

# **Winter/Spring 2016 HF REDAC Subcommittee Meeting**

# Winter 2016 – Finding #1

- Human Performance “roundtable” forum is a great venue to bring together stakeholders and organizations; significant step in prioritizing human factors research needs within the ATO
- Concerns:
  - Timing of the roundtable meetings and how the output will impact out-year research submittals
  - Results of the roundtable process could lead to an emphasis on more reactive research proposals rather than a more strategic view of what needs to be accomplished to fulfill longer term needs and gaps

## ***Recommendations:***

- Expand use of roundtable forum to discuss & prioritize HF research requirements within the ATO
- Consider categorizing & prioritizing HF research needs along at least two time horizons: short-term and long-term needs
  - Will facilitate more strategic view of what needs to be accomplished in the longer term
- Execute on 6-month plan; identification of executive sponsor & advocate for Human Performance within the ATO, education of ATO personnel on Human Performance areas of significance, and documentation of the scope, roles, and responsibilities of the roundtable

## Winter 2016 – Finding #2

- The proposed FAA FY18 UAS HF Research Plan is not properly prioritized, aligned, and funded to meet pressing UAS users and customers' needs in the next five years

### ***Recommendations:***

- FAA conduct several workshops this summer with the Nation's top HF experts and other appropriate areas of expertise to develop UAS baseline guidelines for HF issues
  - Guidelines should be provided to FAA and published. Failure to do so will result in commercial systems being built without the benefit of existing documented HF research & expertise
- FAA prioritize, align, and appropriately fund the HF UAS research using results from the summit addressed in the finding
  - Alignment consists of integrating the HF research into FAA UAS Research Plans and funding priorities to meet priority needs identified in detailed UAS Implementation Plans currently under development

# Winter 2016 – Finding #3

- Current training methodologies and assessment of training effectiveness to measure pilot performance may not keep up with modern learning methods and technologies
  - Ex. Distance learning and bulletins are used to deliver training without determining the effectiveness of the training or adequately measuring if the pilots actually obtained required knowledge and skills to safely fly the new procedures in the NAS

## ***Recommendations:***

- FAA identify required pilot knowledge and skills for current and new flight deck systems operated in NextGen
  - Need research on available training methodologies and procedures to train current and future systems for NextGen that emphasizes performance-based measurements of training effectiveness
- FAA identify process for defining the required knowledge and skills, training devices, and the training methodology for training instructors and aviation personnel for current and new NextGen systems

## Winter 2016 – Finding #4

- Difficult for the HF Subcommittee to assess the HF priorities and total FAA HF research and application investment to include leveraged work done by external agencies supporting FAA

### ***Recommendations:***

- FAA provide summary of overall FAA prioritized research needs across lines of business at a high level and how the proposed investments (both internal and external) are aligned and leveraged to satisfy these needs and identify the gaps
- Director of Research should brief all of the REDAC Subcommittees at an upcoming set of Subcommittee meetings

# Winter 2016 – Finding #5

- Impacts of the reductions to the FY16 and FY17 budgets are not well understood. Reductions come across as delays to existing projects vs impacts to satisfying sponsor requirements

## ***Recommendations:***

- FAA HF community identify specific impacts of budget reductions through a briefing to the HF Subcommittee