

Halon Replacement, Aircraft Engine Nacelle

Aircraft Powerplant Halon Replacement

Presented to: International Aircraft Systems Fire
Protection Working Group

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Federal Aviation
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Presentation Overview

- **New halon replacement test project**
- **FAATC test article behavior**
- **Summarizing statements**



New Halon-replacement Project

- **Project is underway**
- **Blended/”clean” fire extinguishing agent**
- **FAATC nacelle fire simulator restored/operable**
- **Build-up/preliminary testing, Jul/Aug 2014**
- **Generic halon-replacement testing on-going**

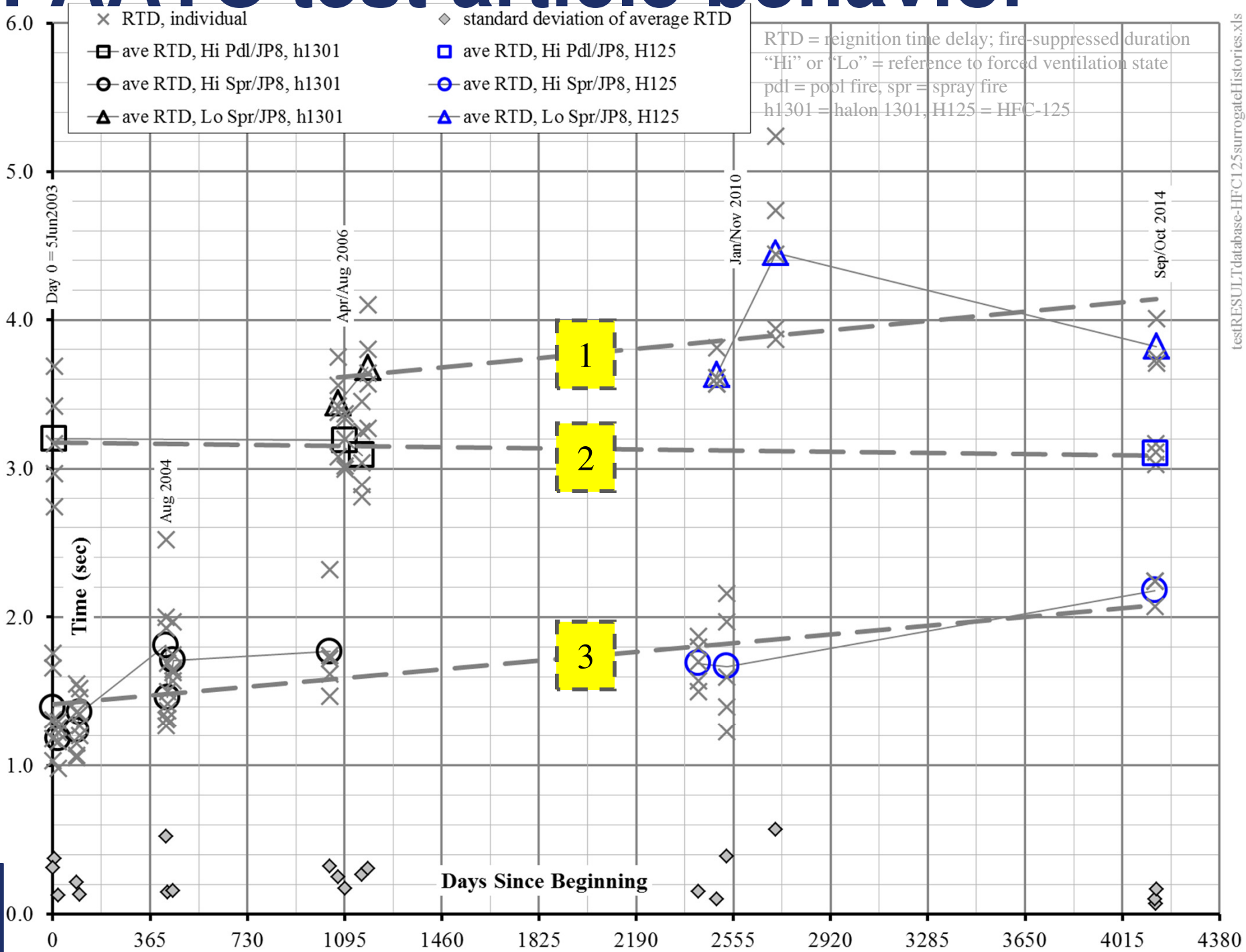


FAATC test article behavior

- **FAATC nacelle fire simulator restored/operable**
- **Performed benchmark test assay**
 - assure consistent operations & assess test environment
 - assay consisted of :
 - HFC-125 fire extinguishment tests, 3-test clusters
 - “low”/“high” ventilation JP-8 spray & “high” ventilation JP-8 pool fire
- **Outcomes**
 - pool fire behavior remains historically consistent
 - slight spray fire behavior alterations observed
 - fire extinction duration increasing
 - 1 threshold criterion will be altered

