

**FEDERAL BUSINESS OPPORTUNITIES POSTING
REQUEST FOR INFORMATION (RFI)**

*Airship and Hybrid Airship Development, Integration, Operations, and Economic
Feasibility*

Number:

USTCTT0111

Notice Type:

Special Notice

Synopsis:

United States Transportation Command (USTRANSCOM) is seeking non-federal partners ("Collaborators") in industry and/or academia for consideration to enter into Cooperative Research and Development Agreements (CRADAs) (described in 15 USC 3710a) to cooperatively explore concepts of operations and integration requirements, perform economic analysis, modeling, simulation, wargaming and experimentation on airship and/or hybrid airship technologies for DOD worldwide airlift distribution missions. USTRANSCOM also wishes to develop understanding of airship and/or hybrid airship operational and economic feasibility when employed in a dual-use mode (DOD and commercial lift).

Working definitions of classes of airships for purpose of this exploration are:

Airship - A "lighter-than-air" (LTA) craft that can be steered and propelled through the air using rudders and propellers or other thrust mechanisms. Examples include blimps and zeppelins.

Hybrid Airship - A hybrid airship is an aircraft that combines characteristics of heavier-than-air (HTA) (fixed-wing aircraft or helicopter) and lighter-than-air (LTA) technology.

This is not a solicitation for a procurement contract, nor should this announcement be construed as implying any future solicitation by USTRANSCOM or any other government agency in this area.

Large and small businesses may respond to this announcement if they possess the qualifications described. Potential Collaborators may team with other qualified non-

federal parties. Airship developers as well as commercial logistics providers (entities which may use airships outside of DOD or to support DOD) such as shipping companies, third party logistics providers, etc., may team.

Multiple federal agencies may participate on behalf of or in partnership with USTRANSCOM, including USAF Air Mobility Command, other federal laboratories, and other agencies of the U.S. government, as the U.S. government deems appropriate.

The CRADA and its related supporting information, discussions and other collaborative activities are proposed to remain at the UNCLASSIFIED level. If classified information exchange is proposed by the Collaborator, Collaborator personnel must be appropriately cleared at the outset of the CRADA.

CRADA partners will explore the technical feasibility, methods of employment, and economics of airships in at least two historically-based scenarios: a humanitarian relief operation and in tactical support to combat operations. Utility and affordability of airships in non-DOD applications (“dual-use”) is of interest, if such use may contribute to a more favorable total cost of ownership, or positive return on investment. How the DOD might take advantage of such dual-use capable airships (contractually, etc.) is another element for collaboration. Through collaborative development and analysis of these scenarios, partners will develop understanding of operational capabilities available today and those requiring additional development (e.g., buoyancy management, self-protection, field maintenance/repair, offload procedures, infrastructure requirements, etc.), economics of airship operations in comparison to other modes of transportation, and overall feasibility/limitations of using airships for DOD and non-DOD lift.

The parties may simulate the humanitarian relief and/or warfighting environments and the airship systems which could operate in them; host government subject matter experts to cooperate with Collaborator subject matter experts to conduct simulations and analysis; and reach better understanding of the feasibility, limitations, risks and mitigation strategies for employment of airships in DOD/commercial applications.

Outputs of the collaboration will be simulations, reports, economic analyses, and other shared information on the characteristics, economics, and feasibility of airships.

CRADAs are defined in 15 USC 3710a(d), in part, as “any agreement between one or more federal laboratories and one or more non-federal parties under which the Government, through its laboratories, provides personnel, services, facilities, equipment,

intellectual property or other resources with or without reimbursement (but not funds to non-Federal parties) and the non-Federal parties provide funds, personnel, services, facilities, equipment, intellectual property, or other resources toward the conduct of specified research or development efforts which are consistent with the missions of the laboratory; except that such term does not include a procurement contract...”

CRADAs are commonly effective for three years after signature by the parties (Collaborator(s) and USTRANSCOM).

