



**ARMSTRONG FLIGHT
PROCEDURAL
REQUIREMENTS (AFPR)**

**Directive: AFPR-7900.3-001,
Rev A
Effective Date: September 28, 2021
Expiration Date: September 28, 2026**

Compliance is mandatory.

SUBJECT: Unmanned Aerial System (UAS) Development / Acquisition

RESPONSIBLE OFFICE: Flight Operations Directorate

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PREFACE

P.1 Purpose

The purpose of this directive is to document the approach for acquiring Unmanned Aerial System (UAS) vehicles.

P.2 Applicability

- a. This directive is applicable to all employees seeking UAS acquisition approval at National Aeronautics and Space Administration (NASA) Armstrong Flight Research Center (AFRC, hereinafter referred to as Center) in Edwards, California, including Component Facilities and Technical and Service Support Centers.
- b. This language applies to the Jet Propulsion Laboratory (JPL) (a Federally-Funded Research and Development Center in Southern California), other contractors, recipients of grants, cooperative agreements, or other agreements only to the extent specified or referenced in the applicable contracts, grants, or agreements.
- c. In this directive, all mandatory actions (i.e., requirements) are denoted by statements containing the term “shall.” The terms “may” or “can” denote discretionary privilege or permission, “should” denotes a good practice and is recommended, but not required, “will” denotes expected outcome, and “are/is” denotes descriptive material.
- d. This directive is applicable to Unmanned Aerial System (UAS) vehicles acquired after the effective date of this Armstrong Flight Research Center Procedural Requirements (AFPR).
- e. In this directive, all document citations are assumed to be the latest version unless otherwise noted.

P.3 Authority

NASA Procedural Requirements (NPR) 7900.3, Aircraft Operations Management

P.4 Applicable Documents

- a. Office of Strategic Infrastructure (OSI) UAS Policy Amplification Letter, dated March 3, 2015 and any superseding updates
- b. NASA Policy Directive (NPD) 9250.1, Capital Asset Identification and Treatment
- c. Department of Defense (DoD) Commercial Off-the-Shelf (COTS) Ban memo
- d. Armstrong Flight Research Center Policy Directive (AFPD)-1000.0-002, Governance and Strategic Management

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P.5 Measurement/Verification

Compliance with this directive are measured against submissions of UAS acquisition packages to Headquarter (HQ) Aircraft Management Division (AMD). The NASA Intercenter Aircraft Operations Panel (IAOP) will verify compliance with this directive during internal and external reviews reported at the Center and Agency level for evaluation.

P.6 Cancellation

AFPR-7900.3-001-2, Unmanned Aerial System (UAS) Development / Acquisition,
Dated September 7, 2017



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MCBRIDE
Date: 2021.09.28 21:51:46 -07'00'

David D. McBride, Center Director
Armstrong Flight Research Center

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CHAPTER 1: UAS DEVELOPMENT/ACQUISITION PROPOSAL

1.1 Overview

The process for the acquisition (including the development and construction) of UAS aircraft that fall below the agency capital asset threshold (currently \$500,000), reflects requirements and expectations set forth by NPR 7900.3, Aircraft Operations Management, the OSI UAS Policy Amplification Letter, the DoD COTS Ban Memo applicable to DoD installations, as well as the Center governance approach of AFPD-1000.0-002, Governance and Strategic Management.

1.2 Authorization Process

- a. Any individual seeking UAS acquisition proposals (a.k.a., UAS acquisitioner) will acquire written concurrence from the Center Mission Directorate Representative confirming acquisition demonstrates strategic plan alignment.
- b. The UAS acquisitioner makes a request to the Center Chief of Staff to brief the acquisition request to the Center Council.
- c. The UAS acquisitioner shall develop and submit a decision memo (via the online governance tool), selecting the Mission Portfolio Management Council (MPMC) as the applicable Council attaching all proposal material, including the written concurrence from the Center Mission Directorate Representative.

The decision memo and attachments will address at a minimum:

- (1) Project Description and Task Number;
- (2) Proposed vehicle for acquisition;
- (3) Concept of operations and location of proposed flights;
- (4) Center Mission Directorate Representative concurrence status;
- (5) Confirmation that the acquisition, required resources, and burden of its oversight are aligned with Center objectives and program goals;
 - (a) Alignment of vehicle acquisition to project and Center mission objectives;
 - (b) Acquisition, development, and/or construction costs;
 - (c) Staffing/labor requirements and costs for acquisition, development and/or construction; and

- (d) Funding source of identified costs.
 - (6) Results of assessment of existing NASA UAS vehicles to meet project needs; and
 - (7) Disposition plan for UAS (e.g., disposal or other programmatic uses?).
- d. Once the decision memo is briefed at the MPMC it is either approved or disapproved by the Center Chief Engineer, Director of Flight Operations, and Center Director by means of digital signature within the online decision memo tool. Decision status is provided to the decision memo originator through a system notification email.
 - e. Upon receipt of decision status notification, the originator will notify the Director of Flight Operations and Branch Chief of Operations Engineering. The acquisition may be initiated at this time.
 - f. Upon notification from the UAS acquisitioner or MPMC, the Director of Flight Operations sends the approved decision memo and attachments as applicable to HQ AMD with an affirmative statement that the acquisition, project, required resources, and the burden of its oversight are aligned with Center objectives and program goals.

