U.S. Department
of Transportation

**Federal Aviation
Administration**

Office of the Administrator

800 Independence Ave., S.W.
Washington, D.C. 20591

September 21, 2012

The Honorable Edward J. Markey
House of Representatives
Washington, DC 20515

Dear Congressman Markey:

Thank you for your April 19 letter, cosigned by Congressman Joe Barton, about personal privacy issues related to the integration of unmanned aircraft systems into the National Airspace System. We have enclosed a list of your questions and our answers.

We have sent an identical letter to Congressman Barton.

If I can be of further assistance, please contact me or Roderick D. Hall, Assistant Administrator for Government and Industry Affairs, at (202) 267-3277.

Sincerely,

Michael P. Huerta
Acting Administrator

Enclosure

QUESTIONS AND ANSWERS

Question 1. What procedure does the FAA currently use to grant temporary licenses for drones?

FAA Response. There are two methods by which the Federal Aviation Administration (FAA) authorizes flight of unmanned aircraft systems (UAS) in the National Airspace System (NAS). The first is by the issuance of a Certificate of Waiver or Authorization (COA) for UAS flight. This method is available to public agencies that can qualify and fly as "public aircraft operations." The term "public aircraft operations" is defined in Title 14 Code of Federal Aviation Regulation 1.1 and now further defined in section 331 of Public Law 112-95. The second method is by issuance of a Special Airworthiness Certificate (SAC) in the Experimental Category. This method is available to all civil operators who wish to fly unmanned aircraft in the NAS for experimental purposes, such as research and development of UAS technology. The FAA does not currently authorize civil commercial UAS operations.

Question 2. Please provide a list of all past and current certifications and authorizations for drones.

FAA Response. Attached is a list of entities that have a current, expired, or disapproved SAC or COA to fly unmanned aircraft in the NAS. This list does not include information that is classified.

Question 3. Have any applications for drone licenses been denied? If yes, how many have been denied and for what reasons?

FAA Response. Yes. Six public agencies have been issued denials. The majority of the denials are due to unresolved high-risk safety hazards associated with the proposed activity and lack of adequate mitigation by the applicant. To date, the FAA has never issued a denial to a civil UAS operator seeking experimental airworthiness certification.

Question 4. What privacy protections and public transparency requirements has the FAA built into its current temporary licensing process for drones used in U.S. airspace?

FAA Response. The FAA's chief mission is to ensure the safety and efficiency of the NAS, as well as people and property on the ground. The FAA currently requires all authorized UAS operators to take measures to avoid manned aircraft in the NAS and prohibits the routine operation of UAS over densely-populated areas.

The FAA recognizes that there are privacy concerns related to UAS operations. There are aspects of the FAA's regulations and procedures that provide transparency and may contribute to privacy protections. For instance, ownership and registration data for UAS operating under a SAC may be searched through the FAA's N-number Registry that is available on the agency's Web site. In addition, subject to applicable exemptions, copies of SACs and supporting applications may be released upon request under the Freedom of Information Act (FOIA),

5 U.S.C. § 552. Further, the FAA is currently working with other government agencies and the UAS industry to develop a comprehensive plan for integration of UAS into the NAS by September 2015, as required by Public Law 112-95. The agency intends to leverage the resources of this group to help keep State and local governments informed of the ongoing integration of UAS into the NAS.

Question 4a. Is the public notified about where and when drones are used, who operates the drones, what data is collected, how is the data used, how long is the data retained, and who has access to that data? If yes, how? If not, why not?

FAA Response. The FAA does not require applicants for SACs and COAs to submit information regarding data that are collected by authorized UAS, how the data are used, how long the data are retained, and who has access to the data. To the extent the FAA has data responsive to this question, the data are contained in SACs and COAs and the underlying applications. For instance, applications include information about the general location and time of day for permitted operations, the name of the person or entity that owns them, and the purpose for the UAS operation. The FAA reviews the information provided in an application to evaluate the potential aviation safety impacts of a proposed UAS operation. The public may request copies of SACs, COAs, and applications under the FOIA process.

Question 4b. Does the FAA require current drone operators to follow guidelines that address privacy concerns? If yes, please describe those guidelines. If not, why not?

