

FY23 Maritime Capable Tethered Unmanned Aerial Systems (UAS) Requirements Check

#	Functional Assessment Category	Requirement	Observed/Modifiable	Demo "Must"	Comments
1	Maritime Capable	Land		X	
2		Saltwater infused air environment to include salt fog or saltwater splash	X		
3	Operations	Persistent Surveillance	X		
4		Situational Awareness for Force Protection/Traditional Security	X		
5		Pattern of Life Monitoring	X		
6		Video Capture of Sizable Outdoor Events	X		
7		Ability to Carry Payloads for Surveillance/Situational Awareness	X		
8		Intelligence, Surveillance and Reconnaissance	X		
9		Emergency Telecommunications Networks	X		
10	Launch/Fly/Land Conditions	Operating Area: Not to exceed deck space of 12ft x 8 ft		X	
11		Static		X	
12		Moving (up to 20 mph)	X		
13		Day		X	
14		Night	X		
15		Tethered		X	
17		GPS-Denied	X		
18	Power	Source (Maritime Craft: ~3KW)	X		
19		Source (Other External)		X	Vendor provided Power Src at Demo
20		Automated Shutdown	X		
21		Backup	X		
23	Various Outdoor Environments	Maritime Craft	X		
24	Endurance	24-hour continuous operations	X		Demo < 8 hours, but must meet to be competitive
41	Operating Altitude	Optimal		X	
42		0' - 400' (Minimum)		X	
26	Transportable	Weight Not to Exceed 40 lbs.		X	
27	Adverse Weather Conditions	Sustained Winds to 25 MPH	X		
28		Gusty Winds to 35 MPH	X		
29		Rain	X		
30		Sleet	X		
31		Light Snow	X		
32		Lightning	X		

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#	Functional Assessment Category	Requirement	Observed/Modifiable	Demo "Must"	Comments
33	Tether	Attachment Security	X		
34		Cable Flexibility	X		
35		Cable Strength	X		
36		Tensioner/Auto Rewind		X	
37		Power Throughput		X	
38		Communication, Control & Data		X	
39	Data	Rates (40 Gbps Min)	X		
40		Security	X		
44	Maintainability	Sustained Autonomous Flight		X	
45		GCS Complexity	X		
46	System Monitoring	Power Management	X		
47		Rotors	X		
48		Drive Motors	X		
49		Control Electronics	X		
50		Payloads	X		
51	Enhanced Survivability	Active RF Signature	X		
52		Radar Cross-Section	X		
53		Infrared	X		
54		Acoustic	X		
55	Safety Features	Flight	X		Vendor description of safety features during demo
56		Backup Power	X		
57		Transient Voltage Arresters	X		
58	Payload Integration	Transport	X		
59		Remote Operations	X		
60		Mod Payload Ready	X		
61	Payload Capacity (Weight)	Up to 10 lbs. (Land)		X	Any vendor payload or mass simulator acceptable
62		Up to 7 lbs. (Maritime Craft)		X	
63	Production-Ready	Flyable Article On-Hand		X	
64	Standardization	Open Architecture	X		