CHAPTER 2: RESPONSIBILITIES

2.1 Center Directors (Center/JPL)

The Center Directors are responsible for approving, disapproving, or requesting additional information from UAS acquisition package originators.

2.2 Director of Flight Operations

a. Approving, disapproving, or requesting additional information from UAS acquisition package originators.

b. Forwarding approved UAS acquisition decision memos and attachments to HQ AMD.

2.3 Center Chief Engineer

The Center Chief Engineer is responsible for approving, disapproving, or requesting additional information from UAS acquisition package originators.

2.4 Center Mission Directorate Representative

The Center Mission Directorate Representative is responsible for providing concurrence or nonconcurrence that UAS acquisition aligned with Mission Directorate strategic plan.

2.5 UAS Acquisitors

a. Obtaining Center Mission Directorate Representative concurrence confirming strategic plan alignment for each UAS acquisition proposal.

b. Generating UAS acquisition proposal decision memo and associated documentation in accordance with this document.

c. Presenting their UAS acquisition proposal at the MPMC.

d. Providing decision memo status to Director for Flight Operations and Branch Chief of Operations Engineering.

APPENDIX A, DEFINITIONS

Unmanned Aircraft System (UAS). A UAS is any airborne vehicle system without a pilot onboard that is controlled autonomously by an onboard control and guidance system or is controlled from a monitoring station outside of or remote from the UAS vehicle. A UAS is defined as an aircraft by the Federal Aviation Administration (FAA). UASs also can be operated via a remotely located, manually operated flight control system or ground control system.

APPENDIX B, ACRONYMS

AFRC	Armstrong Flight Research Center
AFPR	Armstrong Flight Research Center Procedural Requirements
AMD	Aircraft Management Division
COTS	Commercial Off-the-Shelf
DoD	Department of Defense
FAA	Federal Aviation Administration
HQ	Headquarters
IAOP	Intercenter Aircraft Operations Panel
JPL	Jet Propulsion Laboratory
MPMC	Mission Portfolio Management Council
NASA	National Aeronautics and Space Administration
NPD	NASA Policy Directive
NPR	NASA Procedural Requirements
OSI	Office of Strategic Infrastructure
UAS	Unmanned Aerial System

APPENDIX C, VERIFICATION MATRIX

PARAGRAPH	REQUIREMENT	COMPLIANT	NON-COMPLIANT
1.2.c	The UAS acquisitioner shall develop and submit a decision memo (via the online governance tool), selecting the Mission Portfolio Management Council (MPMC) as the applicable Council attaching all proposal material, including the written concurrence from the Center Mission Directorate Representative.	<input type="checkbox"/>	<input type="checkbox"/>

Change Log

This page is for informational purposes and does not have to be retained with the document.

Baseline, October 12, 2016

Admin Change, Baseline-1, October 13, 2016

- Addresses IAOP finding 15-H-08 IAOP 1.9 Acquisition of UAS Below Capital Asset Threshold

Admin Change, Baseline-2, September 7, 2017

- DPR-7900.3-001 renumbered in accordance with Center instruction.

Revision A, 09-28-2021

- P.2, B: Added
- P.2, C: Added
- P.2, D: Added
- Removed from Referenced documents: NPD 9250.1, Capital Asset Identification and Treatment; Added to Applicable documents
- Removed Proposed Content section and added clarification and new content requirements for acquisition to the Authorization Process section
- Modified Authorization Process to incorporate Center governance decision memo approach and presentation at DPMC.
- Edited Responsibilities for Center Chief Engineer: removed “approving, disapproving UAS acquisition packages” and added the responsibility to serve as Subject Matter Expert
- Removed shall statement in Overview: The process for the acquisition (including the development and construction) of UAS aircraft that fall below the agency capital asset threshold (currently \$500,000), shall adhere to the requirements set forth in NPR 7900.3, the March 3, 2015 Office of Strategic Infrastructure (OSI) UAS Policy Amplification Letter and the following requirements.
- Added shall statement in 1.2.c: The UAS acquisitioner shall develop and submit a decision memo (via the online governance tool), selecting the Mission Portfolio Management Council (MPMC) as the applicable Council attaching all proposal material, including the written concurrence from the Center Mission Directorate Representative.
- Appendix C: Verification Matrix Added