Research Report

ANGELA PUTNEY, EMILY ELLINGER

Small Uncrewed Aircraft Systems (SUAS) in Divisional Brigades

Survey of SUAS

For more information on this publication, visit **www.rand.org/t/RRA2642-2**.

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About This Report

This report documents research and analysis conducted as part of a project entitled *Unmanned Aircraft Systems (UAS) to Support Fires at Division, Brigade Combat Team (BCT), and Battalion*, sponsored by XVIII Airborne Corps. The purpose of the project was to identify options for the Army to identify, field and employ uncrewed aircraft systems (UAS), to include commercial off the shelf (COTS) systems, both the Defense Innovation Unit's Blue UAS list (DIU, 2023) and the commercial market overall, at the division, brigade command team (BCT) and battalion units to enhance fire support capabilities. These UASs should be viewed as a component part in the systems that identify and communicate targeting information to fires units and service targets in support of division, BCT, and maneuver battalion operations.

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Summary

The Russo-Ukrainian War, which began in 2022 and continues as this document is finalized, is illustrating the criticality of uncrewed aircraft systems (UAS) on future battlefields. For very small costs, combatants who can effectively employ UAS are reaping enormous benefits. The U.S. Army recognizes this, and as a result XVIII Airborne Corps asked the RAND Arroyo Center to study how it can more effectively introduce small UAS (SUAS) into its divisional brigades and employ them effectively. This report volume presents the results of a survey of SUAS to support the request. Key findings from this study include:

- We identified six use cases that SUAS can support: Platoon; Company, Battery, and Troop; Battalion and Squadron; Brigade; Tethered; and Conveyance.
- There are four to nine SUAS for each use case (except Brigade) that are easy to buy and meet the key features of a given use case (more time and effort needed to acquire those for Brigade use case).
- There are 26 SUAS that can meet or nearly meet the key features of two or more use cases.
- There were 176, out of nearly 4,900, different SUAS in our market analysis that could meet or nearly meet the key features of the use cases.
- The market changes regularly with new SUAS becoming available and others no longer being available.
- Of the systems that meet all the key features of at least one of the use cases: 26 SUAS should be easy to acquire (already likely meet current acquisition requirements); 22 SUAS could be acquired, but systems will need some vetting or testing; and 55 SUAS would take more time to meet acquisition needs (significant modifications to the systems are likely needed to meet current acquisition requirements).
- Of the systems that *nearly* meet all the key features of at least one of the use cases: 14 SUAS should be easy to acquire; 15 SUAS could be acquired, but systems would need some vetting or testing; and 47 SUAS would take more time to meet acquisition needs (significant modifications to the systems would likely be needed to meet current acquisition requirements).

Contents

Figures and Tables

Figures

Tables

Small Uncrewed Aircraft Systems in Divisional Brigades: Survey of SUAS

Uncrewed aircraft systems (UASs, also known as uncrewed aircraft vehicles (UAVs), drones, or, in specific cases, remotely piloted vehicles [RPVs]) have been tested and used by the military for over 100 years (e.g., Blom, 2010; Imperial War Museum, 2023; NOVA, 2002; Abdullah, undated) and civilian use was not far behind (e.g., Academy of Model Aeronautics, undated). Military uses included both weaponry and intelligence, surveillance, and reconnaissance (ISR) from the beginning (e.g., NOVA, 2002).

As technology has improved, small UAS (i.e., those weighing less than 55 lbs; Code of Federal Regulations, Title 14, Part 107 for civilian use),[1] have become a common and popular civilian tool for everything from filming areas or events to carrying small items. The creation of a civilian market for them has brought their cost down and availability up. Two recent foreign military actions, the Nagorno-Karabakh War (2020) and the ongoing Russo-Ukrainian War that began in 2022 have shown how SUAS can be used in war today, and they are changing how the fight is waged (e.g., Jones, et al., 2022).

The XVIII Airborne Corps asked the RAND Arroyo Center to examine the small UAS (SUAS) requirements for its divisional brigades.

Objective

The objective of this survey is to identify options for the Army to find, field and employ uncrewed aircraft systems (UAS), including commercial off the shelf (COTS) systems, such as from the Blue UAS list,[2] at the division, brigade command team (BCT) and battalion units to enhance fire support capabilities.[3] These UASs should be viewed as a component part in the systems that identify and communicate targeting information to fires units and service targets in support of division, BCT, and maneuver battalion operations.

[1] DoD typically includes UAS up to 1320 lbs in its definition of small (e.g., DoD, 2021).

[2] The Defense Innovation Unit tests UAS and checks the UAS compliance with several policies and laws for DoD. Those UAS that pass their checks are added to the Blue UAS list (DIU, 2023). Those UAS on the list can be acquired off the General Services Administration schedule and used readily; there are other paths to passing the checks required by DoD.

[3] Initially we were requested to not include the specific ability to use munitions. During the study that desire altered. Since we always were including the ability to include any payload desired, the capability to launch, drop, or act as a munition is part of the survey.

Background

The current conflict in Ukraine has provided significant insights into the importance of UASs across several missions. These include use as sensors for indirect fire, as well as loitering munitions that have the same effect (i.e., act as the firing unit themselves). According to some reports, as many as 80 percent of the targets identified for Ukrainian fire missions are produced by UASs, and loitering munitions have had considerable publicized effects (see, e.g., Deveraux, 2022). However, U.S. Army BCTs, division artilleries (DIVARTYs), and division sustainment brigades (DSBs) have only limited UAS capabilities when compared to the significant usage of UASs in Ukraine.

The Army is examining this shortfall, and XVIII Airborne Corps has articulated some characteristics of what it believes it needs. Because these systems will operate in the most lethal parts of the battlefield, they must be expendable, replaceable, and easy to use. They should place minimal demands on logistical systems, to include fuel and maintenance. They must be able to communicate with existing communications systems at the BCT and DIVARTY levels, such as Windows Team Awareness Kit (WinTAK) and Android Team Awareness Kit (ATAK). To the maximum extent feasible, they should be interchangeable, including across different platforms, if more than one type of UAS is fielded (i.e., a new UAS, even if a different type, should not require significant training or alterations to plug into the existing control system).

XVIII Airborne Corps is currently working to integrate SUAS capabilities. For example, the Short Range Reconnaissance (SRR) UAS was fielded to one BCT in 2nd Quarter fiscal year 2023 (FY2023) on a trial basis, yet it is very limited in its capabilities (note that maximum range for the Skydio X2D is 10km with little or no loitering time). These could be fielded in large numbers, but, with its limited capability, will only fill part of the mission set envisioned for this study.

The U.S. Army has more capable UASs (e.g., the RQ-7 Shadow) that have significant capabilities such as long endurance and high-quality sensors, but these also require more logistical support, are more expensive, and are not envisioned to be fielded in large numbers down to the maneuver battalion level. Allies also field military grade UASs that could be useful.

While there are many UAS designed for military use, there is also a robust market for commercial and recreational uses. Many of these COTS UAS have capabilities and payloads that can be modified to meet the needs of the XVIII Airborne Corps, if they do not meet the needs as designed. Such other payload options are explored in Volumes I and IV of this set (Kelly, et al., 2025; Osburg, et al., 2025).

SUAS Usage Needs in U.S. Army

As discussed in Volume I of this report series (Kelly, et al., 2025), we conducted a series of interviews with the XVIII Airborne Corps to determine requirements for SUAS to meet the needs of the BCT, maneuver battalion, company level, as well as DIVARTY and the DSB. These

requirements clarify the ranges the different groups needed to aid firing, the weights and sizes each group could handle, and some of the payloads that would be of interest. These requirements are expressed as key features in this analysis since they were not developed formally. Training, supply and acquisition, and spectrum needed were also mentioned as required to support UAS in the XVIII Airborne Corps. There is some mention of these topics in this report, but they are covered in more detail in the other report volumes.

Six Use-Cases

Volume I (Kelly et al., 2025), explains the process of developing the six use cases. These are listed and described in Table 1 (same version appearing in Volume I) for the reader's convenience. We assessed possible SUAS against these different use cases. Each echelon may use SUAS from multiple use cases.

Table 1. Potential Use Cases for SUAS in XVIII Airborne Corps

Use Case Name	Use Case Description
Platoon	Soldiers need to be able to see around corners and inside buildings, and over next hill. May be used in constricted areas (e.g., around buildings, forests).
Company/Battery/Troop	Light infantry and others need to carry and parachute in, then see over next hill and into defensive positions for short range weapons – including mortars, indirect grenade launcher, and direct fire weapons. May be used in constricted areas (e.g., around buildings, forests).
Battalion/Squadron	Supporting firing of up to battalion mortar ranges and similar reconnaissance ranges. May be carried short distances and likely have transportation available.
Brigade	Supporting longer firing (Howitzers) or reconnaissance ranges. Transportation available.
Tethered	Battalion, brigade, or division location behind lines needs to see large area and provide comms relay/link. A tethered SUAS is one that is physically connected by a tether or cord to a base station that it flies above. Typically power and data are sent through the tether.
Conveyance	Battalion, Brigade, Division, or other needs to send high value items somewhere rapidly, such as blood, batteries, (small) weapons or ammunition.

Swarms and first-person view SUAS, which have been mentioned in some Army workshops and summits, are not listed as their own use cases. The aircraft used for either of these could be found in the first four use cases in Table 1, since the general capabilities would be similar.[4]

[4] Swarms, which are still being defined (Defense Systems Information Analysis Center, 2019), are mostly a system control variant of UAS, meaning with the appropriate communications and control systems included on a set of vehicles, the vehicles can be made into a swarm. First person view drones are UAS controlled by a user with a view, often via goggles, of where the drone is heading. Such systems were not excluded from any of the use cases.

Potential SUAS for Use in Divisional Brigades

As we switch our focus from these use cases to the potential SUAS that could support those use cases, two observations from the Russo-Ukrainian War are particularly important. First, the way the U.S. Army buys SUAS will not be adequate for wartime conditions. According to some reports (Watling and Reynolds, 2023) and validated by XVIII Airborne Corps staff, Ukraine is losing in the vicinity of 10,000 UAS a month. They are receiving replacements from a variety of sources, ranging from government purchases to donations funded by private citizens and are fielding whatever systems they can acquire. In a major conflict, the Army will need to be similarly agile in acquiring SUAS from various sources. Second, the way UAS are being employed is changing rapidly. In a major conflict, the U.S. Army will also need to be very flexible in how it employs SUAS and supporting capabilities (e.g., Corera, 2023), which may require efforts beyond what is authorized in tables of organization and equipment (TOEs) and force design (e.g., the ability to quickly reconfigure SUAS to perform different missions, such as identifying targets for indirect fire or conducting kinetic attacks by dropping munitions or as first person view [FPV] systems). This will affect what is acquired and how it is fielded.

Approach to Locating Potential SUAS

The SUAS marketplace is a highly saturated industry with a large variety of models, methods, and companies eager to develop new and innovative systems for the growing demand. As SUAS have a wide range of uses from mapping and farming to conveyance and combat, it was imperative that we surveyed the majority of the industry for the systems that would best fulfill the mission set. This survey consisted of four basic steps with three search and assess stages:

1. Identify the initial search parameters based on use cases
2. Search multiple databases for promising systems using basic parameters
3. Assess the promising systems in more detail, including additional (e.g., optional) parameters
4. Create a final list after further assessment to include other factors such as ability to acquire near-term and potential acquisition approaches.

Each search stage further refines the search parameters and allows for looking more closely at the systems. The following subsections provide the search parameters and results.

Surveying SUAS

Here we walk through the four steps listed above describing the process and presenting the results.

Delineate Initial Search Parameters

We started with the use cases listed in Table 1 and assigned search parameters for the SUAS which would be able to fulfill the functions of that case. These were then translated into specific

capabilities and specifications that could be easily compared among systems. Table 2 lists the key features of the use cases and the correlating specifications used to narrow each category.

The weight, range, and endurance of the system were determined by the range requirements for each use case. Given the requirements, or key features, derived from the interviews, all use case key features required a system to support Electro-Optical/Infra-Red (EO/IR) capabilities. The team restricted our searches to active systems that use batteries, gasoline, or diesel as fuel in order to limit options to easily transportable materials typically found in Army units. Finally, we restricted our initial search to systems where the country of manufacture was not China, Russia, Iran, or North Korea.[5]

In addition to these key features, there were several optional key features that were considered for each use case that would aid in mission fulfillment. In the field, there are many methods of launching and landing UAS, including launcher, catapult, rocket-assisted take-off, parachute, runway, skid, and other methods requiring specific facilities or additional equipment. To avoid these additional complications, preference was shown to systems that allowed hand-launch or vertical take-off and landing (VTOL) launch and recovery options.

[5] These countries probably have some SUAS and the U.S. has some well-known restrictions with each, so we removed them from the beginning of the process. The FY2020 National Defense Authorization Act (NDAA) Section 848 and the FY2023 NDAA Section 817 update to it do not allow use of certain components from covered countries. China is the covered country in the FY2020 NDAA and the FY2024 NDAA added Russia, Iran, and North Korea. There are also additional trade restrictions, particularly based in military concerns, with Russia, Iran, and North Korea that make using their equipment not viable. Later search steps in our process added countries to the list for similar reasons.

