# INTRODUCTORY ARFF TRAINING AGENDA March 15, 2023

### 1. Aircraft Familiarization

LSA/Piston/Turboprop/Turbojet/HELO Identification

Helicopters – weaker structures, can be fatal on sides, & never approach from rear or uphill. Auto-rotations (<500 Height/Velocity curve)

### 2. Aircraft Systems and Materials

Fuels (100LL & Jet A) – 100LL flash points & AIT -49/840 & 100/475

Hazardous Materials – Aircraft can and do carry Hazmat

 $\label{eq:military-Ejection} \mbox{Military-Ejection seats, we apons, after burners, \& specialized fuels. Call nearest}$ 

DOD facility for assistance!

Airbags & BRS

## 3. Types of Aircraft Emergencies/Accident Command Control & Recovery

Landing gear problems (air & ground)

Engine failures Engine fires (air and ground)

Unknown medical emergencies Landing accidents

Accident Scene – victims walk toward first responders. One way in and out.

Preservation of Evidence – crime scene, buddy system, photos (if moving anything)

FAA & NTSB Notification Witnesses – record contact information ASAP

Media – Never speculate, assign a POC until NTSB or FAA arrives. Media overhead.

### 4. ARFF Aircraft Forcible Entry

Stabilization – cribbing, air bags, struts, wedges, etc.

Doors & Emergency Exits - "Try before you pry"

Using the Crash Chart Database. If no time – "Within 3, it should be free"

Cirrus – Do not cut on the left (pilot) side!

Standardized Coding Chart

# Aircraft Familiarization & Crash Chart Databases are Essential! Know what you are cutting!

### 5. Specials

ARFF Extinguishing Agents

"To Foam or not to Foam?" "If you detect, protect it"!

Hot Brakes/Brake Fires "Rescue Side"/Pre-Fire Plans

BPS – safetying the system, cutting the cable, rocket removal

ARFF HAZMAT & Agricultural Operations

Actual Accident photos & Videos

### 6. Site Specific Aircraft Familiarization (HOT if possible. If not, video training)

"<u>Throttles, Bottles, Batteries, Fuel, & Keys</u>" (but, record/document first!) Cessna, Piper, Beech, Mooney, Cirrus, Air Tractor, and other available SEL Light Sport Aircraft (BPS Identification). Available MEL aircraft & helicopter

### INTRODUCTORY ARFF TRAINING AGENDA (cont.)

### 7. ARFF Mobile Trainer

Aircraft familiarization, theoretical landing gear fire "Throttles, Bottles, Batteries, Fuel, & Keys" Theoretical emergency evacuation, theoretical extrication

- 8. Additional Onboard ARFF Equipment:
  - Crash Chart Database
- 14" Rotary Saw & Sawzall(s) with blades
- Extinguishers: PKW "Purple K" & Class D "METL-X"
- Good pair of binoculars
- Seat belt & bicycle cable cutters
- 3/16" diameter allen wrench (to secure BPS)
- Chemical Response Guidebook
- NTSB "Responding to an Aircraft Accident" Pamphlet





- 9. Know your airport, aircraft, and flying environment!
  - How do first responders access the movement areas (entry roads, gates, etc) at your airport?
  - Are there any off airport helipads or Restricted Landing Areas (private airfields) in your service area?
  - Develop access plans for fields, golf courses, and other places along and 30 degrees to either side of the runway centerlines (all runways, all ends)
  - Staging for emergencies

