures to Congress or to an authorized official of an executive agency or the United States Department of Justice that are essential to reporting a substantial violation of law.
- 6.8.2. These restrictions are consistent with and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by Executive Order No. 12958; 5 U.S.C. § 7211 (governing disclosures to Congress); 10 U.S.C. § 1034 as amended by the *Military Whistleblower Protection Act* (governing disclosure to Congress by members of the military); 5 U.S.C. § 2302(b)(8) as amended by the *Whistleblower Protection Act* (governing disclosures of illegality, waste, fraud, abuse or public health or safety threats); the *Intelligence Identities Protection Act of 1982* (50 U.S.C. § 421 *et seq.*) (governing disclosures that could expose confidential Government agents); and the statutes which protect against disclosure that may compromise the national security, including 18 U.S.C. §§ 641, 793, 794, 798 & 952, and section 4(b) of the *Subversive Activities Act of 1950* (50 U.S.C. § 783(b)). The definitions, requirements, obligations, rights, sanctions, and liabilities created by said Executive Order and listed statutes are incorporated into this *Agreement* and are controlling.

ARTICLE 7—Term of Agreement, Modifications, and Termination

7.1. <u>Term of the Agreement.</u> This Agreement commences on the Effective Date of this Agreement and shall expire on <<EXPIRATION DATE>>, unless extended by written agreement of the authorized representatives of the parties, or otherwise terminated in accordance with this article. Expiration of this Agreement shall not affect the rights and obligations of the parties accrued prior to expiration.

- 7.2. <u>Modification.</u> Any extension of this *Agreement* as signed by the *Reviewing Official* may be made by *Modification*, which shall be entered into by mutual written agreement signed by the parties' representatives authorized to execute this *Agreement*. Each *Modification* will be attached hereto, after each such *Modification* is signed by both parties.
- 7.3. <u>Termination.</u> Either party may unilaterally terminate this entire *Agreement* at any time by giving the other party written notice not less than 30 days prior to the desired termination date. The *Software User* shall submit such written notice not less than 30 days prior to the desired termination date. The *Software User* shall submit such written notice to *Air Force Activity*. Upon termination of this *Agreement*, *Software User* shall return or destroy all copies of *Software Package*, including copies or portions thereof embodied within any modified models, developmental versions, or unique study data sets. The *Software User* shall certify in writing that the original and all copies of *Software Package* have been accounted for and returned or destroyed.

ARTICLE 8—Notices and Signatures

- 8.1. Notices specified in this *Agreement* shall be deemed made if given and addressed as set forth below.
- 8.1.1. Send formal notices under this *Agreement* by prepaid certified U.S. Mail to:

SOFTWARE USER:

<u>AIR FORCE</u> ACTIVITY:

Attn: <<Contact>> Attn: <<Contact>>

<<Address>> <<Office Symbol>>

<<City, State Zip>> <<Address>>

Ph: <<Phone>> <<City, State Zip>>

Email: <<Email>> Ph: <<Phone>> Email: <<Email>>

8.1.2. Send correspondence on technical matters by prepaid ordinary U.S. Mail to:

SOFTWARE USER:

AIR FORCE:

Attn: <<Contact>> Attn: <<Contact>>

<<Address>> <<Office Symbol>>

<<City, State Zip>> <<Address>>

Ph: <<Phone>> <<City, State Zip>>

Email: <<Email>> Ph: <<Phone>>

Email: <<Email>>

8.2. **Signatures**

IN WITNESS WHEREOF, the Parties have executed this *Agreement* through their duly authorized representatives as follows:

<u>SOFTWARE U</u>	<u> ISER</u>	<u>AIR FORC</u>	<u>E</u>
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(Name of Official – Print (Title of Offici		(Name of Official – Prin (Title of Offic	
(Signature of Official)	(Date Signed)	(Signature of Official)	(Date Signed)
REVIEWED AND	APPROVED RV AII	R FORCE REVIEWING O	FFICIAI ·
KEVIEW ED AND 2	HT KOYLD DI 7HI	TORCE REVIEW IN CO.	TICI/IL.
	(Name of Official -	Printed or Typed)	
	(Title – Print	ed or Typed)	
(6:		(D)	
(Signature)		(Da	iie)

APPENDICIES

EPA Roles and Responsibilities

AFRL Basic EPA Model

LP EPA Equipment Loan Model

LP EPA Equipment Donation Model

Roles and Responsibilities for EPAs

Technical POC (TPOC)

- 1. Develop the rationale and necessary inputs for the EPA
- 2. Ensure management support for the agreement
- 3. Notify ORTA of EPA requirement
- 4. Conduct tasks identified in the EPA (after signature)
- 5. Notify ORTA of any inventions under the EPA (not common)
- 6. Notify ORTA if either party can't complete its tasks and why
- 7. Notify the ORTA if modifications or amendments are needed (including extensions)
- 8. Notify ORTA of completion of EPA
- 9. Support development of a success story (if applicable)

ORTA

- 1. Train the organization on what can be done with EPAs
- 2. Ensure the organization gives priority to Historically Black Colleges and Universities (HBCUs) and minority institutions (MIs)
- 3. Ensure the organization gives priority to educational institutions that serve women or minority groups who are underrepresented in engineering or science
- 4. Work with the TPOC to develop the EPA
- 5. Ensure that each participant understands what they have agreed to
- 6. Coordinate the legal review and work with the TPOC to resolve remaining issues
- 7. Ensure you equipment custodian is notified when equipment is being donated or loaned
- 8. Coordinate the signature process
- 9. Complete the DTTIS reporting requirement
- 10. If faculty or students are working in the lab under the EPA, discuss the potential for intellectual property (IP) creation and procedures to follow if IP is developed

Legal

- 1. Review the EPA for completeness and adherence to law and AF/DOD guidance
- 2. Identify any issues and provide feedback to the ORTA on legal sufficiency
- 3. Provide alternative language as necessary

Equipment Custodian (if equipment donation or loan)

- 1. Work with the TPOC to ensure that the paperwork on equipment location is accurate
- 2. Remove any donated equipment from the accountability database
- 3. Notify the ORTA and TPOC if there are any issues with the equipment

EDUCATION PARTNERSHIP AGREEMENT

BETWEEN

THE DEPARTMENT OF THE AIR FORCE,

REPRESENTED BY THE AIR FORCE RESEARCH LABORATORY

TECHNICAL DIRECTORATE

AND

EDUCATIONAL INSTITUTION

Article I. Preamble

The United States of America as represented by the Department of the Air Force, Air Force Research Laboratory, <TECHNICAL> Directorate (AFRL/XX), <ADDRESS OF DIRECTORATE>, and <EDUCATIONAL INSTITUTION>, <ADDRESS OF INSTITUTION>, (hereinafter referred to as "the Parties") hereby enter into this Education Partnership Agreement (hereinafter referred to as the "Agreement") pursuant to Title 10 United States Code Section 2194. The terms and conditions of this Agreement are set forth as follows.

Article II. Introduction

The Parties enter this Agreement in recognition of the importance of education to the future and economic well-being of the nation, as well as the importance of AFRL to the business, industrial and educational institutions in the United States.

As a defense laboratory, AFRL has a responsibility to encourage the study of science, mathematics, and engineering at all levels of education by entering into education partnership agreements with educational institutions in the United States.

<EDUCATIONAL INSTITUTION> is <PROVIDE BRIEF DESCRIPTION OF THE PARTICIPATING INSTITUTION.>

<EDUCATIONAL INSTITUTION> <is/is not> a Historically Black College/University <or/nor> Minority Institution.

