

AEROVIRONMENT HAS DELIVERED THE **VAST MAJORITY** OF ALL UNCREWED AIRCRAFT IN THE U.S. DEPARTMENT OF DEFENSE INVENTORY*

UNITS DELIVERED WORLDWIDE

ACCUMULATED UAS FLIGHT HOURS (EST)

ALLIED NATIONS USE OUR LMS, UAS, UGV & SUPPORT SERVICES

WHO WE ARE

At AeroVironment, we are relentless in our efforts to deploy technology in ways that push beyond the realm of what's possible. With each innovation, we strive to broaden our customers' horizons and elevate their capacity to make smarter, quicker decisions.

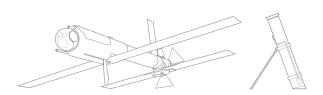
We develop technologies and solutions that enable customers to operate beyond the horizon, enabling them to see the world in powerful new ways, complete ever-more ambitious missions and overcome seemingly intractable challenges. By pushing the boundaries of future-defining technologies, we move beyond what is currently possible to create a powerful, interlocking family of products spanning missions, domains and worlds.

* Source: United States Department of Defense Unmanned Systems Roadmap 2013-2038, page 5





SWITCHBLADE 600 LOITERING MUNITION



LAUNCHER DIMENSIONS Length: 60 in (1.5 m) Diameter: 7.5 in (19.2 cm)

>>> RANGE 37.2 mi (60+ km) 56+ mi (90+km) w/ Forward Pass





SPEED Loiter: 70 mph (113 km/h) Sprint: 115 mph (185 km/h)



Anti-armor & anti-personnel effects

EFFECTS ON TARGET

Munition: 33 lb (15 kg)

AUR: 65 lb (29.5 kg)

Tablet-based FCU with FIRE CONTROL SYSTEM

tap-to-target guidance & built-in mission planner & trainer

TARGETING OPTICS

2-axis, 4-sensor gimbal (Dual EO/IR) integrated

Below 650 ft (198 m)

OPERATING ALTITUDE

AGL; ceiling >15,000 ft (4572 m) MSL

Self-contained LAUNCH launcher for ground, air METHOD & maritime

Precision strike with anti-armor warhead

KEY FEATURES

- >> Patented wave-off feature & recommit capability
- Enhanced frequency hopping Digital Data Link™ covering more frequencies & supporting AES-256-bit encryption
- Intuitive touch screen tablet Fire Control Unit (FCU)
- >> <10 minute system setup & launch

ALL-IN-ONE. MAN-PORTABLE. ANTI-ARMOR. SMART MUNITION SYSTEM









Mission Planning on FCU



Anti-Armor Warhead



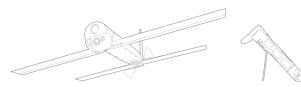
Integrated Training Simulator (T-sim)



Fire Control System

Self-Contained Tube-Launcher

SWITCHBLADE® 300 BLOCK 20



WEIGHT Munition: 3.69 lb (1.68 kg) AUR: 7.2 lb (3.27 kg)



RANGE

30 km with **Extended Range Antenna**



ENDURANCE 20+ min



SPEED Loiter: 63 mph (101 km/h) Sprint: 100 mph (161 km/h)

FIRE CONTROL **SYSTEM** TARGETING

Enhanced EO/IR with forward to left hand **OPTICS** panning camera suite Flight <500 ft (152.4 m)

OPERATING AGL; supports ALTITUDE operation >15,000 ft

(4572 m) ASL Self-contained launcher for ground,

Tablet-based FCU with

tap-to-target guidance

& built-in mission

planner & trainer

LAUNCH **METHOD**

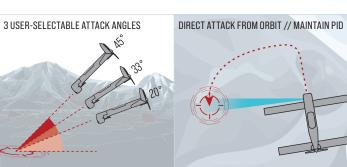
capability Anti-personnel effects;

configurable multipack

LETHALITY precision strike with low collateral effects

KEY FEATURES

- >> Patented wave-off feature & recommit capability
- Enhanced frequency hopping Digital Data Link™ covering more frequencies & supporting AES-256-bit encryption
- Intuitive touch screen tablet Fire Control Unit (FCU)
- Advanced Munition—multiple commit angles, user-selectable point of detonation, left hand commit with continuous Positive Identification (PID)



BLACKWING™ LOITERING RECONNAISSANCE SYSTEM



DIMENSIONS Wingspan: 27 in (68.6 cm) Length: 19.5 in (49.5 cm)

Diameter: 3 in (7.6 cm)

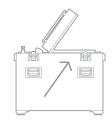
WEIGHT 4 lb (1.8 kg)

SENSORS Integrated EO/IR sensors—day/night operations LAUNCH Underwater-to-air delivery canister, tube, MPL METHOD

KEY FEATURES

- >> Rapid response ISR
- C3 tactical data relay from UAS to UUV
- >> Modular payload

MPL MULTIPACK LAUNCHER



DIMENSIONS 36 in D x 30 in W x 36 in H WEIGHT ~130 lb empty ~160 lb loaded

CONFIG- URATIONS	6-pack standard (Alternates for 2-20 AURs possible)
MOUNTING	Hold-downs for vehicle or shipboard use
POWER	Solar panel & internal battery, Shore/TacVeh power augments to maintain internal operating temps
CONTROL	100 ft remote operation control cable (FOB/COP ops cell bunker/buildings, tactical vehicles, ship CIC)

KEY FEATURES

- Compatible with Switchblade® 300 & Blackwing™
- Rapid Reload—<30 seconds per round
- Low observable remote ops
- Tactical vehicle/MRAP

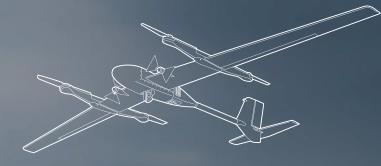




Over the last decade, members of AeroVironment's growing family of small uncrewed aircraft systems (SUAS) — P550™, Puma[™] LE, Puma[™] 3 AE, Raven[®] and VAPOR[®] Helicopter UAS - have been adopted by more than 55 allied nations.

