



Technology transfer is moving intellectual property (IP) from the mind of the inventor to someone who will use it for public benefit. Aerospace continually transfers technology through publications, exchanges at conferences, reports, work under contract, and through relationships within the federal government and industries. Aerospace engages in formal technology transfer through nondisclosure agreements, the release and licensing of software, patent and technology licenses, and the transfer of know-how and deliverables under technical services contracts.

Current Patents Available for Licensing



BLISS

Blind Interference Signal Suppression (BLISS) counters jamming signals that interfere with GPS reception and deny location information. Unlike conventional techniques that suppress jammers by focusing on removing narrowband jamming over a small frequency range, BLISS is effective against jammers that are matched to the signal of interest and is impervious to jammers that rapidly change their frequency or phase characteristics.



3D PRINTED HYBRID ROCKET MOTORS

3D printed hybrid motors are fuel grains in helical shapes that allow a liquid or gas oxidizer to interact with solid fuel more effectively and dramatically improve performance. Liquid motors traditionally require expensive turbopumps to deliver fuel and oxidizer. By creating a 3D-printed "liquid fuel grain" structure, the fuel grain meters the flow of fuel as the oxidizer passes through it, eliminating most or all of the plumbing and turbomachinery typically seen in liquid motors, thereby reducing size, complexity, and cost.



MIRROR FABRICATION

Mirrors are the single most critical and expensive component of any telescope. A process for creating composite replicated mirrors provides weight and cost savings, tailorable mechanical and thermal properties, are damage-tolerant, and can be rapidly manufactured by replicating the surface of a high-quality glass surface.



Licensing of Aerospace intellectual property is overseen by the Technology Transfer and Intellectual Property Licensing Office (@T2). Federal regulations require Aerospace to maximize the practical commercial use of our intellectual property and Aerospace does this in the spirit of our mission. Because Aerospace is precluded by law from manufacturing products, licensing is the primary way of commercializing inventions. There are many types of licenses available to the public for granting access to Aerospace intellectual property; the type of license needed depends on the type of funding used to develop the intellectual property (government or internal) and its intended use by the licensee.

Types of Licenses Offered at Aerospace

Aerospace offers diverse technologies for licensing and technology transfer. Patentable intellectual property ("IP") created at Aerospace using federal funding does not give the federal government ownership of the IP but does grant the government a nonexclusive, royalty-free irrevocable license. The IP created at Aerospace using solely nonfederal funding does not give the federal government any rights; however, the government may request a royalty-free license. The technology transfer office is an Aerospace gateway for nondisclosure agreements; software releases; end-user licenses; and patent, know-how, and copyright licensing.

As a nonprofit corporation and a federally funded research and development center (FFRDC), Aerospace may grant a royalty-free nonexclusive license to universities, other nonprofits, national laboratories, other FFRDCs, and government agencies for use and exploitation of its IP upon request. Additionally, Aerospace may offer qualified commercial companies a royalty-bearing, exclusive, or nonexclusive license for its IP in accordance with federal regulations. Standard licensing terms include:

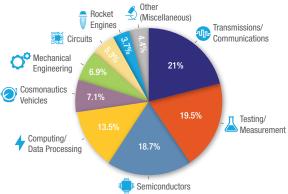
- Reservation of government rights, if any
- Reservation of rights for Aerospace's research and development mission
- Preference for U.S. manufacturing
- Preference for nonexclusive rights
- · Requirement for a business case for exclusive rights
- Periodic utilization reporting
- Export control
- Conflicts of interest mitigation

Our office is your doorway to technology transfer through Non-Disclosure Agreements, software releases and End-User Licenses, export control, and patent, know-how and copyright licensing. Contact us at <u>ip@aero.org</u> or (310) 336-7006.

View the Aerospace Technology Transfer portfolio at aerospace.org/technology-transfer.

The Aerospace Corporation

The Aerospace Corporation is a national nonprofit corporation that operates a federally funded research and development center (FFRDC) and has approximately 4,000 employees. The Aerospace FFRDC is aligned to support the most critical programs of the Department of Defense and the nation, and to serve as its customers' innovation partner across the space enterprise. Consistent with the competencies outlined in our sponsoring agreement, Aerospace provides strategic value through independent, intellectually rigorous, relevant, and timely products and services. With three major locations in El Segundo, Calif.; Colorado Springs, Colo.; and Washington, D.C., Aerospace addresses complex problems across the space enterprise and other areas of national significance.



Active patents at Aerospace