<EDUCATIONAL INSTITUTION> <is/is not> an educational institution serving women, members of minority groups, and other groups of individuals who traditionally are involved in the engineering and science professions in disproportionately low numbers.

Article III. Objective

<STATE THE OBJECTIVE OF THE AGREEMENT. BE SPECIFIC. OBJECTIVE NEEDS TO RELATE TO ONE OR MORE OF THE ACTIVITIES ALLOWED IN THE AUTHORITY.>

<EXAMPLE: The objective of this agreement is to <EDUCATIONAL INSTITUTION> intends to undertake the following tasks: Access to AFRL/XX's ... (i.e., hardware, personnel, facilities, etc.)... will provide a unique opportunity for students to work on which would not otherwise be available in an educational environment.>

Article IV. Authority

Pursuant to the Education Partnership Act, Title 10 United States Code §2194, for the purpose of encouraging and enhancing science, mathematics, and engineering education at all levels of education AFRL/XX is authorized to:

- a. Loan defense laboratory equipment to **<EDUCATIONAL INSTITUTION>**.
- b. Transfer to **EDUCATIONAL INSTITUTION**> defense laboratory equipment determined by the director to be surplus.
- c. Make laboratory personnel available to teach science courses or to assist in the development of science courses and materials for **<EDUCATIONAL INSTITUTION>**.
- d. Involve faculty and students in defense laboratory research projects.
- e. Cooperate with **<EDUCATIONAL INSTITUTION>** in developing a program under which students may be given academic credit for work on defense laboratory research projects.
- f. Provide academic and career advice and assistance to **EDUCATIONAL INSTITUTION>** students.

Article V. <u>Patents and Copyrights</u>

Due to the nature of work performed, it is not expected that any patentable or copyrightable material will be developed under this agreement. In the event patentable material is developed under this Agreement, each Party shall separately own any invention made solely by its respective employees under this Agreement. Inventions made jointly by the Parties will be jointly owned by the Parties. Licensing of intellectual property, if any, will be set out in separate agreements. In the event copyrightable

material is developed under this Agreement, **EDUCATIONAL INSTITUTION**> shall own the copyright in all works created in whole or in part by **EDUCATIONAL INSTITUTION**> and grants in advance to the United States Government a license conveying the right to use, duplicate or disclose such works in any manner, and to have or permit others to do so, for government purposes only.

Article VI. Obligations

a. The **EDUCATIONAL INSTITUTION**> shall:

- (1) Be responsible for all **<EDUCATIONAL INSTITUTION>** faculty, student, and other employee salaries or other compensations and benefits as necessary under this Agreement.
- (2)...(n) **OCCUMENT SPECIFIC OBLIGATIONS OF THE INSTITUTION.** INCLUDE STUDENT PARTICIPATION WHERE APPROPRIATE. INCLUDE RESPONSIBILITIES RELATED TO TECHNICAL EFFORT, LOGISTICS, SAFETY, AND SECURITY.>
- **EXAMPLE:** (2) Provide laboratory space and involve students in the use of wind tunnel technology.>
- <EXAMPLE: (3) Be responsible for round-trip transportation of government loaned equipment between the AFRL/XX and the <EDUCATIONAL INSTITUTION>.>
- <EXAMPLE: (4) Allow for scheduled visits and tours to showcase the program to other community colleges, accrediting agencies' representatives, and other interested parties.>
- **EXAMPLE:** (5) Promote and host tours of the wind tunnel equipment to secondary and primary students with the intent to encourage their pursuit of mathematics, science, and engineering studies.>
- <EXAMPLE: (6) Provide to AFRL/XX, where appropriate and made available through normal operating policies and practices of the University, to fulfill the partnership definition as specified above, equipment and adequate facilities including access to computing resources, libraries, and visitor user space.>
- **EXAMPLE:** (7) Work with AFRL/XX to coordinate activities in the areas of network communications and network resource management.
- **EXAMPLE:** (8) Ensure that **EDUCATIONAL INSTITUTION** faculty, students, and other participating employees abide by all Air Force and AFRL rules for security, safety, and general conduct.>

EXAMPLE: (9) Provide academic credit toward requirements of an appropriate degree program for students working on AFRL/XX research projects.>

b. **AFRL/XX** shall:

- (1) Be responsible for all AFRL/XX employee salaries or other compensations and benefits as necessary under this Agreement.
- (2)...(n) <DOCUMENT SPECIFIC OBLIGATIONS OF AFRL/XX. DO NOT PROMISE THINGS THAT WE CANNOT DELIVER NOR THINGS THAT ARE OUTSIDE THE AUTHORITY.>
- **<EXAMPLE:** (2) Loan the Turbulent Boundary Layer Generator to **<EDUCATIONAL INSTITUTION>.>**
- <EXAMPLE: (3) Encourage its scientists and engineers to provide academic and career advice to <EDUCATIONAL INSTITUTION> students through the AFRL/XX mentoring program.>
- **EXAMPLE:** (4) Promote and host tours of the wind tunnel equipment to secondary and primary students with the intent to encourage their pursuit of mathematics, science, and engineering studies.>
- <EXAMPLE: (5) Provide access to equipment, facilities, and laboratories to personnel with expertise in these areas to conduct research and development projects. These research projects can be independent or joint research efforts with personnel from other universities and/or AFRL/XX personnel.>
- <EXAMPLE: (6) Work with the university members of the XX Institute to support the development of educational courses at both the graduate and undergraduate level. These activities can include AFRL/XX personnel providing research seminars or guest lectures; AFRL/XX personnel working with university members to develop new courses, student/class projects, and research projects; and AFRL/XX personnel participating on advisory and thesis committees and serving as mentors.>
- c. Subject to Article IX (Liabilities) and Article XII (Risk of Loss) below, neither Party shall be obligated to compensate the other Party for costs incurred by the other Party in carrying out activities defined by this partnership.
- d. Each of the Parties shall direct its own activities pursuant to this partnership. No Party shall have authority to direct the other's activities.
- e. Any public announcement of this partnership shall be coordinated among the Parties to include the **AFRL/XX** public affairs office. The **EDUCATIONAL INSTITUTION>** shall not use the name of **AFRL/XX** or Government on any product or

service that is directly or indirectly related either to this partnership or any assignment that implements this partnership agreement without prior written approval of AFRL/XX. Similarly, AFRL/XX shall not use the name of the <EDUCATIONAL INSTITUTION> on any product or service that is directly or indirectly related to this partnership without prior written approval of the <EDUCATIONAL INSTITUTION>. By entering into this partnership, neither Party directly or indirectly endorses any product or service provided, or to be provided, by the other Party. Neither Party shall in any way imply that this partnership is an endorsement of any such product or service.

- f. Generally, only United States citizens are eligible to be participating faculty or students under this Agreement. Exceptions will be determined by **AFRL/XX** on a case-by-case basis.
- g. **EDUCATIONAL INSTITUTION>** faculty and students participating under this Agreement will not be required to obtain security clearances. Research project completion will not require access to classified materials. However, work on certain projects may require **EDUCATIONAL INSTITUTION>** faculty and student access to proprietary information in the possession of **AFRL/XX** or information for which export is restricted by the Arms Control Act (Title 22 United States Code Section 2571 et seq.) or the Export Administration Act (Title 50 United States Code Section 2401 et seq.) or the International Traffic in Arms Regulation (22 C.F.R. 120-25) is militarily-critical technology, or otherwise protected from disclosure by statute, executive order, or regulation. In such cases, to obtain access to this information, faculty members and students must comply with the requirements for disclosure contained in the statutes, executive orders, or regulations, including signing nondisclosure agreements before a disclosure of such information may be made by **AFRL/XX**.
- h. The Parties' obligation under this Agreement are contingent upon and subject to availability of funds.