The reason for their appeal is straightforward. Under battlefield conditions, they have proven themselves ideal for low-altitude intelligence, surveillance and reconnaissance missions. Lightweight, rugged and easy to operate, our SUAS deliver real-time color and/or infrared imagery to ground control and remote viewing stations. With their enhanced communications and interoperability, they are a critical for multi-domain operations.

INTRODUCING P550™ AUTONOMOUS eVTOL UAS



⊗LINK RANGE 40 km Standard; Up to 60 km with DDL range depending on GCS Radio



⊗ENDURANCE Up to 5 hr



PAYLOAD CAPACITY Up to 15 lb (6.8 kg)

15-27 m/s (30-52 kts) SPEED Max. Flight DA 14K ft

OPERATING (4267 m) **ALTITUDE** Max. Launch DA 10K ft

LAUNCH & RECOVERY

(3000 m) Vigilant Spirit GCS with DIMENSIONS

Wingspan: 17 ft (5 m) Length: 9 ft (2.8 m)

WEIGHT Up to 55 lb (24.9 kg) MGTOW

KEY FEATURES -

- >> Advanced mission system enabling secure ATR/ Autonomous missions
- >> mDDL-FH // Advanced Day-Night VIO Navigation for A2/ AD Ops
- >> Modular architecture supporting 3rd party payloads, radios, and control options

PUMA™ LE LONG ENDURANCE

DIMENSIONS Wingspan: 15 ft (4.6 m) Length: 7.3 ft (2.2 m)



>>> LINK RANGE 12.4 mi (20 km) 37.3 mi (60 km) with LRTA



>>> ENDURANCE 6.5 hr with Puma™ Smart 2500 Battery*



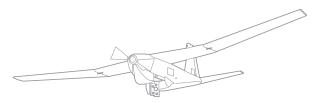
PAYLOAD CAPACITY 5.5 lb (2.5 kg)**

* Puma™ Smart 2500 Battery is not compatible with other Puma™ AE aircraft

**Payload capacity is reduced by 0.3 lb (140 g)

>>> TOTAL

PUMA" 3 AE ALL ENVIRONMENT // RO-20C



DIMENSIONS Wingspan: 9.2 ft (2.8 m) Length: 4.6 ft (1.4 m)

15.4 lb with Mantis™i45/i45 N (7 kg)

>>> LINK RANGE 12.4 mi (20 km) 37.3 mi (60 km) with LRTA



>>> ENDURANCE 3 hr with PS2500 Battery* 2.5 hr with Puma™ Smart Battery*



≫TOTAL PAYLOAD CAPACITY 4 lb (1.8 kg)

* with Mantis™ i45

Cruise: 30 mph (49 km/hr) 26 kts SPEED Dash: 47 mph (76 km/h) 41 kts 300-500 ft (91-152 m)

OPERATING AGL, typical ALTITUDE Max. launch 10K ft (3,048 m) MSL GCS Tomahawk GCS

LAUNCH **METHOD**

optional bungee launch or VTOL kit Autonomous or manual deep-stall: land or sea:

Hand-launched.

RECOVER **METHOD** VTOL option

KEY FEATURES

- Increased payload capacity with optional underwing transit bay for secondary payloads
- >>> Single-case mission packout provides two full flights

Batteries

INTEROPERABLE LRU SHARING ACROSS PUMA™ PRODUCT LINE

Puma™3 AE and Puma™LE share many of the same Line Replaceable Units (LRUs), retaining similar operation, transport and logistics support within the Puma™ family.



i45/i45 N

KEY FEATURES







Support two flights with 2-case mission packout





>> 6.5 hours of ISR capability & full-motion video in all environments

>> Dedicated secondary payload bay with power supply & Ethernet





23.5 lb (10.7 kg) with Mantis™ i45/i45 N

Cruise: 29 mph (47

Dash: 47 mph (76 km/h)

300-500 ft (91-152 m)

km/h) 25 kts

(3.048 m) MSL

Tomahawk GCS

Hand-launched.

launch

bungee or vehicle

Autonomous or manual

deep-stall; land or sea

41 kts

OPERATING AGL, typical

ALTITUDE Max. launch 10K ft

SPEED

GCS

LAUNCH

METHOD

RECOVERY









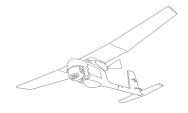






Laptop

RAVEN® B RO-11B



DIMENSIONS Wingspan: 4.5 ft (1.4 m) Length: 3 ft (0.9 m)

WEIGHT 4.8 lb (2.2 kg)





SPEED	Cruise: 32 km/h (17 kts), Dash: 81 km/h (44 kts)
OPERATING ALTITUDE	100-500 ft (30-152 m) AGL, typical Max. launch 14K ft (4,267 m) MSL
GCS	Tomahawk GCS
LAUNCH METHOD	Hand-launched
RECOVERY METHOD	Autonomous or manual deep-stall

PUMA™ KITS AND ACCESSORIES

COMPATIBLE WITH PUMA™ PRODUCT LINE

PUMA™ BUNGEE LAUNCH SYSTEM

- » For environmental scenarios where hand launch is not preferred
- » Setup & operational in <10 min
- » Multiple ground fastener options securely installed in a variety of soil types or mounted to low, immovable objects

COMPATIBLE WITH PUMA™ 3 AE ONLY*

PUMA" VTOL KIT

- » Automated one-button launch & recovery in confined environments
- » Fixed-wing to VTOL in minutes
- » Available as add-on or retrofit kit

PUMA™ UNIVERSAL TRANSIT BAY

- » Optional under-wing transit bay for additional payload capacity
- » Easy integration of third-party payloads
- » Three heights available: 1.75 in, 2.25 in & 3 in