Table 2. Use Case Key Features and Practical Specifications

Use Case Number and Name	Key Features
1. Platoon or Other Small Unit	• Can be carried by a single soldier in packs or pockets • Less than 1 lb. and small • Provides a range of at least 1 km and an endurance of at least half an hour • Contains an Electro-Optical / Infrared (EO/IR) camera • Launch and recovery is either vertical take-off and landing (VTOL) or hand launch and recovery
2. Company / Battery / Troop	• Can be carried in packs or split into multiple packs • Less than10 lbs • Provides a range of at least 3 km and an endurance of at least 1hr • Contains an EO/IR camera • Preferred system will allow other payloads • Preferred system allows VTOL • Preferred system sends data to controller with Android Team Awareness Kit (ATAK)-capabilities
3. Battalion / Squadron	• Can be transported by multiple personnel or in vehicle • Weight is between 10 and 20 lbs • Provides a range between 7 and 10 km and an endurance of at least 1.5 hrs • Contains an EO/IR camera • Preferred system will allow other payloads including electronic warfare (EW), weapon, communication transmissions • Preferred system allows VTOL • Preferred system contains beyond line of sight (BLOS) capabilities • Preferred system sends data to controller with ATAK-capabilities
4. Brigade	• Transported by a vehicle to use location • Weight is between 10 and 30 lbs • Provides a range of at least 20 km and an endurance of at least 2 hrs • Contains an EO/IR camera • Preferred system will allow other payloads including EW, weapon, communication retransmissions, and chemical, biological, radiological and nuclear defense • Preferred system allows VTOL, notably at Long Range the system is likely to have separate launch/recovery teams and controller teams • Preferred system contains beyond line of sight (BLOS) capabilities • Preferred system sends data to controller with ATAK-capabilities
5. Tethered	• Transported by a vehicle to use location • Weight is less than 100 lbs • System must be tethered, where the altitude and payload determine range • Contains an EO/IR camera • Preferred system will allow other payloads including high quality EO/IR and communications • Requires VTOL • Sensor data should be able to be sent to multiple systems, notably the tethered system likely has separate deployment teams and controller teams from other UAS in the unit • Able to accept communications retransmission payloads
6. Conveyance	• Transported by a vehicle to use location • Weight is less than 150 lbs • Provides a range of at least 5 km and an endurance of at least 1 hr. • Contains an EO/IR camera • Preferred system will contain an auto navigation option • System can transport up to 50 lbs

Searching Three Databases

We searched three databases to find potential UAS for the use cases: the Defense Innovation Unit's (DIU's) Blue UAS (DIU, 2023); the Association for Uncrewed Vehicle Systems International (AUVSI) Uncrewed Systems and Robotics Database (AUVSI, 2022); and Janes (Janes, 2023). These were chosen due to their breadth of potential systems and that each covered generally different parts of the market. There was some overlap between the databases, but they each added unique systems to our initial search lists.

DIU is part of the DoD and works to prototype and test commercial technologies for rapid adoption by DoD. Blue UAS vets commercial UAS that can fill different DoD needs, are compliant with the Fiscal Year (FY) 2020 National Defense Authorization Act (NDAA) Section 848 and the FY2023 NDAA Section 817 updates to it (these concern where parts are manufactured), validated as cyber-secure, meet air worthiness needs, and are available for government purchase. The list is updated regularly—both adding new systems and removing those that are no longer compliant (e.g., an update to a UAS may alter its cyber stance, its air worthiness, or source of parts). There are 16 UAS on this list (as of July 2023). The UAS on this list can be purchased by the Army via several methods, including the GSA schedule, and is the reason for including it in this study.

AUVSI is a non-profit industry organization dedicated to uncrewed systems and robotics. Any SUAS vendor can provide information for up to 128 fields of specifications and information on a system it sells and allow it to be hosted on the AUVSI Uncrewed Systems and Robotics Database. We used the version for air platforms extracted October 2022 throughout the project to provide a consistent dataset for analysis (AUVSI, 2022). There were over 4,600 entries from thousands of vendors across the world (some from adversaries) with platform entries across all of the five UAS groups contained in the database and potentially including over 100 parameters about the platforms (not all records are complete for each platform).[6] The platforms in the database include typical consumer systems, industrial systems (e.g., for agriculture or survey), and military systems. The size and quality of systems in the database were the main reason for including it in the study.

Janes is a collection of open-source intelligence information about military and government equipment (among other things). The systems in Janes are in use by militaries across the world, so they are probably designed and tested to meet the rugged use expected in military environments, as well as probably having non-civilian communications capabilities. There were

[6] UAS are frequently categorized into five groups by a combination of maximum takeoff weight, maximum altitude, and maximum speed (see, for example, Harbaugh, 2018). Group 1 are the smallest (e.g., what the typical civilian consumer might purchase) and Group 5 are the largest (e.g., Global Hawk). A listing of the groups and DoD definitions can be found in Annex C of the C-SUAS Strategy (U.S. DoD, 2021).

over 270 UAS in Janes as of March 24, 2023,[7] thus this database seemed appropriate for inclusion.

Additionally, there were occasional systems that the XVIII Airborne Corps brought to our attention that we added to the lists if they met the criteria in Table 2.[8]

Initial Search of Databases

The Blue UAS systems were assessed against the criteria in Table 2. Several key features were met outright, as shown in Table 3. There were some with the weight a little higher than the use case and some with the time a little shorter than the use case; these were marked because the difference might still make it a reasonable choice depending on specific uses, and these UAS can be easily acquired and flown by the Army due to the nature of the vetting by DIU. There were no systems with a tether option (Use Case 5) on the Blue UAS list. For the Blue UAS we are explicitly listing the system name since they are vetted systems and easily found on the Blue UAS web page.

Table 3. Which Use Cases the Blue UAS Systems Support

SUAS Company and Name	Use Case Number						Comments
	1	2	3	4	5	6	
Harris Aerial Carrier H6 HE+				W			14.5 kg with no fuel or payload. Gas-hybrid max time 3 hr, electric-only max 35 min.
Harris Aerial Carrier H6 Hydrone			√	√			Hydrogen max time 2 hr, electric-only max 35 min.
Easy Aerial Osprey			T				Max 55 min endurance
Inspired Flight IF750			T			T	Max 36 min endurance; up to 4.6lb payload
Inspired Flight IF1200			T			T	Max 25 min endurance; up to 19lb payload
Intense Eye V2		√	T				Max 34 min endurance
Wingtra WingtraOne		√					Up to 59 min; Mapping/surveying only; fixed-wing VTOL; high resolution imagery
Ascent AeroSystems Spirit		T	T				Flight time depends on payload and speed, max is 53 min with two batteries. At 60mph, this meets Use Case 3
Freefly Alta X						T	Max time 50 min, range limited by RFD-900x (40km), but likely less than that due to time
Sensefly eBee TAC[a]		√	√				Mapping/surveying only; limited sensors; fixed-wing; Max time 90 min; hand launch
Skydio X2D		T					Max time 35 min
Parrot Anafi USA GOV	√	T					Max time 30 min

[7] Conducted a search on Janes using the term "UAS" and filters of "Air Vehicles," "Air and Space Defence Module," "Land Defence Module," and "Weapons Module."

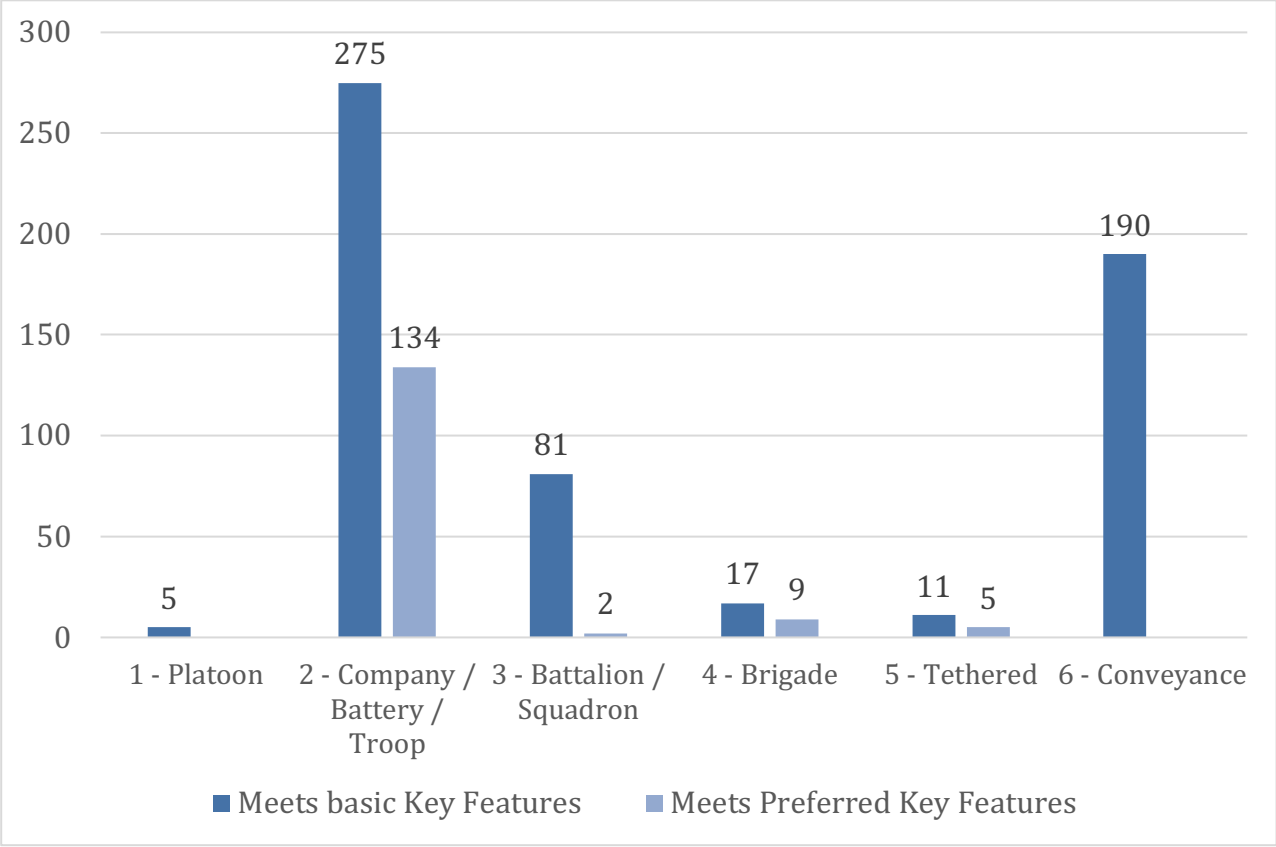
[8] We did not specifically add UAS that were known to be used by Ukraine to the survey. The SUAS used were changed regularly as availability reduced or they were regularly countered. When the survey began, the DJI SUAS were commonly used (Chappel, 2022; Franke, 2023) and those were eliminated due to the country of origin (China). Some of the known ones are in the initial survey, but we have not flagged them as such since the needs change regularly.

SUAS Company and Name	Use Case Number						Comments
	1	2	3	4	5	6	
Parrot Anafi USA MIL	√	T					Max time 30 min
Teal Golden Eagle	W	T					2.3 lb; max time 50 min
Vantage Robotics Vesper	W	T	T				1 kg; max time 50 min
Flightwave Aero Edge 130	W	√	√				1.2 kg; 125 min cruise endurance, hover-only is 30min

NOTES: √ = Meets the base criteria; W = Weight a little too high for base criteria; T = Endurance time too short for base criteria.
[a] This was on the Blue UAS list in April 2023, but on August 30, 2023 it was not on the DIU web page, although the vendor web pages still claim Blue UAS approved.

For the AUVSI database, and using the information in Table 2, a preliminary list of possible systems of interest was developed, as shown in Figure 1.

Figure 1. Use Case Preliminary Results from AUVSI Database



SOURCE: AUVSI database.
NOTE: Use cases one and six did not contain preferred categories.

For the Janes data, the database was queried across equipment profiles for the term UAS with filters for air vehicles on March 24, 2023. That provided 274 entries, which included all sizes of UAS and across all countries. These were then reviewed for potentially meeting the criteria in

Table 2, which left 23 systems. It should be noted that many of the systems listed in Janes are the larger types of UAS that militaries have been using for many years.

During the course of the interviews and discussions with the U.S. Army stakeholders during October 2022 through March 2023, there was one system (Livesky-HL-Spectre) brought to our attention that was not already on one of our lists. It was for the tethered use case, and we added it to the list for the next stage of review since it met the basic capabilities listed in Table 2.

Initial Survey Boundaries

Limits and constraints of the survey process stemmed from several sources including the databases themselves and the diversity of the market. The largest obstacle to a proper understanding of the marketplace is the volume and diversity of companies and systems. This makes it highly complicated to gain a full understanding of all manufacturers and products. As products are often upgraded or discontinued as new hardware and software are developed, this further complicates attempts to gain a full snapshot of all available systems. Additionally, it is challenging to remain up to date with all new releases and tested prototypes in the UAS space in real time. As noted by one market research study, in 2022 there were 1,076 drone companies in the world with the top three countries in terms of volume listed as the United States with 337 companies based in the country, 79 companies in the United Kingdom, and 71 in Germany (Alvarado, 2022). The report also noted that 379 new drone companies had been formed since the previous edition of the report in 2019 while 251 companies were removed either due to closure or acquisition. This shows a rapidly evolving marketplace, which complicates attempts to build a full picture of available and reliable systems.

