

ORAL ARGUMENT NOT YET SCHEDULED

No. 19-5238

**IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

ELECTRONIC PRIVACY INFORMATION CENTER,
Plaintiff-Appellant,

v.

DRONE ADVISORY COMMITTEE, et al.,
Defendants-Appellees.

**On Appeal from Orders of the
U.S. District Court for the District of Columbia
Case No. 18-cv-833-RC**

JOINT APPENDIX

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U.S. District Court
District of Columbia (Washington, DC)
CIVIL DOCKET FOR CASE #: 1:18-cv-00833-RC

ELECTRONIC PRIVACY INFORMATION CENTER v. DRONE
 ADVISORY COMMITTEE et al
 Assigned to: Judge Rudolph Contreras
 Case in other court: USCA, 19-05238
 Cause: 05:App. 2,1 Federal Advisory Committee Act

Date Filed: 04/11/2018
 Date Terminated: 07/30/2019
 Jury Demand: None
 Nature of Suit: 899 Administrative
 Procedure Act/Review or Appeal of Agency
 Decision
 Jurisdiction: U.S. Government Defendant

Date Filed	#	Docket Text
04/11/2018	<u>1</u> R	COMPLAINT against All Defendants (Filing fee \$ 400 receipt number 0090-5418078) filed by ELECTRONIC PRIVACY INFORMATION CENTER. (Attachments: # <u>1</u> Civil Cover Sheet, # <u>2</u> Exhibit 1-21, # <u>3</u> Summons Drone Advisory Committee, # <u>4</u> Summons Federal Aviation Administration, # <u>5</u> Summons Daniel K. Elwell, # <u>6</u> Summons RTCA Advisory Committee, # <u>7</u> Summons United States Department of Transportation, # <u>8</u> Summons David W. Freeman)(Butler, Alan) (Entered: 04/11/2018)
04/11/2018	<u>2</u> R	Corporate Disclosure Statement by ELECTRONIC PRIVACY INFORMATION CENTER. (Butler, Alan) (Entered: 04/11/2018)
04/11/2018		Case Assigned to Judge Rudolph Contreras. (jd) (Entered: 04/12/2018)
04/12/2018	<u>3</u>	SUMMONS (6) Issued Electronically as to DRONE ADVISORY COMMITTEE, DANIEL K ELWELL, FEDERAL AVIATION ADMINISTRATION, DAVID W. FREEMAN, RTCA ADVISORY COMMITTEE, UNITED STATES DEPARTMENT OF TRANSPORTATION, U.S. Attorney and U.S. Attorney General. (Attachment: # <u>1</u> Notice and Consent)(jd) (Entered: 04/12/2018)
04/17/2018	<u>4</u> R	REQUEST FOR SUMMONS TO ISSUE <i>as to U.S. Attorney General</i> filed by ELECTRONIC PRIVACY INFORMATION CENTER. (Attachments: # <u>1</u> R Summons Request as to U.S. Attorney, District of Columbia)(Butler, Alan) (Entered: 04/17/2018)
04/18/2018	<u>5</u> R	SUMMONS (2) Issued Electronically as to U.S. Attorney and U.S. Attorney General (jf) (Entered: 04/18/2018)
05/08/2018	<u>6</u>	RETURN OF SERVICE/AFFIDAVIT of Summons and Complaint Executed as to the United States Attorney. Date of Service Upon United States Attorney on 4/24/2018. (Answer due for ALL FEDERAL DEFENDANTS by 6/23/2018.), RETURN OF SERVICE/AFFIDAVIT of Summons and Complaint Executed on United States Attorney General. Date of Service Upon United States Attorney General 4/23/18., RETURN OF SERVICE/AFFIDAVIT of Summons and Complaint Executed. DRONE ADVISORY COMMITTEE served on 4/23/2018; DANIEL K ELWELL served on 4/23/2018; FEDERAL AVIATION ADMINISTRATION served on 4/23/2018; DAVID W. FREEMAN served on 4/23/2018 (Attachments: # <u>1</u> Certificate of Service as to Attorney General, # <u>2</u> Certificate of Service Drone Advisory Committee, # <u>3</u> Certificate of Service Daniel K. Elwell, # <u>4</u> Certificate of Service Federal Aviation Administration, # <u>5</u> Certificate of Service David W. Freeman)(Butler, Alan) (Entered: 05/08/2018)

