



FY 2023

DEFENSE BUDGET

FOR UNCREWED SYSTEMS AND ROBOTICS

Executive Summary



The Association for Uncrewed Vehicle Systems International, the world's largest nonprofit organization dedicated to the advancement of uncrewed systems and robotics, represents corporations and professionals from more than 60 countries involved in industry, government and academia. AUVSI members work in the defense, civil and commercial markets.

Our vision is to create a future in which remotely operated and automated transportation technologies are fully accepted, valued and utilized to move people, things and data safely and efficiently — providing broad and lasting economic and social benefit.

Our community of innovators, leaders, and dare-to-dreamers is drafting the blueprint for autonomy, assuring its safe and seamless integration into everyday life. To learn more or get involved, visit auvsi.org/our-impact.

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Introduction

Military organizations worldwide are continuing to integrate uncrewed vehicles (UxV) into their operations at a growing rate. The United States (U.S.) Department of Defense (DOD) has funded the research, development, test, and evaluation (RDT&E) and procurement of UxV for decades, and support for these systems and associated technologies continues with the President's most recent budget request. The President's Budget (PB) request is released each year which includes justification documents detailing the range of technologies that will be procured and developed with that budget.

For the most recent PB request (hereafter referred to as PB23), each overarching program includes the requested funding for the next fiscal year (FY) (FY 2023), the enacted funding from the current fiscal year (FY 2022), the actual funding from FY 2021 (sometimes the amount enacted does not always match the amount used), and the projected funding for the next four fiscal years (FY 2024 - FY 2027). This report will discuss some of the programs with the largest funding in the next fiscal year as well as some key growth areas over the next five years.

For terminology used throughout this report, overarching RDT&E efforts are classified as Program Elements (PE) which are further broken down into projects and sub-projects. Overarching procurement efforts are often called programs of record (PoR) and when referring to budget documents it may also be called a line item. For the purposes of this report, all overarching efforts are termed "programs." While AUVSI's preferred term for the technologies referenced in this report is "uncrewed systems," the U.S. Department of Defense continues to use the legacy term "unmanned systems" for programs of record and procurement processes. Given the focus of this report and to avoid confusion for the reader, the term "unmanned" will be used in this report when referring to official programs that use the term. Click here to read more about AUVSI's commitment to inclusive language.

David Klein

Research Analyst Association for Unmanned Vehicle

Systems International (AUVSI)

Procurement of UxV in **FY 2023**

Starting with procurement, it is clear that uncrewed aircraft systems (UAS) have a significantly larger operational footprint on the battlefield when compared with their counterparts in the ground and maritime domains. In the FY 2023 budget request, 29 programs are fully dedicated to the procurement of UAS, totaling over \$2.6 billion. Figure 1 shows the top 13 of these UAS programs with the largest funding represented by the Navy's MQ-25 (\$748 million) and MQ-4 Triton (\$663

million) aircraft. The Army has also requested \$326 million for the Counter Small UAS (C-SUAS) program. The ground and maritime domains are represented by a single program each: the Army's Robotics and Applique Systems requested \$52 million in FY 2023 to acquire ground robotics and soldier borne sensors; and the Navy's Small & Medium UUV (Uncrewed Undersea Vehicle) program requested \$50 million. Detailed information on these programs and the specific technologies being procured will be provided in the "Program Details" section of this report.

Top Procurement Programs Supporting Uncrewed Vehicles in FY 2023

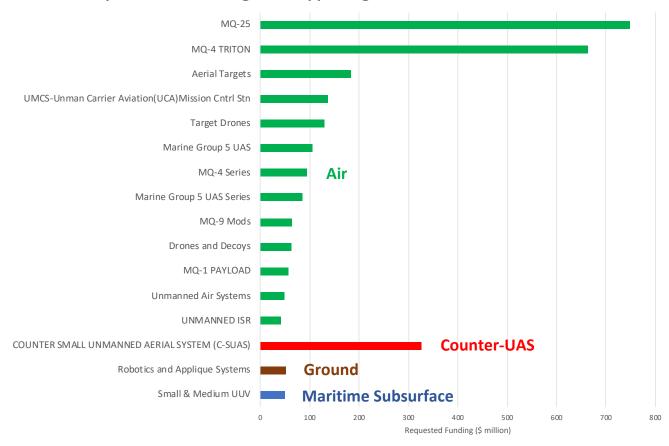


Figure 1: UxV procurement programs in the FY 2023 budget request.

RDT&E of UxV in FY 2023

Moving on to the RDT&E of UxV technologies there is a much stronger representation of programs outside of the air domain (Figure 2).

For maritime technologies, the top four uncrewed surface vehicle (USV) projects total \$457 million in requested funding for FY 2023 to advance the Navy's USV Enabling Capabilities, Large USV, Medium USV, and Mine Countermeasure (MCM) USV programs.

The top four uncrewed underwater vehicle (UUV) programs account for approximately \$245 million in FY 2023 with efforts focused on the extra-large UUV (XLUUV), the Barracuda expendable mine neutralizer, the medium class UUV Razorback (also referred to as the Littoral Battlespace Sensors-Autonomous Unmanned Vehicle (LBS-AUV)), and the medium class Medusa UUV.

In the ground domain, the top five projects have requested a total of approximately \$229 million in FY 2023, four of which are working to develop the Army's robotic combat vehicles (RCV) prototypes and enabling technologies for robotic vehicles deployed in combat environments. The other is supporting the Army's Leader/Follower project.

The air domain exceeds all others in requested budget for FY 2023, and as was shown in procurement, the top programs are represented by the Navy's MQ-25 and MQ-4 Triton aircraft. Other programs with significant funding include the Marine Group 5 UAS Development efforts and the Army's Future UAS project. The Air Force also has a two noteworthy programs with the RQ-4 Capability Enhancements (\$68.8 million) and MQ-9 SLAM (\$61.4 million) projects.

There are only a few projects which are fully dedicated to the development of Counter-UAS (C-UAS) technologies. These include the Army's C-UAS and C-SUAS Joint New Capabilities Development projects with a total funding request of \$64.5 million in FY 2023. The Navy also initiated a new project in FY 2023 titled DRAKE 2.0 C-UAS Afloat with approximately \$6 million requested.

Detailed information on some of these projects will be provided in the "Program Details" section of this report beginning on page 9.

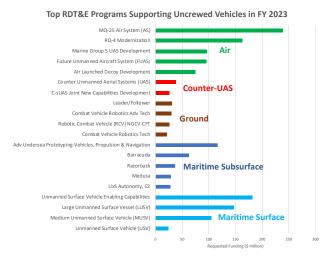


Figure 2: UxV RDT&E Projects in the FY 2023 budget request.

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