January 3, 2007

Resource Reconnaissance and Fire Reconnaissance Matrix Reference

Equipment	Resource Recon Any column is acceptable			Fire Recon Any column is acceptable		
ELT (91.207 excluding f)						
Night VFR Lighting						
760 channel VHF-AM						
GPS (Panel-mounted or Handheld)						
Automated Flight Following (AFF) (see note 1)						
VHF-FM (see note 2)	■		■	■		■
Intercom	■		■			■
Audio Panel	■		■			■
#1 AUX-FM Provisions		■	■		■	■
#2 AUX-FM Provisions		■	■		■	■
VHF-FM Antenna		■		■	■	2 each
Space for Portable Reconnaissance VHF-FM Radio Kit	■	■		■	■	
Accessory Power Source Connector	■	■		■	■	

This matrix shows minimum required avionics items on standard contracts. Contract amendments could change any requirement. Contract use, intent, and aircraft limitations are the determining factors on what is and is not required. Any aircraft with higher capability may substitute for a lesser capable aircraft. For example, a Fire Reconnaissance aircraft can substitute for a Resource Reconnaissance aircraft.

Column note: The third column for both types of aircraft categories shows one method of meeting the intent of the VHF-FM radio requirement for communications with a dispatch center. The portable reconnaissance radio kit need not be as sophisticated as an Air Attack kit. A Resource Reconnaissance radio kit may utilize a portable radio while a Fire Reconnaissance radio kit may contain either two portable radios or an aeronautical VHF-FM radio.

Note 1: AFF is required on all Forest Service special mission aircraft. AFF is required within the Department of the Interior on a Bureau by Bureau basis.

Note 2: VHF-FM – All VHF-FM aeronautical radios must be multimode (P25) digital after January 1, 2010.

Air Tactical Matrix Reference

Equipment	Type I Either column is acceptable		Type II Either column is acceptable		Type III	Type IV
ELT (91.207 excluding f)						
Night VFR Lighting						
#1 760 channel VHF-AM						
#2 760/720 channel VHF-AM						
Transponder (91.411 & 413)						
GPS (Panel-mounted or Handheld)	Panel-Mounted Only		Panel-Mounted Only			
#1 VHF-FM (see note 1)						■
#2 VHF-FM (see note 1)				■	■	■
#3 VHF-FM (see note 1)		■	■	■	■	■
AUX-FM Provisions	■		■			
Automated Flight Following (AFF) (see note 2)						
Intercom						■
#1 Audio Panel						■
#2 Audio Panel for Copilot/ATGS					■	■
Audio Jacks for ATGS Instructor with radio PTT or #3 Audio Panel					■	■
#1 VHF-FM Antenna	■	■	■	■		
#2 VHF-FM Antenna	■	■	■	■		
Accessory Power Source Connector	■	■	■	■		
Space for Air Attack Kit	■	■	■	■		

This matrix shows minimum required avionics items on standard contracts. Contract amendments could change modify requirement. Contract use, intent, and aircraft limitations are the determining factors on what is and is not required. AFF requirements are determined by regional policy. Any aircraft with higher capability may substitute for a lesser capable aircraft. For example, a Type I Air Tactical aircraft can substitute for a Type III Air Tactical or Fire Reconnaissance aircraft.

Note 2: VHF-FM – All VHF-FM aeronautical radios must be multimode (P25) digital after January 1, 2010.

Note 1: AFF is required on all Forest Service special mission aircraft. AFF is required within the Department of the Interior on a Bureau by Bureau basis.

Airtanker/SEAT/Helo/Smokejumper Matrix Reference

Equipment	Airtanker	SEAT	Helicopter Type 1	Helicopter Type 2	Helicopter Type 3	Smokejumper
ELT (91.207 excluding f)						
Schematics & Wiring Diagrams		■				
#1 760 channel VHF-AM						
#2 760 channel VHF-AM		760/720	■	■	■	
#1 VHF-FM (see note 1)						
#2 VHF-FM (see note 1)	■	■	■	■	■	
AUX-FM Provisions			■	■	■	■
GPS (Panel Mounted Only)						
Transponder/Encoder/Static System						
#1 VOR/ILS System		■	■	■	■	
#2 VOR		■	■	■	■	w/ILS
Marker Beacon		■	■	■	■	
ADF	■	■	■	■	■	Or IFR GPS
DME		■	■	■	■	
TCAS/TCAD		■	■	■	■	
Automated Flight Following (AFF)					(see note 2)	(see note 2)
#1 Audio Panel						
#2 Audio Panel		■				
#3 Audio Panel	Or Check Pilot ICS	■	Rappel only (see note 3)	Rappel only (see note 3)	Rappel only (see note 3)	Spotter
Intercom (ICS)						
Cockpit Voice Recorder		■	■	■	■	
Detection System (e.g. RADAR)	■	■	■	■	■	
Flight Data Recorder	■	■	■	■	■	+20 PAX
Public Address System	■	■	■	■	■	
Accessory Power Source Connector (3 pin)	■	■	■	Standard Category only		■
9-Pin Cargo Hook Connector	■	■	■	Ex Use Only	■	■

This matrix shows minimum required avionics items on standard contracts. Contract use, intent, and aircraft limitations are the determining factors on what is and is not required. Contract amendments could modify any requirement. Helo Type III contract language is tailored to meet local needs.

Note 1: VHF-FM – All VHF-FM aeronautical radios must be multimode (P25) digital after January 1, 2010.
Note 2: AFF is required on all Forest Service special mission aircraft. AFF is required within the Department of the Interior on a Bureau by Bureau basis.
Note 3: Rappel/Shorthaul #3 audio panel may not be needed depending on cabin configuration.