PUMA™ VNS visual navigation system

- » Seamless mission continuity through GPS-denied environments
- » Low-SWAP retrofit kit on existing & new Puma™ AE
- » Enables integration of future autonomy capabilities

MANTIS™ IMAGING PAYLOAD SENSORS

COMPATIBLE WITH PUMA™ PRODUCT LINE



MANTIS™ i45 N

- » Maximum visibility during night & low-light ISR
- » Wide & narrow LWIR camera imagers
- » 5 MP monochrome Low Light camera
- » Enhanced laser illuminator



MANTIS™ i45

- » Superior daylight & low-light capabilities
- » Dual 15 MP high-res EO cameras
- » Low Light, LWIR cameras
- » Laser illuminator

COMPATIBLE WITH RAVENS



MANTIS™ i23 D

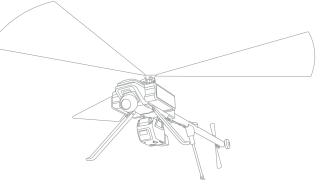
- » High-performance daytime imaging
- » Dual 18 MP high-res EO sensors
- » 25x digital zoom



MANTIS™ i23

- » Daylight & thermal imaging system
- » 5 MP E0 camera imager
- » Laser illuminator

VAPOR° 55 MX ALL-ELECTRIC HELICOPTER UAS



DIMENSIONS

Aircraft: 6 ft x 2.2 ft x 2.1 ft (1.8 m x 0.67 m x 0.64 m) Rotor Diameter: 7.5 ft (2.29 m)



RANGE Up to 19.8 mi (32 km)

>>> ENDURANCE



Cruise: 75 min, Hover: 60 min (2-batteries)* Cruise: 105 min, Hover: 80 min (3-batteries)*



USABLE PAYLOAD* Up to 10 lb (4.5 kg) @ 55 lb Up to 24 lb (10.9 kg) @ 68 lb

*FAA restricts the max Gross Take-off Weight (GTOW) of drones operating in the NAS to 55 lb unless you have special authorization

GTOW WEIGHT'

55 lb (24.9 kg) for commercial use 68 lb (30.8 kg) for defense missions with less endurance

GROUND

SPEED 33 mph (15 m/s) LIMIT

OPERATING 0-12,000 ft (3,657 m)

ALTITUDE* MSL (density) MAX WIND Sustained: 34.5 mph

(30 kts) PEAK* 900 MHz. 2.4 GHz or 5.89 GHz (video). **DATA LINKS** Persistent Systems

MPU5 (Standard),

options Silvus, DTC

KEY FEATURES

- >> Payload Flexibility—payload modules with rail design enables quick & easy payload integration for increased mission flexibility
- Sleek, modular airframe design for easy assembly & disassembly
- >> Telescoping tail & folding landing gear for greater portability

EXAMPLES OF POSSIBLE PAYLOADS













**With HD-25 - up to a 15-18 lbs droppable payload

Hyperspectral

^{*}Puma VTOL kit and Puma VNS cannot be installed and operated at the same time.



JUMP® 20 vtol fixed-wing

DIMENSIONS Wingspan: 18.8 ft (5.7 m) Length: 9.5 ft (2.9 m)



> LINK RANGE 115 mi (185 km)



>>> ENDURANCE



SUSABLE PAYLOAD CAPACITY Up to 30 lb (13.6 kg)



KEY FEATURES

>>> POWER SUPPLY MOGAS, 190 cc EFI Engine **Battery Powered VTOL Jump**

>> Multi-INT/Multi-Domain in a single integrated aircraft

>>> Best-in-class range & endurance, delivering superior performance

capabilities, laser designation, anti-jamming, COMINT/SIGINT

>>> Compatible with ACE™ (Autonomous Control Engine) enabling fully-

autonomous launch & landing from a moving vehicle or vessel

WEIGHT 215 lb MGTOW* (97.5 kg) Fuel & Payload

METHOD

RECOVERY

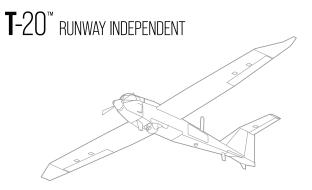
OPERATING 17,000 ft DA ALTITUDE Common GCS with GCS No launch system LAUNCH or runway required;



VTOL landing METHOD *MGTOW - Maximum Gross Take-off Weight

landing (VTOL)

vertical take-off &



DIMENSIONS Wingspan: 18.8 ft (5.7 m) Length: 9.5 ft (2.9 m)

225 lb MGTOW* (102 kg) Fuel & Payload

WEIGHT

METHOD



*MGTOW - Maximum Gross Take-off Weight

manual skid landing



POWER SUPPLY MOGAS, 190 cc EFI Engine

Up to 50 lb (22.7 kg)

KEY FEATURES

- >>> High-Performance Optics—long-range day/night imaging, onboard
- Group 4 capabilities in a Group 3 footprint

- >>> Runway Independent—small operational footprint with PLS (catapult)
- tracking & stabilization
- >>> Class-leading endurance & payload flexibility in a Group 3 UAS

>>> Fully Integrated Payload Options—synthetic aperture radar, mapping

SENSOR OPTIONS



















SWAPPABLE IMAGING SYSTEMS

» Superior long-range day and night imaging systems that offer onboard tracking, MWIR, image stabilization, analog and digital output with H.264/5 compression.

















» Provides ISR support, MUM-T interoperability, OSRVT downlink to ground or air forces, and the ability to communicate across multiple channels and bands.



TRILLIUM HD80/95













SPOTTER



COMMUNICATIONS RELAY

» Provides unobstructed ground-to-ground and pilot-to-ground voice/video communication in urban environments or challenging terrain.



