

		ASN	2007-AHQ-40-COA
		Case Status	EXPIRED
		Date Created	08/13/2007
		Date Submitted	09/11/2007
Proponent Organization		Sponsor	NASA ARC
		Attn Of	Mark Sumich
		Address	Aviation Management Office
		Address2	Mail Stop 158-1
		City	Moffett Field
		State	CA
		Postal Code	94035-1000
		Telephone	(650)604-6193
		Email	msumich@mail.arc.nasa.gov
Declaration		Declaration(a)	Yes
		Declaration(b)	Yes
Point of Contact		Representative	Stanley Herwitz
		Address	UAV Collaborative
		Address2	NASA Research Park MS 18-2
		City	Moffett Field
		State	CA
		Postal Code	94035
		Telephone	(650)604-2192
		Email	sherwitz@mail.arc.nasa.gov
Operational Description	Requested Effective Period	Beginning	
		End	
		Light out operation	Yes
		VFR operation	Yes
		IFR operation	No
		Day operation	Yes
		Night operation	No
		Program Executive Summary	The APV-3 UAV will be operating at Moffett Federal Airfield for the purposes of NASA flight training and pilot proficiency activities, payload testing, data acquisition, and demonstrations.
		Operational Summary	The frequency of APV-3 UAV operations at Moffett Federal Airfield is expected to be 1 to 2 times per month. The number of APV-3 UAV flights at Moffett Federal Airfield is expected to be approximately 2 to 8 flights per day of operational deployment. The anticipated duration of each flight is expected to be approximately 15 to 90 minutes.
	Location	State	CA
		County	Santa Clara
		Nearest Airport	MOFFETT FEDERAL AFLD
		AOR	California - Northern
	Class Of Airspace	Class-A	
		Class-B	
		Class-C	
		Class-D	
		Class-E	
		Class-G	
System Description		Aircraft Type	
		Aircraft Type And Model Description Attachment	1
		Control Station Attachment	1
		Communications System Attachment	1
		List Certified Components (TSO) Attachment	1
		Other Attachment	0
Performance Characteristics		Climb Rate (feet/Minute)	800
		Descent Rate (feet/Minute)	800
		Turn Rate (Degrees/Second)	15
	Cruise Speed	Maximum	80
		Minimum	40
		Approach Speed	45
	Operating Attributes	Maximum MSL	10000
		Minimum MSL	0
		Gross Takeoff Wt	80.0
		Launch/Recovery Attachment	1
Airworthiness		FAA Type Certificate	
		If No FAA Certificate (Public Aircraft Only) Attachment	1
Procedures		Lost Link/Mission Procedures Attachment	1
		Lost Communications Procedures Attachment	1

		Emergency Procedures Attachment	1
Avionics/Equipment		Equipment Suffix Type	X
		GPS	Yes
		Moving map indicator (Command Station)	Yes
		Tracking capability	Yes
		TCA/MCAS	No
		ELT	No
	Transponder	Transponder	No
		On	Yes
		Off	Yes
		Standby	No
		Ident	Yes
		Mode S	No
		Mode C	Yes
		Transponder Retuneable in Flight	No
Lights		Landing	No
		Position/Navigation	No
		Anti-collision	No
		Infrared (IR)	No
Spectrum Analysis Approval		Data Link	Yes
		Data Link Attachment	0
		Control Link(s)	Yes
		Control Link Attachment	0
		Operations utilizing Radio Control (R/C) frequencies as described in Title 47 CFR 95	Yes
		NTIA/FCC Authorization Attachment	1
ATC Communications	Transmitter VHF Band	VHF Band	Yes
		Quantity	1
		In-Flight Retunable	No
	Transmitter UHF Band	UHF Band	No
		Quantity	
		In-Flight Retunable	No
	Transmitter HF band	HF Band	No
		Quantity	
		In-Flight Retunable	No
	Receiver VHF Band	VHF Band	Yes
		Quantity	1
		In-Flight Retunable	No
	Receiver UHF Band	UHF Band	No
		Quantity	
		In-Flight Retunable	No
	Receiver HF band	HF Band	No
		Quantity	
		In-Flight Retunable	No
Guard (Emergency) Frequencies VHF Band	VHF Band	No	
	Quantity		
Guard (Emergency) Frequencies UHF Band	UHF Band	No	
	Quantity		
Instantaneous Two-Way Voice	Direct to pilot	No	
	SATCOM	No	
	Relay via aircraft	No	
Electronic Surveillance/ Detection Capability		EO/IR	No
		Terrain detection	No
		Weather/icing detection	No
		Radar	No
		Other Attachment	0
		Electronic detection systems	No

		Electronic detection systems attachment	0	
		Radar observation	No	
		NAS Operational Capability Attachment	0	
Visual Surveillance/ Detection Capability	Maximum Distance from UA	Vertical	1000 Feet	
		Horizontal	1.0 Nautical Miles	
		Airborne based (Chase Aircraft)	No	
		Ground based	Yes	
		Visual observation from one or more ground sites	Yes	
		Forward or side looking cameras	No	
		Attachment for All	0	
Aircraft Performance Recording		Flight data recording	Yes	
		Control station recording	Yes	
		Voice Recording	No	
Flight Aircrew Qualifications	Pilots	Private (Written)	Yes	
		Private (Certified)	No	
		Instrument	No	
		Commercial	No	
		Air Transport	No	
		Unique Trained Pilot	No	
		Unique Trained Pilot Description	N/A	
		DOD certified/trained	No	
		Other Certified Training	No	
		Trained on FAR Part 91 Requirement	Yes	
		Medical Certification Class (FAA or DOD equivalent)	3	
		Currency Status	Current	
		Duty Time Restrictions	None	
		Single UAS Control	Yes	
		UAS Description		
		Total Numbers of UAS Controlled	1	
		Observers	Private (Written)	No
			Private (Certified)	No
			Instrument	No
			Commercial	No
Air Transport	No			
Unique Trained Pilot	No			
Unique Trained Pilot Description	N/A			
DOD certified/trained	No			
Other Certified Training	No			
Trained on FAR Part 91 Requirement	Yes			
DOD Certified Training Attachment	0			
Medical Certification Class (FAA or DOD equivalent)	3			
Currency Status	Current			
Duty Time Restrictions	None			
Single UAS Control	Yes			
UAS Description				
Total Numbers of UAS Controlled	1			
Special Circumstances	Special Circumstances	Note that 2-way voice communication takes place between the NASA Range Safety Officer (safety observer), any other ground observers and ATC. The Range Safety Officer stands next to the PIC and can immediately convey ATC instructions.		

Flight Operations Area/Plan

Type	User Defin	Point	Loc ID	Degree	Distance	Latitude	Longitude	MSL Ceilin
DEPARTURE								

Total Map Attachment 1

<u>MSL Floor</u>	<u>Maximum</u>	<u>Minimum</u>	<u>S Radius</u>	<u>SUA Description</u>	
		37-24-58.11N		122-02-56.90W	1000

0

80

40

3.0