

OMB Control No. 21XX-XXXX Collection Expires XX/XX/XXXX

# Instructions for Completing the 40102(a)/40125 Certificate of Authorization (COA) Unmanned Aircraft System (UAS) Monthly Operational Flight Report

#### **Public Burden Statement**

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a currently valid OMB Control Number. The OMB Control Number for this information collection is 21XX-XXXX. Public reporting for this collection of information is estimated to be approximately 60 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

All responses to this collection of information are required to obtain or retain a benefit (49 U.S.C. § 106(I) and (m)). Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: Information Collection Clearance Officer, Federal Aviation Administration, 10101 Hillwood Parkway, Fort Worth, TX 76177-1524.

The information on this tab provides general information about this workbook and the definitions for the mission types and flight types. Guidance regarding individual questions in the report is provided in the user guide and via tooltips within the form. The tooltips will appear when the answer field in the form is selected.

Complete and submit the monthly operational flight report by the seventh day of each month for the previous month's flights.

The COA report is for respondents operating under a 40102(a) or 40125 COA. Participants operating under these COAs are required to submit a monthly report to the COA Application Processing System (CAPS) or via e-mail to the Safety Management and Future Systems Branch (AJV-P22). The respondent has two options:

- 1. Submit the COA Detailed Flight Report form for all flights that occur during the month and the DAA Details form for flights that utilize DAA technology. Upon submission of these forms, the UAS Integration Office generates the output report to submit to AJV-P22 via email.
- 2. Use CAPS to complete the monthly COA reporting requirement. Complete and submit to the UAS Integration Office the COA Partial Flight Report form for all flights that occur during the month and the DAA Details form for flights that utilize DAA technology.

# **Mission Type:**

Select the category that best represents the purpose of the mission/flight.

Definitions: Aeronautical Research: The purpose of the flight is to research UAS and/or their

Agricultural Delivery/Application: The purpose of the flight is to apply fertilizer, pesticide, or other agricultural products to crops, to deliver bait to traps to capture animals that are destroying crops or preying on livestock, or to transport and/or apply other materials in support of agricultural programs.

livestock, or conduct other flights in support of agricultural programs that do not involve transporting cargo.

Environmental Survey: The purpose of the flight is to monitor the climate, soil, and/or living things by measuring atmospheric conditions, charting changes in soil conditions over time, counting wildlife, etc.

Infrastructure Inspection (Linear): The purpose of the flight is to inspect man-made constructions that extend in a nearly straight line. Examples include inspections of roads, power lines, railway lines, canals, pipelines, and fences. constructions that do not extend in a nearly straight line. Examples include buildings and aircraft.

another.

Public Safety: The purpose of the flight is for law enforcement, fire, or emergency medical services departments/agencies to protect the welfare of the general public.

Select the purpose of the flight: operational, performance check, or training.

Definitions: Operational: The purpose of the flight is to complete a routine business function.

Functional Check: The purpose of the flight is to check the performance of the UAS as part of an inspection process.

Training: The purpose of the flight is to increase the proficiency of the pilot and/or other crewmembers in flying the UAS.

Instrument/COA UAS Flights (5/21)



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# Unmanned Aircraft System (UAS) Monthly Operational Flight Report (Detailed Version) Complies with 40102(a) & 40125 Certificates of Authorization Reporting Requirements

Complete this form if you are required to submit a monthly report to the FAA via the UAS Certificate of Authorization (COA) Application Processing System (CAPS) or the AJV-P22 email and you choose the latter. This form includes fields (shaded in yellow) not required of all participants in the PSP or BEYOND program.

Section 1	: Summary Inforr	nation (drop-dowr	n boxes are snaded)						
Proponer	t					Contact Information			
Month ar	nd Year e Used to Record	Flight Times				Agricultural Deliveries/Applicatio	ns and Package Deliv	veries:	]
Certificate	e of Waiver, Exen tion Number(s)	J				(1) Did ALL flights contain HAZMA (2) Were all flights WITHOUT HAZ	MAT cargo?		-
Mission T	" specify:					(If the answer to one of the questions above is do not populate the HAZMAT column in Section			
		corded in Section 2; other	wise leave blank)	]		Total Number of Deviations from Agreement/Procedures	ATC Instructions and	d/or Letters of	
Total Con	trol Station Opera munication Type	ational Hours				Describe Other Operational/Coor	dination Issues Whic	ch Occurred Durii	ng the Month
ATC Comi	munication Methors " specify:	bd							
Section 2	: Flight Data								
Flight #	Aircraft Nickname or Registration Number	Ground Population Density	Cargo Contained HAZMAT? (leave blank if the answer to one of the HAZMAT questions in Section 1 is "Yes")	Flight Type (leave blank if the flights are all the same type)	Launch Date	Launch Time (if using 12-hr clock, include "am" or "pm", as applicable)	Launch Location Longitude	Recovery Time (if using 12-hr clock, include "am" or "pm", as applicable)	Pilot Duty Time per PIC
0	_								