Article VII. Value of Contributions

a. **<EDUCATIONAL INSTITUTION>** estimates the value of its contributions to this agreement to be:

TOTAL **\$XXXXX.XX**

- b. **AFRL/XX** estimates the value of its contributions to this agreement to be:
 - (5) Labor (Scientists, Engineers, Support Personnel) \$XXXXXXXX

(6) Facilities \$XXXXX.XX
(7) Supplies and equipment \$XXXXX.XX
(8) Other \$XXXXX.XX

TOTAL \$XXXXX.XX

Article VIII. Benefits

- a. The benefits to the **<EDUCATIONAL INSTITUTION>**, its students and the State of **<NAME THE STATE THE EDUCATIONAL INSTITUTION IS LOCATED IN>** include:
- (1)...(n) <THESE STATEMENTS NEED TO COME FROM THE EDUCATIONAL INSTITUTION. WHAT PERCEIVED VALUE/BENEFIT TO THEM, THEIR STUDENTS, AND/OR THEIR STATE DOES THIS AGREEMENT PROVIDE? THE PERCEIVED BENEFITS CAN BE BOTH SHORT-TERM AND LONG-TERM.>
- **EXAMPLE:** (1) A formal vehicle for information exchange with AFRL/DE, the Air Force focal point for directorate energy technology.>
- <EXAMPLE: (2) Access to state-of-the-art C4I technologies for research and study, and access to computing equipment and databases dedicated to technology transfer that would not otherwise be available.>
- **EXAMPLE:** (3) Insight into Air Force and Department of Defense future information system technology and computational needs.>
- <EXAMPLE: (4) A forum for participants to exchange ideas and information that may lead to teaming arrangements or other formal agreements for pursuing competitive research projects and grants.>
- <EXAMPLE: (5) Opportunities for further collaboration between the <EDUCATIONAL INSTITUTION> and AFRL/IF on various technology transfer projects that will strengthen overall United States competitiveness as well as improve economic development through the application of AFRL/IF technologies to commercial industrial problems.>
- <EXAMPLE: (6) Improved educational relevance to academic programs as a result of closer interaction with AFRL/IF personnel and research projects based upon practical, "real world" problems and needs.>
 - b. The benefits to AFRL/XX and the Air Force include:
 - (1) Promoting the education of future scientists and engineers.

- (2) Good will.
- (3)...(n) < SPECIFY HOW THE DIRECTORATE, LABORATORY, AND/OR THE AIR FORCE WILL BENEFIT FROM THIS AGREEMENT, PARTICULARLY AS IT PERTAINS TO THE MISSION OF THE LABORATORY AND ITS CUSTOMERS.>
- <EXAMPLE: (3) Enhancing AFRL/XX scientists, engineers and managers as a result of conducting research in conjunction with academic and practicing professionals who work in Information Science & Technology.>

<EXAMPLE: (4) Access, where made available through normal operating policies and practices of the University, to some of the world's most powerful supercomputers, related resources, and other facilities unique to the university members of the XX Institute.>

Article IX. Partnership Administration

The administration of this Agreement and the coordination of specific activities which comprise this program will be the joint responsibility of the designated program managers from AFRL/XX and the **EDUCATIONAL INSTITUTION>**.

<TECHNICAL POINT OF CONTACT>, AFRL/XXXX, will serve as the partnership Program Manager on behalf of AFRL/XX. She will work with the program manager for <EDUCATIONAL INSTITUTION> to identify, select, and prioritize the activities in which the Parties engage pursuant to this Agreement and will ensure that program activities meet the statutory and regulatory requirements of the Federal Government and the Department of the Air Force.

EDUCATIONAL INSTITUTION POC, POSITION> will serve as the partnership program manager on behalf of the **EDUCATIONAL INSTITUTION>**. He will work with the program manager for **AFRL/XX** to identify, select, and prioritize activities in which the Parties engage pursuant to this Agreement, and will ensure that program activities meet the statutory and regulatory requirements of the **EDUCATIONAL INSTITUTION>**.

Loan (or donation) of all equipment from **AFRL/XX** to **<EDUCATIONAL INSTITUTION>** shall be documented on an Equipment Loan (or Donation) Form and appended to this Agreement.

Article X. Liabilities

As between the Parties, each Party acknowledges that it will be responsible for claims or damages arising from personal injury or damage to persons or property to the extent they result from negligence of its employees, agents, instructors, or students.

Article XI. Force Majeure

Neither Party shall be liable for any unforeseeable event beyond its reasonable control not caused by the fault or negligence of such Party, which causes such Party to be unable to perform its obligations under this Agreement (and which it has been unable to overcome by the exercise of due diligence), including, but not limited to, flood, drought, earthquake, storm, fire, pestilence, lightning and other natural catastrophes, epidemic, war, riot, civic disturbance or disobedience, strikes, labor disputes, or failure, threat of failure, or sabotage, or any order or injunction made by a court or public agency. In the event of the occurrence of such a force majeure event, the Party unable to perform shall promptly notify the other Party. It shall further use its best efforts to resume performance as quickly as possible and shall suspend performance only for such period of time as is necessary as a result of the force majeure event.

Article XII. Deliverables

<Required deliverables are to be negotiated between the two partners and documented here. Note, all donation equipment shall require a report documenting that such equipment has been used to enhance student learning experiences and/or aspirations.>

XIII. Risk of Loss

The **EDUCATIONAL INSTITUTION**> shall return all government-owned equipment loaned under this Agreement to **AFRL/XX** in good working order, normal wear and tear excepted, at the end of the time period(s) for loan or **XX**> days prior to end of this agreement, which ever comes first. While in the care or possession of the **EDUCATIONAL INSTITUTION**>, the equipment shall be covered by the **EDUCATIONAL INSTITUTION**> insurance program. Any modifications or repairs to the government-owned equipment that the **EDUCATIONAL INSTITUTION**> may find necessary to make shall be performed only after receiving written approval of the **AFRL/XX**. Any such repair or modification shall be at the expense of the **EDUCATIONAL INSTITUTION**> and shall not affect the title of **AFRL/XX** to said hardware and software.

Article XIV. Period of Agreement

The term of this Agreement is for a period of **XX>** months, commencing on the date of the last signature affixed below. Any Party may terminate this Agreement earlier upon delivery of written notice at least **<thirty (30) days or sixty (60) days or XXXXX (XX) days>** in advance. Termination of this Agreement by any Party for any reason shall not affect the rights and obligation of the Parties accrued prior to the effective date of termination of this Agreement. If any Party requests modification of this Agreement, including extension of this Agreement, the Parties shall, upon reasonable notice of the proposed modification by the Party desiring the change, confer in good faith to determine the feasibility of such modification. Modifications shall not be effective until a written amendment is signed by duly authorized representatives of the Parties. If **AFRL/XX** terminates this Agreement, it shall not be liable for any costs resulting from or related to the termination, including but not limited to, consequential damages or any other costs experienced by third parties including participating school, or their students.

Article XV. Signatures

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed in duplicate.