ISR SERVICES

AeroVironment's ISR services ensures uninterrupted operations and mission success through effective mission planning, on-site operational support, maintenance, repairs, and timely supply chain management. Our highly trained staff of Field Service Representatives (FSR) are ready to quickly mobilize to support customer mission requirements in any theater of operation.

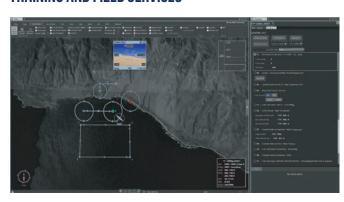
- >>> Fully Equipped & Staffed **Turnkey Solutions** for COCO & GOCO operations
- >> OEM-SME remote pilot certified operators, instructors & maintainers
- Design & Development of mission-tailored TTPs & SOPs
- >> Development of on-site sustainment operations & delivery

- >> Total Logistical & **Operational Support** mission planning, coordination & monitoring
- Maintenance & Repair Services on-site to ensure mission sustainment & success





TRAINING AND FIELD SERVICES



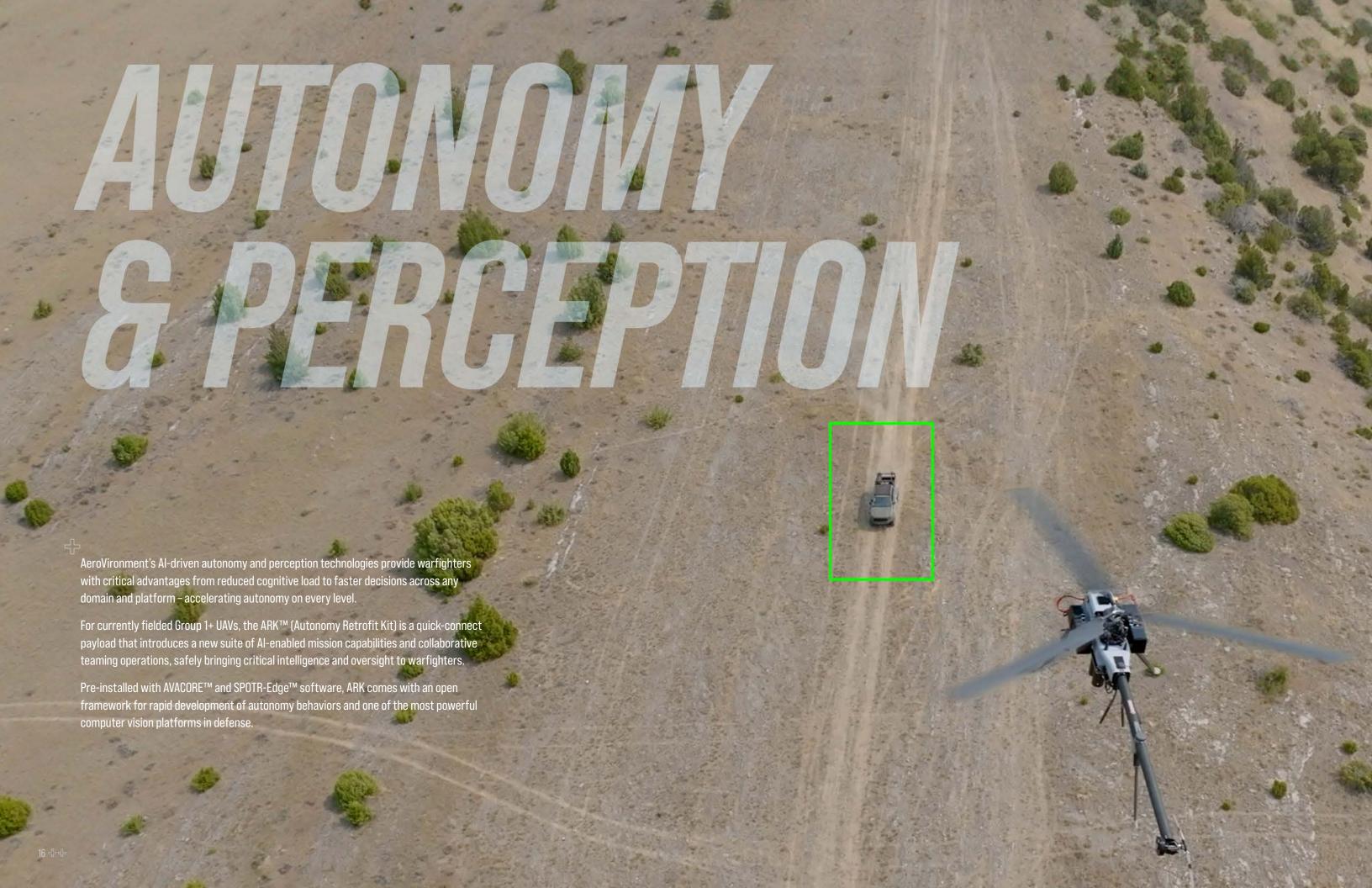
STUDENT TRAINING

- >> Training includes classroom and live flights
- >> Tailored FSR training for air vehicle operators and mechanics to include a "dual qualification" in 8 weeks
- >> Training offered at AV facilities or Customer Location
- >>> Built in robust simulator offers realistic training conditions and scenarios

FIELD SERVICE

- >>> Factory support program
- Ongoing global logistics support
- >> Component replacement tracking
- >> On-site FSRs
- Crew member currency training support





ARK™ AUTONOMY RETROFIT KIT

ARK is a quick-connect payload that brings AV's accelerated autonomy to fielded Group 1+ UAV assets and future uncrewed platforms, providing critical advantages to warfighters. Directly compatible with Puma[™] 3 AE and Puma[™] LE, ARK is designed as an open and modular system that also enables easy integration of Al-driven autonomy and computer vision on a wide range of uncrewed platforms.

The ARK system accelerates autonomy across uncrewed platforms, allowing defense forces to accomplish various tasks without constant operator oversight. ARK enhances mission efficiency while enabling faster responses to dynamic situations.

