

Engine/APU Halon Replacement Industry Consortium (IC)

October 30, 2014

*INTERNATIONAL AIRCRAFT SYSTEMS FIRE PROTECTION WORKING GROUP
MEETING*

Atlantic City, New Jersey, U.S.A.

By

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Industry is leading a broad stakeholder approach

The IC will . . .

- Define a common non-halon fire extinguishing solution for use in engine/APU fire zones that...
 - is compliant to basic industry and regulatory requirements
 - meets multiple OEM (airframe, engine, APU, nacelle, etc.) requirements
 - meets multiple governmental agency regulatory requirements;
 - provides a viable business solution for Consortium partners; and
 - is production-ready
- Engage...
 - Primary Stakeholders = Airframer OEMs
 - Members = Firex Agents/System Suppliers, Airlines, engine companies, nacelle suppliers, airworthiness authorities, etc.
 - A focal point, facilitator & fiscal/contracting “Managing Entity” (ME)
 - Boeing activities facilitating IC initiation will be turned over to the ME
- Execute to a plan...
 - Phase I – initial engagement, confirm interest, launch IC, engage ME, business agreements
 - Phase II – develop technical statement of work (requirements, performance validation, down selection criteria, etc.)
 - Phase III – execute activities required to produce the solution

The IC is progressing as planned

- Phase I
 - Stakeholder engagement growing since July 2013 Kick-off Telecon
 - Coordination Activities
 - First Face-to-Face IC Meeting in Philadelphia, December 3, 2013
 - *Seventh Triennial International Fire & Cabin Safety Research Conference*
 - Telecons as needed for entire IC or OEM Airframers during ME selection
 - ME Selection & Contract Completed 1 Oct. 2014
 - Ohio Aerospace Institute (OAI)
 - Joint Services Agreement signed
 - OAI and founding IC OEM Airframers (Airbus SAS, The Boeing Company, Bombardier Inc., Embraer S.A., Textron Inc.)
 - Formal agreement to proceed with and fund Phase I activities
 - Next Steps - Joint Collaboration Agreement Development
 - Will define IC administration and governance, IP protection, member rights & benefits, supplier integration & participation, etc.
 - Boeing hand off of IC management to OAI is effective immediately
 - Continue ongoing stakeholder outreach and engagement

The IC is progressing as planned

- Phase II - Technical Statement of Work Definition
 - Development of and agreement on...
 - Agent/System Design & Validation Requirements
 - Candidate agent/system evaluation plans down selection criteria
 - Etc.
 - Start of Phase II is dependent on Phase I completion (target complete Sept. 2015)
- Phase III - Primary Deliverable Development/Validation
 - All activities required to produce the Primary Deliverable
 - Identification of potential candidate agents/systems & solicitation of proposals
 - Evaluate against Phase II Agent/System Design & Validation Requirements
 - Down selection to go-forward agent/system candidate(s)
 - Testing & analyses
 - Final down selection to common agent/system candidate
 - Follow-on evaluation (as needed)
 - Testing & analysis (E.g. MPSHRe, Toxicology, SNAP approval, other)
 - Final agreement by members on Primary Deliverable •
 - Start of Phase III is dependent on Phase II completion (TBD)

IC Proposal Details & Contacts

IC Proposal Presentation Venues

- IASFPWG Meeting, Cologne, Germany, May 22-23, 2013
 - <https://www.fire.tc.faa.gov/pdf/systems/May13Meeting/BennettMacias-0513-ICInterestEngineAPU.pdf>
- Halon Alternatives Research Corporation (HARC) sponsored Aviation Stakeholder's Meeting Chicago, Illinois, U.S.A., 11 June, 2013
- IASFPWG Meeting, Bremen, Germany, May 14, 2014
 - <https://www.fire.tc.faa.gov/pdf/systems/May14Meeting/Bennett-0514-ICCAIAEngineAPU.pdf>

ICAO

- 2013 ICAO Assembly recognized IC commitment ([link](#))

Contacts

- Primary Contact for IC Activities
 - Ohio Aerospace Institute (OAI) <http://www.oai.org/>
 - Carol Cash, IC Project Manager CarolCash@oai.org
- Secondary Temporary Contacts – Assisting IC management transition to OAI as necessary
 - Technical: Alan Macias (alan.o.macias@boeing.com)
 - ME Engagement: Jean Kiendl (jean.m.kiendl@boeing.com)

Thank you!