Halon Replacement for Aircraft Portable Fire Extinguishers – Progress Report

PRESENTATION TO:

International Aircraft Systems Fire Protection
Working Group

May 18-19, 2016

Bradford Colton
American Pacific Corp.
bradford.colton@ampac.us



BTP – US EPA Status

- US EPA SNAP has published in the Federal Register a notice of proposed acceptability
 - Published April 18, 2016
 - Proposed acceptability for aviation onboard handhelds and engine nacelle / APU systems
 - Comment period ends June 2, 2016
 - It is anticipated that there will be at least a 90 day EPA review of comments
 - Q4 2016 final SNAP rule
- Reminder: EU REACH registration completed 2014



BTP - ASTM

- FAA AC 20-42D, Hand Fire Extinguishers for use in Aircraft
 - "New Halon 1211 replacement agents must have and meet an applicable ASTM or equivalent specification."
- ASTM D26 Committee on Halogenated Organic Solvents and Fire Extinguishing Agents
 - Developed purity and handling standards
 - Standards have passed sub-committee ballot
 - Main committee ballot anticipated to close by June 30, 2016
 - If approved, standards will be available online ~6 weeks later



Fire Extinguisher Development

FAA Handheld MPS

- Requires UL 5B, Hidden Fire, and Seat Fire/Toxicity Test
 - 5B pan fires and hidden fires conducted at UL
 - Seat Fire/Toxicity Test conducted at FAA Tech Center
 - Passed: Data in May 2011 presentation by R. Morrison

Underwriter's Laboratories

- AC 20-42D and SAE AS6271 require UL711 and UL2129 or equivalent
- Multiple OEMs have successfully passed the 5B & hidden fire tests
- Work continues on UL2129 requirements
- Final UL listings starting in 2016