FAA Response. The FAA's primary mission is ensuring safety of the NAS. The FAA does not currently authorize civil commercial UAS operations. However, public agencies and civil operators can currently qualify for limited UAS operations. The FAA recognizes that there are privacy concerns related to UAS operations, and the agency will review these concerns in the context of the ongoing UAS rulemaking activities and integration plans.

Question 5. Please describe the FAA's plans for implementing Sections 331-336 of the FAA Modernization and Reform Act, which mandates government and non-government drone access to U.S. airspace.

FAA Response. The FAA is currently developing a comprehensive plan with its interagency partners that addresses four separate activities, as required under section 332. These four activities include: generation of national goals and objectives, generation of a UAS concept of operations, a roadmap addressing the integration of UAS into the NAS, and prioritization of UAS-related research. Federal agencies that employ UAS technology are being engaged through Joint Planning and Development Office (JPDO) workshops in various areas and through the FAA's UAS Aviation Rulemaking Committee (ARC), which has representation from industry. In addition, the JPDO has begun engaging industry through the NextGen Institute.

As mandated by Section 332(c) of the FAA Modernization and Reform Act, the FAA will be instituting six UAS test sites to advance the integration of UAS into the NAS. The FAA has initiated a competitive process to select these sites and sought comment from the public regarding the appropriate test site selection criteria. The comment period for this notice closed

on May 8, 2012. We are currently reviewing the feedback obtained through this transparent process to help us develop the UAS test site requirements, designation standards, and oversight activity.

Work on the small UAS (sUAS) Notice of Proposed Rulemaking (NPRM) is on-going. The rulemaking is currently under Departmental review. Upon approval, the draft will be given to the Office of Management and Budget for review. Updated information regarding the status of this rulemaking is provided on the Department of Transportation's significant rulemaking Web site, http://regs.dot.gov/rulemakings/index.htm.

The FAA is currently developing an implementation plan to expand the use of UAS in the Arctic, as required under section 332(d). The agency continues to work with its interagency partners and the international community to fulfill this obligation.

As mandated by Section 333 of the FAA Modernization and Reform Act, the FAA will seek additional opportunities to approve safe access under the provisions of this section. The agency is currently evaluating whether access to the operational area can be controlled to reduce risk to persons and property on the ground, as well as other users of the NAS.

The FAA has been working to develop guidance material that addresses methods to expedite the COA process, the collection and reporting of safety data, and the operational requirements for aircraft operating in Flight Test Centers. The guidance material is currently under executive review.

Question 6. Please describe the process by which drone license applications will be evaluated and approved.

FAA Response. Upon receipt of an application, the FAA reviews the application through a detailed process that includes an administrative check, air traffic control feasibility check, safety review, air traffic control facility coordination, and signature phases.

Question 7. How does the FAA plan to ensure that drone use under the FAA Modernization and Reform Act is transparent and protects individual privacy rights?

Question 7a. How will the public be notified about where and when drones are used, who will operate the drones, what data will be collected, how the data will be used, how long the data will be retained, and who will have access to that data?

Question 7b. How will the FAA determine whether an entity applying to operate a drone will properly address these privacy concerns?

Question 7c. How does the FAA plan to work with government agencies, businesses, nationwide community-based organizations and other stakeholders on privacy and transparency issues to implement the new law?

FAA Response. The expanded use of UAS presents great opportunities but also presents significant challenges as unmanned aircraft systems are inherently different from manned aircraft. The FAA is working to ensure the safe integration of unmanned aircraft. This involves gaining a better understanding of operational issues, such as training requirements, operational specifications and technology considerations. Our primary tool for testing all aspects of UAS integration, including addressing privacy concerns, will be the designation and operation of the UAS test sites. The agency has received feedback from the public and industry stakeholders regarding the appropriate test site criteria, which are currently being evaluated. As the test site program develops, the agency will continue to make ownership and registration data of SAC holders available on FAA's Web site.

Final Note Applicable to the Responses Above: These questions (and the answers provided) relate solely to the FAA's authorities and activities regarding UAS. UAS operators are subject to requirements independent of the FAA's authorities, including restrictions arising under Federal, State, or local laws that protect individual privacy.