<pre><educational institution=""></educational></pre>	<u>AFRL/XX</u>
By:(Signature)	By:
Name:	Name:
Title:	Title:
Date:	Date:



Education Partnership Agreement

Between

[Air Force Activity]

And

[Partner]

EPA No. FY-DDD-TD-XX

EDUCATION PARTNERSHIP AGREEMENT

for the **Loan of Equipment**

Component: Partner:

[Air Force Activity Name] [Name of Educational Institution]
Address Address
Address
Phone: Phone:
Fax: Fax:

1. Purpose of this Agreement

To encourage and enhance the study of mathematics and science or for the conduct of technical and scientific education and research activities through the loaning of certain Department of Defense laboratory research or other scientific equipment ("Equipment") from the United States of America, as represented by the Secretary of the Air Force and acting through [Air Force Activity Name] ("Component") to [Name of Educational Institution], a nonprofit educational institution ("Partner").

2. Authority

This agreement is entered into under the authority of 10 U.S.C. § 2194, "Education Partnerships" and 15 U.S.C. § 3710(i), "Utilization of Federal Technology Research Equipment." See also Department of Defense Interim Guidance, 22 June 2001 (http://www.osd.mil/ddre/edugate/) and Air Force Instruction 61-301, "The Domestic Technology Transfer Process and the Offices of Research and Technology Applications."

3. Loan of Equipment

- a. Certain Department of Defense (DoD) *Equipment* (listed in Appendix A) will be used to encourage and enhance the study of science, mathematics and engineering [in accordance with *Partner's* proposal (Appendix B) or as determined by the Director of *Component*]. The *Partner* agrees to use *Equipment* in accordance with the authorities under paragraph 2 for the entire duration of this agreement. The *Equipment* is provided AS IS and *Partner* assumes all responsibility for its operation and maintenance. The *Component* makes no representation whatsoever as to the condition of *Equipment*.
- b. The *Equipment* shall be returned to *Component* within thirty (30) days of the expiration of this agreement as specified in paragraph 9, unless otherwise terminated by either party under paragraph 10. Additional equipment may be loaned by *Component* during the period of this agreement and will be identified in subsequent attachments as needed.
- c. Each party shall bear its own costs. Though *Equipment* is loaned without cost, *Partner* will pay all costs associated with the initial transfer of *Equipment* from *Component* to

Partner, including packaging and other preparation expenses. The *Component* will pay all costs associated with the return of *Equipment* from *Partner* to *Component*.

4. Liabilities

Component's responsibility for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of Component while acting within the scope of his office or employment will be in conformance with the Federal Tort Claims Act (28 U.S.C. Section 2671 et seq.). Except as provided by the Federal Tort Claims Act, Component will not be liable to Partner for any claims whatsoever, including loss of revenue or other indirect or consequential damages.

5. Indemnification by Partner

The *Partner* holds *Component* harmless and shall indemnify *Component* for all liabilities, claims, demands, damages, expenses, and losses of any kind arising out of the performance by *Partner* or other entity acting on behalf of or under the authorization of *Partner*.

6. Governing Laws

The Parties agree that the laws of the United States of America as applied by the Federal Courts shall govern this agreement for all purposes.

7. Entire Agreement & Severability

This agreement constitutes the entire agreement between the Parties concerning the subject matter hereof and supersedes any prior understanding or written or oral agreement relative to said matter. The illegality or invalidity of any provisions of this agreement shall not impair, affect or invalidate the other provisions of this agreement.

8. Non-Endorsement

The *Partner* shall make no claim or inference regarding this agreement or *Equipment* which implies governmental endorsement or recommendation

9. Term of Agreement

This agreement shall be effective for a period of [one year, from Date – Date].

10. Termination by Mutual Consent and Unilateral Termination

The *Partner* or *Component* may terminate this agreement at any time by mutual consent. Either Party may unilaterally terminate this agreement at any time by giving the other Party written notice not less than thirty (30) days prior to the desired termination date. Upon notice of mutual or unilateral termination, *Partner* shall return *Equipment* to *Component* within thirty (30) days of receiving a written request from *Component* to return *Equipment*.

11. Surviving Provisions

The articles covering Liabilities, Entire Agreement, Severability, Governing Laws, Termination, and Surviving Provisions shall survive the termination of this agreement.

12.	Rep	porting
		~

The Component shall comply with Department of Defense reporting requirements.

This Education Partnership Agreement is a	agreed to by:
[Name of <i>Component</i> Official]	[Name of <i>Partner</i> Official]
[Title of Component Official]	[Title of Partner Official]
Date:	Date:

APPENDIX A **List of** *Equipment*

APPENDIX B (optional)

Educational Institution Proposal for *Equipment* **Loan**



Education Partnership Agreement Between

[Air Force Activity]

And

[Partner]

EPA No. FY-DDD-TD-XX

EDUCATION PARTNERSHIP AGREEMENT

for the

Donation of Equipment

Component: Partner:

[Air Force Activity Name] [Name of Educational Institution]

[Donating Party]AddressAddressAddressAddressPhone:

Phone: Fax:

1. Purpose of this Agreement

To encourage and enhance the study of mathematics and science or for the conduct of technical and scientific education and research activities through the transfer of excess or surplus Department of Defense laboratory research or other scientific equipment ("Equipment") from [Donating Party] ("Component") to [Name of Educational Institution], a nonprofit educational institution ("Partner").

Fax:

2. Authority

10 U.S.C. § 2194, "Education Partnerships" and 15 U.S.C. § 3710(i), "Utilization of Federal Technology—Research Equipment." See also Department of Defense Interim Guidance, 22 June 2001 and Air Force Instruction 61-301, "The Domestic Technology Transfer Process and the Offices of Research and Technology Applications."

3. Terms and Conditions

- a. Certain Department of Defense *Equipment* (listed at Appendix A) will be used to encourage and enhance the study of science, mathematics and engineering in accordance with *Partner's* proposal (Appendix B). The *Partner* agrees to use *Equipment* in accordance with *Partner's* proposal for the entire duration of this agreement. The *Equipment* is provided as is and *Partner* assumes all responsibility for its operation and maintenance. The *Component* makes no representation whatsoever as to the condition of *Equipment*.
- b. Title of *Equipment* shall transfer to *Partner* on the final day of this agreement as specified in paragraph 11, unless otherwise terminated by either party under paragraph 12. Additional equipment may be transferred during the period of this agreement and will be identified in subsequent attachments to include a listing of additional equipment and an updated *Partner's* Proposal to identify the anticipated use of the *Equipment*.

4. Funding

Each party will pay for its own costs.

5. Liabilities

Component's responsibility for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of Component while acting within the scope of his office or employment will be in conformance with the Federal Tort Claims Act (28 U.S.C. Section 2671 et seq.). Except as provided by the Federal Tort Claims Act, Component will not be liable to Partner for any claims whatsoever, including loss of revenue or other indirect or consequential damages.

6. Indemnification by Partner

Partner holds Component harmless and agrees to indemnify Component for all liabilities, claims, demands, damages, expenses, and losses of any kind arising out of the performance by Partner or other entity acting on behalf of or under the authorization of Partner under this agreement.

7. Non-Endorsement

The *Partner* shall make no claim or inference regarding this agreement or *Equipment* which implies governmental endorsement or recommendation.

8. Governing Laws

The Parties agree that the laws of the United States of America as applied by the Federal Courts shall govern this agreement for all purposes.

9. Entire Agreement

This agreement constitutes the entire agreement between the Parties concerning the subject matter hereof and supersedes any prior understanding or written or oral agreement relative to said matter.