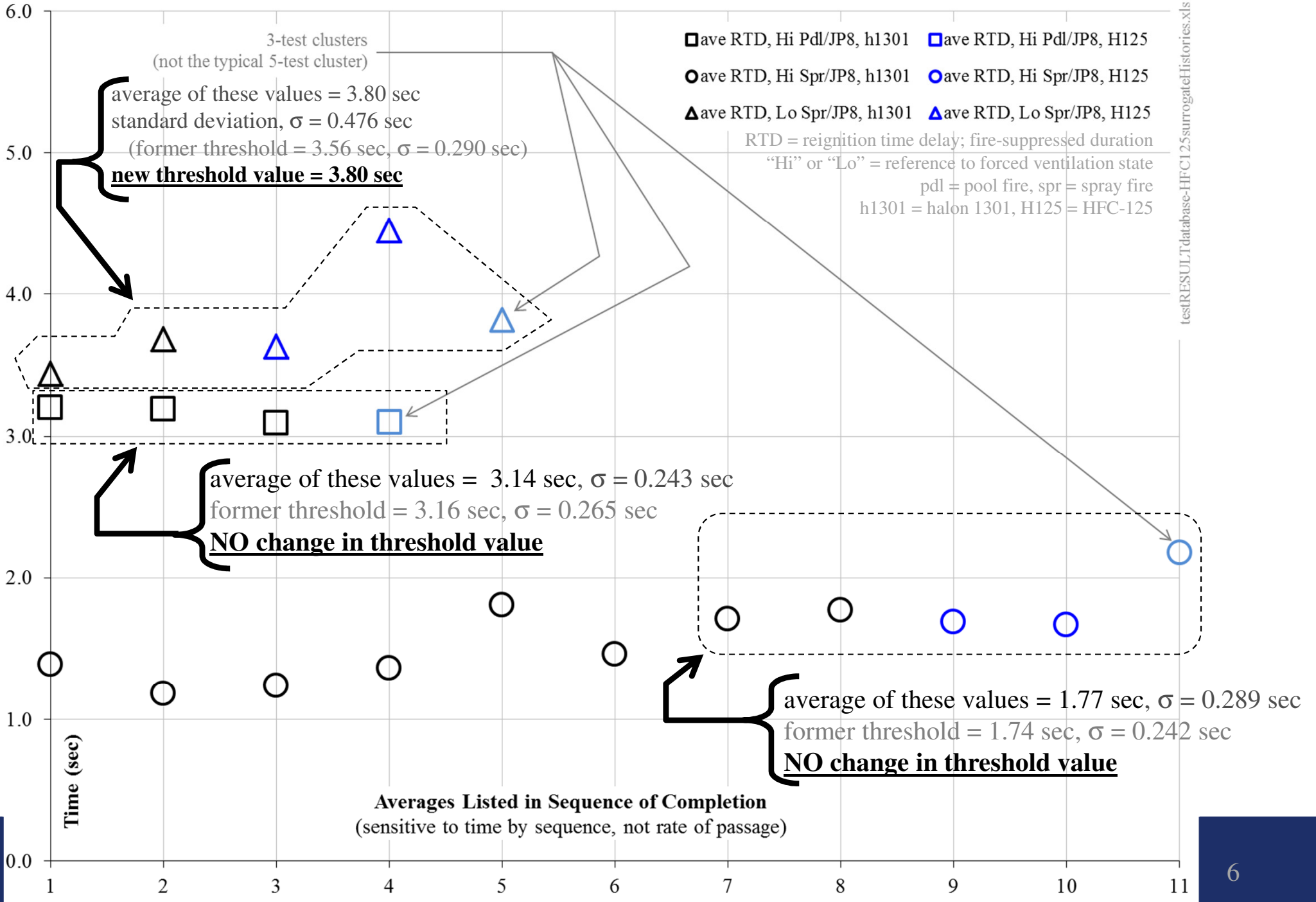


FAATC test article behavior



testRESULTdatabase-HFC125surrogateHistories.xls

FAATC test article behavior



Summarizing Statements

- **A new halon-replacement project is underway**
- **FAATC nacelle fire simulator restored/operable**
 - Performed benchmark test assay
 - Outcomes
 - pool fire behavior remains historically consistent
 - “low” ventilation/JP-8 spray fire threshold increased
- **Halon-replacement project is prime focus, all else is paused**