In an effort to gain a reasonably full picture despite the breadth and time constraints, our team used the AUVSI database. However, there are several issues with the database itself. The database relies on user inputs, meaning incorrect data entries or misleading information may have initially incorrectly categorized the system. Once the information is in the database, it remains there even if the system or company is discontinued and there is no timestamp on when the entry was last updated. Therefore, some systems in the initial pass may no longer be in production. Finally, in order to narrow down from the 4,629 drones listed on the database, we had to filter the data based on our use case parameters listed in Table 2. This filtered out all parameters outside the use case search fields but also excluded systems where the specification field was left blank by the user who input the system.[9] When this is applied to several columns at once, employing use case filters will disproportionately favor systems that fill out a larger percentage of the database form. In order to combat this, special attention was paid to categories

[9] While nearly any web search will yield a lot of very small UAS for sale, there are not many that remain in our first category. There were not a lot in the databases and many of those were from countries we eliminated based on the FY2020 NDAA Section 848 and FY2023 NDAA Section 817.

that lacked a significant proportion of responders to ensure the largest selection of initial systems was identified.

Despite these limitations in the data, this analysis provides a relatively complete and useful snapshot of available UAS that could meet XVIII Airborne Corps requirements, as discussed below.

Individual Assessment of Potential UAS Candidates

The initial search described above yielded lists of possible systems that could meet the different use case needs. There were 624 total systems that were identified as potential candidates. We then conducted individual assessments of these systems, whereby we reviewed the vendor web sites for more information. As mentioned in the limitations above, many of these systems are no longer (or never were) in production and several companies no longer exist. There are several cases where a different version or name or model was found on the vendor website that could meet the need and those we included as being more current information. There are some cases where the company has been purchased or otherwise changed its name, however, searches on the UAS name helped us locate it (confirmed by then determining that the original company is now a part of the one with the UAS of that name).

In this individual search, we included more information as available, such as cost, potential for flight worthiness, manufacturing needs, and environmental conditions, although in most cases there was minimal information available. This then provided a count of systems as shown in Figure 2. Given the large numbers of systems that are still on the list, each vendor was not contacted directly, and information was limited to company web pages, specification sheets, and other published information. The system characteristics provided by vendors varied significantly, and thus we still lack some key information about several of these systems. Unavailable information included costs, operating temperature ranges and other environmental constraints, and details on system controls. Other characteristics were also missing, especially details on system controls. For example, some of the features listed in Table 2 specifically mention the ability to use WinTAK or ATAK and while this was mentioned in some cases, the version used (e.g., Department of Defense or Homeland Security, or civilian (first responders) versions) was not mentioned, nor was it mentioned if TAK or other such controllers or displays could be added.[10]

For the conveyance use case we eliminated the fixed-wing systems unless they specifically mentioned or demonstrated the ability to carry cargo, even if small.[11] The rationale is that, in

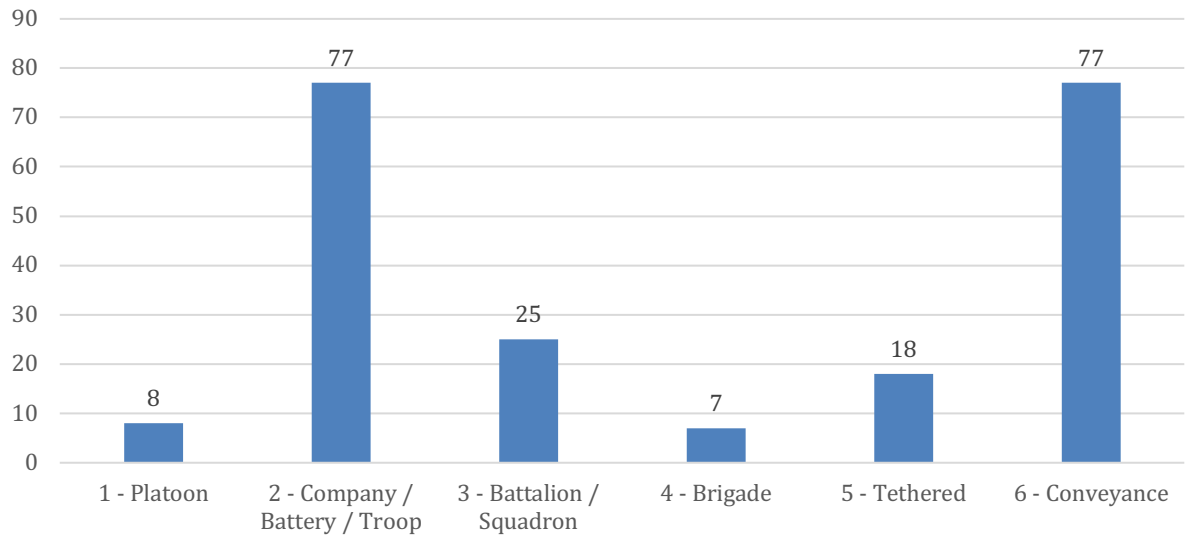
[10] With CivTAK software made publicly available, see the GitHub repository (DoD Defense Digital Service, undated) and the CivTAK pages (CivTAK, undated), it is now easier for companies to have that version available. It is not clear how different the government and military versions are from this version, but vendors need authorization to access.

[11] Many vendors have videos to demonstrate their systems. Some fixed-wing VTOL systems did show random items being carried or carried and dropped. These ranged from boxes to stuffed animals.

general, the aerodynamics of fixed-wing (VTOL or not) flight restrict what can hang off the body of the aircraft, with minor variations such as a sensor ball or pod. These restrictions would probably make it difficult for the XVIII Airborne Corp (or the Army as a whole) to use them effectively, especially during conflicts when requirements are harder to foresee. The rotary wing systems are generally more capable of adapting to oddly shaped items hanging off the bottom while still maintaining air worthiness.

We mark some systems, including fixed-wing VTOL, as multi-use-case systems. Multi-use-case are when a UAS meets the key features of more than one use-cases from Table 2. The idea being that they are (or would be) already around and, despite having restrictions in payload size or weight, they could be used in an emergency for some types of cargo.

Figure 2. Potential Identified UAS Systems by Use Case



SOURCE: Blue UAS; AUVSI database; Janes; individual manufacturer websites.

In total, there are 176 different SUAS that could meet XVIII Airborne Corps needs as defined in our use cases. There are 22 SUAS that could meet more than one of the use cases (see Appendix Table A.7). There are five systems that fit one of the use-cases that are already being used by an Army program. The Puma (RQ-20) and Raven (RQ-11) from AeroVironment fit the Company, Battery, Troop use case. Two versions of the Lockheed Martin Stalker (current and planned upgrade, as per discussions with one user group) and the Shield AI V-BAT could be used for some forms of conveyance, although none are designed to be a conveyance platform.

Potential for Near-Term Acquisition

Knowing that the XVIII Airborne Corps is interested in what can be acquired now as well as in the future, we conducted one more assessment: a review of the potential for acquisition in the

near-term. This consisted of a brief assessment of each company, using descriptions from the company web pages, from other information posted about the company and purchasers, and subject matter expert assessments of the information found. Companies and their SUAS were placed in one of three categories: (1) likely the SUAS can be acquired near term, i.e., within a few months but no longer than a year, (2) possibly the SUAS can be acquired near term, and (3) unlikely the SUAS can be acquired near term. The rationales are based on whether the company has already sold SUAS (not necessarily this one) to the Army or is on the Blue UAS list, whether they have sold any SUAS to any military or just commercial sales, and where they are based (see Table 4 for rationale for placing a company and UAS in a category and why that matters).

Table 4. Near-Term[a] Category Descriptions and Rationale

Vendor Description Type	Rationale for Placement in Category
Category: Likely in Near-Term	
Actively selling this system to DoD or Federal gov't.	If they are already selling the UAS, probably can meet requirements with little to no modification.
Actively selling other systems to DoD or Federal gov't.	If they sell other systems, probably know what the gov't needs for cyber, part origin, etc. and can produce in appropriate levels.
On the Blue UAS list.	Just need to order off GSA schedule.
Have other systems on Blue UAS list.	Likely other UASs meet gov't needs for cyber, part origin, etc. or can quickly modify to meet DoD requirements.
Category: Possibly in Near-Term	
U.S. Company that may not be selling to DoD, but has the capability to produce in quantity and has done other related work for U.S. government; may claim to meet NDAA country of origin requirements and/or cyber requirements.	Working for other parts of the government means they had met some requirements and can probably modify to meet remaining requirements.
Five-eyes company that sells the system or similar systems to their own or other five-eyes countries militaries.	Likely have similar requirements, and the Army can possibly get approvals to buy from them in a not-unreasonable amount of time.
Non-U.S. or non-five-eyes company that has sold to DoD, possibly through U.S. Subsidiary.	If the company has already sold to the DoD, then they have been approved at some level and know the process.
Category: Unlikely in Near-Term	
North Atlantic Treaty Organization (NATO) company that sells the system or similar systems to their own or other NATO countries militaries.	• Likely have similar requirements, but approvals to buy from them my take a little longer.
U.S. Company that has not clearly sold to the U.S. Gov't, does not clearly have capability to mass produce.	• Potentially may need significant effort to meet part origins requirements, cyber and other needs. • Production quantities could be a problem.
Five-eyes company that has not sold to a military (i.e., commercial).	• Potentially may need significant effort to meet part origins requirements, cyber and other needs. • Production quantities could be a problem. • Approvals to buy from them may take time.
NATO company that has not sold to a military (i.e., commercial).	• Potentially may need significant effort to meet part origins requirements, cyber and other needs. • Production quantities could be a problem. • Approvals to buy from them may take time.
Non-U.S., non-five-eyes, non-NATO that has sold to a military.	• Potentially may need significant effort to meet part origins requirements, cyber and other needs. • Production quantities could be a problem. • Approvals to buy from them may take time.
Non-U.S., non-five-eyes, non-NATO that has not sold to a military (i.e., commercial).	• Potentially may need significant effort to meet part origins requirements, cyber and other needs. • Production quantities could be a problem. • Approvals to buy from them may take time.

NOTE: [a]Near-term is a few months and no longer than a year.

Upon completion of this final categorization, the totals are as seen in Table 5. Regardless of the categorization for near-term likeliness, all of the SUAS listed in the Appendix still have potential use for the Army, but some may take more time and effort before they can be acquired.

Table 5. Number of Systems per Use Case per Potential of Acquisition in Near-Term Category[a]

Use Case	Likely Near-term	Possibly Near-term	Unlikely Near-term
Platoon	5	2	1
Company / Battery / Troop	15	11	46
Battalion / Squadron	7	8	10
Brigade	0	2	5
Tethered	9	5	4
Conveyance	14	15	48

NOTE: [a]Some of the systems meet multiple use cases, thus column totals are not unique systems.

Potential SUAS by Use Case

Due to time and funding constraints, we were not able to actually test each and every of the 176 systems, or contact all the vendors to learn about each system in more detail thus we are not able to provide a definitively ranked list. However, in Table 6, we provide a list of all the systems that both meet all the key features and can likely be acquired near term (second column of Table 5). There are fewer systems listed in Table 6 than are in the count in column two of Table 5 since those are an assessment of the potential of acquiring the system, regardless of whether all or most of all key features are met.

Table 6. Name and Vendor for SUAS That Meet Key Features for a Use Case and Likely Could be Acquired Near-Term

SUAS Name	Vendor	Use Case
Anafi USA GOV	Parrot	Platoon
Anafi USA MIL	Parrot	Platoon
Golden Eagle	Teal	Platoon
Vesper	Vantage Robotics	Platoon
Edge 130 Blue	Flightwave	Platoon, Company / Battery / Troop, Battalion / Squadron
Puma AE (RQ-20)	AeroVironment	Company / Battery / Troop
Raven B RQ-11	AeroVironment	Company / Battery / Troop
NX30	Ascent AeroSystems	Company / Battery / Troop, Conveyance
R80D SkyRaider	Teledyne FLIR	Company / Battery / Troop, Tethered
IF750	Inspired Flight	Company / Battery / Troop, Battalion / Squadron
Indago 3	Lockheed Martin	Company / Battery / Troop
eBee	senseFly	Company / Battery / Troop
Ghost 60	UAV Solutions, Inc.	Company / Battery / Troop
Stalker XE	Lockheed Martin	Battalion / Squadron
Carrier H6 Hydrone	Harris Aerial	Battalion / Squadron
R70 Sky Ranger	Teledyne FLIR	Tethered
Alpine Swift	Easy Aerial	Tethered
Albatross	Easy Aerial	Tethered
Raptor	Easy Aerial	Tethered
Indago 3T	Lockheed Martin	Tethered
Indago 3TM	Lockheed Martin	Tethered
Livesky-Sentry	Hoverfly Technologies, Inc.	Tethered
Livesky-HL-Spectre	Hoverfly Technologies, Inc.	Tethered
Carrier H6 Hybrid HE	Harris Aerial	Conveyance
Carrier H6 Hybrid HE+	Harris Aerial	Conveyance
Vapor 55 MX	Aerovironment	Conveyance

NOTE: There were no SUAS in the Brigade use case that both met the use case requirements and could likely be acquired near-term.

Additionally, the Appendix contains a table for each of the use cases with the UAS we located and that meet or nearly meet the key features in Table 2 (see Tables A.1 through A.6). Those listed as "likely" meet the characteristics. Those that are listed as "possible" nearly meet them (frequently with shorter duration) thus depending on the actual planned use, the "possible" UAS might be an appropriate UAS to acquire. The Appendix also contains a table with all the systems that Likely and Possibly meet more than one use case, along with which use cases are met (Table A.7).