10. Severability

The illegality or invalidity of any provisions of this agreement shall not impair, affect or invalidate the other provisions of this agreement.

11. Term of Agreement

This agreement shall be effective for a period of one year, from [Start Date] – [End Date].

12. Termination by Mutual Consent and Unilateral Termination

Partner or Component may terminate this agreement at any time by mutual consent. Either Party may unilaterally terminate this entire agreement at any time by giving the other Party written notice not less than thirty (30) days prior to the desired termination date. Upon notice of mutual or unilateral termination, Partner shall return Equipment to Component within thirty (30) days of receiving a written request from Component to return Equipment.

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The articles covering Liabilities, Entire Agreement, Severability, Governing Laws, Termination, and Surviving Provisions shall survive the termination of this agreement.

14. Reporting

The Component shall comply with De	partment of Defense reporting requirements.
This Education Partnership Agreement is a	greed to by:
[Name of Component Official]	[Name of <i>Partner</i> Official]
[Title of Component Official]	[Title of Partner Official]
Date:	Date:

APPENDIX A

List of Equipment

APPENDIX B

Partner's Proposal

APPENDICIES STATES

Air Force Model CTA

CTA Roles and Responsibilities

COMMERCIAL TEST AGREEMENT

between

THE UNITED STATES OF AMERICA DEPARTMENT OF THE AIR FORCE

AIR FORCE RESEARCH LABORATORY << DIRECTORATE >> DIRECTORATE (AFRL/XX)

and

<<CUSTOMER>>

Article 1—Preamble

This Commercial Test Agreement ("Agreement") is made and entered into pursuant to 10 U.S.C. § 2539b(a)(3), DoD Instruction (DoDI) 5535.11, Availability of Samples, Drawings, Information, Equipment, Materials, and Certain Services to Non-DoD Persons and Entities (12 March 2012), and Air Force Instruction (AFI) 61-301, The Domestic Technology Transfer Process and the Offices of Research and Technology Applications (30 May 2001), by and between the United States of America as represented by the Secretary of the Air Force, acting through the Air Force Research Laboratory, <<DIRECTORATE>> ("Air Force Activity"), located at Wright-Patterson Air Force Base, Ohio, and <<CUSTOMER>> ("Customer"), located at <<CUSTOMER LOCATION>>.

WITNESSETH:

WHEREAS *Air Force Activity* desires to make available, at a prescribed fee, certain services for the testing of materials, equipment, models, computer software or other items to *Customer*;

WHEREAS *Air Force Activity* has determined that the use of facilities contemplated under this *Agreement* will not degrade performance of its primary mission activities and will not divert *Air Force Activity* personnel or resources from scheduled tests of government material or otherwise interfere with *Air Force Activity* mission requirements;

WHEREAS *Air Force Activity* has determined this *Agreement* to be in the interest of national defense and that the services do not involve expansion of the capabilities and capacities of *Air Force Activity*, even if *Customer* agrees to finance the expansion; and

WHEREAS *Customer* has established, to the satisfaction of *Air Force Activity*, that provisions of the services will not constitute undue competition with the private sector.

Article 2—Definitions

As used in this *Agreement*, the following terms shall have the following meanings and such meanings shall be applicable to both the singular and plural forms of the terms:

- 2.1. "Test Agency Representative" means the authorized Air Force Activity representative identified at Article 13, paragraph 13.2.
 - 2.2. "Government" means the Government of the United States of America.
- 2.3. "Equipment" or "Materials" means personal property, including machinery, devices and apparatus, and components of such items.
- 2.4. "Test Results" means information generated by or resulting from tests performed with services made available by Air Force Activity under this Agreement.
- 2.5. "Effective Date" is the date of the last signature of the authorized representatives of the parties designated under Article 13.

Article 3—Work Statement

- 3.1. The Work Statement at Appendix A sets forth the nature and scope of the work to be performed by both parties, including all responsibilities of each party under this *Agreement*.
- 3.2. The *Customer* must submit requests for all testing services in accordance with the test request procedures described at Appendix A.

Article 4—Statement of Capability

The Statement of Capability at Appendix B sets forth *Air Force Activity*'s technical capability, specific technical approach, the detailed costs, other support, and any associated reporting requirements and any special conditions to the manner in which the testing services will be provided or delivered to *Customer*.

Article 5—Cost Reimbursement

- 5.1. <u>Fees.</u> The *Customer* must reimburse *Air Force Activity* for all costs incurred in rendering the services set forth at Appendix A. Such costs must include, at minimum, all direct costs incurred by *Air Force Activity*. Such costs will also include indirect costs, where applicable, such as the costs of modifying and restoring any test facility to its original configuration. Fees for services are based on reimbursement of all actual costs (i.e., all direct and applicable indirect costs) involved.
- 5.2. <u>Total Not-To-Exceed (NTE) Cost Estimate</u>. A detailed cost analysis and the not-to-exceed (NTE) total cost of services shall be included in Appendix B and shall be provided to *Customer* prior to the beginning of each approved test. The cost analysis shall contain estimates, as appropriate, for

Page 2 of 7

Government labor, contract services (e.g., contract labor, materials, travel, subcontracting, and material handling fee), product service fees, management reserve, project overhead, and general and administrative fees. The labor rates, burden rates and fees are contained in Appendix C.

- 5.3. Total NTE Cost Estimate Exceeded. Unless otherwise indicated in the Work Statement, *Air Force Activity* will provide *Customer* written notice within ten (10) days or as soon as practicable before expending more than the NTE total costs. Such written notice will include a revised estimate of the NTE total cost for completion of the testing services and a due date for payment at or before the NTE total cost is expended. The *Customer* must pay the additional amount reflected in the revised estimate of the NTE total cost before the due date, in which case this *Agreement* shall be modified accordingly. If no such payment is received, *Air Force Activity* will stop work immediately upon expenditure of the NTE total cost amount or on the due date, whichever is earlier.
- 5.5. <u>Payments</u>. Payments will reference this *Agreement* by USAF CTA Number and by the names of the parties and shall state the purpose of the payments. The *Customer* must also send, by ordinary mail, a copy of the payment documents to the *Test Agency Representative*. The *Customer* shall submit all payments by cashier's check, certified check, bank money order or postal money order, payable to << PAY ACCOUNT>>, to the following address:

<<ADDRESS>

5.7. <u>Payment Required in Advance</u>. The *Air Force Activity* must receive payment of the estimated NTE total cost before conducting any testing. Any surplus funds (i.e., those in excess of the actual costs incurred) remaining after the conclusion of each test shall be refunded to *Customer* within thirty (30) days thereof. Under no circumstance may the fees for services received exceed the amount necessary to recoup the total costs incurred.

Article 6—Confidentiality of Test Results

All *Test Results* under this *Agreement* are confidential pursuant to 10 U.S.C. § 2539b(b) and may not be disclosed outside the *Government* without written consent of *Customer*.

