

Halon Options Report

Chapter 3: Alternative Technologies



CH. 3 LEAD AUTHOR:

**BRADFORD COLTON
AMERICAN PACIFIC CORP.
BCOLTON@APFC.COM**

Alternative Technologies



- Covers all non-halocarbon agents
- Covers two categories

Classical	New
Foams	Water Misting
Water Sprinklers	Particulate Aerosols
Dry Chemicals	Inert Gases
Carbon Dioxide	Solid Propellant Gas Generators
Loaded Stream	Combination

Coverage



- **Chapter 3 provides overview of characteristics of non-halocarbon alternatives**
 - Discusses general advantages and disadvantages
- **Chapter 4 covers applicability of these agents for specific aviation applications**

Tentative Updates



- **Foams**
 - Move “new foam agents” from 3.10 into this section
 - ✦ New foam = wetting agents – Flameout, Coldfire, Fire-X-Plus

- **Water sprinklers – no change**

- **Dry chemicals**
 - Add language concerning negative impacts of ABC powder
 - Add language concerning lack of Class A capability of sodium and potassium bicarbonate
 - Reference Boeing dry chemical bulletin

Tentative Updates



- Carbon Dioxide – No change

- Loaded Stream – No change

- Water Mist
 - Review and update Table 15
 - ✦ Add Victraulic water mist/nitrogen system
 - Review cargo water mist tests and incorporate appropriate updates

Tentative Updates



- **Particulate Aerosols**
 - Are there any new generators to add?
 - ✦ Kidde aerosol tests for engine protection in 2006-2008 timeframe
 - No test report issued so data limited –worth mentioning?
 - There is a Kidde Duegra KD-A 96 generator already listed

- **Inert gases**
 - Add OBIGGS section

- **Solid Propellant Gas Generators**
 - Add clean nitrogen generators, ATK and N2 Towers
 - Discuss differences between tetrazole and sodium azide based

Tentative Updates



- **Combination agents**
 - Add ECOLOG – Novec 1230/gas generator