Commentary on Payloads

Payloads were considered in general in the assessment, but not specific payloads since those can often be swapped for a different model or type. The majority of the SUAS on our lists have an optical camera and, often, an infrared camera. Several have a variety of other sensors that can be purchased through the SUAS vendor, such as light detection and ranging (LiDAR) systems. Some, especially the fixed-wing systems, have a specific form factor that must be met to fit on the platform. All systems have a way to communicate with an operator, although those vary including cases where the communication is only when not in flight (e.g., preload a route and download data upon return). The ability to add specific radios may be limited due to size, weight, and power restrictions in addition to available locations on the platform. Several systems are designed to take a variety of shapes for payloads, especially multirotor systems where the payload hangs below the main SUAS body. These systems are more likely to be able to be used for carrying cargo or munitions. Several have dropping mechanisms available. If the vendor stated that the payloads, or other aspects, were modular, that is noted in the tables in the Appendix.

Commentary on Prices

Prices were not considered in the assessment. Very few prices are published openly. Generally, vendors, including third party vendors, need to be contacted directly and the potential purchaser typically needs to provide information on number of systems desired, payloads, planned support, and other factors before a price is acquired. Given the number of systems in the survey, that was not feasible. Of the SUAS that do have prices published, the prices for those likely to be acquired near-term (Table 5, column 1) tended to be mostly in the $10,000 to $25,000 range, with at least one outlier at the low end and several on the higher end. The consumer market for SUAS, which typically will not be compliant with the NDAA requirements among other needs for the Army, can range from several hundred dollars to over $10,000.[12]

Next Steps for These SUAS and the XVIII Airborne Corps

This is one volume of a set of related reports on SUAS for the XVIII Airborne Corps. Other volumes discuss the requirements (Kelly et al., 2025), acquisition of systems (Camm, Girardini, and Kelly, 2025), training (Phillips et al., 2025), and spectrum (Osburg et al., 2025) needed to field SUAS in the XVIII Airborne Corps. Below, we summarize a few key points on the spectrum and acquisition for the SUAS listed in Table 6 and the Appendix.

[12] A simple search on the Internet for UAS, SUAS, drone or similar terms will yield large numbers of SUAS of various prices, capabilities, and origins.

Spectrum

Due to the lack of specific communication information from nearly every vendor and lack of a specific spectrum requirement, the spectrum used or the potential for modifying the communications equipment was not included in the basic assessment. Many systems, especially those that are sold commercially, operate in Wi-Fi bands, although other radio frequencies are possible. Almost all require line of sight communications, if communications are needed.[13] Several can operate with pre-planned routes so do not need active communications if real-time imagery is not needed. Depending on the weight of specific radios, many can carry a customer-preferred radio. This needs to be investigated for each system.

Acquisition

Volume III of this series covers acquisition and accountability of SUAS (Camm, Girardini, and Kelly, 2025) As discussed there, and in other volumes, SUAS need to be expendable, attritable, or the like due to expected wear and tear and losses in both training and combat. This is seen in Ukraine (Watling and Reynolds, 2023), and is seen in the lack of use while training on bases for fear of a "flying FLIPL" (Financial Liability Investigations of Property Loss). This may make parts of the aircraft consumable while the controllers or other ground portions of the system will probably be accountable.

Additionally, the technology is rapidly evolving, making some of the traditional acquisition routes, and, more importantly, acquisition schedules of five or more years essentially untenable. A route needs to be used that allows newer technologies to reach the XVIII Airborne Corps more rapidly than most traditional routes.

The actual acquisition process will depend on the SUAS and whether it currently meets Army requirements. The following sub-sections discuss options depending on whether the SUAS is known to be compliant with DoD requirements. Those on the Blue UAS list and some already purchased by the DoD, meet them.

Blue UAS or already purchased by DoD

If the SUAS that is of interest to procure is from the Blue UAS list, then acquisition can be as simple as ordering systems from the General Services Administration (GSA) Advantage web site or the vendor using their GSA schedule contracting prices.

If a system is not currently on the Blue UAS list, it is possible to fund DIU to vet the desired system and then procure in this manner. It may also be possible to fund other entities, e.g., Army labs or even corporations, to conduct the equivalent vetting and testing.

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[13] Federal Aviation Administration (FAA) regulations require the pilot of a SUAS to have visual line of sight of the SUAS while in flight (14 CFR § 107.31). Since most commercial SUAS are for people flying under Part 107 rules and since SUAS are under 55 lbs, the communications systems on them are usually designed for these limitations, but many can be modified or replaced. Note that it is possible to get a Part 107 Waiver (14 CFR Part 107 Subpart E), and likely for Army uses, these are necessary.

Additionally, if the SUAS is already being acquired elsewhere in the Army or DoD, then there is a reasonable chance that it already satisfies requirements for purchase (i.e., at a minimum is compliant with FY2020 NDAA Section 848 and FY2023 NDAA Section 817; meets current DoD cyber security needs; and meets airworthiness requirements). If this is the case, it may be possible to contract for more either through the existing acquisition contract or starting a similar purchasing agreement with the vendor based on the approvals for the existing acquisition contract.

Other SUAS

If the SUAS is not on the DIU Blue UAS list or cannot be acquired through either an existing acquisition contract or similar agreement with same vendor as describe above, then the acquisition will require more steps and probably take longer, although using the DoD's Adaptive Acquisition Framework (DoD Instruction [DoDI] 5000.02, 2022) Urgent Capability Pathway would be one way to make that shorter (see also Camm, Girardini, and Kelly, 2025). That path can involve the vetting and testing of the system to meet the purchase requirements.

Regularly Adding New SUAS

The technologies and commercial market for SUAS are constantly changing and improving. Typical DoD acquisition time frames (two years for urgent paths and five or more standard paths) may mean that by the time systems are in hand, they are out of date and new ones are available. Volume III of this series (Camm, Girardini, and Kelly, 2025) discusses this and the possibility of using Other Transaction Authorities (OTAs) to speed up some of the process to acquiring newer models sooner.

Conclusion and Findings

- We identified six use cases that SUAS can support: Platoon; Company, Battery, and Troop; Battalion and Squadron; Brigade; Tethered; and Conveyance.
- There are four to nine SUAS for each use case (except Brigade) that are easy to buy and meet the key features of a given use case (more time and effort needed to acquire those for Brigade use case).
- There are 26 SUAS that can meet or nearly meet the key features of two or more use cases.
- There were 176, out of nearly 4,900, different SUAS in our market analysis that could meet or nearly meet the key features of the uses cases.
- The market changes regularly with new SUAS becoming available and others no longer being available
- Of the systems that meet all the key features of at least one of the use cases: 26 SUAS should be easy to acquire (already likely meet current acquisition requirements); 22 SUAS could be acquired, but systems will need some vetting or testing; and 55 SUAS would take more time to meet acquisition needs (significant modifications to the systems are likely needed to meet current acquisition requirements).

- Of the systems that *nearly* meet all the key features of at least one of the use cases: 14 SUAS should be easy to acquire; 15 SUAS could be acquired, but systems would need some vetting or testing; and 47 SUAS would take more time to meet acquisition needs (significant modifications to the systems would likely be needed to meet current acquisition requirements).

Next Steps

This study conducted provides viable SUAS options for the XVIII Airborne Corps. Table 6 contains a list of SUAS, each of which meets the key features for one or more use cases and meets the criteria stated in Table 4 for potential near term acquisition. Since there were no specific sets of requirements, this was not an analysis of alternatives. Also, since there are no empirical data on the ease or difficulty of purchasing any item not on a GSA schedule, we are not able to provide definitive recommendations on the ease of purchasing other systems with which to train. Any of the SUAS in Table 6 that are on the Blue UAS list are probably the easiest and fastest to acquire for training and use. The next steps for the Corps should be to determine the key features of their near term (i.e., over the next several months) needs and review the list in Table 6 to find a match. There may be better matches of the key features in the tables in the appendix. Those systems should be investigated, including the acquisition processes needed, and processes started to acquire one or more SUAS.

Appendix. Listings of All Systems by Use-Case

This appendix contains the potential UAS that we identified in Tables A.1 through A.6, with one table per use-case. The Blue UAS (marked in bold in the appendix tables) can be purchased at any time. The other UAS would need additional vetting to determine if they (1) are compliant with FY2020 NDAA Section 848 and FY2023 NDAA Section 817; (2) meet current cyber security needs; (3) meet airworthiness requirements. Please note if the UAS is from the same vendor as a Blue UAS, those are likely to meet (1) and (2) or possibly be able to do so quickly. Table A.7 contains the 22 SUAS that could meet more than one of the use cases.

Table A.1. Potential Platoon SUAS

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
Meets Key Features of Use Case								
Bug 4.1 UAVTEK UK	0.77 lbs (350 g)		32 min	VTOL/VTOL	(20° C to +50° C)	Camera	Maybe	https://www.uavtek.com/bug4-1
Anafi USA GOV Parrot France	**1.42 lbs (644.11 g)**	**battery**	**32 min (30 min with Microhard)**	**VTOL/VTOL**	**IP53 -32 °F to +120 °F (-35 °C to+49 °C)**	**Camera, EO/IR, GPS**	**Yes**	**https://www.parrot.com/assets/s3fs-public/2023-02/ANAFI-USA-product-sheet.pdf**
Anafi USA MIL Parrot France	**1.42 lbs (644.11 g)**	**battery**	**32 min (30 min with Microhard)**	**VTOL/VTOL**	**IP53 -32 °F to +120 °F (-35 °C to+49 °C)**	**Camera, EO/IR, GPS**	**Yes**	**https://www.parrot.com/assets/s3fs-public/2023-02/ANAFI-USA-product-sheet.pdf**
Golden Eagle Teal USA	**2.3 lbs (1.043 kg)**	**battery**	**up to 50 min**	**VTOL/VTOL**	**-32°F to -110°F***	**Camera, EO/IR**	**Yes**	**https://tealdrones.com/wp-content/uploads/2023/01/SUP-00005-GETAC-MK1-Field-Maintenance-Schedule-REV-A-15-JULY-2022.pdf**
Vesper Vantage Robotics USA		**battery**	**50 min recon rotor; 32 min shrouded rotor**	**VTOL/VTOL**	**-20°C to +45°C IP-53**	**Camera, EO**	**Yes**	**https://vantagerobotics.com/vesper/**
Edge 130 blue Flightwave USA		**battery**	**125 min cruise; 30 min hover only**	**VTOL/VTOL**		**Camera**	**Yes**	**https://www.diu.mil/blue-suas-2#Edge130**
Drone40 DefendTex Australia			1 hr	VTOL, Grenade launcher/VTOL		Camera, EW, Kinetic	Maybe	https://www.defendtex.com/uav/
NANO ONE xCraft Enterprises, LLC. USA		battery	31min	VTOL/VTOL	-10°C to 44°C, light precipitation	EO/IR	No	https://xcraft.io/nano/

NOTES: Bolded rows are on the DIU Blue UAS list. All SUAS in this list meet the requirements for the use case.
* Listed as -110°F but likely this is an error, and it is probably intended to say +110°F.

Table A.2. Potential Company, Battery, and Troop SUAS

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
Meets Key Features of Use Case								
Amuse Oneself (AOS) SUAV - Glow.H Amuse Oneself, Inc. Japan	8.8 lbs (3.9 kg)	Battery, Gasoline	2.5 hrs	VTOL / VTOL		Camera, IR, Thermal	No	https://amuse-oneself.com/en/product/glowh/glowh_spec
BLACKBIRD VT120 UcanDrone Greece	2.65 lbs (1.2 kg)	Battery	1 hr	VTOL, hand launch / VTOL, Belly			No	https://ucandrone.com/en/uas-products/blackbird-vt120/
Bug 4.1 UAVTEK UK	0.77 lbs (0.3 kg)	0	0.53 hrs	Hand launch	-4°F to +122°F (-20°C to +50°C)	Camera, Thermal radios	Maybe	https://www.uavtek.com/bug4-1
DeltaQuad Pro Vertical Technologies Netherlands	13.7 lbs (6.2 kg)	Battery	1.83 hrs	VTOL / VTOL		Camera, EO/IR, Thermal, Package	No	https://www.deltaquad.com/vtol-drones/view/
Eagle Plus VTOL Challenger Aerospace Systems United States	46.96 lbs (21.2 kg)	Hydrogen Liquid Battery	5 hrs	VTOL / VTOL		Battery	Maybe	http://www.drones-mart.com/product/10052/Eagle-Plus-UAV-VTOL-3500mm
eBee senseFly Switzerland	4.4 lbs (1.9 kg)	Battery	1.5 hrs	Hand launch / Linear landing	+5°F to +104°F (-15°C to 40°C)	Camera	Yes	https://ageagle.com/drones/ebee-x/
GeoDrone 6 / VideoDrone 6 (formerly X4S) Nordic Drones Oy Finland	14 lbs (6.3 kg)	Battery	1.23 hrs	VTOL / Parachute, VTOL		Camera, Thermal	No	https://nordicdrones.fi/en/products/product-information/
Ghost 60 UAV Solutions, Inc. United States	5.5 lbs (2.4 kg)	Battery	1 hr	VTOL / VTOL		Camera, EO/IR	Yes	https://uav-solutions.com/unmannedaircraft/ghost-60/