Instrument/COA UAS Flights (5/21) 3 of 10

Flight #	Aircraft Nickname or Registration Number	Ground Population Density	Cargo Contained HAZMAT? (leave blank if the answer to one of the HAZMAT questions in Section 1 is "Yes")	Flight Type (leave blank if the flights are all the same type)	Launch Date	Launch Time (if using 12-hr clock, include "am" or "pm", as applicable)	Launch Location Longitude	Recovery Time (if using 12-hr clock, include "am" or "pm", as applicable)
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0:	5							
0	6							
0	7							
0	8							
0'	9							
10	0							

Instrument/COA UAS Flights (5/21) 4 of 10



Section 1: Summary Information (drop-down boxes are shaded)

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## Unmanned Aircraft System (UAS) Monthly Operational Flight Report (Detailed Version) Complies with 40102(a) & 40125 Certificates of Authorization Reporting Requirements

Complete this form if you are required to submit a monthly report to the FAA via the UAS Certificate of Authorization (COA) Application Processing System (CAPS) or the AJV-P22 email and you choose the former. This form includes fields required of participants in the PSP or BEYOND program that are not required in CAPS.

Time Zone Used to Record Flight Times  Certificate of Waiver, Exemption, or Authorization Number(s)  Mission Type  If "Other," specify: Flight Type (populate if the same for all flights recorded in Section 2; otherwise leave blank)  Flight # Aircraft Nickname or Registration Number  Flight # Aircraft Nickname or Registration Number  Cargo Contained HAZMAT questions in Section 1 is "Yes")  Launch Date (flusing 12-hr clock, includer "mor" or "pm", as applicable)  Agricultural Deliveries/Applications and Package Deliveries:  (1) Did ALL flights contain HAZMAT cargo?  (2) Were all flights WiTHOUT HAZMAT cargo?  (If the answer to one of the questions above is "Yes", do not populate the HAZMAT column in Section 2.)  ATC Communication Type ATC Communication Method If "Other," specify:  Section 2: Flight Data  Flight # Aircraft Nickname or Registration Number  Cargo Contained HAZMAT?  Launch Date (flusing 12-hr clock, includer "mor" or "pm", as applicable) opplicable)  opplicable)  opplicable)  opplicable)  opplicable)  opplicable)  opplicable)  opplicable)  opplicable)						
Authorization Number(s)  Mission Type  Mission Type  If "Other," specify: Flight Type (populate if the same for all flights recorded in Section 2: otherwise leave blank)  Flight # Aircraft Nickname or Registration Number  Number  Ground Population Density  O1  O2  O3  O4  O5	Time Zone	e Used to Record I	Flight Times			Agricultural Deliveries/Applications and Package Deliveries:
Mission Type  If "Other," specify:  Flight Type  (populate if the same for all flights recorded in Section 2: otherwise leave blank)  Section 2: Flight Data  Flight # Aircraft Nickname or Registration Number  Registration Number  Flight # Other," specify:  Section 1: "Yes")  ATC Communication Type ATC Communication Method If "Other," specify:  Launch Date (fir using 12-th clock, include "am" or "pm", as applicable)  Recovery Time (fir using 12-th clock, include "am" or "pm", as applicable)  O1  O2  O3  O4  O5			ption, or			
If "Other," specify: Flight Type (populate if the same for all flights recorded in Section 2: otherwise leave blank)  Section 2: Flight Data  Flight # Aircraft Nickname or Registration Number  Number  O1  O2  O3  O4  O5	Mission T	vne				
Flight # Aircraft Nickname or Registration Number Density Density Density Density Density Number Plant	If "Other, Flight Typ	' specify: e				
Flight # Aircraft Nickname or Registration Number Density Density Cleave blank if the answer to one of the HAZMAT questions in Section 1 is "Yes")  Cargo Contained HAZMAT? (leave blank if the answer to one of the HAZMAT questions in Section 1 is "Yes")  Flight Type (leave blank if the flights are all the same type)  Launch Time (if using 12-hr clock, include "am" or "pm", as applicable) include "am" or "pm", as applicable)  All Cargo Contained HAZMAT? (leave blank if the answer to one of the HAZMAT questions in Section 1 is "Yes")	(populate if t	ne same for all flights red	corded in Section 2; other	wise leave blank)		If "Other," specify:
Nickname or Registration Number  HAZMAT? (leave blank if the flights are all the same type)  O1  O2  O3  O4  O5	Section 2:	Flight Data				
02 03 04 05	Flight #	Nickname or Registration	Population	HAZMAT? (leave blank if the answer to one of the HAZMAT questions	(leave blank if the flights are all the same	(if using 12-hr clock,  (if using 12-hr clock, include "am" or         include "am" or "pm", as
03 04 05	0:	1				
04 05	0:	2				
05						
06						
07						
	U.	<i>'</i>				

Instrument/COA UAS Flights (5/21)

Flight #	Aircraft Nickname or Registration Number	Ground Population Density	Cargo Contained HAZMAT? (leave blank if the answer to one of the HAZMAT questions in Section 1 is "Yes")	Flight Type (leave blank if the flights are all the same type)	Launch Date	Launch Time (if using 12-hr clock, include "am" or "pm", as applicable)	Recovery Time (if using 12-hr clock, include "am" or "pm", as applicable)
	08						

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U.S. Department of Transportation **Federal Aviation Administration** 

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#### Addendum to Detailed Flight Report: Detect and Avoid (DAA) Details

To the extent feasible, use this form to provide data about each encounter within 3 nautical miles horizontally and 2,000 feet vertically during each flight.

