

		ASN	2010-CSA-3-COA
		Case Status	EXPIRED
		Date Created	10/27/2009
		Date Submitted	01/08/2010
Proponent Organization		Sponsor	US Army Fort Polk JRTC
		Attn Of	(b) (6), DPTMS
		Address	Air Traffic Control
		Address2	7575 Donaldson Lp
		City	Ft. Polk
		State	LA
		Postal Code	71459
		Telephone	(337) 531-6810
		Email	(b) (6) @us.army.mil
Declaration		Declaration(a)	Yes
		Declaration(b)	Yes
Point of Contact		Representative	(b) (6)
		Address	Air Traffic Control
		Address2	7575 Donaldson Loop
		City	Fort Polk
		State	LA
		Postal Code	71459
		Telephone	(337) 531-6810
		Email	(b) (6) @us.army.mil
Operational Description	Requested Effective Period	Beginning	
		End	
		Light out operation	No
		VFR operation	Yes
		IFR operation	No
		Day operation	Yes
		Night operation	Yes
		Program Executive Summary	<p>The Department of Army, JRTC/Fort Polk is requesting your office effect coordination to renew and amend current FAA Certificate of Authorization of 2008-CSA-57, to operate the RQ-7B "Shadow 200" remotely piloted vehicle within specified portions of Warrior 1 low Military Operations Area (MOA). The Joint Readiness Training Center provides unique training opportunities to UAS operators due to multi service participation in exercises. Scenarios for JRTC training exercises use the latest lessons learned from units currently deployed to forward and hostile areas. Some installations cannot provide effective training because they lack sufficient SUA. FAA authorization to conduct UAV/ROA (UAS) operations in the NAS at JRTC/Fort Polk was first approved in 1999. As COAs were renewed additional restrictions/provisions have been added, Fort Polk complied without objection. Six years of uneventful UAS operation demonstrates Fort Polk's ability to ensure UAS operations provide an acceptable level of safety for both non-participating and non-cooperative aircraft.</p>

		Operational Summary	<p>Attached maps depict airspace considered essential. It includes the Polk Army Airfield Class D, Self tactical landing strip on the West side of R3804, and a one nautical mile wide corridor, altitude 5000-7000MSL, connecting R3804 and R3803. Fort Polk is proactive in informing the flying public about UAS operations by issuing press releases, NOTAMs, attending local airport board & pilot meetings, and FSDO sponsored events. The Department of the Army program office for Unmanned Aircraft Systems has many years working experience UAS issues and has provided the maximum amount of safety of flight functions necessary.</p> <p>This includes redundant data links in the control shelter, redundant communications to ATC and other agencies as required. The electrical power supply is the equivalent of a critical power buss to include uninterruptible power supply system (UPS). The JRTC Air Traffic Control system is one of the most modern equipped radar ATC facilities in the world. The system operates with five primary and secondary radar feeds.</p> <p>Seven (7) air/ground communications sites cover all required operational areas. JRTC aircraft operations are under positive control at all times within the JRTC airspace complex. Polk ATC also provides terminal and enroute radar control and flight following services to all civil aircraft, air carrier, and private aviation operations within the area by agreement with Houston and Fort Worth ARTCCs. Polk ATC operates 24 hours per day, 7 days per week to service the JRTC and the National Airspace System.</p> <p>During night operations, the unit will provide and double the number of Ground Observers as well continuous Radar Services from Fort Polk ARAC to lower the Risk factors of Night Operations.</p>
	Location	State	LA
		County	Vernon
		Nearest Airport	POLK AAF
		AOR	Louisiana
	Class Of Airspace	Class-A	
		Class-B	
		Class-C	
		Class-D	Yes
		Class-E	Yes
		Class-G	Yes
System Description		Aircraft Type	8063 - Shadow - RQ-7B
		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)	500
		Descent Rate (feet/Minute)	500
		Turn Rate (Degrees/Second)	5
	Cruise Speed	Maximum	110
		Minimum	70
		Approach Speed	55
	Operating Attributes	Maximum MSL	15000
		Minimum MSL	0
		Gross Takeoff Wt	375.0
		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	U
		GPS	Yes
		Moving map indicator (Command Station)	Yes
		Tracking capability	Yes
		TCA/MCAS	No
		ELT	No
	Transponder	Transponder	Yes
		On	Yes
		Off	Yes
		Standby	Yes
		Ident	Yes
		Mode S	No
		Mode C	Yes
		Transponder Retuneable in Flight	No
Lights		Landing	No
		Position/Navigation	Yes
		Anti-collision	Yes
		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	No
		NTIA/FCC Authorization Attachment	0
ATC Communications	Transmitter VHF Band	VHF Band	Yes
		Quantity	1
		In-Flight Retunable	Yes
	Transmitter UHF Band	UHF Band	Yes
		Quantity	1
		In-Flight Retunable	Yes
	Transmitter HF band	HF Band	No