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
Heliplane LRS 240 Drone Volt France	17.6 lbs (7.9 kg)	Battery, Gasoline	1.66 hrs	VTOL / VTOL	+14°F to +122°F (-10°C to +50°C)	Camera, thermal	No	https://www.dronevolt.com/en/expert-solutions/heliplane/
ICON Aeronavics, Ltd. New Zealand	41.9 lbs (19 kg)	Battery	1 hr	VTOL / Parachute, VTOL		Camera, IR	No	https://aeronavics.com/models-of-drones/heavy-lift-drone/
IF750 Inspired Flight United States	**15 lbs (6.8 kg)**	**Battery**	**0.62 hr**	**VTOL / VTOL**	**Operating Temperature: +14°F to +122°F (+10°C to +50°C) Storage Temperature: +14°F to +104°F (+10°C to +40°C)**	**Camera**	**Yes**	**https://shop.inspiredflight.com/products/if750-hlblue-fpv**
Indago 3 Lockheed Martin United States	5 lbs (2.2 kg)	Battery	1 hr	VTOL / VTOL		Camera	Yes	https://www.lockheedmartin.com/en-us/products/indago-vtol-uav.html
Lynx VTOL Swift Radioplanes United States	9.9 lbs (4.4 kg)	Battery	2 hrs	VTOL / VTOL		Camera	No	https://srp.aero/lynx-vtol/
MERA UcanDrone Greece	12.4 lbs (5.6 kg)	Battery	1 hr	VTOL / VTOL			No	https://ucandrone.com/uas-products/mera/
NETRA Pro UAV ideaForge Technology Pvt. Ltd. India	13.2 lbs (5.9 kg)	Battery	1.5 hrs	VTOL / VTOL		Camera, thermal	No	https://ideaforgetech.com/security-and-surveillance/switch-uav
Netra V Series ideaForge India		Battery	1 hr	VTOL / VTOL	IP65	Camera	No	https://ideaforgetech.com/security-and-surveillance/netra-v4-pro
NX30 Ascent AeroSystems United States	30 lbs (13.6 kg)	Battery	1.08 hrs	VTOL / VTOL	IP56	Camera, modular options.	Yes	https://ascentaerosystems.com/nx30/
OA-2 VT Aries Offshore Aviation Group United States	14.33 lbs (6.4 kg)	Battery	1.67 hrs	VTOL / VTOL			Maybe	https://www.offshoreaviation.com/offshoreuas.html

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
Puma AE (RQ-20) AeroVironment United States	*15.4 lbs (6.9 kg)*	*Battery, Solar*	*2.5*	*Hand launch, Bungee, VTOL / Skid, Belly, VTOL*	*-20°F to +120°F (-29°C to +49°C)*	*Camera, EO/IR, modular*	*Yes*	*https://www.avinc.com/uas/puma-ae*
Raven B RQ-11 AeroVironment United States	*4.4 lbs (1.9 kg)*		*1.25*	*Hand launch / Skid, Belly*		*Camera, EO/IR*	*Yes*	*https://www.avinc.com/uas/raven*
R80D SkyRaider FLIR Systems, Inc. United States		Battery		VTOL / VTOL			NA	https://www.flir.com/products/r80d-skyraider/?vertical=uas&segment=uis
Sentaero 5 Censys Technologies United States	14 lbs (6.3 kg)	Battery	1.5 hrs	VTOL / VTOL		Camera, EO/IR	No	https://censystech.com/sentaero-5/
SkyDrone7 Nordic Drones Oy Finland	14.11 lbs (6.3 kg)	Battery	1 hr	VTOL / VTOL	-4°F to +104°F (-20°C to +40°C)	Camera, Package	No	https://nordicdrones.fi/en/skydrone7-new-drone-performance-for-military-and-security-needs/
SPIKE NES&TEC Co., Ltd. South Korea	6.6 lbs (2.9 kg)	Battery	1 hr	VTOL / VTOL		Camera	No	http://nesnt.com/eng/product/menu_01.html
The Edge 130 VTOL FlightWave Aerospace Systems Inc. United States	**2.65 lbs (1.2 kg)**	**Battery**	**2.08 hrs**	**VTOL / VTOL**		**Camera**	**Yes**	**https://www.flightwave.aero/edge-130-blue/**
Trinity Tactical Quantum Systems GmbH Germany	12.68 lbs (5.7 kg)	Battery	1.5 hrs	VTOL / VTOL	IP54 +10°F to +122°F (-12°C to +50°C)	Camera	Maybe	https://quantum-systems.com/trinity-tactical/
Vetal HG Robotics Company Limited Thailand	10.14 lbs (4.5 kg)	Battery	1 hr	VTOL / VTOL	+14°F to +140°F (-10°C to 60° C)	Camera, thermal	No	https://www.hiveground.com/vetal/vetal-specification/

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
Mostly Meets the Key Features of the Use Case								
Altura Zenith ATX4 Aerialtronics Netherlands	14 lbs (6.3 kg)	Battery	0.5 hr	VTOL / VTOL	IPX5	Camera, modular options	No	https://www.aerialtronics.com/en/products/altura-zenith#specifications
AR100-H Airrobot GmbH & Co KG Germany				VTOL / VTOL			No	https://nordicunmanned.com/drones/ar100-h/
ATI BOT V2 Aerial Technology International United States	14 lbs (6.3 kg)	Battery	0.5 hr	VTOL / VTOL	+14°F to +104°F (-10°C to +40°C)	Camera, package	No	https://www.aerialtechnology.com/bot
AVID EDF-8 AVID, LLC. United States	3 lbs (1.3 kg)	Battery	0.5 hr	VTOL / VTOL		Modular options	No	http://www.avidaerospace.com/avid-edf-8
Bereginya / Berehynya OJSC Meridian Ukraine	4.4 lbs (1.9 kg)	Battery	0.75 hr	VTOL / VTOL		Camera	No	https://merydian.kiev.ua/en/services/unmanned-aircraft-system-spectator-2/
Blackwing AeroVironment United States	4 lbs (1.8 kg)			Launcher / Expendable		Camera, EO/IR, thermal	Yes	https://www.avinc.com/lms/blackwing
BUZZARD Challenger Aerospace Systems United States	4.19 lbs (1.9 kg)	Battery	1.5 hrs	Hand Launch / safety parachute			Maybe	https://challengeraerospace.com/innovations/fixed-wing-systems-uav-uas-vtol/
Carrier Hx8 Efficiency Harris Aerial LLC United States	42 lbs (19 kg)	Battery	0.5 hr	VTOL / VTOL		Camera, EO/IR, Thermal, Package	Yes	https://www.harrisaerial.com/carrier-hx8/
Draganflyer Commander 2 Draganfly Innovations, Inc. Canada	8.26 lbs (3.7 kg)	Battery	0.5 hr	VTOL / VTOL		Camera, IR, thermal	Yes	https://draganfly.com/draganflyer-commander2/

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
EasyOne aircraft Microdrones, GmbH Germany	12 lbs (5.4 kg)	Battery		VTOL / VTOL	+14°F to +104°F (-10 °C to 40°C)	LiDAR	No	https://www.microdrones.com/en/integrated-systems/easyone/easyoneuhr-uhr-lite/
EasyOneLiDARUHR Microdrones, GmbH Germany	12 lbs (5.4 kg)	Battery		VTOL / VTOL	+14°F to +104°F (-10°C to 40°C)	LiDAR	No	https://www.microdrones.com/en/integrated-systems/easyone/easyoneuhr-uhr-lite/
eBee Geo SenseFly Switzerland	2.9 lbs (1.3 kg)	Battery	0.75 hr	Hand Launch / Skid, Belly	+5°F to +104°F (-15°C to 40°C)	Camera	Yes	https://www.sensefly.com/drones/ebee-geo/
Endurance Hitec Commercial Solutions, LLC. United States	7 lbs (3.1 kg)	Battery	0.67 hr	VTOL / VTOL		Camera, thermal, modular	No	https://hiteccds.com/drone-fleet/
ERE-75 (Desert Hawk) CopterPIX PRO Israel	4 lbs (1.8 kg)	Battery	0.83 hr	VTOL / VTOL			No	https://www.copterpix.pro/products/ere-75-oz-tactical/
Heavy Lift Octocopter Versadrones Ireland	35.3 lbs (16 kg)	Battery	0.5 hr	VTOL / VTOL		Camera	No	some information here: https://hexcam.wixsite.com/versadrones-uav/heavy-lift-octocopter main website is "down for maintenance"
Humming-Prop Sistemas de Control Remoto Spain	13.23 lbs (6 kg)	Battery	0.67 hr	VTOL / VTOL		Modular	No	https://scrdrones.com/en/product-item/humming-prop/
HUNTER Halcon United Arab Emirates	4.41 lbs (2 kg)	Battery	0.5 hr	Hand Launch / VTOL			No	https://edgegroup.ae/solutions/hunter-hand-launched-drone-rotary
IA-3 Colibri IDS Ingegneria Dei Sistemi S.p.A. Italy	11 lbs (4.9 kg)	Battery	0.67 hr	VTOL / VTOL, Water Recovery	+14°F to +113°F (-10°C to +45°C)	Camera, IR	No	https://www.idscorporation.com/pf/ia-3-colibri/

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
MAGNI Elbit Systems EW and SIGINT - Elisra Israel	5.5 lbs (2.4 kg)	Battery	0.5 hr	VTOL / VTOL		Camera	Maybe	https://elbitsystems.com/product/magni/
MATRIX SE xCraft Enterprises, LLC. United States	7.3 lbs (3.3 kg)	Battery	0.7 hr	VTOL / VTOL		Camera, EO/IR, modular	No	https://xcraft.io/matrix-se/
md4-200 Microdrones, GmbH Germany	2.43 lbs (1.1 kg)	Battery	0.5 hr	VTOL / VTOL		Camera, thermal	No	https://dronelitic.com/microdrones-md4-200/
mdLiDAR1000UHR Microdrones, GmbH Germany	14 lbs (6.3 kg)	Battery		VTOL / VTOL	+14°F to +104°F (-10°C to 40°C	LiDAR	No	https://www.microdrones.com/en/integrated-systems/md4-1000/mdlidar1000uhr-uhr-lite/
mdLiDAR1000UHR Lite Microdrones, GmbH Germany	14 lbs (6.3 kg)	Battery		VTOL / VTOL	+14°F to +104°F (-10°C to 40°C)	LiDAR	No	https://www.microdrones.com/en/integrated-systems/md4-1000/mdlidar1000uhr-uhr-lite/
NAVI Aeronavics, Ltd. New Zealand	11 lbs (4.9 kg)	Battery	0.5 hr	VTOL / Parachute, VTOL		Camera, thermal	No	https://aeronavics.com/models-of-drones/navi/
Navig8-Electric 4Front Robotics Canada	12 lbs (5.4 kg)	Battery	0.67 hr	VTOL / VTOL		Camera, EO/IR, LiDAR	No	https://www.4frontrobotics.com/uavs
Oktokopter (OktoXL 6S12) HiSystems GmbH Germany	11.24 lbs (5 kg)	Battery	0.75 hr	VTOL / VTOL		Camera, EO/IR, thermal, package, farming	No	https://www.mikrokopter.de/en/products/copter-oktoxl6s12
Pandion S PRENEU.Co.Ltd South Korea	4.4 lbs (1.9 kg)	Battery	0.5 hr	VTOL / VTOL		Camera, EO/IR	No	https://www.preneu.com/pandion_s-en/
PD4-XA1 Prodrone, Inc. Japan	13 lbs (5.8 kg)	Battery, External Power Supply	0.67 hr	VTOL / VTOL	IP67 case, IPX4 system	Camera	No	https://www.prodrone.com/products/pd4-xa1/

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
Pegasus Mini Robotic Research United States	4 lbs (1.8 kg)	Battery	0.5 hr	VTOL / VTOL		Camera	No	https://rr.ai/defense
Phoenix 30 UAV Solutions, Inc. United States	12 lbs (5.4 kg)	Battery	0.58 hr	VTOL / VTOL			Yes	https://uav-solutions.com/unmannedaircraft/uavs-phoenix-ace-xl/
Pigeon-C TOP Engineering Group Co., Ltd. Thailand	11 lbs (4.9 kg)	Battery	1 hr	VTOL, Runway, Wheeled / Runway, Wheeled, VTOL		Camera, thermal	No	https://www.top-engcorp.com/pigeon-c
Q4X MAVTech Italy	9.3 lbs (4.2 kg)	Battery	0.53 hr	VTOL / VTOL	+14°F to +104°F (-10°C to +40°C)	Camera, LiDAR, modular	No	https://www.mavtech.eu/en/products/q4x-drone/
RDASS HD2 Leptron Unmanned Aircraft Systems United States	7.8 lbs (3.5 kg)	Battery - LiPo 6S		VTOL / VTOL	+14°F to +122°F (-10°C to 50°C)	Camera	Maybe	http://www.leptron.com/leptron_rdass.html
RDASS Precision Leptron Unmanned Aircraft Systems United States	7.8 lbs (3.5 kg)	Battery - LiPo 6S	0.33 hr	VTOL / VTOL	+14°F to +122°F (-10°C to 50°C)	Camera	Maybe	http://www.leptron.com/leptron_rdass_precision.html
Scorpion Quantum Systems GmbH Germany	15.4 lbs (6.9 kg)	Battery	0.58 hr	VTOL / VTOL	IP54 -4°F to +113°F (-20°C to +45°C)	Camera	Maybe	https://quantum-systems.com/scorpion/
Sentinel G1 (old model) Aero-Sentinel Ltd. Israel	3.5 lbs (1.5 kg)	Battery	0.66 hr	VTOL / VTOL	+14°F to +122°F (-10°C to +50°C)	Camera, thermal	Maybe	https://www.airbornedrones.co/surveying-and-mapping/
SkyRanger™ R70 FLIR Systems, Inc. United States	11 lbs (4.9 kg)	Battery	0.83 h	VTOL / VTOL		Camera, EO/IR	Yes	https://www.flir.com/products/skyranger-r70/?vertical=uas&segment=uis