Certificates of Authorization

	Sponsor
1	1/24 SBCT
2	147 RW, Ellington Field, Tx
3	147th Reconnaissance Wing
4	155th Brigade Combat Team
5	163rd Reconnaissance Wing
6	174th Fighter Wing
7	1st Battalion, 3rd Special Forces Group (Airborne)
8	1st Brigade (Stryker) 25th Infantry Division
9	2nd Brigade Combat Team, 82nd Airborne Division
10	30th Reconnaissance Squadron
11	49 OSS
12	49th Missile Defense Battalion (GMD)
13	4th Brigade Combat Team, 82nd Airborne Division
14	4th Infantry Division (HQ 4th ID, Bldg 1430)
15	4th Infantry Division, FT Carson, CO
16	645 AESG Air Force Material Command
17	658 AESS Air Force Material Command
18	69RG/OSA
19	703 AESG Air Force Material Command
20	9th Reconnaissance Wing, Beale AFB, CA
21	AFNORTH JFACC
22	Air Force Research Laboratory
23	Air Force Special Operations Command
24	Air Test and Evaluation Squadron TWO ONE (HX-21)
25	Arlington Texas Police Department (APD)
26	Army Aviation Applied Technology Directorate (AATD)
27	ASC/WII Det 3
28	B Company, 79th BSTB (MI)
29	Bastrop County Texas Emergency Management Coordinator Office
30	Becker Soil & Water Conservation District (City of Minnesota)
31	California Air National Guard - 163rd Reconnaissance Wing
32	California Fire
33	California State University, Fresno
34	Camp Roberts
35	Camp Shelby Joint Forces Training Center (CSJFTC)
36	Canyon County Sheriff's Office
37	Center for Interdisciplinary Remotely Piloted Aircraft Studies
38	CERDEC Flight Activity
39	City of El Dorado, KS
40	City of Herington, KS
41	City of Houston, TX
42	City of North Little Rock, AR - Police Department
43	Clackamas County Sheriff's Office
44	Co C, 2nd BN, 20th SFG (A)
45	College of Natural Resources-Utah State University
46	Colorado Department of Transportation (DOT)

47	Commander Officer, BLT 3/8
48	Commander, Naval Undersea Warfare Center Division, Newport
49	Commander, Patrol and Reconnaissance Wing - Two (CPRW-2)
50	COMSUBFOR
51	Cornell University - College of Agriculture and Life Sciences
52	Defense Advanced Research Projects Agency (DARPA)
53	Department of Energy - National Energy Technology Laboratory
54	Department of Energy (DOE) - Idaho National Laboratory
55	Department of Energy (DOE) - Oak Ridge National Laboratory
56	Department of Homeland Security (DHS) Customs and Border Protection (CBP)
57	Department of Homeland Security (DHS) Science and Technology (S&T)
58	Department of Interior (DOI)
59	Department of Military and Veterans Commonwealth (PA)
60	Department of the Navy; Air Test & Evaluation Squadron Two Zero (VX-20)
61	Eastern Gateway Community College
62	Federal Bureau of Investigation (FBI)
63	Florida Atlantic University
64	Fort A.P. Hill, DPTMs Range Control
65	Fort Bliss, TX
66	Fort Sill Garrison, Installation Mangement Command
67	Gadsden Police Department
68	Georgia Tech Police Department
69	Georgia Tech Research Institute - ATAS Laboratory
70	Grand Forks County Sheriff's Department
71	Guam Army National Guard
72	Hayes County Emergency Services
73	Headquarters, Marine Corps Department of Aviation
74	Headquarters, United States Army Garrison, Fort Bragg
75	Headquarters, US Army Garrison Command, Fort Knox
76	Headquarters, US Army Garrison, Fort Stewart
77	Headquarters, US Army Garrison, Hawaii
78	HQ 2-25 SCBT, 25ID
79	HQ ACC/A3AA
80	HQ Air Force North Command
81	HQ Air Force Special Operations Command
82	HQMC AVN
83	HQs, 72nd Infantry Brigade Combat Team
84	Illinois Army National Guard
85	Illinois Army National Guard, State Army Aviation Officer
86	Indiana State University
87	Indiana University
88	Installation Range Office
89	Iowa Army National Guard
90	Jacksonville District Corps of Engineers
91	Joint Base Lewis-McChord, Yakima Training Center
92	Joint Forces Air Component Commander (JFACC)
93	Kansas State University