		Quantity	
		In-Flight Retunable	No
	Receiver VHF Band	VHF Band	Yes
		Quantity	1
		In-Flight Retunable	Yes
	Receiver UHF Band	UHF Band	Yes
		Quantity	1
		In-Flight Retunable	Yes
	Receiver HF band	HF Band	No
		Quantity	
		In-Flight Retunable	No
	Guard (Emergency) Frequencies VHF Band	VHF Band	Yes
		Quantity	1
	Guard (Emergency) Frequencies UHF Band	UHF Band	Yes
		Quantity	1
	Instantaneous Two-Way Voice	Direct to pilot	Yes
		SATCOM	No
		Relay via aircraft	No
Electronic Surveillance/Detection Capability		EO/IR	Yes
		Terrain detection	No
		Weather/icing detection	No
		Radar	No
		Other Attachment	0
		Electronic detection systems	No
		Electronic detection systems attachment	0
		Radar observation	Yes
		NAS Operational Capability Attachment	1
Visual Surveillance/Detection Capability	Maximum Distance from UA	Vertical	3000 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	1
Aircraft Performance Recording		Flight data recording	Yes
		Control station recording	Yes

		Voice Recording	Yes
Flight Aircrew Qualifications	Pilots	Private (Written)	No
		Private (Certified)	No
		Instrument	No
		Commercial	No
		Air Transport	No
		Unique Trained Pilot	No
		Unique Trained Pilot Description	Pilots and observers are DOD trained and cer ified. All control operators will be medically cleared for duty by a military flight surgeon annually. All personnel in designated positions (instructors, control operators, ground, and flight observers) have a current Class III flight physical in accordance to Army and DoD regulations to perform their duties.
		DOD certified/trained	Yes
		Other Certified Training	No
		Trained on FAR Part 91 Requirement	Yes
		Medical Certification Class (FAA or DOD equivalent)	3
		Currency Status	The Medical Class 3 is in compliance with Army and DoD Regula ions. The flight crew maintains currency in accordance wi h TC 1-600 and Army Regulation 95-1, which establish the semi-annual and annual flight hour training requirements for operators of the RQ7B Shadow 200.
		Duty Time Restrictions	IAW AR 95-1/ Army crew Endurance guidance. Maximum length of duty is 12 hours with a minimum of 8 hour rest.
		Single UAS Control	Yes
		UAS Description	Air crew will be responsible for operating and observing 1 UAS at a time.
		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	Same as he Pilot.
		DOD certified/trained	Yes
		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	Same as he Pilot.
		Duty Time Restrictions	Same as he Pilot.
		Single UAS Control	Yes
		UAS Description	Air crew will be responsible for operating and observing 1 UAS at a time.
		Total Numbers of UAS Controlled	1

