

Partnership with the Center of Excellence for Commercial Space Transportation

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The Federal Aviation Administration (FAA) Office of Commercial Space Transportation supports the Center of Excellence for Commercial Space Transportation (COE CST) in expanding its research portfolio. This expansion occurs through an increasing number of partnerships with external entities, beyond the *Core Members*, conducting open research in the COE CST thematic areas. Such entities include community colleges, universities, nonprofit organizations, and for-profit corporate partners, all of which may be domestic or international. Details of the COE CST organization, structure, and research themes are presented elsewhere in this journal.

Affiliate Members customarily possess similar or complementary research activity to that conducted under the COE CST, which currently has an open application period to review new *Affiliate Member* applications (outlined below).

At the conclusion of COE CST Year 6, a total of 6 *Affiliate Members* have been accepted into the network, who conducted independent nonproprietary research and presented at FAA COE CST Annual Technical Meetings, as well as published their findings in peer-reviewed journals.

Affiliate Members bring their own self-funded open research to the COE CST network. One of the current *Core Members* must serve as *Host*, whereby providing the formal linkage between the *Affiliate Member* and the COE CST network. *Hosts* are determined by such factors as geographic region and research alignment. The benefits of collaborative activities, annual presentation of their research in a COE CST technical forum, monthly videoconference opportunities, and professional networking enjoyed by COE CST *Core Member* universities extend to *Affiliate Members* as well. *Affiliate Members* do not receive direct funding from the FAA Office of Commercial Space Transportation, but are encouraged to

jointly propose research for FAA and other external funding consideration when possible.

BENEFITS AND RESPONSIBILITIES

The *Affiliate Member* is recognized as part of the COE CST by both the FAA and the *Core Members*. Technical guidance by FAA technical monitors, program management, COE program office, and *Core Members* is provided to *Affiliate Members* upon request. A presentation time/date slot at the COE CST Annual Technical Meeting is provided for the *Affiliate Member* Principal Investigator and/or student to present their COE CST research. Finally, the *Affiliate Member* is granted permission to refer to their organization as an *Affiliate Member* of the COE CST in media releases, reports, publications, and other instruments of information dissemination when relevant to COE activities.

Responsibilities incurred by the *Affiliate Member* include the following. The *Affiliate Member* must work with both the *Host* university and FAA AST to develop a research plan that is satisfactory to all parties. Such a plan is termed a Statement of Work (SOW), and must be submitted through the *Host* university to the FAA using the grants.gov portal. All costs associated with the SOW, for example, proposal writing, research planning and execution, reporting, publishing, and participation in COE CST meetings, are covered by the *Affiliate Member*.

As such, the *Affiliate Members* typically will be expected to expend funds to carry out their proposed COE CST research. These expenditures may be both in-kind and cash. The financial value of *Affiliate Member* research expenditure will be reported to the COE CST program office and to the *Host* university. This value, including participation in meetings, graduate student tuition and stipends, and related expenses, will be credited to the matching funds requirement of the *Host* university.

SELECTION CRITERIA

Successful *Affiliate Members* are selected primarily on the following criteria. First, does the candidate *Affiliate Member* propose significant research that aligns with that of the COE CST thematic areas? This intellectually meritorious research

must be widely disseminated and nonproprietary. Second, how strongly does the commercial space industry support the candidate Affiliate Member's general research direction and/or specific proposed research project as outlined in the SOW? Third, can the Affiliate Member clearly demonstrate a track record in successfully completing CST or related studies in both scope and depth as proposed in the SOW, in accordance with all US policies, laws, and regulations?

ASSOCIATE MEMBERS

Whereas COE CST Affiliate Members actively lead scientific inquiries to conduct their own research, which is then added to the Center's portfolio, *Associate Members* of the COE CST typically, but not always, contribute to ongoing research activities that are being led by Core Members. Representative activities of Associate Members range from providing research equipment and technical guidance to substantial contribution of the research design, data acquisition, analysis, and interpretation. Associate Membership does not currently have a formal application process, but is based on existing research involvement of the organization with a Core Member. Supporting the COE CST in significant ways, Associate Members provide invaluable contributions to the Center and are graciously acknowledged for their efforts.

GETTING INVOLVED

The COE CST has a formal application process for interested parties to become Affiliate Members, as published on the COE CST website (www.coe-cst.org) under the Publications Tab. Details are provided on the Affiliate Member Application Form. It is intended that solicitation of new Affiliate Members will be continuously active and that completed applications will be reviewed on an ongoing basis. Selection of Affiliate members will be made by the COE CST Core Member uni-

versities within 90 days of submission of the completed Affiliate Member Application Form.

To get involved in the COE CST, candidate Affiliate Member organizations are encouraged to contact the author. Additional inquiries are welcome should organizations have any questions or require clarification on applying for Affiliate membership to the FAA COE CST.

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AUTHOR DISCLOSURE STATEMENT

No competing financial interests exist.

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