WORKING WITH FIREFIGHTING AIRCRAFT

AN INTRODUCTION
Three basic categories of firefighting aircraft:

- Air Tactical Aircraft
- ATGS (Air Tactical Group Supervisor) “Air Attack”

Required when multiple aircraft sharing airspace over the fire

Eyes in the sky, directing the air show, the voice in your radio.
Three basic categories of firefighting aircraft:

- Air Tactical Aircraft
- ATGS “Air Attack”
- Lead Plane

leads airlifters onto drop targets
many of the same a/c types as ATGS planes
Lead Plane in action - smoke trail at start of drop run
Three basic categories of firefighting aircraft:

- Air Tactical Aircraft
  - ATGS “Air Attack”
  - Lead Plane
  - ASM

Aerial Supervision Module
- acts as both ATGS & Lead plane
Three basic categories of firefighting aircraft:

- Air Tactical Aircraft
- Fixed Wing Air Tankers
VLAT = Very Large Air Tanker
8000+ gallons

DC10 12K gallons
Retardant line – 1 mile x 300’

747 VLAT
24,000 gal.
Type 1 = 3000 – 7999 gallons
C-130 above
RJ 85, right
P-3 Orion recently resurrected, and Colorado has 6 on CWN contract now.
Type 2 = 1800 – 2999 gallons

Type 3 = 800 – 1799 gallons

Grumman S-2
CL-415 “super scooper”

can scoop from 6’ depth, x 3000’

1000+ gallons
Type 3 – SEATs
Single Engine Air Tankers
Type 4 air tankers - Kansas Ag Pilots, below 800 gallons (mostly 400 or 600)
Partners in Suppression

- REFILL VIA 2” CAMLOCK COUPLINGS
- COMMO VIA AIRCRAFT VHF AM, OR AIR-TO-GROUND FREQS
- REQUEST DIRECTLY, VIA KFS COST-SHARE PROGRAM, OR IN A DECLARED STATE OF EMERGENCY, VIA KDEM
- PILOTS REQUEST NUMBERS ON TOP OF APPARATUS
Three basic categories of firefighting aircraft:
- Air Tactical Aircraft
- Fixed Wing Airtankers
- Rotor Wing (Helicopters)
3 types based on capacity
Type 1, 700+ gallons

Heavy Helicopters:
Sikorsky/Erickson S-64 ‘Skycrane’
~2500 gallons
Type 1, Heavy Helicopters: Kaman K-Max

CH-47 Chinook
Type 1 helitanker, S-61 Sea King
Type 2, Medium Helicopters:

- Bell 205 Huey clones
- Blackhawk
- 300-699 gallons
Typical Type 3, Light Helicopters:
Bell 206
less than 300 gallons
Astar B3
WORKING WITH AIRTANKERS and HELICOPTERS
If you’re going to use A/C, order them early! Very effective in IA!
Have a plan:

Determine your tactics using A/C - direct or indirect based on fire size up, BEFORE they arrive on-site! Do Not put them in a holding pattern while you discuss it on the ground.

* Cost/benefit, Risk/benefit
* Right kind of aircraft for the tactics needed and support available
* Response time
* Communications
* Refill procedures/location
Establish effective communication with ATGS, ASM, or pilot. Radio communication on established air-to-ground frequencies is mandatory, or aircraft will not drop.
Discuss your strategy, tactics, winds, and hazards with on scene A/C
Establish an anchor point from or towards which A/C can work.
Let ground forces know when there are A/C inbound, no surprises!!
Identify the ground contact
Ensure A/C approach, departure, and line is clear of personnel and equipment, notify A/C.

Provide feedback

Move in and take advantage
Aerial Retardant Drop Safety

#1, communicate and clear the drop area
If you can’t escape the drop area

*1.5 to 90 TONS falling from the sky*

- GET CLEAR OF SNAGS, DEAD TOPS, AND LIMBS IN DROP AREA
- HOLD YOUR HANDTOOL AWAY FROM YOUR BODY
- LIE FACE DOWN W/ HEAD TOWARD ONCOMING A/C WITH HELMET ON.
- GRAB SOMETHING FIRM TO PREVENT BEING CARRIED OR ROLLED BY THE DROPPED LIQUID.
- DO NOT RUN UNLESS ESCAPE IS ASSURED
- Working in an area covered by wet retardant should be done with caution due to slippery surfaces.

- Vehicles, personnel, and equipment hit by retardant should be deconned as soon as practical.
Other aircraft you might encounter

- Aerial recon/spotter planes
- IR, Mapping/GIS flights
- Sling loads, cargo missions
- Medevac
- Etc.
Ordering/planning considerations

- Any tanker request will automatically get a lead plane as part of the request.

- Any request for multiple or mixed aircraft, and some other requests, will get Air Attack automatically as part of the request.

- Any request for federal aircraft will automatically result in a Temporary Flight Restriction (TFR) for the fire area as part of the request.
Considerations, continued

- Any mixing of aircraft – National Guard, Ag pilots, Fed contract, or any others, requires coordination between. You MUST inform each of the others’ presence and be prepared to help coordinate. Aircraft can share airspace only with coordination.

- All of these aircraft are daylight-only operations.

- Aircraft are great tools, but must be used appropriately, and add significant complexity to your operations.
IF YOU FLY, WE CAN'T
KFS Fire Duty Officer
Hotline
785-532-3321
Always someone ready to assist in emergencies
QUESTIONS??
Eric Ward, 785-532-3307
eward@ksu.edu