<u>Article 7—Term, Modification, Extension, and Termination</u>

- 7.1. <u>Term and Extension</u>. The term of this *Agreement* shall commence on the *Effective Date* of this *Agreement* and shall expire on << EXPIRATION>>, unless extended by written agreement of the authorized representatives of the parties, or otherwise terminated in accordance with this article. The expiration of this *Agreement* shall not affect the rights and obligations of the parties accrued prior to expiration.
- 7.2. <u>Modification</u>. Any modification must be by written agreement of the authorized representatives of the parties and shall be incorporated into this *Agreement*.
- 7.3. <u>Termination</u>. Either party may terminate this *Agreement* for any reason upon delivery of written notice to the other party at least thirty (30) days prior to such termination. Termination of this *Agreement* shall not affect the rights and obligations of the parties accrued prior to the date of termination. In the event of termination by *Customer*, *Customer* shall be responsible for all costs

incurred by Air Force Activity through the date of termination. If Air Force Activity terminates this Agreement, it shall not be liable to Customer or its contractors or subcontractors for any costs resulting from or related to the termination, including, but not limited to, incidental or consequential damages.

7.4. <u>Interruption or Cancellation of Services</u>. National security and *Air Force Activity* mission requirements shall take precedence over *Customer's* requirements under this *Agreement*. The *Test Agency Representative*, or any higher authority, may terminate, interrupt or delay *Customer's* testing services whenever such termination, interruption or delay is in the best interests of *Government*. The *Air Force Activity* will notify *Customer*, in writing, of the termination, interruption or delay. The *Government* will not be liable to *Customer*, or any third party, for any costs or consequences resulting from the termination, interruption or delay, including any direct or consequential damages.

Article 8—Disputes

- 8.1. <u>Disputes</u>. The parties shall resolve all disputes arising out of, or related to this *Agreement* in accordance with this Article.
- Resolution attempts must be documented and kept on file by the local technology transfer focal point for *Air Force Activity*. If the parties are unable to agree on a resolution, either party may submit the dispute for resolution, in writing, to the *Test Agency Representative* and to *Customer's* Program Manager who together shall attempt to resolve the dispute by mutual agreement. If the parties are unable to resolve the dispute, within thirty (30) business days after the issue has been submitted to the *Test Agency Representative* and Program Manager, the Director of *Air Force Activity*, identified on the signature page, shall issue a written decision which shall be considered to be an exhaustion of administrative remedies by the agency. Nothing in this section is intended to limit or prevent either party from pursuing any other right or remedy available at law.

Article 9—Representations and Warranties

- 9.1. The *Customer* hereby represents and warrants to *Air Force Activity*:
 - 9.1.1. <u>Corporate Organization</u>. The *Customer*, as of the date hereof, is duly organized and validly existing in good standing under the laws of the State of <<<u>STATE>></u>.
 - 9.1.2. <u>Statement of Ownership</u>. The *Customer* is not foreign-owned or a subsidiary of a foreign-owned entity.
 - 9.1.3. <u>Authority</u>. The official executing this *Agreement* on behalf of *Customer* has the requisite authority to do so.
- 9.2. The *Air Force Activity* hereby represents to *Customer*:
 - 9.2.1. <u>Authority</u>. The *Air Force Activity* official executing this *Agreement* has the requisite authority to do so.

- 9.2.2. <u>Termination for Good Cause Only</u>. The *Air Force Activity* will seek termination or interruption or cancellation of services for good cause only, ordinarily where mission requirements or national security concerns dictate.
- 9.3. The parties make no other representation or warranty whatsoever.

Article 10—Liability

- 10.1. The parties shall inform each other in writing of any claim, suit, loss or injury arising under this *Agreement*. The parties further agree to consult promptly on the defense of such claims and to provide information, aid and cooperation to assist in the defense of such claims.
- 10.2. The *Customer* assumes all liability for *Customer's* employees while performing work under this *Agreement* using or physically situated on *Government* property. The *Customer* is not authorized under this *Agreement* to allow any third party access to *Government* property.
- 10.3. <u>General Disclaimer</u>. THE *AIR FORCE ACTIVITY* MAKES NO EXPRESS OR IMPLIED WARRANTY AS TO THE CONDITION OF ANY RESEARCH TEST(S), INTELLECTUAL PROPERTY, TEST RESULTS, OR ANY RESULTING PRODUCT OR PROCESS, THE TRANSFER OF ANY PROPERTY OR SERVICE OF WHATEVER NATURE OR THE MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OF THE ARTICLE(S) TESTED.
- 10.4. <u>Government Assumes No Liability</u>. The *Customer* agrees that *Air Force Activity* shall not be liable for any damage, whether direct or consequential, and that *Customer* will indemnify and hold *Government* harmless for any loss, claim, damage or liability of any kind arising out of or in connection with any property or service provided by *Air Force Activity* under this *Agreement*.

Article 11—Mishap Investigation(s)

- 11.1. The *Air Force Activity* may conduct a safety investigation pursuant to AFI 91-204 into any mishap resulting in loss, damage or destruction of a test article or test facility. The safety report will not be released to *Customer*.
- 11.2. The *Air Force Activity* may conduct an accident investigation pursuant to AFI 51-503. The accident report may be released to *Customer*.

Article 12—General Terms and Provisions

12.1. <u>Disposal of Toxic or Other Waste</u>. The *Customer* shall be responsible for the proper removal and disposal from *Air Force Activity* property of any and all toxic, hazardous, or solid waste, and the removal of any other material provided or generated in the course of performing this *Agreement* if specified for removal by *Customer* in Appendix A. The *Customer* shall obtain at its own expense all necessary permits and licenses as required by local, state and federal law and regulation.

- 12.2. <u>Force Majeure</u>. Neither party shall be in breach of this *Agreement* for any failure of performance caused by any event beyond its reasonable control and not caused by the fault or negligence of that party. Should a force majeure event occur, the party unable to perform will promptly notify the other party and shall in good faith resume performance as soon as is reasonably practicable.
- 12.3. <u>Relationship of the Parties</u>. The parties to this *Agreement* and their employees are independent entities and are not agents of each other, joint venturers, or partners to any business organization. Neither party is authorized or empowered to act on behalf of the other with regard to any contract, warranty or representation as to any matter, and neither party will be bound by the acts or conduct of the other. Each party will maintain sole and exclusive control over its own personnel and operations.
- 12.4. <u>Inspection</u>. The *Customer* may inspect the *Air Force Activity* testing facility identified in Appendix A prior to any testing conducted under this *Agreement*. The *Air Force Activity* will maintain and calibrate the testing facility.
- 12.5. <u>Publicity/Use of Name/Endorsement</u>. The *Customer*, *Air Force Activity*, and the appropriate public affairs office shall coordinate any announcement of this *Agreement* by either party to this *Agreement*. The *Customer* shall not use any name or logo attached to *Government*, the Department of the Air Force, HQ AFMC, AFRL or *Air Force Activity* on any product, service, patent license or assignment related directly or indirectly to this *Agreement* without the prior written approval of *Air Force Activity*. By entering into this Agreement, neither the *Government*, the Department of the Air Force, HQ AFMC, AFRL, nor *Air Force Activity* directly or indirectly endorses any product or service provided, or to be provided, by *Customer*. The *Customer* shall not in any way imply that this *Agreement* is an endorsement of any such product or service. The *Air Force Activity* shall not use *Customer's* name, logo, or product without prior written consent.
- 12.6. <u>Governing Law</u>. U.S. federal law governs this *Agreement* for all purposes, including but not limited to, determining the validity of the *Agreement*, the meaning of its provisions, and the rights, obligations and remedies of the parties or third parties.
- 12.7. <u>Waiver of Rights</u>. Any waiver shall be in writing and provided to the other party. Failure to insist upon strict performance of any of the terms and conditions hereof, or failure to delay to exercise any rights provided herein or by law, shall not be deemed a waiver of any rights of either party.
- 12.8. <u>Severability</u>. The illegality or invalidity of any provisions of this *Agreement* shall not impair, affect or invalidate the other provisions of this *Agreement*.
- 12.9. <u>Assignment</u>. Neither party shall assign or transfer any rights or obligations derived from this *Agreement* without the prior written consent of the other party.
- 12.10. <u>Controlled Information</u>. The parties understand that information and materials provided pursuant to or resulting from this *Agreement* may be export controlled, classified, or unclassified sensitive and protected by law, executive order or regulation. This *Agreement* does not permit any disclosure in violation of these restrictions or other applicable law or regulation.