USTRANSCOM and other designated government agencies selected by USTRANSCOM will evaluate potential Collaborators’ white papers (submittal instructions follow). Based on Collaborator experience/capability to innovate in this area, technical qualifications of Collaborator and assigned personnel, past experience in airship concept development and engineering, experience in developing airship/airship system concepts of operation and support, economic analysis capability, and USTRANSCOM’s interest and capacity to enter into such agreements, will choose one, multiple, or zero white papers.

Initial selection of white papers and subsequent discussions do not guarantee selection of any Collaborator by USTRANSCOM to actually enter into a CRADA.

After initial selection, discussions will ensue separately with each selected Collaborator, seeking to reach mutual agreement between USTRANSCOM and the Collaborator(s) on objectives, duration, intellectual property, and resources to be applied by the parties in the proposed CRADA(s). The government may choose to visit pertinent facilities for a tour of Collaborator capabilities prior to final selection.

No funding is available from the government to cover white paper preparation or submittal costs, or to cover discussions, facility visits or any other Collaborator costs.

The USTRANSCOM template CRADA is at <http://www.transcom.mil/about/org/tccs/ORTA.cfm> so potential Collaborators may understand its terms. The Collaborator(s) and government will draft and seek to finalize specific CRADA objectives and language collaboratively via discussions/mutual agreement after government white paper selection.

Interested parties may respond with white papers not later than NLT 10 December 2010 0000 (12:00 midnight Central United States time) by unclassified e-mail to USTCCS-

ORTA@ustranscom.mil by submitting an UNCLASSIFIED written white paper in following format. Submittals not following this format will not be considered:

- Microsoft Word or .pdf format of not more than 5 pages in length, on standard 8½ by 11-inch page, with 1-inch margins at top, bottom, left and right, in Times New Roman font of not less than 12-point size, with not more than 6 lines per inch.
- Pages numbered sequentially in the bottom footer including company name and designation of proprietary information as appropriate on each page.
- Clearly marked/identified any proprietary information, photos, diagrams.
- Include the following information (within the 5-page limit):
 - Title (no separate title page needed; use space for useful white paper information).
 - Company name and state of incorporation, and incorporation of any parent entity. Companies with foreign ownership or parentage must identify the nation of incorporation of that non-U.S. entity.
 - Description and location of any specialized facilities (other than typical office space) to be dedicated to the collaborative effort; a brief video overview of facilities and their capabilities, small enough in file size to be e-mailed (typically 5 megabytes or less), in addition to the 5-page textual white paper input, is an option.
 - How your company meets USTRANSCOM's interests and could contribute to the formation of a CRADA partnership in this area; capability to innovate, develop advanced airship concepts, work to mitigate risks of development, production, or operations; simulate, model, author reports, host meetings and exercises, perform economic analysis, and otherwise apply resources and expertise pertinent to long-term collaborative experimentation.

- Resources to be supplied by the Collaborator (facilities, overall personnel expertise, information systems, proprietary materials, prototypes, etc.).
- Describe any open source software and any third party software to be provided by the Collaborator.
- Resources requested from USTRANSCOM (skillsets, data, test facilities, etc.; no DOD-provided funding is permitted).
- Background/experience in airship development, engineering, integration with existing systems and infrastructures, economic and other analysis, test, and operation, (with DOD points of contact and address/phone numbers as references, if available).
- Points of contact (name, point of contact, address, e-mail, and phone) for notification of selection/non-selection and follow-on discussions/visits (if chosen).

USTRANSCOM and other government entities participating in white paper review and actual collaborative work under CRADAs may include in-house support contractors and members of Federally Funded Research and Development Centers (FFRDCs). The USTRANSCOM Office of Research and Technology Applications (ORTA) manager (coordinator of USTRANSCOM Technology Transfer activities) is a member of the MITRE Corporation, an FFRDC.

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