Special Circumstances		Special Circumstances	<p>This is renewal of the current COA "2008-CSA-57. All UAS Aircrew are trained and certified. All personnel in designated positions (instructors, control operators, ground, and flight observers) have a current Class III flight physical in accordance to Army and DoD regulations to perform their duties.</p> <p>Night operations requested for transition between launch / recovery sites and R3804 as well as the corridor from R3804 to R3803. If launch and or recovery operations is required at night the UAS will be within Polk Class D airspace until Restricted area entry. If corridor operations are required at night, approval will be based on observed VFR traffic.</p> <p>Additionally the UAS will transition level at 6000 and ARAC will block IFR altitudes between 5000 and 7000 while the UAS is outside of restricted airspace. All operations are monitored by a designated radar controller at Polk ARAC to mitigate risk. UAS operators shall call prior to departure and receive their squawk code and release. UAS operators shall coordinate use of transition corridor per letter of agreement. Polk Tower and ARAC can visually and/or procedurally de-conflict the UAS from military and or civil traffic. This corridor was used successfully with Hunter UAS from 1999 to 2003 before current UAS COA restrictions applied. During night operations, the unit will provide and double the number of Ground Observers as well continuous Radar Services from Fort Polk ARAC to lower the Risk factors of Night Operations.</p>
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Flight Operations Area/Plan

Type	User Define Area ID	Point	Loc ID	Degree	Distance	Latitude	Longitude	MSL Ceiling	MSL Floor	Maximum Speed	Minimum Speed	Radius	SUA Description
SUA													Restricted area - 3804A: BEGINNING AT LAT. 31-0-53N, LONG. 93-8-12W; TO LAT. 31-0-53N, LONG. 92-56-53W; TO LAT. 31-0-20N, LONG. 92-56-14W; TO LAT. 31-0-20N, LONG. 92-54-23W; TO LAT. 31-3-55N, LONG. 92-51-34W; TO LAT. 31-9-35N, LONG. 92-58-25W; TO LAT. 31-9-35N, LONG. 93-0-56W; TO LAT. 31-8-43N, LONG. 93-1-55W; TO LAT. 31-8-43N, LONG. 93-8-12W; TO POINT OF BEGINNING.
SUA													Restricted area - 3804B: BEGINNING AT LAT. 31-0-53N, LONG. 93-10-53W; TO LAT. 31-0-53N, LONG. 93-8-12W; TO LAT. 31-6-11N, LONG. 93-8-12W; TO LAT. 31-4-15N, LONG. 93-12-31W; TO POINT OF BEGINNING.
SUA													Restricted area - 3803A: BEGINNING AT LAT. 31-23-37N, LONG. 93-9-58W; TO LAT. 31-23-13N, LONG. 93-9-49W; TO LAT. 31-22-1N, LONG. 93-10-6W; TO LAT. 31-19-17N, LONG. 93-11-11W; TO LAT. 31-19-17N, LONG. 93-20-16W; TO LAT. 31-24-31N, LONG. 93-20-16W; TO LAT. 31-24-31N, LONG. 93-16-43W; TO LAT. 31-23-36N, LONG. 93-13-25W; TO POINT OF BEGINNING.
SUA													MOA - WARRIOR 1 LOW: BEGINNING AT LAT. 31-30-0N, LONG. 93-39-0W; TO LAT. 31-30-0N, LONG. 93-8-0W; TO LAT. 31-27-31N, LONG. 93-3-1W; TO LAT. 31-23-41N, LONG. 93-5-46W; TO LAT. 31-13-56N, LONG. 92-49-46W; TO LAT. 31-5-16N, LONG. 92-34-51W; TO LAT. 31-11-46N, LONG. 92-30-16W; TO LAT. 31-6-0N, LONG. 92-24-0W; TO LAT. 31-0-0N, LONG. 92-23-42W; TO LAT. 31-0-0N, LONG. 93-52-6W; TO LAT. 31-7-0N, LONG. 93-56-0W; TO THE POINT OF BEGINNING, EXCLUDING THAT AIRSPACE AT AND BELOW 1500 FEET AGL WITHIN A 3NM RADIUS OF THE LEESVILLE AIRPORT LEESVILLE, LA, AND THE WOODWORTH AIRPORT, WOODWORTH, LA; AND R-3803A, R-3804A, AND R-3804B WHEN ACTIVATED.
ARRIVAL	31-08-00.00N	93-05-00.00W		7000	5000	110			70			1.0	

Total Map
Attachment 3