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
Surveying Robot service-drone.de GmbH Germany	11 lbs (4.9 kg)	Battery	0.46 hrs	VTOL / VTOL		Camera, IR	No	https://multirotor.net/en/products/aircraft/surveying-robot
SwitchBlade-Elite Vision Aerial United States	11 lbs (4.9 kg)	Battery	0.67 hr	VTOL / VTOL	14°F to 122°F (-10ºC to 50ºC) IP52	Camera	Maybe	https://visionaerial.com/switchblade-elite/
TITAN LE Italdron srl Italy	12.13 lbs (5.5 kg)	Battery	0.5 hr	VTOL / VTOL	+23°F to +104°F (-5°C to +40°C)	Camera	No	https://www.italdron.com/drone-professionale-titan-le
UM-12 UMAC Air Co. Ltd. South Korea		Battery		VTOL / VTOL		Camera	No	http://www.umacair.com/product_en/um-12/?sop=and&page=3
UM-6 UMAC Air Co. Ltd. South Korea		Battery		VTOL / VTOL		Camera	No	http://www.umacair.com/product_en/um-6/?sop=and&page=2
UM-8 UMAC Air Co. Ltd. South Korea		Battery		VTOL / VTOL		Camera	No	http://www.umacair.com/product_en/um-8/?sop=and&page=3
Vespa Hex HG Robotics Company Limited Thailand	10.03 lbs (4.5 kg)	Battery	0.67 hr	VTOL / VTOL	+32°F to +122°F (0°C to 50° C)	Camera, modular	No	https://www.hiveground.com/vespa-drone/
XeFi NES&TEC Co., Ltd. South Korea	6.6 lbs (2.9 kg)	Battery	0.58 hr	VTOL / VTOL		3-axis gimbal	No	http://nesnt.com/eng/product/menu_01.html

NOTE: Italicized rows are already purchased by U.S. Army. Bolded rows are on the DIU Blue UAS list.

Table A.3. Potential Battalion and Squadron SUAS

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
				Meets Key Features of Use Case				
ATLAS-V Nextech South Africa	26.4 lbs (12 kg)	Battery (petrol optional)	3 hrs	VTOL / VTOL		Camera, EO/IR	No	https://www.nextech.online/products/vtol-drone
Carrier H6 Hydrone Harris Aerial United States	**55.1 lbs (25 kg)**	**Battery, Fuel Cell**	**1.5 hrs**	**VTOL / VTOL**			**Yes**	**https://www.harrisaerial.com/harris-carrier-h6-hydrone/**
Circinae VTOL Challenger Aerospace Systems, USA United States	15.4 lbs (7 kg)	Battery	1.5 hrs	VTOL / VTOL			Maybe	https://challengeraerospace.com/innovations/fixed-wing-systems-uav-uas-vtol/
E400 Event 38 Unmanned Systems United States	20.5 lbs (9.3 kg)	Battery	1.5 hrs	VTOL / VTOL		Camera, EO/IR, modular	Maybe	https://event38.com/fixed-wing/e400-vtol-drone/
Flightwave Aero Edge 130 Flight Wave United States			**2 hrs**	**VTOL / VTOL**		**Camera, EO/IR, modular**	**Yes**	**https://www.flightwave.aero/edge-130-enterprise/**
FT-100 FH FT Sistemas Ltd. Brazil	26.4 lbs (12 kg)	Gasoline, Aviation Fuel	2.5 hrs	VTOL / VTOL		Camera, EO/IR, EW	No	http://ftsistemas.com.br/en/ft-100-fh/
Gyrotrak GT20 Airial Robotics, Inc. Germany	44.1 lbs (20 kg)	Battery	2.5 hrs	VTOL / VTOL		Camera	No	https://airialrobotics.com/gt20-gyrotrak/
Heliplane LRS 340 Drone Volt France	16.5 lbs (7.5 kg)	Battery, Gasoline	2.5 hrs	VTOL / VTOL	Operating Temperature: +14°F to +122°F (-10 °C to +50 °C)	Camera, thermal	No	https://www.dronevolt.com/en/expert-solutions/heliplane/

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
ideaForge Switch ideaForge India	15.4 lbs (7 kg)	0	2 hrs	VTOL / VTOL	Operating Temperature: +5°F to +104°F (-15°C to +55°C) Any Govt Lab/DRDO/ NABL accredited Lab certified	Camera	No	https://ideaforgetech.com/security-and-surveillance/switch-uav
IF750 Inspired Flight United States	**14.9 lbs (6.8 kg)**	**Battery**	**22-37 mins**	**VTOL / VTOL**		**EO/IR**	**Yes**	**https://shop.inspiredflight.com/products/if750-hlblue-fpv**
Sentinel G3 Aero-Sentinel Ltd. Israel	24.2 lbs (11 kg)	Battery	1.5 hrs	VTOL / VTOL	Operating Temperature: 14°F to +122°F (-10°C to +50°C)	Camera, thermal	Maybe	https://www.aero-sentinel.com/military-drones/military_drone_sentinel_g3/
Shadow Quad Inova Drone United States	31.9 lbs (14.5 kg)	Battery	1.5 hrs	VTOL / VTOL		Camera, EO/IR, thermal, LiDAR	No	https://www.inovadrone.com
Skylark I-LEX Elbit Systems EW and SIGINT - Elisra Israel	16.5 lbs (7.5 kg)	Battery	3 hrs	Hand Launch / Hand Launch		Camera	Maybe	https://elbitsystems.com/product/skylark-i-lex-2/
Stalker XE Lockheed Martin Corporation United States	*22 lbs (10 kg)*	*Propane Fuel Cell*	*8 hrs*	*VTOL, Bungee, Pneumatic / VTOL, Bungee, Pneumatic*		*Camera, EO/IR, package*	*Yes*	*https://www.lockheedmartin.com/en-us/products/stalker.html*
Perimeter 8 Skyfront United States	50.7 lbs (23 kg)	Battery, Gasoline	5 hrs	VTOL / VTOL	Operating Temperature: 14°F to +113°F (-10°C to +45°C)		No	https://skyfront.com/perimeter-8/
Vector Quantum-Systems Germany	35.9 lbs (16.3 kg)	Battery	3 hrs	VTOL / VTOL	Operating Temperature: -4°F to +113°F (-20°C to 45°C)	Camera, EO/IR	No	https://quantum-systems.com/vector/

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
VelosV3 Velos Rotors, LLC. United States	55.1 lbs (25 kg)	Battery	1.25 hrs	VTOL / VTOL		Camera, thermal, LiDAR, package	No	https://velos-rotors.com/home/products/velos-v3/
Volanti Carbonix Australia	26.4 lbs (12 kg)	Battery, Gasoline	2 hrs	VTOL / VTOL		Camera	No	https://carbonix.com.au/volanti/
Mostly Meets the Key Features of the Use Case								
Aeromapper Talon Aeromao Inc. Canada		Battery	2 hrs	Hand launch / Hand launch	Storing Temperature: -4°F to +104°F (-20° C to +40° C)	Camera, modular	Maybe	https://aeromao.com/products/aeromapper-talon/
Aeromapper Talon LITE Aeromao Inc. Canada		Battery	2.75 hrs	Hand launch / Hand launch	Storing Temperature: -4°F to +104°F (-20°C to +40°C)	Camera, thermal, modular	Maybe	https://aeromao.com/aeromapper-talon-lite/#specifications
Aeromapper Talon Amphibious Aeromao Inc. Canada			1.5 hrs	Hand launch / Hand launch	Storing Temperature: -4°F to +104°F (-20°C to +40°C)	Camera	Maybe	https://aeromao.com/products/aeromapper-talon-amphibious/
CORVO PPDS Corvo Australia	11.9 lbs (5.4 kg)	Battery		Hand or catapult / Hand or catapult		Camera, modular	Maybe	https://corvouas.com.au/wp-content/uploads/CORVO-PPDS-web-version-23082023-compressed.pdf
IF1200 Inspired Flight United States	**48.5 lbs (22 kg)**	**Battery**	**18-24 mins**	**VTOL / VTOL**			**Yes**	**https://shop.inspiredflight.com/products/copy-of-copy-of-if1200a-blue-herelink**
Intense Eye V2 Blue Halo United States	13.2 lbs (6 kg)		34 mins	VTOL / VTOL			Yes	
Osprey Easy Aerial United States			55 mins	VTOL / VTOL			Yes	https://www.easyaerial.com/osprey/

NOTE: Bolded rows are Blue UAS. Italicized rows are already purchased by U.S. Army.

Table A.4. Potential Brigade SUAS

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
Meets Key Features of Use Case								
ALPHA 800 Alpha Unmanned Systems Spain	55.1 lbs (25 kg)	Gasoline	4 hrs	VTOL / VTOL		Camera, IR, LiDAR	No	https://alphaunmannedsystems.com/product/uav-helicopter-alpha-800/
ATLAS-V Nextech South Africa	26.4 lbs (12 kg)	Battery (petrol optional)	3 hrs	VTOL / VTOL		Camera, EO/IR, modular	No	https://www.nextech.online/products/vtol-drone
Gyrotrak GT20 Airial Robotics, Inc. Germany	44.1 lbs (20 kg)	Battery	2.5 hrs	VTOL / VTOL	IPX5 electronics	Camera	No	https://airialrobotics.com/gt20-gyrotrak/
RUEPEL PRENEU.Co.Ltd South Korea	50.7 lbs (23 kg)	Gasoline (Battery option)	2 hrs	VTOL / VTOL		Camera, EO/IR, LiDAR, modular, packages	No	https://www.preneu.com/ruepel_e10-en/
Mostly Meets Key Features of Use Case								
CORVO PPDS HL Corvo Australia	28.6 lbs (13 kg)	Battery		Hand, bungee / belly, deck, water		Camera, modular	Maybe	https://corvouas.com.au/wp-content/uploads/CORVO-PPDS-HL-web-version-23082023-compressed_1.pdf
CORVO PPDS Corvo Australia	11.9 lbs (5.4 kg)	Battery		Hand or catapult / belly		Camera, modular	Maybe	https://www.sypaq.com.au/solution/corvo-unmanned-systems/
Wingcopter 198 Wingcopter Germany		Battery	15 min to 1.5 hrs	VTOL / VTOL	+32°C to +113°F (0°C to +45°C)	Packages	No	https://wingcopter.com/wingcopter-198

Table A.5. Potential Tethered SUAS

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
Meets Key Features of Use Case								
Albatross Easy Aerial USA	8.5 lbs (3.8 kg)		unlimited	VTOL / VTOL	All weather (rain, snow, fog)		Yes	https://www.easyaerial.com/wp-content/uploads/2023/01/Easy-Aerial-Solution-Deck-Jan-2023.pdf
Alpine Swift Easy Aerial USA	5.5 lbs (2.5 kg)		unlimited	VTOL / VTOL	All weather (rain, snow, fog)		Yes	https://www.easyaerial.com/wp-content/uploads/2023/01/Easy-Aerial-Solution-Deck-Jan-2023.pdf
Aster-T Sistemas de Control Remoto/Everis Group Spain	8.8 lbs (4 kg)	battery	unlimited	VTOL / VTOL		Camera, EO/IR, thermal	No	https://scrdrones.com/wp-content/uploads/2021/04/FOLLETO-ASTER-T-CAUTIVO-EN-ne.pdf
HoverMast Sky Sapiance Israel	24.3 lbs (11 kg)			VTOL / VTOL	IP65	Camera, EO/IR, EW	Maybe	https://skysapience.com/wp-content/uploads/2019/12/SkySap_presentation_May_2021.pdf
Indago 3T Lockheed Martin Corp USA		battery		VTOL / VTOL	"Ruggedized for use in extreme weather conditions" IP 54	Camera, IR	Yes	https://www.lockheedmartin.com/content/dam/lockheed-martin/rms/documents/indago/Indago-3T-Brochure.pdf
Indago 3TM Lockheed Martin Corp USA				VTOL / VTOL	“Ruggedized for rain and dust”	Camera, IR	Yes	https://www.lockheedmartin.com/content/dam/lockheed-martin/rms/documents/indago/Final-(Planck)-Indago-3TM-Factsheet.pdf
IT180-999 ECA Group France	6.6 lbs (3 kg)	external	unlimited	VTOL / VTOL	-4°F to 104° F (-20°C to +40°C)	Camera, EO/IR, thermal, modular	No	https://www.ecagroup.com/en/solutions/tethered-mini-uav-permanent-surveillance
Livesky-HL-Spectre Hoverfly Technologies, Inc. USA	5 lbs (2.2 kg)	90-240 VAC, 2000W	1500 hrs (maintenance)	VTOL / VTOL	MIL-STD-810 (coming soon)	Camera, EO/IR, EW	Yes	https://hoverflytech.com/tethered-drones-uav-uas/livesky-hl-spectre/