94	King County Sheriff's Office
95	Lawson Army Airfield (Fort Benning)
96	Lorain County Community College
97	Louisiana Army National Guard
98	Marine Corps Air Station Cherry Point, NC, ATC Facility
99	Marine Corps Base Hawaii
100	Marine Corps Mountain Warfare Training Center (MCMWTC)
101	Marine Corps System Command
102	Marine Corps Warfighting Laboratory (MCWL)
103	Mesa County Sheriff's Office
104	Mesa County Sheriff's Office, Sheriff Stan Hilkey
105	Miami-Dade Police Department
106	Michigan Army National Guard
107	Middle Georgia College
108	Middle Tennessee State University
109	Minnesota Army National Guard (Camp Ripley, MN)
110	Mississippi Department of Marine Resources
111	Mississippi State University
112	Montgomery County Sheriff's Office
113	National Aeronautics & Space Administration (NASA) - Ames Research Center (ARC)
114	National Aeronautics & Space Administration (NASA) - Dryden Flight Research Center (DFRC)
115	National Aeronautics & Space Administration (NASA) - Goddard Space Flight Center (GSFC)
116	National Aeronautics & Space Administration (NASA) - Jet Propulsion Laboratory (JPL)
117	National Aeronautics & Space Administration (NASA) - Langley Research Center (LaRC)
118	National Guard Bureau Aviation and Safety Division
119	National Oceanic & Atmospheric Administration (NOAA)
120	NAVAIR PMA 263
121	Naval Oceanography Intelligence Surveillance Reconnaissance Component Stennis Space Center
122	Naval Outlying Field (NOLF) Choctaw Air Traffic Contol Tower (ATCT)
123	Naval Strike Air Warfare Center, Operations / Range N5
124	Naval Undersea Warfare Center
125	Navy, PMA-266
126	Navy, PMA-268
127	New Mexico Army National Guard
128	New Mexico Institute of Mining and Technology - PTRC
129	New Mexico State University (NMSU)
130	New Mexico State University (NMSU) - Physical Science Laboratory (PSL)
131	New Mexico Tech at Playas Training and Research Center
132	Nicholls State University
133	NIST
134	North Air Force Auxiliary Field
135	Northwestern Michigan College
136	NSWC Dahlgren/MCWL
137	Ogden Police Department
138	Ohio Army National Guard - Camp Ravenna Joint Military Training Center
139	Ohio Army National Guard - State Army Aviation Office (NGOH-AVO)
140	Ohio University - Avionics Engineering Center

141	Oklahoma Army National Guard
142	Oklahoma Army National Guard, Camp Gruber
143	Orange County Sheriffs Office, Sheriff Jerry Demings
144	Oregon Army National Guard
145	Oregon National Guard
146	Oregon State University
147	Otter Tail County (MN)
148	Polk County Sheriff's Office
149	PSU Aerospace Engineering
150	Seattle Police Department
151	Sinclair Community College
152	SPAWAR Systems Center Charleston
153	SPAWAR Systems Center LANT
154	Stark County Sheriff Department
155	State Army Aviation Office
156	Tennesse Army National Guard 1/278th ACR
157	Texas A&M University
158	Texas Department of Public Safety (DPS)
159	Texas Engineering Experiment Station (TEES)
160	Texas National Guard
161	Texas Rangers
162	Texas State University - River Systems Institute
163	U.S. Air Force
164	U.S. Air Force Materiel Command (AFMC)
165	U.S. Army - Aviation Applied Tech Directorate
166	U.S. Army - Fort Bliss, Garrison
167	U.S. Army - Fort Hood
168	U.S. Army - Future Force Integration Directorate
169	U.S. Army Aeroflightdynamics Directorate
170	U.S. Army Close Combat Weapon Systems Project Office
171	U.S. Army Corps of Engineers, Jacksonville District
172	U.S. Army Fort Polk JRTC
173	U.S. Army- Fort Riley
174	U.S. Army Garrison, Redstone
175	U.S. Army Installation Management Command, Adelphi Labortory Center
176	U.S. Army Project Manager, Unmanned Aircraft Systems
177	U.S. Army Space and Missile Defense Command (SMDC), Space Division
178	U.S. Army Technology Applications Support Activity (TASA)
179	U.S. Army Threat Systems Management Office
180	U.S. Army UAS Project Office
181	U.S. Army, 25th Infantry Division, Hawaii
182	U.S. Army, Night Vision and Electronic Sensors Directorate (NVESD)
183	U.S. Department of Justice & Queen Anne's County Office of the Sheriff
184	U.S. Environmental Protection Agency
185	U.S. Forest Service
186	U.S. Marine Corps, Marine Unmanned Aerial Vehicle Squadron Two (VMU-2)
187	U.S. Special Operations Command (USSOCOM)

