

Improving Aeromedical Certification through Safety Risk Management



Advances in healthcare, aviation technology, and data-driven risk management suggest that we can improve FAA medical certification while sustaining aviation safety. Aviation leaders have created the Aeromedical Certification Collaborative (ACC) to study how the health of pilots and air traffic controllers (ATCs) affects performance and how to better manage related safety risks.

Applying a safety risk management approach

The ACC conducts analyses and research to improve the safety, transparency, and agility of the aeromedical certification system and its role in aviation risk management.

We are a voluntary initiative where ACC participants (see sidebar) lead the work and define the nature of our collaboration. Together we set expectations for our studies and data protections – so each participant and the flying public can benefit.

The ACC is a safe space for participants to explore the topics they care about and to collaboratively advance safety. We are planning studies about both mental and physical health conditions.

Our studies will apply safety risk management techniques and advanced analytical methods to aeromedical certification challenges. Studies will range in size and scope, from tabletop exercises to risk modeling to privacy-protected data analysis.

The ACC is partnering with MITRE to analyze safety, operations, and health data. MITRE has a record of safeguarding data as the data steward for similar efforts, such as [Aviation Safety Information Analysis and Sharing](#) and the [Partnership for Analytics Research in Traffic Safety](#).

The ACC expects to make an impact by...

- Clarifying the performance effects of medical conditions to understand potential impacts on aviation safety.
- Enabling an earlier return to duty for grounded pilots and ATCs by providing evidence to support aeromedical decisions.
- Reducing costs to airlines and the public when pilots and ATCs stay healthy and work healthy.

We welcome inquiries from stakeholders who would like to get involved.

To learn more, visit sites.mitre.org/aeromedical-ppp or email us at aeromed-cert-collab@mitre.org.

“This is all about the safety of the national airspace. Safety for individuals, pilots, and the American public.”

— Dr. Susan Northrup,
Federal Air Surgeon

ACC participants

- Airlines and airline associations
- Pilots and pilots’ associations
- Aviation medical examiners and healthcare professionals
- Academic researchers
- Federal Aviation Administration
- MITRE (serving ACC as its independent convener and connector)
- Other stakeholder groups to be added in the future

MITRE is a not-for-profit that is chartered to serve the public interest. Through our public-private partnerships and federally funded research and development centers, we work across government, industry, and academia to tackle our nation’s biggest challenges.