

Appendix A (Exhibit 33/Attachment 26)

1. Clearly Describe the ATU System Installed

The ATU system is comprised of a solid-state module that includes circuitry to provide the USFS with fire attack data and associated AFF data. The ATU will report the following fire support events: tank door/bucket filled, tank door/bucket open, gallons dropped, tank door/bucket closed and the GPS data associated with these events.

The ATU will utilize the aircrafts existing AFF or new AFF equipment and associated network as shown in Figure A.1 to make the data available to the US Forest Service in near real time.

The ATU system is comprised of 3 AFF configurations and 3 ATU configurations:

Skyconnect AFF: This configuration utilizes the existing Honeywell Skyconnect AFF system. The ATU can interface to a Bambi Bucket or Water Tank Fire System. The configuration is selected by grounding a pin on the ATU (i.e. grounded = Tank configuration floating = Bucket). This configuration utilizes the 583/606-E2-100-3 and 606-E2-400-2 ATU.

Spider AFF: This configuration utilizes a new SpiderTracks AFF system. The AFF is located on the glare shield so the internal GPS and Iridium antenna has a clear view of the sky. The AFF can also be remotely mounted with an external antenna. The ATU can interface to a Bambi Bucket or Water Tank Fire System. The configuration is selected by grounding a pin on the ATU (i.e. grounded = Tank configuration floating = Bucket). This configuration utilizes the 606-E2-100-4 and 606-E2-400-1 ATU.

BlueSky AFF: This configuration utilizes the existing BlueSky AFF system. The ATU can interface to a Bambi Bucket or Water Tank Fire System. The configuration is selected by grounding a pin on the ATU (i.e. grounded = Tank configuration floating = Bucket). This configuration utilizes the 606-E2-100-5 ATU and 606-E2-400-2.

The Skyconnect, Spider and BlueSky systems are functionally equivalent, and no discernment within this report is provided. The ATU firmware is modified as required to accomplish the various ATU and AFF functions.