188	University of Alaska (Fairbanks) - Geophysical Institute, Poker Flat Research Range
189	University of Arizona
190	University of California, Davis
191	University of California, Merced
192	University of Colorado (Boulder) - Research & Engineering Center for Unmanned Vehicles (RECUV)
193	University of Connecticut
194	University of Florida
195	University of Florida Department of Entomology and Nematology
196	University of Michigan
197	University of New Mexico
198	University of North Dakota
199	University of Oklahoma
200	University of Wisconsin (Madison)
201	US Department of State - Diplomatic Security
202	USAF - 36 OSS/OSAT (Andersen Tower)
203	USAF - 432nd OG
204	USAF - 452 FLTS
205	USAF - 49 OSS/OSOA (Holloman Tower)
206	USAF - 49th Wing
207	USAF - 556th TES
208	USAF - 57th OG
209	USAF- 556 TES/ADO
210	USAG Fort Polk
211	USDA Agricultural Research Service
212	USDA Agricultural Research Service Jornada Experimental Range
213	USDI/NBC/AMD
214	USMC- VMU-2
215	USMC- VMU-4
216	USN - Navy Irregular Warfare Office
217	USN - PEO IWS 2.0
218	USN PEO Strike Weapons & Unmanned Aviation (PMA266)
219	Utah State University - Space Dynamics Laboratory (SDL)
220	Utah Water Research Laboratory - Utah State University
221	Virginia Army National Guard
222	Virginia Commonwealth University
223	Virginia Polytechnic Institute & State University
224	Virginia Tech
225	Volk Field Combat Readiness Training Center
226	Washington State Department of Transportation (WSDOT)
227	West Virginia University - Flight Control Systems Laboratory
228	Wheeler-Sack Army Airfield (Fort Drum, NY)

Special Airworthiness Certificates

Unmanned Aircraft Systems

Company	Certificate Issued: Yes / No	Certificate: Active / Expired	Registration (N) Numbers
General Atomics	Y	Active	8172V
Bell-Textron	Y	Expired	5916A
Raytheon	Y	Expired	601RN
	Y	Expired	602RN
	Y	Expired	603RN
	Y	Expired	604RN
	Y	Expired	605RN
	Y	Active	606RN
	Y	Active	607RN
	Y	Expired	608RN
	Y	Expired	723RN
AAI	Y	Expired	207SH
General Atomics	Y	Expired	20321
Aurora	Y	Expired	828AU
	Y	Expired	824AU
	Y	Expired	827AU
Telford	Y	Expired	305BX
Cyber Defense	Y	Expired	253CB
Honeywell	Y	Expired	3047W
	Y	Expired	338FH
	Y	Expired	220AW
General Atomics	Y	Active	114HK
	Y	Active	188HK
Defense Technologies	Y	Expired	2554V
	Y	Expired	2555R
	Y	Expired	2554B
General Atomics	Y	Expired	94430
	Y	Expired	94433
	Y	Expired	374AX
	Y	Expired	406AB
	Y	Expired	675PL
	Y	Expired	405WP
	Y	Active	406WP
L-3 BAI Aerosystem	Y	Expired	721UA
Telford	Y	Expired	805BX
Unmanned Systems	Y	Active	441KS
Lockheed Martin	Y	Active	474LL
	Y*	Expired	3001Z

*** 3001Z issued a special flight permit. All others were experimental.**

As of 08/07/12