05/10/2018	7	RETURN OF SERVICE/AFFIDAVIT of Summons and Complaint Executed. UNITED STATES DEPARTMENT OF TRANSPORTATION served on 5/10/2018 (Butler, Alan) (Entered: 05/10/2018)
05/21/2018	8 R	RETURN OF SERVICE/AFFIDAVIT of Summons and Complaint Executed. RTCA ADVISORY COMMITTEE served on 5/21/2018, answer due 6/11/2018 (Rotenberg, Marc) (Entered: 05/21/2018)
05/24/2018	9	NOTICE of Appearance by Bert W. Rein on behalf of RTCA ADVISORY COMMITTEE (Rein, Bert) (Entered: 05/24/2018)
05/24/2018	10 R	Consent MOTION for Extension of Time to File Answer re 1 R Complaint, by RTCA ADVISORY COMMITTEE (Attachments: # 1 Text of Proposed Order)(Rein, Bert) (Entered: 05/24/2018)
05/24/2018		MINUTE ORDER granting 10 R Consent Motion for Extension of Time: It is hereby ORDERED that Defendant RTCA Advisory Committee shall answer or respond to Plaintiff's complaint on or before June 25, 2018. SO ORDERED. Signed by Judge Rudolph Contreras on 05/24/2018. (lcrc1) (Entered: 05/24/2018)
05/25/2018		Set/Reset Deadlines: Answer due by 6/25/2018. (tj) (Entered: 05/25/2018)
06/22/2018	11	NOTICE of Appearance by Lisa Zeidner Marcus on behalf of All Defendants (Marcus, Lisa) (Entered: 06/22/2018)
06/22/2018	12 R	MOTION for Extension of Time to <i>Respond to Plaintiff's Complaint</i> by DRONE ADVISORY COMMITTEE, DANIEL K ELWELL, FEDERAL AVIATION ADMINISTRATION, DAVID W. FREEMAN, RTCA ADVISORY COMMITTEE, UNITED STATES DEPARTMENT OF TRANSPORTATION (Attachments: # 1 Text of Proposed Order)(Marcus, Lisa) (Entered: 06/22/2018)
06/25/2018	13	STIPULATION of Dismissal <i>Without Prejudice as to Defendant RTCA Advisory Committee</i> by ELECTRONIC PRIVACY INFORMATION CENTER. (Butler, Alan) (Entered: 06/25/2018)
06/25/2018	14	Memorandum in opposition to re 12 R MOTION for Extension of Time to <i>Respond to Plaintiff's Complaint</i> filed by ELECTRONIC PRIVACY INFORMATION CENTER. (Attachments: # 1 Exhibit 1, # 2 Text of Proposed Order)(Butler, Alan) (Entered: 06/25/2018)
06/25/2018	15	REPLY to opposition to motion re 12 R MOTION for Extension of Time to <i>Respond to Plaintiff's Complaint</i> filed by DRONE ADVISORY COMMITTEE, DANIEL K ELWELL, FEDERAL AVIATION ADMINISTRATION, DAVID W. FREEMAN, RTCA ADVISORY COMMITTEE, UNITED STATES DEPARTMENT OF TRANSPORTATION. (Marcus, Lisa) (Entered: 06/25/2018)
06/26/2018		MINUTE ORDER granting 12 R Defendants' Motion for Extension of Time: Upon consideration of Defendants' motion, Plaintiff's opposition, and Defendants' reply, it is hereby ORDERED that Defendants shall respond to Plaintiff's complaint on or before July 3, 2018. SO ORDERED. Signed by Judge Rudolph Contreras on 06/26/2018. (lcrc1) (Entered: 06/26/2018)
06/27/2018		Set/Reset Deadlines: Answer due by 7/3/2018, (tj) (Entered: 06/27/2018)
07/03/2018	16	MOTION to Dismiss , MOTION to Dismiss for Lack of Jurisdiction by DRONE ADVISORY COMMITTEE, DANIEL K ELWELL, FEDERAL AVIATION ADMINISTRATION, DAVID W. FREEMAN, RTCA ADVISORY COMMITTEE, UNITED STATES DEPARTMENT OF TRANSPORTATION (Attachments: # 1

