



**DEPARTMENT OF DEFENSE
HUMAN FACTORS ENGINEERING
TECHNICAL ADVISORY GROUP
Meeting #74**



DOD HFE TAG 74 Agenda
Holistic Human Factors Engineering

**In person 16-20 May, 2022 at the
FAA Mike Monroney Aeronautical Center,
Oklahoma City, OK**

THEME

Holistic Human Factors Engineering

In the human factors, human performance, and Human Systems Integration (HSI) fields, there is recognition that factors combine and interact to influence efficiency, effectiveness, safety, and satisfaction related to human performance, sometimes in unpredictable ways. It is important to investigate and account for these interactions in order to reach and sustain the capability levels and operational tempo required of modern technology and warfare.

TAG 74 will highlight Holistic Human Factors Engineering (HHFE) and explore the impacts that innovative technologies, ubiquitous threats, and novel approaches have on human mental and physical health, wellness, and capabilities. A myriad of human factors techniques and technologies are relevant to this space, such as wearables for situation awareness; mental imagery for mastery; big-data analytics to target interventions; and mixed reality, artificial intelligence, and machine learning application to selection, training, and system maintenance.

Developments and achievements in HHFE may have broad application and implication across DoD and beyond. Thus, we invite HFE government, industry, and academic communities of interest to work together to share ideas, findings, and advances in this area. In addition to presentations and poster sessions, submissions are sought for innovative technology demonstrations providing hands on experiences to TAG attendees. This is a golden opportunity to garner feedback on your design and discover opportunities for collaboration. TAG 2022 will provide a collaboration environment for discussion of holistic human centric approaches, challenges and potential solutions in order to forge the future of HHFE cross-service solutions.

In addition to our community of practice technical briefs, Dr. Melchor Antuñano, Aviation Safety Director, Civil Aerospace Medical Institute (CAMI), Federal Aviation Administration (FAA) will provide a keynote address. As a Plenary, LT Col Matthew Taranto, PhD, USAF, and Dr. Anthony Tvaryanas, FAA will present Model-Based Human Systems Integration and Dr. Larry Shattuck and Dr. Nita Shattuck, Naval Postgraduate School (NPS) will present Lessons Learned from Eight Decades of Teaching and Research in HSI, HFE, and Human Performance.

The detailed TAG 74 Program including abstracts cleared for public release will be posted to the TAG website and social media 07 May, 2022. Be sure to check for updates!

AGENDA

Monday, 16 May

- 1100 - 1630 Meeting Check-in
Sign-up for Tours & Social Events
Pick-up: badge & conference material
- 1200 - 1400 **Training**
Accessing HSI Body of Knowledge and Community of Practice Online Resources
- 1400 - 1430 Networking Break
- 1430 - 1630 **Workshop**
Review of the HSI Tools Catalog for the Joint HSI Working Group

Close Day 1

TAG Leadership meetings – Invitation Only

- 1645 - 1745 Operating Board (OPBOARD)

Tuesday, 17 May

- 0730 - 1630 Meeting Check-in
Pick-up badge & conference materials and sign-up for Tours & Social Events
- 0830 - 0840 Welcome
Dr. Ben Petro, Director, Human Systems Directorate, OUSD(R&E)
- 0840 - 0900 Opening Remarks
Ms. Marianne Paulsen, DOD HFE TAG Chair
- 0900 - 1000 **Plenary Topic 1**
Model-Based Human Systems Integration
Lt Col Matthew Taranto, PhD, USAF and Dr. Anthony Tvaryanas, FAA
- 1000 – 1100 **Plenary Topic 2**
Lessons Learned from Eight Decades of Teaching and Research in HSI, HFE, and Human Performance
Dr. Larry Shattuck and Dr. Nita Shattuck, NPS
- 1100 – 1200 **Keynote**
Research Trends at the Civil Aerospace Medical Institute: New Challenges & Opportunities
Melchor J. Antuñano, Aviation Safety Director, Civil Aerospace Medical Institute (CAMI), Federal Aviation Administration (FAA)
- 1200 – 1330 Lunch (no-host)
- 1330 – 1400 New Member Orientation
- 1330 – 1400 Poster Sneak Peek: Browse topics and mingle with TAG OPBOARD, see Appendix A
- 1400 - 1630 Technical Sessions
 - Trust in Autonomy SubTAG
 - Extended Reality SubTAG
 - Tech Society/Industry SubTAG

1630 Close Day Two

Wednesday, 18 May

0730 – 1430	Meeting Check-in (Final day for check-in) <i>Pick-up badge & conference materials and sign-up for Tours & Social Events</i>
0830 – 1130	Technical Sessions <ul style="list-style-type: none">• Training SubTAG• Healthcare Human Factors SubTAG• Human Performance Measurement SubTAG Session 1
1130 – 1300	Lunch
1300 – 1500	Technical Sessions <ul style="list-style-type: none">• Personnel SubTAG• Human Performance Measurement SubTAG Session 2• SAE G45 Business Meeting
1500	Close Day Three
1700 – 2000	Social (No-host): Location TBD

Thursday, 19 May

0830 - 1130	Tour of Civil Aerospace Medical Institute (CAMI), details to follow.
1130 - 1300	Lunch (No-host)
1300 - 1530	Technical Sessions <ul style="list-style-type: none">• Modeling & Simulation SubTAG• Test & Evaluation SubTAG
1300 - 1530	Poster Session Two: Q&A with the Authors, see Appendix
1530 - 1630	Service Caucuses

Friday, 20 May

0830 - 1000	Technical Sessions <ul style="list-style-type: none">• Cognitive Readiness SubTAG
0830 – 1200	Technical Sessions <ul style="list-style-type: none">• Standardization SubTAG• HFE/HSI Application and Management SubTAG

1200 End of Technical Program

TAG Leadership Meetings – Invitation Only

1215 – 1345	Operating Board Post TAG Meeting: Working Lunch
1400 – 1530	Warrior Toughness Training Pilot

1530 End of TAG 74