ENABLING TEAM COLLABORATION

Operators can task single UAVs or teams with autonomous missions, distributing intelligence and oversight to dismounted units using a mesh network and ATAK. ARK also enables networked remote tasking for powerful control of aircraft and sensors between primary operators and command personnel - wherever they are located.







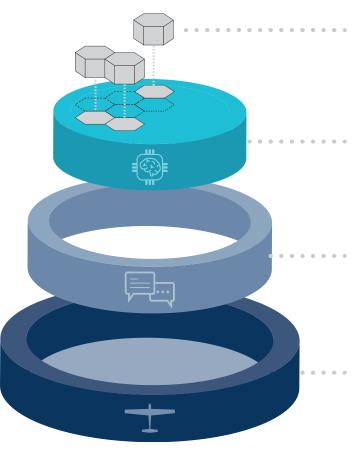
SINGLE- OR MULTI-AGENT CAPABILITIES

MULTI-REGION Search	Terrain-aware sensor coverage of multiple search regions using onboard Al target detection
AREA SURVEY	Create 3D area map with EO or IR imagery
OVERWATCH	Persistent observation of desired area for target detection
TRACK & FOLLOW	Track and follow targets, including evasive targets
ISTAR WITH Strategic comms	Automatically configure UAV radio to comply with geo- tagged EMCON rules while conducting autonomous ISTAR missions
TRIPWIRE	Event or condition-based responses to real-time perception
CROSS-CUE	Accept and/or send target information from/to other assets
COMPOSITE MISSIONS	Combine above capabilities for composite multi-stage missions



AVACORE™ AUTONOMY SOFTWARE

AVACORE is AV's autonomy software that implements autonomous missions for uncrewed systems. It provides a framework for rapidly adopting new behaviors and algorithms for these missions.



PLUG-INS

- · Plug-in interfaces allow alternative waypoint planning, target detection, team behaviors, and other algorithms
- Discovered at run-time to dynamically enhance behaviors

AVACORE

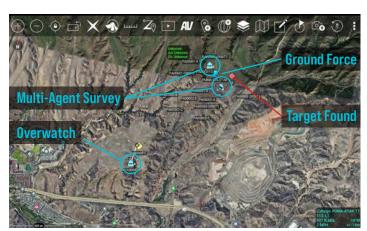
- Executes complex, adaptable missions for single agent or team autonomy
- · Missions are defined by behavior trees that can be loaded at run-time, delivering maximum flexibility for users
- Common message definitions provide the canonical data model for adapting specialized platform hardware to mission

Software interface adapters for each of the platform devices

PLATFORM

Uncrewed Vehicle platform to be enhanced by AVACORE

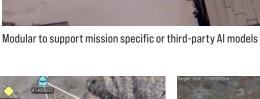
- Autopilots
- Radios
- Sensors
- Drop Mechanisms User Interfaces
- Emitters/Designators
- · Kinetic Payloads



Through AVACORE, ATAK with SPOTR-Edge™ provides multi-agent collaborative autonomy











SPOTR-Edge[™] COMPUTER VISION SOFTWARE

SPOTR-Edge is a suite of computer vision and video analytics capabilities for embedded applications including robotic systems, edge devices, and other low size, weight and power (SWaP) environments. Core functions include object detection, classification, localization / geolocation, tracking, and reidentification – day or night. SPOTR-Edge consumes video and metadata sources in standard formats and outputs real-time data products to the onboard autonomy software and/or other downstream consumers.

Messaging APIs adhere to an interface control document (ICD) and streaming outputs include MISB-compliant KLV (key-length-value) metadata for platform and target track data. The baseline software includes a library of operationally relevant object classes including persons and different types of vehicles and maritime vessels; additional models can be provided to meet mission-specific requirements and use cases. Target models are swappable in the field and online for maximum flexibility, and to allow for upgrades and extensibility.









ACE[™] AUTONOMOUS CONTROL ENGINE

ACE (Autonomous Control Engine) is a vision-based navigation solution that enables fully-autonomous UAS operation, including push-button takeoff and landing from confined spaces, moving vehicles, and moving vessels. ACE enables centimeter-level precision landing in dynamic conditions without GPS.

KEY FEATURES

- >>> Suitable for UAS that needs to operate from moving vehicles and vessels on land or at sea
- >>> GPS-optional operation
- Standard open interfaces for compatibility with third-party and legacy systems
- >> Enables mobile tethered UAS for long duration missions

