



AIAA Fluid Instability and Transition Committee Charter

Version	Revision date	Revisions Made by
Ver1	10/07/2025	T. Corke

1. Committee Name

Fluid Instability and Transition (FIT)

2. Scope

To build upon the 40-year legacy of the Transition Study Group to better serve the aerospace community that relies on turbulence transition prediction and control, increase the role of a growing number of younger professionals in the field, and to take the lead in the direction of technical sessions and focused symposia to address prevailing questions regarding mechanisms for turbulence onset.

3. Governance

The TC falls within the Aerospace Sciences Group.

4. Roles and Responsibilities

4.a The Committee on Conferences and Sessions will determine session topics and solicit presentations/papers, as well as organize Special Sessions that may be part of the Awards Recipients. The Nominations and Membership Committee will work on recruiting new AIAA membership and filling Committee positions. The Honors and Awards Committee will solicit nominations for the awards listed in 4c. The Publications and Policy Committee will produce public policy statements on FIT and the role it plays within AIAA and the aerospace community. The Liaison Committee has the very important role of interfacing with the other TCs as well as within the Aerospace Industry. Finally, the role of the STEM Education Committee is to work with and enhance STEM educators, including developing modules with an aerospace theme.

4.b. Committees to-date include: Conferences and Sessions, Nominations and Membership, Honors and Awards, Publications and Policy, Liaison, and STEM Education.

4.c. Planned: Lifetime Achievement Award. Young Investigator Award, STEM Education Award



5. Leadership

The founding FIT Committee leadership includes:

Chair: Thomas Corke (University of Notre Dame)

Vice-chair: Xiaolin Zhong (UCLA)

Secretary: Koen Groot (UWyoming) *note: Will assume following his 1-year commitment to Fluids TC*

Steering: Meelan Choudhari (NASA Langley RC)

6. Structure

The following are the committee members to date:

Conferences and Sessions Subcommittee: Javier Sierra Aisin (ONERA), Christopher Hader (U. of Ariz.), Madeline Peck (U of ND), Eric Matlis (Embry-Riddle)

Nominations and Membership Subcommittee: Sonya Smith (Howard Univ.)

Honors and Awards Subcommittee: Mujib Malik (NASA Langley RC)

Publications and Policy Subcommittee: Eylul Bilgin (Stanford)

Liaisons Subcommittee: Stefan Wertz (Raytheon)

STEM Education Subcommittee: Possible Lori Stiglitz (NSWC Crane)

7. Membership

Based on the 177 listed Transition Study Group membership, the FIT membership is expected to include members from Industry, Laboratories and Academia, with broad international representation. These are expected to represent all AIAA membership grades from Member to Fellow. The current leadership includes three AIAA Fellows, and the subcommittee are a mix of all three membership grades. The selected terms of the leadership and committees, and election format, will follow the traditional TC guidelines and be executed by the Nominations and Membership Subcommittee. The Steering Leader will help in that effort. For continuity and stability, the terms will be staggered in time.

8. Meetings

The meetings will be held twice a year at the SciTech and Aviation Forums. The purpose of each of the meetings will be to provide reports from the chair and each of the subcommittees, plan upcoming events, and invite open discussion. Open Forums that focus on technical discussions will accompany the meetings.

9. Committee Website

We will need guidance on steps to establish the AIAA Engage website.



10. Charter Revision

The FIT TC charter will be reviewed every two years as the chair takes office, and updated if appropriate.