Charter and Strategic Plan

Michigan Tech Aerospace Research Center (MARC)

Approved: December, 2023

1. Mission

To establish Michigan Tech as a leader in aerospace engineering research.

2. Description of Activities

The Center brings together faculty and staff across the university in the pursuit of aerospace (aeronautics, astronautics, and space) engineering research. The Center provides guidance and potential resources necessary to attract funding from external sources to pursue its mission. The Center supports its members through activities, such as, but not limited to, identifying funding opportunities, helping researchers develop externally funded research proposals, assisting in the creation and management of multiple investigator proposal and project teams, assisting with post-award project management and compliance, providing seed funding to support research development and acquisition of shared equipment, and providing opportunities to promote collaboration both at MTU and externally.

3. Governance Structure and Management

3.1 Structure

The Center is constituted with four sub-centers:

- CRE³ST: Center for Robotics on Earth, Extreme Environments and Space Technology
- CODES: Center for Control, Optimization and Dynamics of Energy Systems
- AeroMatS: Center for Aerospace Materials and Structures
- CMuST: Center for Multiscale Technologies

Sub-centers can be created or retired at any time by majority vote of the Leadership Team. Changes to the sub-center structure should be based on changes in expertise at Michigan Tech or global changes in trends of Aerospace research.

3.2 *Membership*

Membership in the Center will be open to all faculty, staff, postdoctoral associates, and adjunct faculty participating in research and graduate education in the subject area. Members are classified as Voting or Affiliated.

3.3 Voting Members

Voting members are limited to those members serving as Principal Investigator, Co-Principal Investigator or Official Collaborator on extramural projects that generate overhead return to the center of \$2,000 or more on an annual basis (based on activities in the current and preceding Michigan Tech fiscal years). An Official Collaborator contributes to the scientific development or execution of the project in a substantive, measurable way and has attached a letter of collaboration to an extramurally funded grant at the time of submission that generates overhead return if awarded, but they are not listed as a Co-Principal Investigator on the grant cover sheet. Voting membership may also be granted

to faculty and staff that directly support Center activities through other funding avenues at the discretion of center leadership.

3.4 *Affiliated Members*

Affiliated members are those that do not qualify as a voting member, as defined in Section 3.3. Affiliated members can participate in Center activities, but cannot vote on the allocation of Center resources, appointment of the Director, changes in the Center Charter, or any other action that requires a formal vote by the voting members.

3.5 Center Director, Associate Directors, and Staff

A Director will provide general oversight of the Center. The Director must be a voting member and is installed, renewed, or removed by a simple majority vote of voting members by ballot. The Director will serve a four-year renewable term. Nominations of voting members will be accepted for at least one week upon notification to all members. Notice of an election should be provided to all members at least two weeks in advance. Voting will occur following the process set out below. Should a Director not be able to continue in their role, a temporary Director may be elected as described above or appointed by the Vice President for Research.

The Director shall perform such duties and exercise such powers as are necessary or incident to the supervision and management of the Center and shall see that the orders and resolutions as authorized by the membership are carried into effect. The Director is responsible for meeting the requirements and guidance for MTU centers and institutes as provided by the office of the Vice President of Research. Unless prohibited, the Director may delegate some or all of the duties and powers of their office, however, the Director remains accountable for proper and efficient performance of any delegated duties.

Each sub-center is led by an Associate Director, who also must be a voting member (unless they are non-voting at the time of the inception of this charter), and are installed, renewed, or removed by a simple majority vote of voting members by ballot. Terms of Associate Directors are indefinite, and should a Associate Director not be able to continue in their role, a temporary Associate Director may be appointed by the MARC Director. The Associate Directors are responsible for the distribution of the funds that are allocated to their respective sub-centers, as detailed in Section 3.7.

Staff may be hired using MARC funds to support the center mission, including a center manager, accountant, research scientists, or others. Any positions should be approved by the membership. The Director will have supervisory authority over all staff. Staff are considered Affiliated Members of the Center, but can become Voting Members if they meet the stated requirements.

3.6 Leadership Team and Committees

The Director, Associate Directors, and the voting members will constitute the MARC Leadership Team. The Leadership Team will meet to address resource allocation, leadership changes, strategic planning, and other center-related items that require attention.

The Leadership Team or the Director may from time to time appoint other committees as deemed proper and may prescribe the functions, duties, duration, and terms of membership of such committees.

3.7 Financial Management and Resource Allocation

The Center is funded through the receipt of Internal Research and Development (IRAD) funding provided by MTU in proportion to the total F&A charged on funded projects submitted through the Center. The IRAD distribution amount is governed by MTU policy.

There will be a central index associated with MARC, and linked indexes associated with each of the current sub-centers. Each Associate Director will be responsible for expenditures on the corresponding sub-center index. The MARC Director will be responsible for the central MARC index. The central MARC index is intended for expenditures that provide support for the whole Center for items such as equipment, equipment service contracts, travel, staff support, meetings, and student activities. The MARC Director will seek Leadership Team support for expenditures greater than \$5000. The sub-center indexes are intended for support of research within the sub-center focus areas, and expenditures are at the discretion of the corresponding Associate Director.

When overhead return funds are distributed from the university into the central MARC index, the funds will be split:

- 40% will be kept in the central MARC index
- 60% will be distributed to the corresponding sub-center index (a sub-center will be designated by the Director for each incoming research grant)

3.8 Meetings

The MARC Leadership Team will hold at least two meetings each academic year, one in each academic semester. All meetings will be announced at least two weeks in advance and members will be able to forward agenda items for each meeting to the Director. The Director will distribute an agenda at the beginning of each meeting, and meetings will follow the agenda as amended by members at the beginning of each meeting. Minutes of each meeting will be taken by a designated attendee and they will be distributed to members within two weeks following each meeting.

3.9 Voting

Voting shall take place via ballot either electronically or in meetings of the whole where a quorum has been reached. For any meeting of the whole where business is conducted, a quorum will consist of 50% + 1 of all Voting Members. Votes via electronic ballot require notice to all voting members, a 50% + 1 response rate of Voting Members, and should follow an opportunity for discussion of the matter. A motion will pass with a majority of votes, unless a larger vote is required as set forth in this charter or another authority. A voting period should typically last one week with notice of the voting period provided in the notice.

3.10 *Annual Report and Renewal*

The Center Director will submit an annual report to the members and the Vice President for Research (VPR) or appropriate entity as required. The annual report will summarize the activities of the Center for the past year, including financials, progress on goals, future plans or other topics as required by VPR.

The Center is authorized according to MTU policy. At the end of a term, the director, in consultation with the members, will seek renewal in accordance with current VPR guidelines.

3.11 Charter Amendments

Proposed changes to the Charter can be initiated by voting members of MARC. Notice of proposed changes must be provided to members for review 14 days prior to the opening of voting. Voting will follow the procedures set out above except that changes to the Charter require a two-thirds majority of voting members.

Approval Signatures

Kathlein Ethali

Gregory M. Odegard, MARC Center Director

Kathy Halvorsen, Associate Vice President for Research Development

Version History

Date	Notes
December 2023	Initial adoption of the charter