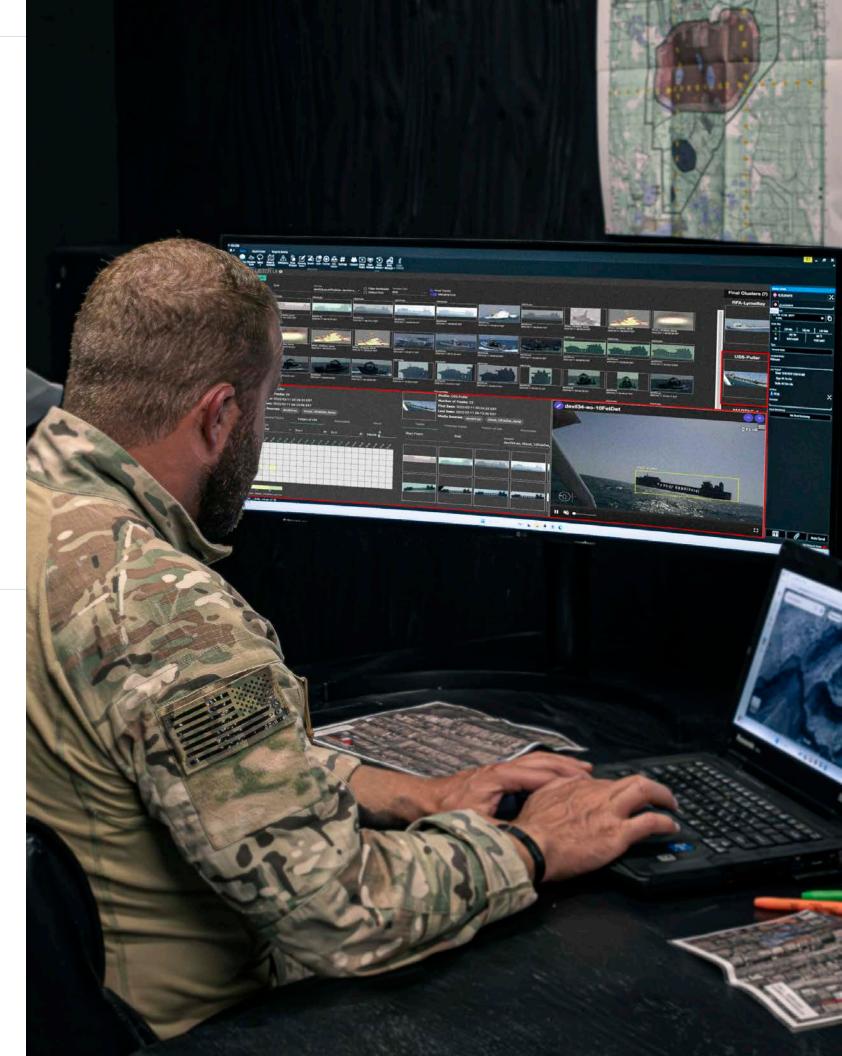




This optical guidance system enables fully autonomous UAS launch and recovery onto a small passive optical marker, without GPS.



ACE system tracks a passive visual fiducial called a "tag" during takeoff and landing to achieve centimeter-level accuracy and real-time operation.





TOMAHAWK™ GROUND CONTROL STATIONS



The Tomahawk GCS is an Al-enhanced, open-architecture common control system providing multi-domain, multi-robotic command-and-control capabilities. Tomahawk's Kinesis software and Kinesis SDKs enable rapid development, integration, and deployment of 3rd-party technology to the warfighter at the edge, and unlock an extensive ecosystem of protocols, comms, robotic platforms, and Al to the warfighter.

TOMAHAWK HARDWARE

(A) GRIP S20

Grip S20 is a rugged controller designed around the Samsung Galaxy S20 Tactical Edition smartphone. Grip S20 is military-hardened and provides an intuitive UI to simplify UxV control. Available with an optional hinged MOLLE chest mount.

B KxM

KxM is a 4-port hub and edge processor providing users with a ruggedized platform to ingest large amounts of data for high-speed, body-worn computation at the tactical edge, reducing cognitive load, and fusing raw intelligence data for real-time decision-making. KxM can host a federated TAK/ATAK server while performing Al-based video classification.



MxC-Mini is a Nett Warrior-compliant data link that seamlessly integrates with the leading tactical UxVs. Available with multiple operating frequencies and radio modules including Wi-Fi - choose your uncrewed system, strap the corresponding MxC-Mini to your kit, and deploy the UxV with the knowledge that the link is secure and reliable across the tactical network.



(D) RAID

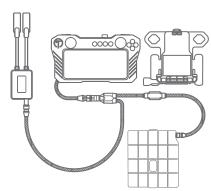
RAID is an all-in-one tactical GCS solution designed to provide powerful networking and edge processing using hot-swappable radios and batteries to support multi-domain, multi-robotic control via the included Grip controller bringing C2 and Al-enhanced capabilities to the warfighter.

RAID couples all the functionality of the KxM and Kinesis ecosystem into a lightweight, snag-free backpack.

KINESIS SOFTWARE

At the heart of the Tomahawk GCS is Kinesis, a powerful tactical software solution enabling multi-robotic command-and-control, tactically-optimized mission planning, TAK/ATAK integration to provide video rebroadcasting, COT messaging, and bi-directional syncing of POIs. Kinesis optimizes the vehicle pairing process, enables UxV formations and control, and a map engine that supports multiple sources via layers, DTED, and coordinates in both Lat Long and MGRS.

TOMAHAWK ULTRALIGHT GCS





>>> PORTABILITY
Wearable

LINK RANGE



≫ SETUP TIME

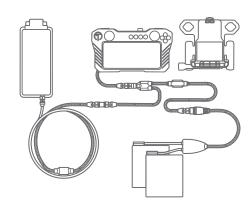


>>> WEIGHT System: 4.7 lb (2.1 kg)

USE CASE

Single operator (wearable); ideal for on-the-move and mobile ISR operations; virtual touch screen or tactile joystick of UAS and payloads

TOMAHAWK TACTICAL GCS





>>> PORTABILITY
Backpackable



≫ SETUP TIME 10 min



>>> LINK RANGE 20 km

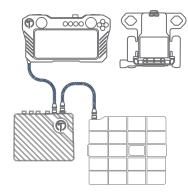


>>> WEIGHT System: 8.6 lb (3.9 kg)

USE CASE -

Single operator deployment and launch; full control of UAS and payloads through virtual or tactile joysticks; wearable, lightweight, rugged for use in any environment with an operational range up to 20 km

TOMAHAWK COMMON CONTROL GCS





>>> PORTABILITY



SETUP TIME



LINK RANGE
Determined by Datalink

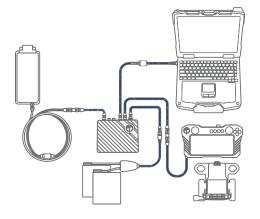


>>> WEIGHT System: 5.4 lb (2.4 kg)

USE CASE

Single operator (wearable); provides situational awareness, battlefield coordination and support to large and/or small teams; multi-domain and multi-robotic control

