

		ASN	2012-WSA-46-COA
		Case Status	RELEASED
		Date Created	10/27/2011
		Date Submitted	04/09/2012
Proponent Organization		Sponsor	Seattle Police Department
		Attn Of	Reuben Omelanchuk
		Address	610 5 Ave
		Address2	PO Box 34986
		City	Seattle
		State	WA
		Postal Code	98124-4986
		Telephone	(206) 733-9364
		Email	omelanr@seattle.gov
Declaration		Declaration(a)	Yes
		Declaration(b)	Yes
Point of Contact		Representative	Reuben Omelanchuk
		Address	610 Fifth Avenue
		Address2	PO Box 34986
		City	Seattle
		State	WA
		Postal Code	98124
		Telephone	(206) 733-9364
		Email	omelanr@seattle.gov
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	The objective of our program is to create a higher standard of safety for members of our community by utilizing the Draganflyer X6 Unmanned Aerial System in support of numerous Law Enforcement related functions which could include but are not limited to: 1)Crash site related to interstate transport of hazardous materials 2)Crash site related to railroad transport of hazardous materials 3)Search & Rescue operations 4)Tactical support of Law Enforcement operations
		Operational Summary	Operation of the Draganflyer X6 will be utilized in "Class G" and "Class D" airspace at or below 400 feet AGL, and not within the street boundaries surrounding King County International Airport (KBFI) (see attachment in "Flight Operations Area/Plan"). Flights within the downtown core of the City of Seattle will be restricted to significant emergency incident where the potential for loss of life is actual. (In a significant emergency incident a Bureau Chief or higher rank will be made aware of the exigency, need and risks of the UAS operation and authorize its use.) Because there are many buildings in the downtown core of Seattle, first responders will evacuate noncritical personnel/civilians out of the secure perimeter (which is established by first responders on the ground), or sheltered noncritical personnel/civilians in place within a building, so as to mitigate any potential air or ground hazards within the defined incident perimeter.  The operation will launch, remain within, and recover from within the City of Seattle (if an incident occurs outside the boundaries of this COA, the emergency COA process will be utilized). Duration of each flight will be approximately 15 minutes and will not exceed a ceiling of 400 feet AGL. City limits extend from (approximately) the South end of KBFI to NE 145th Street.
	Location	State	WA
		County	King
		Nearest Airport	HARBORVIEW MEDICAL CENTER
		AOR	Washington
	Class Of Airspace	Class-A	
		Class-B	
		Class-C	
		Class-D	Yes
		Class-E	
		Class-G	Yes
System Description		Aircraft Type	102154739 - Other
		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)	1380
		Descent Rate (feet/Minute)	780
		Turn Rate (Degrees/Second)	90.0
	Cruise Speed	Maximum	30
		Minimum	0

		Approach Speed	0
	Operating Attributes	Maximum MSL	8000
		Minimum MSL	0
		Gross Takeoff Wt	3.3
		Launch/Recovery Attachment	1
Airworthiness		FAA Type Certificate	
		If No FAA Certificate (Public Aircraft Only) Attachment	2
Procedures		Lost Link/Mission Procedures Attachment	1
		Lost Communications Procedures Attachment	2
		Emergency Procedures Attachment	2
Avionics/Equipment		Equipment Suffix Type	D
		GPS	Yes
		Moving map indicator (Command Station)	Yes
		Tracking capability	Yes
		TCA/MCAS	No
		ELT	No
		Transponder	No
		On	
		Off	
		Standby	
		Ident	
		Mode S	
	Mode C		
		Transponder Retuneable in Flight	
Lights		Landing	Yes
		Position/Navigation	Yes
		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	0
ATC Communications	Transmitter VHF Band	VHF Band	No
		Quantity	
		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	No
		Quantity	
		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	Yes
		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	400 Feet
		Horizontal	0.25 Nautical Miles
		Airborne based (Chase Aircraft)	No
		Ground based	Yes
		Visual observation from one or more ground sites	Yes
		Forward or side looking cameras	Yes
		Attachment for All	1
Aircraft Performance Recording		Flight data recording	Yes
		Control station recording	Yes
		Voice Recording	No
Flight Aircrew Qualifications	Pilots	Private (Written)	Yes
		Private (Certified)	Yes
		Instrument	No
		Commercial	No
		Air Transport	No
		Unique Trained Pilot	Yes
		Unique Trained Pilot Description	Pilot Qualifications: UA pilots will have an understanding of, and comply with Federal Aviation Regulations and Military Regulations applicable to the airspace where the UAS will operate. Pilots must have in their possession a current second class (or higher) airman medical certificate that has been issued under 14CFR 67, Medical Standards and Certification. 14CFR 91.17, alcohol or drugs, applies to UA pilots. Additionally, per UAS interim Operational Approval Guidance 08-01 Section 9.1.1., the Pilot in Command will also obtain and have in their possession a Private Pilot Certificate if operating within 5NM of airport, heliport, etc.
		DOD certified/trained	No
		Other Certified Training	No
		Trained on FAR Part 91 Requirement	Yes
		Medical Certification Class (FAA or DOD equivalent)	2
		Currency Status	Class 2 Medical exam renewed yearly
		Duty Time Restrictions	none
		Single UAS Control	Yes
		UAS Description	One Draganflyer X6 UAS only per pilot
		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	Observer Qualifications: Observers will have met all pilot qualifications specified in Interim Operational Approval Guidance 08-01 Section 9.
		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)	2
		Currency Status	Class 2 Medical exam renewed yearly
		Duty Time Restrictions	none
		Single UAS Control	Yes
		UAS Description	One Draganflyer X6 UAS only per observer

		Total Numbers of UAS Controlled	1
Special Circumstances		Special Circumstances	<p>The proponent acknowledges that the Pilot in Command and Observer will have a valid FAA Class 2 Medical or greater issued under 14 CFR part 67, and to have it in their possession before UAS operations begin. Additionally, per UAS interim Operational Approval Guidance 08-01 Section 9.1.1., the Pilot in Command will also obtain and have in their possession a Private Pilot Certificate if operating within 5NM of an airport, heliport, etc. Observers will also adhere to guidelines set forth in UAS interim Operational Approval Guidance 08-01 Section 9.2.</p> <p>Critical locations:  Attached document shows exhaustive list of critical locations within the City of Seattle and how they will be mitigated to minimize loss of property and life.</p> <p>NO-FLY: Areas that are prohibited for flight unless an emergency incident occurs where the potential of loss of life is great.</p> <p>EVACUATE: Areas where patrol officers can safely evacuate non-LE persons (ie. baseball fields).</p> <p>SECURE PERIMETER: Areas where LE can maintain a perimeter around an incident to prevent non-LE persons from entering or leaving, to increase life safety at the incident.</p> <p>MIN. ELEVATION: Areas where an established minimum height is adhered to to mitigate the potential for unintended crashes, damage to property or loss of life (ie. power sub-stations)</p> <p>Prior to beginning any UAS activity, the area will be secured to mitigate any life safety or property damage.</p> <p>The Proponent acknowledges that the Pilot in Command and Observer will adhere to the specified Flight Aircrew Qualifications as specified.</p>

Flight Operations Area/Plan

Type	User Defin Point	Loc ID	Degree	Distance	Latitude	Longitude	MSL Ceilin	MSL Floor
USER DEFINED ARE	Center of Seattle		1					

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Total Map Attachmen: 1

Maximum	Minimum	ξ Radius	SUA Description		
	47-36-45.22N		122-19-10.37W	940	0

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9.0