Article 13—Notices

13.1.	Send all formal and administrat	ive notices under this <i>Agreement</i> by U.S. Mail to:
	Air Force Activity	Customer
	AFRL/XXXX	YYYY
	Attn: ORTA	Attn:
	ADDRESS	ADDRESS
	Phone: Email Address	Phone: Email Address
13.2.	Send all correspondence on tecl	nnical matters to:
	Air Force Activity AFRL/XXXX	Customer
	Attn:	Attn:
	ADDRESS	ADDRESS
	Phone:	Phone:
	Email	Email
< <n2< th=""><th>nme-AF Activity>></th><th><<name-customer>></name-customer></th></n2<>	nme-AF Activity>>	< <name-customer>></name-customer>
Divis	ion Chief	< <title>></th></tr><tr><td>Date</td><td></td><td>Date</td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td><<NA</td><td>AME>>></td><td>Date</td></tr><tr><td></td><td>AME>> nical Director</td><td>Date</td></tr></tbody></table></title>

USAF	CTA	NUN	IBER	-	_	-

Appendix A WORK STATEMENT

Title

Appendix B AIR FORCE ACTIVITY'S STATEMENT OF CAPABILITY

Appendix C RATES & FEES

Roles and Responsibilities for CTAs

Technical POC (TPOC)

- 1. Develop the rationale and necessary inputs for the CTA and provide to the ORTA
- 2. Ensure management support for the agreement
- 3. Ensure Customer submits certification that use of facility does not constitute undue competition with private sector
- 4. Support the ORTA during negotiations, serving as the liaison to the Customer
- 5. Make changes as required or explain why changes cannot be made
- 6. Conduct tasks identified in the CTA (after signature and fees are received)
- 7. Maintain the official file (either stand-alone file or as part of another case file)
- 8. Notify ORTA if testing can't be completed and why (e.g., need for mission-essential testing)
- 9. Notify the ORTA if modifications or amendments are needed (including extensions)
- 10. Notify ORTA of completion of CTA
- 11. Support development of a success story (if applicable)

ORTA

- 1. Work with the TPOC to develop the CTA
- 2. Ensure fees are appropriately calculated for the CTA (conferring with the Finance group)
- 3. Identify issues with the initial draft CTA, either resolving or flagging them for legal review
- 4. Coordinate the legal review and work with the TPOC to resolve remaining issues
- 5. Negotiate with the Customer, if appropriate
- 6. Coordinate the signature process
- 7. Complete the DTTIS reporting requirement
- 8. Ensure that the TPOC fully understands his/her responsibilities
- 9. Ensure that the Finance group receives a copy of the CTA

Legal

- 1. Review the CTA for completeness and adherence to law and AF/DOD guidance
- 2. Identify any issues and provide feedback to the ORTA on legal sufficiency
- 3. Support the ORTA during negotiations with the Customer and continue to provide feedback on any potential legal issues

Finance

- 1. Provide input on labor rates and other costs for the CTA
- 2. Receive the check from the Customer and deposit in the appropriate account
- 3. Provide feedback to the TPOC on the status of funds available, including if funding is running out

PIA APPENDICIES

Air Force PIA Guidance Memo

DEPARTMENT OF THE AIR FORCE



WASHINGTON, DC

October 10, 2019

MEMORANDUM FOR AIR FORCE ACQUISITION COMMUNITY

FROM SAF/AQC and SAF/GC

SUBJECT: PARTNERSHIP INTERMEDIARY AGREEMENT GUIDANCE

- 1. Purpose. This memorandum establishes a common Air Force interpretation governing the use of partnership intermediary agreements (PIAs). Air Force components seeking to exercise PIA authority shall consider this interpretation authoritative.
- 2. Background. PIAs provide a mechanism to facilitate and enhance the transfer of federal research and technology to local and state governments, private industry, and other non-federal entities through Partnership Intermediaries, and facilitate the transition of vital technologies back to the federal government. Partnership Intermediaries identify individuals, companies, and academic institutions best suited to provide technological solutions necessary to fulfill the Air Force's mission. These research and technology transfers can benefit both the military community and the industrial base with dual use technologies. At present, two legal authorities exist, which the Air Force can use to create PIAs: 10 USC §2368 and 15 USC §3715. 10 USC §2368 applies only to certain DoD science and technology reinvention laboratories. Currently, the Air Force Research Laboratory is the only Air Force organization that qualifies for such a designation under 10 USC §2368. In contrast, 15 USC §3715 applies to all federal laboratories.
- 3. Types of Partnership Intermediaries. State and local government entities and their affiliates may qualify as Partnership Intermediaries. A Partnership Intermediary can be: (1) a state or local government agency; (2) a non-profit entity owned, operated, or funded in whole or in part by, or on behalf of, a state or local government; or (3) a non-profit entity chartered by a state or local government. 10 USC §2368(f)(2); 15 USC §3715(c). A non-profit entity seeking to qualify as a partnership intermediary therefore must show a nexus to a state or local government. This nexus may consist of legislative sponsorship and/or (partial) funding, a defined state or local role in its operations, even if limited, or some form of government action demonstrating the organization is authorized to work on behalf of a state or local government. The circumstances upon which a non-profit may have a qualifying nexus to a state or local government can vary considerably. Consequently, we recommend program officials consult with their contracting officer and legal counsel when making this determination.

Importantly, 15 USC §3715 contains a limitation, which 10 USC §2368 does not. 15 USC §3715 authorizes federal laboratories to use a partnership intermediary "...to perform services for the Federal laboratory that increases the likelihood of success in the conduct of cooperative or joint activities of such Federal laboratory with small business firms, institutions of higher education as defined in section 1141(a) of title 20*, or educational institutions within the meaning of section 2194 of title 10." 15 USC

^{*} Section 1141(a) of title 20 was repealed in 1998, however, the term "institution of higher education" is defined in section 1001 of title 20.

- §3715. No corresponding limitation exists under 10 USC §2368(f). This means that the Air Force Research Laboratory can use a partnership intermediary to engage more broadly with academia and industry than other federal laboratories who must rely on the 15 USC §3715 authority.
- 4. Role of Partnership Intermediaries. Partnership Intermediaries perform services to develop collaborative, technical relationships and promote better communication between Air Force laboratories and third parties. However, Partnership Intermediaries do not perform the technological research and development work themselves. Among other things, partnership Intermediary services can include:
 - Consulting, strategic planning, military and technology assessments;
 - Facilitating transfer of technologies from the Air Force to businesses;
 - Evaluating patents and patent applications to identify the most viable candidates for licensing to industry;
 - Marketing Air Force technologies to potential industry licensees;
 - Providing support and assistance for media/legislative interactions;
 - Working with small business and regional economies interested in commercializing federal technology;
 - · Arranging technical conferences, workshops and seminars; and
 - Identifying companies with innovative technologies, which match Air Force operational needs

While partnership intermediaries can perform a range of services, laboratory officials should refrain from using the partnership intermediary as a purchasing or procurement agent to obtain goods or services that the laboratory can acquire directly through its contracting channels. For example, if a laboratory needed equipment for its own use, the laboratory should not use the PIA as a vehicle to purchase that equipment for them.

