Memorandum

DATE: November 6, 2015

TO: Honorable Members of the Public Safety Committee:
   Adam Medrano (Chair), B. Adam McGough (Vice Chair), Sandy Greyson, Tiffinni A. Young,
   Jennifer S. Gates, Philip T. Kingston

SUBJECT: Aircraft Rescue Fire Fighting (ARFF)

On Monday, November 9, 2015, the Public Safety Committee members will be briefed on the Aircraft
Rescue Fire Fighting (ARFF). The materials are attached for your review.

Eric D. Campbell
Assistant City Manager

Attachment

C: Honorable Mayor and Members of the City Council
   A.C. Gonzalez, City Manager
   Warren M.S. Ernst, City Attorney
   Craig D. Kinton, City Auditor
   Rosa A. Rios, City Secretary
   Daniel F. Solis, Administrative Judge
   Ryan S. Evans, First Assistant City Manager

Jill A. Jordan, P.E., Assistant City Manager
   Mark McDaniel, Assistant City Manager
   Joey Zapata, Assistant City Manager
   Jeanne Chipperfield, Chief Financial Officer
   Sana Syed, Public Information Officer
   Elsa Cantu, Assistant to the City Manager – Mayor & Council
Aircraft Rescue Fire Fighting (ARFF)
Overview

1. Dallas Airport System (DAS) facilities
2. ARFF Incident Classifications
3. ARFF Staffing
   - Dallas Love Field Airport
   - Dallas Executive Airport
4. Personal Protective Equipment
5. Extinguishing Agents
6. ARFF Apparatus
7. Training Requirements
8. Current ARFF Program Projects
Dallas Love Field Airport

- Opened by the US Army in 1917
- 1,300 acres in size
- 380 passenger flights per day
- 210 “other” (general aviation, corporate/private, military, etc.) flights per day
- 43,320 people travel through Dallas Love Field every day
- ARFF Index “C”
Dallas Executive Airport

- Formerly known as “Redbird Airport”
- Built in 1945
- 1,040 acres in size
- Serves as a general aviation and a “reliever” airport
- Non-Indexed Airport because it does not have scheduled commercial flights (ARFF Index B capable)
Dallas CBD Vertiport (49T)

- Built in 1994
- Adjacent to the Convention Center
- Approximately four (4) acres in size
- Approximately 50 landings and take-offs per month
How is ARFF different from structural firefighting?

- Incident Types
- Strategies and Tactics
- Personal Protective Equipment (PPE)
- Extinguishing Agents
- Apparatus
During an emergency...

- FAA performance requirements are based on “aircraft skin burn-through” and providing a safe exit corridor.

- These influence ARFF response time requirements and ARFF station locations.
ARFF Incident Classifications

Alert 1
- Minor in-flight emergency

Alert 2
- Major aircraft in-flight emergency
  - Faulty landing gear
  - Engine fire
  - Bomb threat

Alert 3
- Aircraft crash or fire involving an aircraft on the ground
Number and Type of Alerts at Dallas Love Field Airport

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ARFF Staffing – Dallas Love Field

Station 21
- Dedicated to Dallas Love Field
- Seven (7) ARFF firefighters per shift

Station 42
- Structural, EMS, and ARFF
- Minimum of two (2) ARFF firefighters per shift
ARFF Staffing – Dallas Executive

Station 40
- Structural, EMS, and ARFF responsibilities
- Minimum of two (2) ARFF firefighters per shift

Station 49
- Structural, EMS, and ARFF responsibilities
- Minimum of four (4) ARFF firefighters per shift
Personal Protective Equipment
Extinguishing Agents

Dry Chemical – Purple K

Foam – Aqueous Film Forming Foam (AFFF)
ARFF Apparatus

Arm Extension

Red 1
Dallas Love Field ARFF Apparatus

Red 1

- 2011 Rosenbauer Panther
- 3000 gallons of water
- 420 gallons of foam (AFFF)
- 500 lbs. of dry chemical extinguishing agent (Purple K)
- High-Reach Extendable Turret (HRET) – “Stinger”
Dallas Love Field Apparatus

1999 and 2001 Oshkosh Ti-3000s

• We have three of these
• Two will be replaced in 2016
• 3,000 gallons of water
• 420 gallons of foam (AFFF)
• 500 lbs. of dry chemical extinguishing agent (Purple K)
• HRET – “Snozzle”
Dallas Executive Airport Apparatus

Red 49

• 1998 Oshkosh T-3000
• 3,000 gallons of water
• 420 gallons of foam (AFFF)
• 500 lbs. of dry chemical extinguishing agent (Purple K)
ARFF Training Requirements

- Federal Aviation Administration (FAA)
  - 13 Training Categories
  - Hands-On Training (HOT) - Aircraft
  - Live Fire Training
  - Airport-Specific Training

- Texas Commission on Fire Protection (TCFP)
  - Basic ARFF Certification
  - Continuing Education based on FAA requirements

- Dallas Fire-Rescue
  - Compliance with state and federal requirements
  - 40 hours of recurrent training every 12 months
Current ARFF Program Projects

- Update of our FAA Recurrent Training Program
- Acquisition of replacement ARFF Apparatus
- National Fire Protection Agency (NFPA) 1851 Risk Assessment
ARFF Questions?