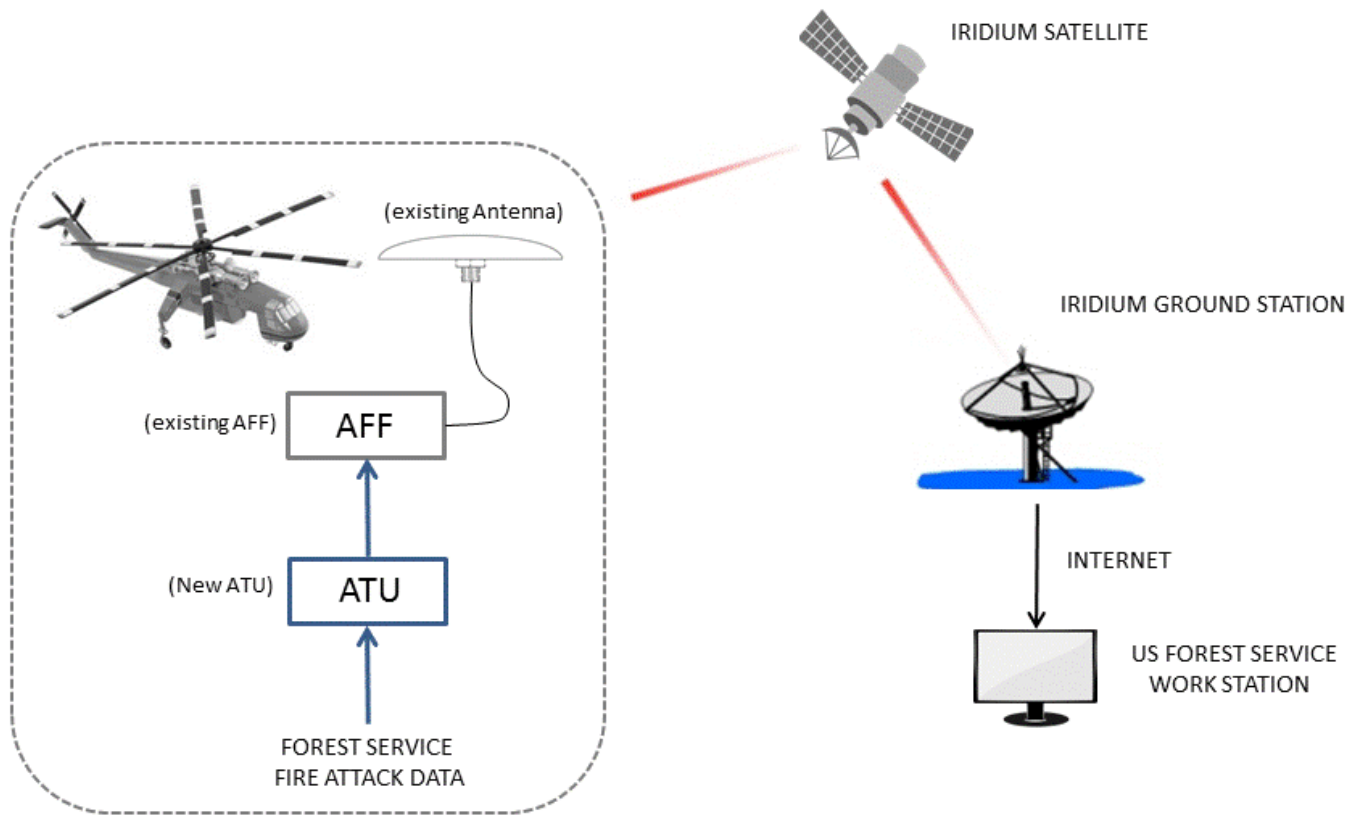


Figure A.1
ATU System

2. Hardware Configuration

Table A.1 Hardware Configuration

Manufacturer/Company	Model Number
AFF Hardware	
Option#1: Spidertracks	Spider8
Option#2: Skyconnect	1616-050 Series
Option#3: BlueSky	D1000 Series
AFF Service Provider	
Option#1: Spidertracks	NA
Option#2: TrooTracks	NA
Option#3: BlueSky	NA
ATU Hardware	583-E2-200-1 “Skyconnect – Simplex” 583-E2-200-2 “Skyconnect – AeroUnion” 583-E2-200-3 “Skyconnect – Erickson” 606-E2-200-3, 606-E2-400-2 “Skyconnect” 606-E2-200-4, 606-E2-400-1 “Spidertracks” 606-E2-200-5, 606-E2-400-2 “BlueSky”
ATU Service Provider	
Olympic Aero ETS	NA
Tank/Bucket Provider	
Isolair	varies
Bambi (Max) (Torentula)	varies
Simplex	varies
AeroUnion	varies
Erickson	Varies
Cloud Burst	Varies
Drop Controller	
Isolair	Varies
Cloud Burst	
Load Weigh/Water Quantity	
Onboard Systems	C-39,C-40: 0-5 VDC systems
MSI	.5-5 VDC systems
Isolair	4-20mA (Tank Float)
Isolair and Simplex	4 discrete float switches (Incremental Level)
Other	Other 0-5 VDC systems Other 01-10V systems
Erickson (JBox), Helitak (PLC)	RS232 serial (9600)
Olympic Aero ETS	641 External Load System
Load Pin (4-20mA)	UART CMOS Level (9600)

3. What parameter logic determines the following:

Note: (see Table 2.0.1 for specific details)

- a. Tank/Bucket Fill: When water quantity is:
>100 gallons **AND** water quantity is stable (not significantly changing for 5 seconds)
- b. Gate or Door Open:
Door/Gate Switch Open is determined by the ATU monitoring Door/Gate switch to be positioned to 28 VDC or Ground
- c. Gate or Door Closed:
Door/Gate Switch Closed is determined by:
ATU monitoring Door/Gate switch to be positioned to Open/Floating
AND
ATU determining water quantity has stopped decreasing
- d. Volume Dropped:
The ATU records the water quantity Immediately before the door/gate opens (W1). When the door/gate closes (see item c above) the ATU records this quantity (W2).
The water quantity dropped = $W1 - W2$

4 ATU Service Provider Website:

www.olympicaeroets.com