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
Livesky-Sentry Hoverfly Technologies, Inc. USA	1.8 lbs (0.8 kg)			VTOL / VTOL	IP54; MIL-STD-810 (coming soon for both) -4°F to +131° F (-20°C to +55°C)		Yes	https://hoverflytech.com/tethered-drones-uav-uas/livesky-sentry/
Panadrone xCraft Enterprises, LLC. USA	4.2 lbs (1.9 kg)	battery	unlimited	VTOL / VTOL		Camera, thermal, IR/EO, modular	No	https://xcraft.io/panadrone/
Quad-8 Zenith AeroTech USA	20 lbs (9 kg)	battery		VTOL / VTOL	Operating Temperature: -4°F to +122° F (-20°C to 50°C)		Maybe	
Quad-L Heavy Zenith AeroTech USA	8 lbs (3.6 kg)	battery		VTOL / VTOL	Max Wind Resistance 30 mph (gust) Operating Temperature: -4°F to +122° F (-20°C to 50°C)		Maybe	
R70 Sky Ranger Teledyne FLIR USA	4.4 lbs (2 kg)		24 hrs	VTOL / VTOL	Tested to IP54, MIL-810G Tether systems –- -4°F to +122° F (-20°C to +50°C)	Camera, thermal, EO/IR	Yes	https://www.flir.com/products/r80d-skyraider/?vertical=uas&segment=uis
R80D SkyRaider Teledyne FLIR USA	4.4 lbs (2 kg)		24 hrs	VTOL / VTOL	Tested to IP54, MIL-810G Tether systems –-4°F to +122° F (20°C to +50°C)	Camera, EO/IR, EW	Yes	https://www.flir.com/products/r80d-skyraider/?vertical=uas&segment=uis
Raptor Easy Aerial	6.6 lbs (3 kg)		unlimited	VTOL / VTOL	All weather (rain, snow, fog)		Yes	https://www.easyaerial.com/raptor/
Shadow xCraft Enterprises, LLC. USA	0.5 lbs (0.2 kg)	battery	virtually unlimited	VTOL / VTOL		Camera		https://xcraft.io/shadow/
Watt-200 Drone Aviation Corporation (DAC) USA	10 lbs (4.5 kg)		>8hr (virtually unlimited)	VTOL / VTOL	Inclement weather - Rain, 20 mph winds	Camera, EO/IR, EW	Maybe	https://droneaviationcorp.com/watt200 https://d2ghdaxqb194v2.cloudfront.net/2453/181923.pdf
WATT-300 Drone Aviation Corporation (DAC) USA	10 lbs (4.5 kg)		>8hr (virtually unlimited)	VTOL / VTOL	Inclement weather - Rain, 20 mph winds	Camera, thermal, EO/IR	Maybe	https://droneaviationcorp.com/watt200 https://d2ghdaxqb194v2.cloudfront.net/2453/181923.pdf

NOTE: All SUAS in this list meet the key features for the use case.

Table A.6. Potential Conveyance SUAS

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
Meets Key Features of Use Case								
AAT - 1200 Thunderbolt Aurora Aerial, Inc. Canada	55.1 lbs (25 kg)	battery	29-64 min (payload dependent)	VTOL / VTOL, parachute	-4°F to +140°F (-20°C to +60°C)	Camera, modular, package	No	https://auroraaerial.aero/aat-1200-thunderbolt-specs/
aOrion HeliE aOrion Poland	60.6 lbs (27.5 kg)	battery	105 min	VTOL / VTOL	-22°F to +113°F (-30°C to +45°C)	Camera, EO/IR, EW, package	No	https://aorion.aero/aorion-heli-e/
Argus Predator Mark VII PRO Free Horizons s.r.o. Czech republic	93.7 lbs (42.5 kg)	battery, gasoline (2.5-3L)	4 hrs	VTOL / VTOL	+14°F to +122°F (-10°C to +50°C)	Package, kinetic	No	https://www.freehorizons.eu/fh/Catalog_FH_122022.pdf
ATLAS-V Airborne Drones South Africa	26.4 lbs (12 kg)	battery, optional gasoline	3 hrs 15 hrs with fuel option	VTOL / VTOL	These drones are able to work in extremely hot or humid climates	Camera, thermal, EO/IR, LiDAR, package	No	https://www.nextech.online/products/vtol-drone
AV-2 Pelican DroneTech UAV Corp USA	92.6 lbs (42 kg)	battery, gasoline	8 hrs	VTOL / VTOL		Modular	No	https://www.dronetechuav.com/av2-pelican
Black Eagle 35E Steadicopter, Ltd. Israel	77.1 lbs (35 kg)	battery	1.5 hrs	VTOL / VTOL	-4°F to +122°F (-20°C to +50°C)	Camera, EO/IR, LiDAR, package	Maybe	https://steadicopter.com/wp-content/uploads/2023/03/Full-brochure-for-web.pdf
Black Eagle 50 Steadicopter, Ltd. Israel	77.1 lbs (35 kg)	gasoline	4 hrs	VTOL / VTOL	-4°F to +122°F (-20°C to +50°C)	Camera, EO/IR, LiDAR, package	Maybe	

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
Black Eagle 50E Steadicopter, Ltd. Israel	110.2 lbs (50 kg)	battery	2 hrs	VTOL / VTOL	-4°F to +122°F (-20°C to +50°C)	Camera, EO/IR, LiDAR, package	Maybe	https://steadicopter.com/products1/blackeagle50/
Black Eagle 50H Steadicopter, Ltd. Israel	110.2 lbs (50 kg)	battery, gasoline	5 hrs	VTOL / VTOL	-4°F to +122°F (-20°C to +50°C)	Camera, EO/IR, LiDAR, package	Maybe	https://steadicopter.com/products1/blackeagle50/
Cargotrak CT30 Airial Robotics, Inc. Germany	66.1 lbs (30 kg)	battery	>1 hrs	VTOL / VTOL	IPX5	package	No	https://airialrobotics.com/ct30-cargotrak/
Carrier H6 Hybrid HE Harris Aerial LLC USA	**44.1 lbs (20 kg)**	**gasoline**	**3 hrs**	**VTOL / VTOL**	**-4°F to +104°F (-20°C to +40°C)**	**Camera, EO/IR, LiDAR**	**Yes**	**https://hse-uav.com/products/carrier-h6-hybrid-he**
Carrier H6 Hybrid HE+ Harris Aerial LLC USA	**50.7 lbs (23 kg)**	**gasoline**	**5 hrs, 1.5 hrs with max payload**	**VTOL / VTOL**	**-4°F to +104°F (-20°C to +40°C)**	**Camera, EO/IR, LiDAR**	**Yes**	**https://www.harrisaerial.com/carrier-h6-hybrid-drone/**
CGT50 VTOL [CGT50-SLT] a-techSYN Ireland	121.2 lbs (55 kg)	battery, gasoline (18L)	6 hrs	VTOL / VTOL			No	https://a-techsyn.com/uavs/cgt50-vtol/
DeltaQuad Pro Vertical Technologies Netherlands	14.1 lbs (6.4 kg)	battery	110 min max payload (but EU export limited to 59min)	VTOL / VTOL	-4°F to +113°F (-20°C to +45°C) Light rain	Camera, thermal, IR, package	No	https://docs.deltaquad.com/deltaquad-operation-manual/vehicle-specifications

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
Domani Electric Carbonix Australia	55.1 lbs (25 kg)	battery	8 hrs	VTOL / VTOL		Thermal, LiDAR, modular	No	https://carbonix.com.au/domani/
ERE-1000 HL CopterPIX PRO Israel	66.1 lbs (30 kg)	battery	76 min	VTOL / VTOL		EO/IR	No	https://www.copterpix.pro/products/ere1000-hl/
ERE-95 Pro (Desert Storm) CopterPIX PRO Israel	46.3 lbs (21 kg)	battery	78 min	VTOL / VTOL		EO/IR	No	https://www.copterpix.pro/products/ere-95-pro/
ERE-95 Pro Hybrid CopterPIX PRO Israel	46.3 lbs (21 kg)	generator	320 min	VTOL / VTOL		EO/IR	No	https://www.copterpix.pro/products/ere-95-pro-hybrid/
Flydeo X8 Flydeo s.r.o. Czech Republic	44.1 lbs (20 kg)	battery	70 min	VTOL / VTOL	+14°F to +104°F (-10°C to +40°C) dust and water resistant.	Camera, thermal, packages	No	https://flydeo.com/x8/
Flydeo Y6 Flydeo s.r.o. Czech republic	26.4 lbs (12 kg)	battery	70 min	VTOL / VTOL	+14°F to +104°F (-10°C to +40°C) dust and water resistant.	Camera, thermal, LiDAR, packages	No	https://flydeo.com/y6/
FT-100 FH FT Sistemas Ltd. Brazil	26.4 lbs (12 kg)	gasoline or aviation fuel	≥2.5 hrs	VTOL / VTOL		Camera, EO/IR	No	http://ftsistemas.com.br/en/ft-100-fh/
HE300 AP Helipse France	109 lbs (49.4 kg)	gasoline	2 hrs	VTOL / VTOL		Modular	No	https://helipse.com/en/product/HE300

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
HYBRiX 2.1 Quaternium Technologies S.L. Spain	55.1 lbs (25 kg)	battery, gasoline	2-4 hrs	VTOL / VTOL	+14°F to +113°F (-10°C to +45°C)		No	https://www.quaternium.com/wp-content/cache/all/uav/hybrix-drone/index.html
IT180-5TH-S ECA France		gasoline	2 hrs	VTOL / VTOL		Camera, EO/IR, modular	No	https://www.igp.de/drohnen/eca-group/gasoline-uav/IT180%205TH-U%20Gasoline%20powered.pdf
KittyHawk Mobile Recon Systems USA	60 lbs (27.2 kg)	battery	<35 min	VTOL / VTOL	+10°F to +100°F (-12°C to +38°C)	Camera, package	Maybe	https://mobilereconsystems.com/kittyhawk-mr10/
KUS-HD Korean Air Aerospace Division (KAL) South Korea	77.1 lbs (35 kg)	battery, gasoline	2 hrs	VTOL / VTOL	-4°F to +113°F (-20°C to +45°C)	Camera, EO/IR, modular	No	https://aerospace.koreanair.com/contents/media/brochure/hd3.pdf
NX30 Ascent AeroSystems USA	30 lbs (13.6 kg)	battery	>65 min (20 min max payload)	VTOL / VTOL	IP56 Operating temperature: -40°F to +130°F (-40°C to 54°C)	Camera	Yes	https://ascentaerosystems.com/nx30/
OA-2 VT Aries Offshore Aviation Group USA	16.5 lbs (7.5 kg)	battery	112 min	VTOL / VTOL		Package	Maybe	https://www.offshoreaviation.com/offshoreuas.html
OA-2D Gryphon Offshore Aviation Group USA	48.5 lbs (22 kg)	battery	Up to 4hr	VTOL / VTOL	Operating temperature: +32°F to +95°F (0°C to +35˚C)	Camera	Maybe	https://www.offshoreaviation.com/offshoreuas.html
Parcelon-Hybrid NES&TEC Co., Ltd. South Korea	39.6 lbs (18 kg)	gasoline	4 hrs	VTOL / VTOL	-4°F to +104°F (-20°C to +40°C)	Camera, package	No	http://nesnt.com/eng/product/menu_01.html

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
PDH-GS120 Prodrone, Inc. Japan	77.1 lbs (35 kg)	battery, gasoline	2.5 hrs	VTOL / VTOL		Camera, modular, package	No	https://www.prodrone.com/products/pdh-gs120/
Perimeter 4 Skyfront USA	33 lbs (15 kg)	battery, gasoline	5+ hrs without payload 1+ hrs with max payload	VTOL / VTOL	+14°F to +104°F (-10°C to +40°C)	Camera, thermal, LiDAR, packages	No	https://skyfront.com/perimeter-4/
Perimeter 8 Skyfront USA	51 lbs (23 kg)	battery, gasoline	5 hrs without payload 1 hr max payload	VTOL / VTOL	+14°F to +113°F (-10°C to +45°C)	Modular	No	https://skyfront.com/perimeter-8/
Perimeter 8+ Skyfront USA	56 lbs (25.5 kg)	battery, gasoline	5+ hrs no payload, 1 hr max payload	VTOL / VTOL	+14°F to +122°F (-10°C to +50°C)	Modular	No	https://skyfront.com/perimeter-8/
Sentinel G3 Aero-Sentinel Ltd. Israel	24.2 lbs (11 kg)	battery	90 min max	VTOL / VTOL	Operating Temperature: +14°F to +122°F (-10°C to +50°C) Storage Temperature: +5°F to +140°F (-15°C to +60°C) Ruggedized, dust and rain proof	Camera	Maybe	https://www.aero-sentinel.com/military-drones/military_drone_sentinel_g3/
Stream C VTOL Threod Systems, Ltd. Estonia	83.7 lbs (38 kg)		<6 hrs	VTOL / VTOL		Modular	No	https://threod.com/products/stream-c-vtol/

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
SuperVolo XL (HP3) Hybrid Project LLC USA	40 lbs (18.1 kg)	battery, gasoline, oil	8 hrs	VTOL / VTOL	"Operation in harsh environments"	Modular, packages	No	https://www.hybridproject.com/technical-details
Surveyor-H UVH 170 UAVOS, Inc. USA	100 lbs (45 kg)	battery, gasoline	5 hrs	VTOL / VTOL	Temperature range: -31°F to +104°F (-35°C to +40°C)	Camera, packages	No	https://www.uavos.com/products/vtols/uav-helicopter-uvh-170/
Surveyor-H UVH 25EL UAVOS, Inc. USA	55 lbs (25 kg)	battery	1.5 hrs	VTOL / VTOL	Operating temperature: -4°F to +104°F (-20°C to +40°C)	Camera, payloads	No	https://www.uavos.com/images/brochures/UVH-25EL.pdf
Thor Flying Production LLC, Elbit Systems LLC Israel	55.1 lbs (25 kg)	battery	75 min	VTOL / VTOL	MIL-STD-810F	Camera, EO/IR, EW, kinetic	Maybe	https://flying-production.com/wp-content/uploads/2022/11/Thor2.pdf
Vapor 55 MX Aerovironment USA	65 lbs (29.4 kg)	battery	75 min	VTOL / VTOL	0 °F to 120 °F (-17 °C to 49 °C)	Camera, EO/IR, LiDAR, packages	Yes	https://www.avinc.com/uas/vapor
VelosV3 Velos Rotors, LLC. USA		battery	<80 min	VTOL / VTOL	IP65	Camera, packages	No	https://velos-rotors.com/home/products/velos-v3/
Mostly Meets the Key Features of the Use Case								
Alpha 800 Alpha unmanned systems Spain	30.8 lbs (14 kg)	gasoline	2.5 hrs	VTOL / VTOL	electronics IP64	Cameras, EO/IR, LiDAR	No	https://alphaunmannedsystems.com/product/uav-helicopter-alpha-800/