TOMAHAWK COMMAND GCS





>>> PORTABILITY

Man-packable



SETUP TIME
15 min



>>> LINK RANGE 20 km



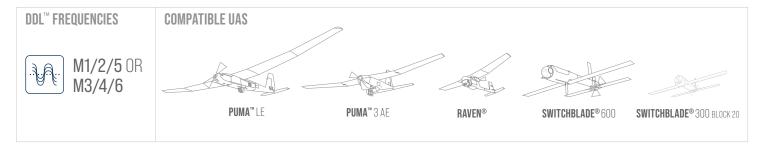
System: 14.3 lb (6.49 kg)

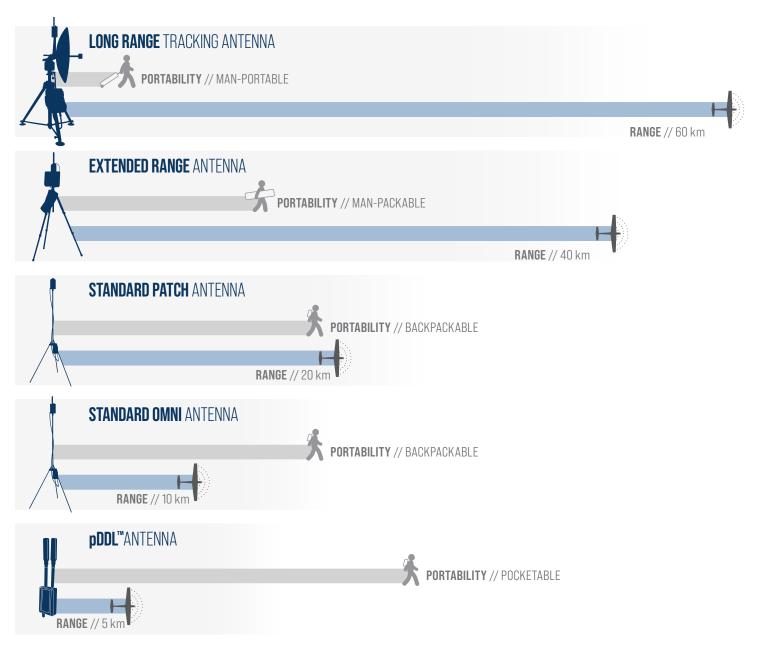
USE CASE

Single or dual operator deployment; all-in-one modular and flexible ground control system and payloads through tactile joysticks; ideal for Al-enhanced command-level operations; semi-fixed positions

DDL™ NETWORK ANTENNAS

AeroVironment's Digital Data Link™ (DDL™) is a small, lightweight, broadband digital network module enabling enhanced command and control of SUAS and LMS. DDL is IP-based, allowing maximum flexibility and interoperability between small airborne and ground systems with limited power and bandwidth to maximize the number of systems that can operate in a given area. DDL is compatible with AeroVironment's network connectivity solutions and antennas, providing command and control ranges that extend from the wearable, short-range pDDL™ (5 km) to the Long Range Tracking Antenna (60 km).







p**ddl**™ antenna

STANDARD RANGE



DIMENSIONS

pDDL

Up to 5 km

DIMENSIONS

WEIGHT

7.1 oz (201 g)

4 in x 2.25 in x 0.75 in

LINK RANGE

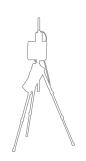
(10.2 cm x 5.7 cm x 1.9 cm)



Height: 6.5 ft (2 m) Base Diameter: 3 ft (0.9 m)

WEIGHT 3 lb (1.3 kg)





Height: 4.25-7 ft (1.3-2.2 m) Base Diameter: 3.75-8.2 ft (1.1-2.5 m)

WEIGHT 10.8 lb (4.9 kg)

Note: excludes the GCS RF Head, hub and system battery

LRTA

LONG RANGE TRACKING ANTENNA



DIMENSIONS Height: M1/2/5: 5.8-9.4 ft (1.8-2.9 m) M3/4/6: 5.25-8.8 ft (1.6-2.7 m) Base Diameter: 5.3 ft (1.6 m)

> WEIGHT M1/2/5: 304 lb (138 kg) M3/4/6: 300 lb (136 kg)

ERA LRTA STANDARD RANGE Up to 20 km Up to 40 km Up to 60 km M1/2/5 or M3/4/6 M1/2/5 or M3/4/6 M1/2/5 or M3/4/6 -98 dBm @ 2 Mbps -98 dBm @ 2 Mbps -98 dBm @ 2 Mbps -93 dBm @ 6 Mbps -93 dBm @ 6 Mbps -93 dBm @ 6 Mbps

UNGREWED GROUND VEHICLES

[⊕]UGV

Our family of uncrewed ground vehicles (UGV) share the same purpose as our uncrewed aircraft and loitering munition systems: to keep operators out of harm's way.

Our UGVs have proven themselves in a variety of dangerous ground applications, including the localization and mitigation of threats due to explosive ordnance disposal (EOD), hazardous materials handling (HAZMAT), chemical, biological, radiological and nuclear (CBRN) threat assessments, and special weapons and tactics (SWAT) team operations.

With their advanced, specialized, precision manipulators, autonomous functionality and intuitive operation, our rugged, all-terrain UGVs accommodate a high degree of mission flexibility. That's why they have been adopted in 45 countries for homeland security, emergency response and defense purposes.



tEODor™ EVO



DIMENSIONS 54 in x 27 in x 44 in (1370 mm x 685 mm x 1130 mm)

LIFTING CAPACITY

220 lb (100 kg)



GRIPPER WIDTH 12 in (300 mm)



MANIPULATOR 6-axis manipulator with



CLIMB STAIRS

WEIGHT

844 lb (383 kg)

TOTAL PAYLOAD 771 lb (350 kg) CAPACITY



1.8 mph (3 km/h) Dual track-inde-

DRIVE

MECHANISM pendent high-torque motors

Forward Reach: 73 in

Downward Reach: 50 in

Upward Reach with Vertical Gripper: 113 in (2860 mm) Upward Reach with FUNCTION- Horizontal Gripper: 95 in (2410 mm)