5. Competition Requirements. We are aware of no GAO, Court of Federal Claims, or federal district court decision that directly addresses the question of whether the Competition in Contracting Act, 10 USC §2304 (CICA), applies to PIAs. However, a PIA contract contains the key elements of a procurement instrument: (1) a written agreement; (2) use of appropriated funds; and (3) the purchase of services. Moreover, unlike other instruments not subject to the general competition requirements, such as cooperative agreements, neither 15 USC §3715 nor 10 USC §2368 expressly exempt PIAs from CICA. Therefore, absent any decisional authority addressing this question, it is prudent to compete PIAs to the maximum extent practicable consistent with CICA. Competition promotes transparency and public confidence in the process, and enhances the probability that the congressional objectives of leveraging private sector investment and fostering technology transfer will be maximized. We are mindful that the statutory requirements for partnership intermediaries will necessitate limiting PIA competitions in particular cases.

PIAs can also be formed through a Memorandum of Understanding (MOU). Competition is not required for a PIA MOU. MOUs generally are not procurement instruments and therefore are not subject to CICA or other procurement laws. Similarly, no-cost contracts do not require competition, since no appropriated funds are used for these arrangements.

- 6. Managing Partnership Intermediaries. Partnership Intermediary personnel are not Air Force employees; laboratories must maintain the proper separation between the Partnership Intermediary and government workforce. Moreover, laboratories must ensure that government employees working with Partnership Intermediaries comply with applicable Air Force policies and procedures, including rules pertaining to inherently governmental functions, organizational conflicts of interest, ethics (e.g., treatment of gifts, gratuities, and the prohibition against endorsements), hosting of conferences, fiscal law, oversight of contractor employees, and restrictions on the use of Air Force intellectual property.
- 7. Other Arrangements Supporting the Technology Transfer and Transition Mission. When considering how best to accomplish the technology transfer and transition mission, Air Force officials should keep in mind that they have an array of tools they can employ in addition to PIAs. These tools include cooperative agreements, patent licensing agreements; cooperative research and development agreements; intergovernmental support agreements; educational partnership agreements; grants and cooperative work education agreements. Additionally, the Small Business Innovative Research Program and Small Business Technology Transfer Program can provide assistance and funding to facilitate technology transfer to eligible concerns. We recommend that program officials consult with their contracts/agreements officer and legal counsel to determine which tools are the best fit for their particular needs. Each of these tools have their own varying legal requirements.
- 8. Review of PIAs. When deciding whether to use a PIA, laboratories should work directly with their local legal and contracting offices to ensure that the right relationship is chosen to best meet the stated objectives.

Signature,

RICHARD B. CLIFFORD, SES

Deputy General Coursel

(Acquisition, Technology & Logistics)

CAMERON G. HOLT, Maj Gen, USAF Deputy Assistant Secretary (Contracting)

Assistant Secretary of the Air Force

(Acquisition, Technology & Logistics)

10-10-2019

Data

10 OCT 2019

Date

References:

- 10 USC §2368, Centers for Science, Technology, and Engineering Partnership
- 15 USC §3715, Use of Partnership Intermediaries
- DoDD 5535.8, DoD Domestic Technology Transfer Program, 21 May 1999, Incorporating Change 1, 15 October 2018
 - DoDI 5535.8, DoD Technology Transfer (T2) Program, 14 May 1999, Incorporating Change 1, 1 September 2018
 - AFI 61-301, The Domestic Technology Transfer Process and the Offices of Research and Technology Applications, 30 May 2001
 - AFPD 61-3, Management of Science and Technology, 20 May 2013

New ORTA Checklist

New ORTA Checklist

1. First Steps

This checklist summarizes the essential steps or tasks that new ORTA needs to undertake to get started and to begin to become established as a technology transfer (T2) professional.

Conta	act AFRL/SB for a basic orientation
Reach	n out to the Air Force T3 Office Request an "newcomer" briefing in AF T2
	Request access to available AF T2 training materials and videos
	Request instructions on how to establish a DTTIS account
	lish a DTTIS account (for reporting data) Complete and submit DD 2875 Bookmark the link to DTTIS on your computer
Unde	rtake basic training in T2
	Carefully review AF T2 training materials and videos Access and review T2 training materials on the Federal Laboratory Consortium for Technology Transfer (FLC) website at
	https://www.federallabs.org/learning-center
Locat	e the online Air Force T2 Handbook and establish a bookmark for ite
	Read the Introduction and What Does an ORTA Do? modules, then the single page "At a Glance" overviews for each of the major T2 mechanisms
	Read the Introduction sections for each of the modules on the major T2 mechanisms
	Read and/or become familiar with all of the modules in this T2 Handbook (some sections are detailed instructions on how to establish the subject T2 agreement and should be read while referring to the template for that agreement)

NEW ORTA CHECKLIST - APPENDIX II

AIR FORCE TECH TRANSFER HANDBOOK

	Read	the following basic legal authorities for AF T2
		Code of Federal Regulations, 37 CFR §404 – Licensing of Government- Owned Inventions
		15 U.S. Code § 3710a - Cooperative Research and Development Agreements
		Education Partnership Act, 10 USC §2194
		DoD Directive 5535.03
		DoD Directive 5535.08
		Air Force Policy Directive (AFPD) 61-3
		Air Force Instruction (AFI) 61-301
	yours and P https://	elf with them: FLC Green Book: Federal Technology Transfer Legislation olicy and FLC Technology Transfer Desk Reference at //federallabs.org/learning-center/on-demand/reference-materials
ш	identi	ry your servicing legal office and introduce yourself
	-	est an introduction to your Partnership Intermediaries from AFRL/SB or luce yourself
		TechLink (National DoD PIA for technology transfer)
		MilTech (National DoD PIA for technology transition)
		AF Academic Partnership & Engagement Experiment (APEX, national AF PIA)
		Local PIAs (such as the Wright Brothers Institute, Griffiss Institute, or AFRL NM/NM Tech

2.	Confir	m T2 Authorities in Place
		e delegations of authority for agreements are valid or request ations
		Cooperative Research and Development Agreement (CRADA)
		Education Partnership Agreement (EPA)
		Information Transfer Agreement (ITA)
		Commercial Test Agreement (CTA)
		Patent License Agreement (PLA)
		Software License Agreement (SLA)
		Partnership Intermediary Agreement (PIA)
3.		ory T2 Agreements and IP Portfolio w your organization's existing T2 agreements (if any)
		When do they expire?
		What reports are due and when?
		Do you have existing success stories for them? If not, ask if they have any results that could be used for a success story
		tory and review your organization's existing intellectual property nts, patent applications, invention disclosures)
		Have any inventions been licensed?
		Are there any on-going marketing efforts to achieve licensing?
		Are the inventors still in the organization and available to help with marketing?

AIR FORCE TECH TRANSFER HANDBOOK

4.	Review Existing T2 Strategies and Plans
	Review your organization's existing T2 strategies and plans (if any)
	Review your office's existing T2 training and education program for S&Es (if any)
	Meet with your organization's leaders to discuss T2 goals and the resources you will have available to meet these goals. Refer to strategy development section in "What Does an ORTA Do?" module

NEW ORTA CHECKLIST - APPENDIX II