Federally Approved UAS Aircraft and Specifications July, 2018

Additional Information: Interagency Fire UAS Subcommittee Website

SOLO Agency Owned and Operated



3DRobotics

Туре	Crew Size	Transportation	Flight Ready
4	1-3	Backpack	5 minutes

SIZE - WEIGHT - POWER

Height: 10 in

Wingspan: 18 in

Mean Operating Weight: 3.9 lbs

Payload: 420 grams

PERFORMANCE

Endurance: 20 minutes Max Ceiling: 1,200 ft

Max Speed: 55 mph

Engine: Electric (Li-Po Battery)

Max Range: 0.5 miles

SENSOR OPTIONS

GoPro Image/IR Camera GPS Data Logger

RECCOMMENDED MISSIONS

Small Fire Mapping Perimeter Updates Situational Awareness EO/IR

DATA PRODUCTS

KML, GPX or Shapefiles Video and/or Still imagery Small Orthomosaics

FIREFLY 6 PRO

Agency Owned and Operated



Type	Crew Size	Transportation	Flight Ready	
3	1-3	Pickup Truck or UTV	25 minutes	

SIZE - WEIGHT - POWER

Length: 32.6 ft

Wingspan: 60 in

Mean Operating Weight: 8.4 - 9.9 lbs

Payload: Up to 1.5 lbs

PERFORMANCE

Endurance: 1 hour

Wing-borne Ceiling: 14,000 ft

Cruise Speed: 35 knots

Engine: Electric (Li-Po Battery)

SENSOR OPTIONS

GoPro Image/IR Camera Sony RX1R II MicaSense RedEdge-M

RECCOMMENDED MISSIONS

Small/Medium Fire Mapping Perimeter Updates Situational Awareness EO/IR Multispectral Mapping

DATA PRODUCTS

KML, GPX or Shapefiles Video and/or Still imagery Small Orthomosaics

BRAMOR C4Eye Call When Needed (CWN)



Туре	Crew Size	Transportation	Flight Ready
2	1-3	Pickup Truck	30 minutes

SIZE - WEIGHT - POWER

Length: 3.1 ft

Wingspan: 7.5 ft

Mean Operating Weight: 9.9 lbs

PERFORMANCE

Endurance: 3 hours

Wing-borne Ceiling: 16,404 ft

Max Horizontal Speed: 30 m/s Cruise Speed: 16 m/s

Engine: C-Astral Brushless (LiPo)

SENSOR OPTIONS

EO / IR / LI

RECCOMMENDED MISSIONS

Large Fire Mapping Perimeter Updates Heat Perimeters (Polygon) Isolated Heat Sources (Point)

DATA PRODUCTS

KML, GPX or Shapefiles Video and/or Still imagery Large Orthomosaics

STALKER XE

Call When Needed (CWN)



Туре	Crew Size	Transportation	Flight Ready
2	2-4	Pickup Truck	30 minutes

SIZE - WEIGHT - POWER

Length: 10 ft

Span: 12 ft

Operating Empty Weight: 22.5 lbs

Payload: Up to 5.5 lbs

PERFORMANCE

Endurance: 4-8 hours

Ceiling: 12,000 ft

Max Horizontal Speed: 45 knots

Cruise Speed: 31 knots

Engine: Hybrid power system (propane/battery)

SENSOR & DATA OPTIONS

EO Camera Pod - Color 26x Optical Zoom IR Camera Pod - 50mm lens 2x Digital Zoom Dual Imager Pod - Color 10x Optical Zoom

RECCOMMENDED MISSIONS

Large Fire Mapping Perimeter Updates Heat Perimeters (Polygon) Isolated Heat Sources (Point)

DATA PRODUCTS

KML, GPX or Shapefiles Video and/or Still imagery Large Orthomosaics

SILENT FALCON

Call When Needed (CWN)



Туре	Crew Size	Transportation	Flight Ready	
2	2-4	Pickup Truck	45 minutes	

SIZE - WEIGHT - POWER

Length: 6.2 ft

Wingspan: 14.4 ft

Mean Operating Weight: 32 lbs Payload: Up to 5.5 lbs

PERFORMANCE

Endurance: 5 hours

Wing-borne Ceiling: 20,000 ft Max Horizontal Speed: 48 knots

Cruise Speed: 25 knots

Engine: Electric (Li-Po Battery) / Solar (Integrated Thin Film

Photovoltaic)

SENSOR OPTIONS

Four (4) different ISR EO/IR sensors
Midwave Infrared (MWIR) camera
VNIR Hyperspectral Imager
SWIR Hyperspectral Imager
FireWatch and CropWatch Payload
Spectrometer
Multispectral Imager
Three (3) different mapping payloads...

RECCOMMENDED MISSIONS

Large Fire Mapping and Multispectral Data Collection
Perimeter Updates
Heat Perimeters (Polygon)
Isolated Heat Sources (Point)

DATA PRODUCTS

KML, GPX or Shapefiles Video and/or Still imagery Large Orthomosaics ArcFMV

SCANEAGLE

Call When Needed (CWN)



Boeing Insitu

Туре	Crew Size	Transportation	Flight Ready
1	2-4	Mult. Pickup Trucks	4 hours

SIZE - WEIGHT - POWER

Length: 5.3 ft / 1.6 m

Wingspan: 10.2 ft / 3.1 m

Operating Empty Weight: 35.3 lb / 16 kg

Payload Power: Up to 150 W

PERFORMANCE

Endurance: 24+ hours

Ceiling: 19,500 ft / 5,944 m

Max Horizontal Speed: 80 knots / 41.2 m/s Cruise Speed: 50-60 knots / 25-30 m/s

Engine: Heavy fuel (JP-5 or JP 8)

or C-10 gasoline engine

SENSOR OPTIONS

Turret: EO, EO900 (EO camera and EO telescope), MWIR, Dual Imager (EO and MWIR) Video Datalink: Analog, digital encrypted C2 Datalink: Encrypted, unencrypted

RECCOMMENDED MISSIONS

Large Fire Mapping Perimeter Updates Heat Perimeters (Polygon) Isolated Heat Sources (Point)

DATA PRODUCTS

KML, GPX or Shapefiles Video and/or Still imagery Large Orthomosaics ArcFMV