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
Alpha 900 Alpha unmanned systems Spain	55.1 lbs (25 kg)	gasoline, heavy fuel, aviation fuel	4 hrs	VTOL / VTOL		Camera, EO/IR, LiDAR, packages	No	https://alphaunmannedsystems.com/product/uav-helicopter-alpha-900/
Alta X Freefly USA	**76.9 lbs (34.9 kg)**	**battery**	**10.75 hrs to 50 min, weight dependent**	**VTOL / VTOL**	**-4°F to +122°F (-20°C to +50°C) IP43 equivalent tested**	**Modular**	**Yes**	**https://freeflysystems.com/alta-x/specs**
ALTI Transition ALTI UAS South Africa	35.2 lbs (16 kg)	gasoline	8 hrs	VTOL / VTOL		Modular	No	https://www.altiuas.com/
BLACKBIRD VT120 UcanDrone Greece	2.6 lbs (1.2 kg)	battery	1 hrs	VTOL / hand launch / VTOL / belly land	rain, snowfall	Camera	No	https://ucandrone.com/uas-products/blackbird-vt/
Carrier H6 Hybrid HL Harris Aerial LLC USA	209.4 lbs (95 kg)	battery, gasoline	45 min	VTOL / VTOL	-4°F to +104°F (-20°C to +40°C)	Camera, modular	Yes	https://www.harrisaerial.com/carrier-h6-hybrid-drone/
CORVO PPDS Corvo Australia	11.9 lbs (5.4 kg)	battery	3 hrs	Hand or catapult / belly		Camera, packages	Maybe	https://corvouas.com.au/wp-content/uploads/CORVO-PPDS-web-version-23082023-compressed.pdf
CORVO PPDS HL Corvo Australia	28.6 lbs (13 kg)	battery	1.3 to 3.3 hrs depending on number of batteries	Hand or bungee / belly / deck / water		Camera, packages	Maybe	https://www.sypaq.com.au/solution/corvo-unmanned-systems/
E400 Event 38 Unmanned Systems USA	20 lbs (9.3 kg)	battery	1.5 hrs	VTOL / VTOL		Camera, EO/IR	No	https://event38.com/fixed-wing/e400-vtol-drone/

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
Eagle Plus VTOL Challenger Aerospace Systems USA	46.9 lbs (21.3 kg)	battery, hydrogen	5 hrs	VTOL / VTOL		Camera, EO/IR	Maybe	https://challengeraerospace.com/innovations/fixed-wing-systems-uav-uas-vtol/
Eagle VTOL Challenger Aerospace Systems USA	35.2 lbs (16 kg)	battery	5 hrs	VTOL / VTOL		Camera, EO/IR	Maybe	https://challengeraerospace.com/innovations/fixed-wing-systems-uav-uas-vtol/
EOS C VTOL Thredo Systems, Ltd. Estonia	31.3 lbs (14.2 kg)	battery	up to 3 hrs	VTOL / VTOL	-4°F to +122°F (-20°C to +50°C) Precipitation: 0.4 inches/hr (10 mm/hr)	Camera, EO/IR	No	https://thredo.com/wp-content/uploads/2023/02/Eos-C-VTOL-2023-homepage.pdf
FH-900 Flint Hills Solutions, LLC. USA	67 lbs (30.3 kg)	electricity	1 hr	VTOL / VTOL		Camera, EO/IR, package	No	http://fhsllc.com/pdfs/FH900-Product-Sheet.pdf
Flexrotor Aerovel Corporation USA	55 lbs (24.9 kg)	gasoline	>30 hrs	VTOL / VTOL	"This all-weather aircraft has operated in some of the harshest conditions on earth."	Camera, EO/IR, modular	Maybe	https://aerovel.com/flexrotor/
FVR-55 L3Harris Technologies USA	54.9 lbs (24.8 kg)	battery, gasoline	5 hrs (10-12 hrs with more fuel/less payload)	VTOL / VTOL	WMO Sea State Limit 3–4	Camera, EO/IR, modular	Yes	https://www.l3harris.com/sites/default/files/2021-11/as-pes-latitude-resources-fvr-55.pdf
GeoDrone 6 / VideoDrone 6 (formerly X4S) Nordic Drones Oy Finland	14.1 lbs (6.4 kg)	battery	74 min	VTOL / VTOL	IP43 tested successfully at 19.4°F (-7°C)	Camera, LiDAR, modular	No	https://nordicdrones.fi/en/products/product-information/

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
Gyrotrak GT20 Airial Robotics, Inc. Germany	44.1 lbs (20 kg)	battery	2 hr	VTOL / VTOL	BFT8 IPX5 electronics	Camera, thermal, LiDAR, packages	No	https://airialrobotics.com/gt20-gyrotrak/
HAMR (Hybrid Advanced Multi-Rotor) Advanced Aircraft Company USA	40 lbs (18.1 kg)	battery, gasoline	1hr at max payload, up to 3.5 hr for more fuel and minimal payload	VTOL / VTOL	IP54 +10°F to +120°F (-12.2°C to +48.9°C)	Camera, modular	No	https://advancedaircraftcompany.com/news/aac-secures-afwerx-contract-to-develop-next-generation-tactical-uas/
Hercules 10 Drone Volt France		battery	<35 min	VTOL / VTOL	-4°F to +113°F (-20°C to +45°C) moderate rains	Packages	No	https://www.dronevolt.com/en/expert-solutions/hercules-10
Hercules 20 Drone Volt France		battery	<40 min (15 min for 15kg)	VTOL / VTOL	-4°F to +113°F (-20°C to +45°C) moderate rains	Packages	No	https://www.dronevolt.com/en/expert-solutions/hercules-20
Hybrid Quadrotor (HQ-90) / FVR-90 L3Harris Technologies USA	120 lbs (54.4 kg)	gasoline or jet fuel	8-16 hrs	VTOL / VTOL	-20° F to 120° F (-29° C to 49° C) Maximum Precipitation 0.25 in/hr	Camera, packages	Yes	https://www.l3harris.com/all-capabilities/hybrid-quadrotortm-technology
IF1200 Inspired Flight USA	**48.5 lbs (21.9 kg)**	**battery**	**13-43 min**	**VTOL / VTOL**	**+14°F to +104°F (-10°C to +40°C)**	**Modular**	**Yes**	**https://inspiredflight.com/wp-content/uploads/2021/11/IF1200-Spec-Sheet-r1.8.pdf**
IF750 Inspired Flight USA	**15 lbs (6.8 kg)**	**battery**	**21-37 min**	**VTOL / VTOL**	**Operating Temperature: +14°F to +122°F (-10°C to +50°C) Storage Temperature: +14°F to +104°F (-10°C to +40°C)**	**Modular**	**Yes**	**https://shop.inspiredflight.com/products/if750-hlblue-fpv**

Platform Name, Vendor, Vendor Country	MGTOW	Power Source	Endurance	Launch / Recovery	Environmental	Payload	Near Term	Product Webpage URL
Indago 3 Lockheed Martin Corp USA	5 lbs (2.2 kg)	battery	50-70 min	VTOL / VTOL	IP54 (pursuing IP67)	Camera, IR, modular	Yes	https://www.lockheedmartin.com/en-us/products/indago-vtol-uav.html#
IT180-120 ECA France	46.3 lbs (21 kg)	battery, gasoline	50 min	VTOL / VTOL	-22°F to +122°F (-30°C to +50°C)	Modular	No	https://www.ecagroup.com/en/solutions/uav-it180-60-unmanned-aerial-vehicle
RQ-17 ION JETWIND Brazil	55 lbs (25 kg)	battery or gasoline	4 hrs (gasoline) 1 hr (battery)	VTOL / VTOL			No	https://www.jetwind.com.br/rq-17-ion
RUEPEL PRENEU.Co.Ltd South Korea	50.7 lbs (23 kg)	battery	120 min	VTOL / VTOL		EO/IR, LiDAR	No	https://www.preneu.com/ruepel_e10-en/
RUEPEL-E10 PRENEU.Co.Ltd South Korea	50.7 lbs (23 kg)	battery	90 min	VTOL / VTOL		EO/IR, LiDAR	No	https://www.preneu.com/ruepel_e10-en/
Scout B1-100 Aeroscout GmbH Switzerland	169.7 lbs (77 kg)	gasoline	1.5 hrs max payload	VTOL / VTOL		LiDAR, packages	No	https://www.aeroscout.ch/index.php/scout-uav-helicopters/scout-b1-100-uav-helicopter
Sicura EG-1100 UAS Global Services USA	55 lbs (24.9 kg)	battery or gasoline	3.5 hrs (gasoline), 1hr (battery)	VTOL / VTOL		Camera, LiDAR, modular	No	https://www.uas-gs.com/custom-aircraft-consultancy/aircraft/sicura-eg-1100/
Stalker VXE30 *Lockheed Martin Corporation* *USA*		*Battery, gasoline, solid oxide fuel cell*	*<4hr (battery), <8hr fuel cell*	*VTOL, Bungee, Rail / VTOL*		*Camera, EO/IR, packages*	*Yes*	*https://www.lockheedmartin.com/en-us/products/stalker.html*

Platform Name, Vendor, Vendor Country	**MGTOW**	**Power Source**	**Endurance**	**Launch / Recovery**	**Environmental**	**Payload**	**Near Term**	**Product Webpage URL**
Stalker XE Lockheed Martin Corporation USA		*Battery, gasoline*	*<2hr (battery), <4hr fuel cell*	*VTOL / VTOL*	*"all-weather"*	*Camera, packages*	*Yes*	
US-1 Vayu Aerospace Corporation USA		battery	75 min max payload	VTOL / VTOL	Operating Temperature: +32°F to +122°F (0°C to +50°C)	Packages	Maybe	https://vayuaerospace.com/us-1-quadcopter
V-BAT Shield AI USA			*10hr flight*	*VTOL / VTOL*		*Camera, EO/IR, packages modular*	*Yes*	*https://shield.ai/v-bat/*
Wingcopter 198 Wingcopter Germany	55.1 lbs (25 kg)	battery	15min (multi-copter), 90 min (fixed wing)	VTOL / VTOL	Operating temperature: (0°C to +45°C)	Packages	No	https://wingcopter.com/wingcopter-198

NOTE: Bolded rows are on the DIU Blue UAS list. Italicized rows are already purchased by U.S. Army.

Table A.7. Multi-Use-Case SUAS

Platform Name Vendor	Platoon	Company / Battery / Troop	Battalion / Squadron	Brigade	Tethered	Conveyance
ATLAS-V Nextech			X	X		X
BLACKBIRD VT120 UcanDrone		X				X
Bug 4.1 UAVTEK	X	X				
CORVO PPDS Corvo			X	X		X
CORVO PPDS HL Corvo				X		X
DeltaQuad Pro Vertical Technologies		X				X
E400 Event 38 Unmanned Systems			X			X
Eagle Plus VTOL Challenger Aerospace Systems		X				X
Edge 130 Blue FlightWave Aerospace Systems Inc.	X	X	X			
FT-100 FH FT Sistemas Ltd.			X			X
GeoDrone 6/ VideoDrone 6 Nordic Drones Oy		X				X
Gyrotrak GT20 Airial Robotics, Inc.			X	X		X
IF750 Inspired Flight		X	X			
Indago 3 Lockheed Martin Corporation		X				X
Perimeter 8 Skyfront			X			X
SkyRanger R70 Teledyne FLIR		X			X	
R880D SkyRaider Teledyne FLIR		X			X	
RUEPEL PRENEU.Co.Ltd.				X		X
Sentinel G3 Aero-Sentinel Ltd.			X			X
Stalker XE Lockheed Martin Corporation			X			X
VelosV3 Velos Rotors, LLC			X			X
Wingcopter 198 Wingcopter				X		X

Abbreviations

ATAK	Android Team Awareness Kit
AUVSI	Association for Uncrewed Vehicle Systems International
BCT	Brigade Combat Team
COTS	commercial off-the-shelf
DIU	Defense Innovation Unit
DIVARTY	Division Artillery
DSB	division sustainment brigades
EO/IR	electro-optical/infra-red
EW	electronic warfare
FY	fiscal year
ISR	intelligence, surveillance, and reconnaissance
LiDAR	light detection and ranging
NATO	North Atlantic Treaty Organization
NDAA	National Defense Authorization Act
SUAS	small uncrewed aircraft system(s)
TAK	Team Awareness Kit
UAS	uncrewed aircraft system(s)
UAV	uncrewed aircraft vehicle
VTOL	vertical take-off and landing
WinTAK	Windows Team Awareness Kit

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