Federally Approved UAS Aircraft and Specifications

July, 2018

Additional Information: Interagency Fire UAS Subcommittee Website

SOLO

Agency Owned and Operated

3DRobotics

Type	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

Birdseye View Aero

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

SIZE - WEIGHT - POWER

Length: 32.6 in
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)

C-Astral Aerospace

Type	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)

Lockheed Martin

Type	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)

Bridger Aerospace

Type	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

Type	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