

RAMS / NATO Science & Technology Organization

HFM-445 Technical Course 2027

FORWARD TOGETHER:

AURORA BOREALIS – AEROSPACE MEDICINE IN THE SKIES OF THE NORTH

16-19 March 2027

Edelweiss Lodge and Resort
Garmisch-Partenkirchen, Germany

Call for Papers & Topics

The Ramstein Aerospace Medicine Summit (RAMS) and NATO Science & Technology Organization HFM-445 Technical Course will take place **16-19 March 2027** at the Edelweiss Lodge and Resort, Garmisch-Partenkirchen, Germany.

The theme for the 2027 Technical Course is ***"Aurora Borealis - Aerospace Medicine in the Skies of the North."***

We are now seeking Presentations, Panels, Posters and Working Groups! Consider partnering with a colleague to debate an issue, host a panel discussion or describe operational/exercise related international cooperation challenges/successes.

Abstracts will be accepted until 04 December 2026.

Please include the following information with your submission:

- 150-300 word abstract (priority will be given to those with research or novel information, this should be made clear in the abstract)
    - For CME purposes, include a 1-2 sentence objective for the presentation, as well as two multiple choice or true/false questions.
- Presenter Information
    - Name, rank and preferred name of presenter(s)
    - Current e-mail addresses of all presenters/authors
    - Whether the speaker is a first-time presenter at NATO-RAMS
    - A short (2-3 sentence) biography for an introduction of the speaker
- Topic title
- Type of Presentation:
    - Podium Presentation: oral presentation of approximately 15-20 minutes
    - Panel Discussion: indicate panel chair, panel members already identified, and desired duration for discussion
    - Poster: for display during a defined period during NATO-RAMS (can also submit as podium or poster)
    - Working Group: identify the topic, desired outcomes, and desired participants for a 2-3 hour group discussion
- All presentations and posters should be ***Public Release***
- **COMPLETED FORM 13 ALONG WITH YOUR ABSTRACT**
- Please also comply with your national policies for clearances

The Program Committee will present awards for the best first-time presenter and the best poster presentation(s).

Submit your abstract at: http://www-eur.cvent.com/c/abstracts/14f1ba16-b81b-4ecc-9b54-402f8533a594

- Note you will need to sign up for the website; this process is simple and rapid.
- Please contact Joseph.Earnshaw@cso.nato.int or LectureSeries@cso.nato.int with any questions or difficulties submitting.

Information about Ramstein Aerospace Medicine and NATO STO Technical Course HFM-445 (NATO-RAMS):

NATO-RAMS focuses on military flight medicine with an emphasis on the European region and is a unique forum to dialogue with professional colleagues.
The objective of this Course is to provide state of the art knowledge and practices in aerospace medicine, share national practices and evaluate new and emerging technologies on the subject of Aerospace Medicine and Human Performance in its broadest context to NATO Flight Surgeons, by a group of expert lecturers from NATO nations. The course will cover the current and future challenges in Aerospace Medicine in deployed area and multinational environments, focusing on Operational Aviation Medicine. Risks and advantages of various approaches will be compared with the aim of recommending best practices and thus improving interoperability.

Aurora Borealis - Aerospace Medicine in the Skies of the North

"Ad inquisitionem tantorum aetas una non sufficit, ut tota caelo vacet... Veniet tempus quo posteri nostri tam aperta nos nescisse mirentur" ("A single lifetime, though it were wholly devoted to the study of the sky, does not suffice for the investigation of problems of such complexity. The day will yet come when posterity will be amazed that we remained ignorant of things that will to them seem so plain."), Seneca the Younger, AD 62-64.

Military aerospace operations have evolved from WW 1 dogfights and have moved ever upward, surpassing even the boundary of air and space where Aurora Borealis occurs. The Northern Lights require a complex combination of solar radiation and geomagnetic forces; similarly, military aerospace operations have moved toward an increasingly complex, globally connected, and integrated battlefield. With the inclusion of Space and Cyberspace along with the incorporation of AI and human-machine teaming, the current theatre of operations literally expands over and beyond multiple domains, all while the human operator continues to be central to mission success. Aerospace Medicine has to evolve alongside those ever changing and increasing demands to provide up to date and evidence based medical support for aircrews and ground personnel, so they are medically ready and fully prepared for optimal performance and able to excel in current and future operational environments. This medical support is especially important in challenging environments such as those within Nordic airspace, including degraded visual conditions and extreme temperatures. The panel is looking forward to your contributions – just as Aurora Borealis illuminates the darkest skies, your contributions to the NATO-Ramstein Flight Medicine summit will help light the path forward for those who fly, fight, and operate above the horizon.

Topics you may wish to consider for your Presentations, Panels, Posters or Working Group include the Aerospace Medicine aspects of:

- Aviation and/or Space Medicine
- Regulations/Aeromedical Standards
- Operational Aviation Medicine
- Human Performance – Optimization, Enhancement, and Sustainment
- Multinational Operations, Cooperation and Partnerships
- Interoperability, Standardization, Coordination, Training
- Medical Evacuation, Evacuation of CBRN Casualties, Mass Casualty Evacuation
- Personnel Recovery/Search & Rescue (SAR)
- Crew Resource Management
- Selection & Training of Aircrew – Physiological Training, Training/Simulation,

Survivability

- Medical Readiness – Sustainment, Treatment, and Optimization of Aircrew
- Selection & Training of Flight Surgeons
- Risk Management (Fatigue Detection and Management Strategies, High-G, High Altitude, Long Duration Sorties, Thermal Stress, Space Radiation, NVGs, Lasers, Accident Investigation)
- Perception & Situational Awareness
- Preventive Medicine & Data Management
- Modernizing aeromedical standards and support for today's military aviators
- Medical Monitoring & Clinical Guidelines
- Aerospace Medicine Case Studies
- Emerging and Future Issues in Aerospace Medicine
- Aerospace Medicine Support to Future Operations
- Aerospace Medicine: Operations During Pandemics, Disasters, and Disruptions
- Aerospace Medicine: Cold Weather Operations

Any other topic relevant to the theme *"Aurora Borealis - Aerospace Medicine in the Skies of the North"* is also welcome - the above list is neither exhaustive nor limiting. Ideally, any presentation should include lessons learned or items you would want to improve.

Once abstracts have been received and the program is built, the program committee will seek Continuing Medical Education (CME) approval. The amount of CME credit will depend upon the final program; historically, NATO-RAMS has granted 20+ hours of CME.

Please forward this e-mail to any others you feel might like the opportunity to speak or whom you believe would benefit from the experience! This event is not only useful and informative, but also great fun. Speakers are the key to success**. In particular, we would like to encourage poster submissions and working group topics to foster collaborative discussions and provide opportunities for junior attendees.**

The Program Committee aims to notify speakers/presenters of abstract acceptance status by mid-January 2027.

Finalized presentations should be completed approximately 01 March 2027 and uploaded; presenters will receive instructions upon acceptance of their abstract.

See Attachment: NATO Form 13E.


AURORA BOREALIS
RAMS NATO STO 2027