				Range at C	losest Point	of Approach for each	Encounter	
Flight #	Track #	Cooperative or Non-Cooperative Sensor?		Closest Horizontal Unit of Measure				Closest Slant Range Unit of Measure

## Monthly Operational Flight Report Definitions

Term	Definition	Source
Accident [UAS]	An occurrence associated with the operation of any public or civil unmanned aircraft system that takes place between the time that the system is activated with the purpose of flight and the time that the system is deactivated at the conclusion of its mission, in which: (1) Any person suffers death or serious injury; or (2) The aircraft has a maximum gross takeoff weight of 300 pounds or greater and sustains substantial damage.	49 CFR 830.2
Anomaly [UAS]	An event (e.g., equipment malfunction or loss of a safety-critical communication or navigation link) that does not meet the reporting criteria of an accident, incident, or occurrence but adversely affects the operation of any public or civil unmanned aircraft system between the time that the system is activated with the purpose of flight and the time that the system is deactivated at the conclusion of its flight, in which (1) a mitigation strategy is executed (via application of technology and/or procedures); or (2) the aircraft exceeds its operational boundaries.	IPP Data Team 8/12/20
Cargo		UAS FY19 Implementation Plan
Cooperative aircraft	Aircraft that have an electronic means of identification (i.e., a transponder or ADS-B transceiver) aboard in operation.	N 8900.227 (cancelled)
Dangerous goods	See Hazardous material.	
Detect and Avoid (DAA)	A system/technology that enables the UA to avoid other aircraft or obstacles.	UAS FY19 Implementation Plan
Flight time	Pilot time that commences when an aircraft moves under its own power for the purpose of flight and ends when the aircraft comes to rest after landing	14 CFR 1.1
Hazardous material	A substance or material that the Secretary of Transportation has determined is capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and has designated as hazardous under section 5103 of Federal hazardous materials transportation law (49 U.S.C. 5103).	49 CFR 171.8

## Monthly Operational Flight Report Definitions

Incident	An occurrence, other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations.  Examples of serious incidents from NTSB Advisory to Operators of Civil Unmanned Aircraft Systems in the United States:  True "fly-away", inability of required flight crewmember to perform normal duties as result of injury or illness, inflight fire, aircraft collision in flight, >\$25K damage to objects other than the aircraft, aircraft is overdue and is	49 CFR 830.2
Non-cooperative aircraft	believed to have been involved in an accident.  Aircraft that do not have an electronic means of identification (i.e., a transponder) aboard or that have inoperative equipment because of malfunction or deliberate action.	N 8900.227 (cancelled)
Occurrence	An abnormal event, other than an accident or incident. Examples include: low speed aborts or air turnbacks.	FAA Order 8900.1
Pilot in Command (PIC)	The person who (1) has final authority and responsibility for the operation and safety of the flight; (2) has been designated as pilot in command before or during the flight; and (3) holds the appropriate category, class, and type rating, if appropriate, for the conduct of the flight.	14 CFR 1.1
Remote Pilot in Command (RPIC)	Person who is directly responsible for and is the final authority as to the operation of the UAS; has been designated as remote pilot in command before or during the flight of a UAS; and holds the appropriate CAA certificate for the conduct of the flight.	ASTM F3266-18
Rural	A geographic area comprising open country and towns with fewer than 2,500 residents. For those interested in a more specific density definition, a rural area contains up to 100 people per square mile. (Definition specific to reporting requirement of PSP and BEYOND program.)	PSP/BEYOND
Suburban	A geographic area comprising the outlying district of a city. For those interested in a more specific density definition, a suburban area contains between 101 and 7,000 people per square mile. (Definition specific to reporting requirement of PSP and BEYOND program.)	PSP/BEYOND
Track	The specific collection of data that a particular DAA system accumulates and is used in determining whether an intruder aircraft is a collision risk or loss of well-clear risk, or both.	ASTM F3442/F3442M-20
Unmanned Aircraft (UA)	An aircraft operated without the possibility of direct human intervention from within or on the aircraft.	JO 7200.23A
Unmanned Aircraft System (UAS)	An unmanned aircraft and associated elements (including communication links and the components that control the unmanned aircraft) that are required for the pilot in command to operate safely and efficiently in the national airspace system.	JO 7200.23A

#### Monthly Operational Flight Report Definitions

	A geographic area comprising the main city or metropolitan area. For those interested in a more specific density definition, an urban area contains more than 7,000 people per square mile. (Definition specific to reporting requirement of PSP and BEYOND program.)	PSP/BEYOND
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