(1860 mm)

Robo Command

ALITY

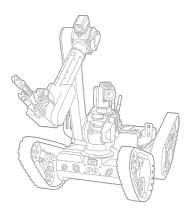
GCS

(1260 mm)

KEY FEATURES

- >> Laser rangefinder, video input & data interface integrated into gripper
- >> Universal interfaces—multiple firing system connection options
- >> Expansive payload bay eliminates round-trip load-outs

telemax™ EVO PLUS



DIMENSIONS 34 in x 27 in x 29 in (870 mm x 680 mm x 740 mm)

WEIGHT 249 lb (113 kg)

LIFTING CAPACITY 176 lb (80 kg)



GRIPPER WIDTH 8 in (200 mm)



MISSION DURATION



CLIMB STAIRS

TOTAL PAYLOAD

CAPACITY 3.1 mph (5 km/h) SPEED

DRIVE

4-track running gear MECHANISM with individually adjustable flippers

154 lb (70 kg)

Obstacle Height: 16 in FUNCTION- (400 mm)

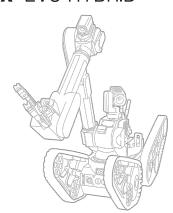
Gap Width: 20 in (500 mm)

GCS Robo Command

KEY FEATURES

- >>> Heavy lift capable precision 6-axis manipulator
- >> Tool Center Point Control provides precise, humanlike movement of the manipulator
- >> Double payload bay provides space for additional batteries & sensors
- >> Pre-programmed automatic manipulator & flipper motion sequences

telemax™ EVO HYBRID



DIMENSIONS 32 in x 16 in x 30 in (815 mm x 400 mm x 770 mm) WEIGHT Max. 176 lb (80 kg)

GCS

LIFTING CAPACITY

82 lb (37 kg)



GRIPPER WIDTH 8 in (200 mm)



MISSION DURATION



KEY FEATURES

CLIMB STAIRS & SLOPES

TOTAL PAYLOAD 68 lb (31 kg) CAPACITY

Max. 6.2 mph **SPEED** (10 km/h)

4-track running gear DRIVE with individually MECHANISM adjustable flippers; optional wheels

Obstacle Height: 20 in **FUNCTION-**(500 mm) **ALITY** Gap Width: 24 in (600 mm)

Robo Command

DIMENSIONS 31 in x 16 in x 29 in

(775 mm x 400 mm x 750 mm)

telemax™ EVO PRO

Max. 169 lb (77 kg)

WEIGHT

TOTAL

SPEED

DRIVE

PAYLOAD

CAPACITY



LIFTING CAPACITY 44 lb (20 kg)



MANIPULATOR 7-axis with telescopic reach



MISSION DURATION

>>> CLIMB STAIRS

& SLOPES



Obstacle Height: 20 in (500 mm) Gap Width: 24 in **FUNCTION-**(600 mm) ALITY Gripper Width: 4.7 in

> [120 mm] Reach Height: 106 in (2690 mm)

77 lb (35 kg)

Max. 6.2 mph

4-track running gear

with individually

optional wheels

(10 km/h)

MECHANISM adjustable flippers;

GCS **Robo Command**

KEY FEATURES

- >> Telescopic joint allows for extended horizontal & vertical reach
- >> Tool Center Point Control provides precise, humanlike movement of the manipulator
- >> Pre-programmed automatic manipulator & flipper motion sequences

MISSION VARIANTS



EOD Explosive Ordnance Disposal



HAZMAT Hazardous Materials



Chemical, Biological, Radiological, Nuclear & Explosives



SWAT High Risk Law Enforcement **Operations**

INTERCHANGEABLE ACCESSORIES

underground trains & buses



Optics/Visual

Augmentation

the manipulator



Compact design suited for confined spaces, e.g., airplanes,

>> Tool Center Point Control provides precise, humanlike movement of

>> Pre-programmed automatic manipulator & flipper motion sequences

UGV

Communications



Power Sources





Tooling & Hauling









FIELD OPERATIONS AND CUSTOMER SUPPORT

SUPPORT SERVICES

FIELD OPERATION SERVICES

AeroVironment provides world-class field operation services on a global scale. Our field operation services include fully-equipped and staffed turnkey solutions and outstanding OEM-certified operators, instructors and maintainers.

FIELD SERVICE REPRESENTATIVES

Our Field Service Representatives (FSRs) provide on-site field service support and act as the liaison between customers and our engineering team. The FSRs are highly qualified to provide on-site flight standardization program development and training support package development.

PROGRAM MANAGEMENT AND SME SUPPORT

We supply customer-focused program management and subject matter expert (SME) support. Our exceptionally skilled staff provides tailored mission planning and operational support, and we include engineering support from the original equipment manufacturer. We also offer on-site sustainment operations development and delivery.

SUSTAINMENT OPERATION

We support our customers with sustainment operations, including professional inventory control and comprehensive logistical services. Our logistical support includes extensive planning, coordination and monitoring to successfully plan and maintain operations.

AIRWORTHINESS

» AeroVironment's airworthiness organization monitors and evaluates airworthiness regulation initiatives in key markets and regions across the globe to ensure our products conform to our customers' airworthiness certification needs.

TRAINING

We specialize in student-centered learning using state-of-the-art, interactive 3D digital training media that aids in the retention of information and promotes student participation. Courses include simulator-focused mission scenarios providing a real world digital experience, hands-on practical exercises, mission planning and live flight field operations. We offer all levels of operator training from basic to advanced courses in a safe and controlled environment. Our distinctive training program is recognized both domestically and internationally.

QUALITY

» AeroVironment's ISO-9001:2015 production and service facility ensures the highest level product and support quality. The company's unmatched experience and technology roadmap combine to deliver an outstanding customer experience in situations where reliability and effectiveness can make the difference between success and failure.