		Memorandum in Support, # 2 Text of Proposed Order)(Marcus, Lisa) (Entered: 07/04/2018)
07/04/2018	17	ERRATA by DRONE ADVISORY COMMITTEE, DANIEL K ELWELL, FEDERAL AVIATION ADMINISTRATION, DAVID W. FREEMAN, UNITED STATES DEPARTMENT OF TRANSPORTATION 16 MOTION to Dismiss MOTION to Dismiss for Lack of Jurisdiction filed by DRONE ADVISORY COMMITTEE, RTCA ADVISORY COMMITTEE, UNITED STATES DEPARTMENT OF TRANSPORTATION, DANIEL K ELWELL, DAVID W. FREEMAN, FEDERAL AVIATION ADMINISTRATION. (Attachments: # 1 Exhibit 1, # 2 Exhibit 2, # 3 Exhibit 3)(ztd) (Entered: 07/06/2018)
07/17/2018	18	Memorandum in opposition to re 16 MOTION to Dismiss MOTION to Dismiss for Lack of Jurisdiction filed by ELECTRONIC PRIVACY INFORMATION CENTER. (Attachments: # 1 Text of Proposed Order)(Butler, Alan) (Entered: 07/17/2018)
07/20/2018	19	Unopposed MOTION for Extension of Time to File Response/Reply as to 16 MOTION to Dismiss MOTION to Dismiss for Lack of Jurisdiction by DRONE ADVISORY COMMITTEE, DANIEL K ELWELL, FEDERAL AVIATION ADMINISTRATION, DAVID W. FREEMAN, RTCA ADVISORY COMMITTEE, UNITED STATES DEPARTMENT OF TRANSPORTATION (Attachments: # 1 Text of Proposed Order) (Marcus, Lisa) (Entered: 07/20/2018)
07/20/2018		MINUTE ORDER: Upon consideration of 19 Defendants' Unopposed Motion for Extension of Time, it is hereby ORDERED that Defendants shall file their reply brief in response to Plaintiff's opposition to Defendants' motion to dismiss on or before July 27, 2018. SO ORDERED. Signed by Judge Rudolph Contreras on 07/20/2018. (lcrc1) (Entered: 07/20/2018)
07/27/2018	20 R	REPLY to opposition to motion re 16 MOTION to Dismiss MOTION to Dismiss for Lack of Jurisdiction filed by DRONE ADVISORY COMMITTEE, DANIEL K. ELWELL, FEDERAL AVIATION ADMINISTRATION, DAVID W. FREEMAN, RTCA ADVISORY COMMITTEE, UNITED STATES DEPARTMENT OF TRANSPORTATION. (Marcus, Lisa) (Entered: 07/28/2018)
10/16/2018	21	NOTICE of Appearance by John L. Davisson on behalf of ELECTRONIC PRIVACY INFORMATION CENTER (Davisson, John) (Entered: 10/16/2018)
10/16/2018	22	NOTICE OF SUPPLEMENTAL AUTHORITY by ELECTRONIC PRIVACY INFORMATION CENTER (Davisson, John) (Entered: 10/16/2018)
11/03/2018	23 R	RESPONSE re 22 NOTICE OF SUPPLEMENTAL AUTHORITY by DRONE ADVISORY COMMITTEE, DANIEL K. ELWELL, FEDERAL AVIATION ADMINISTRATION, DAVID W. FREEMAN, UNITED STATES DEPARTMENT OF TRANSPORTATION (Marcus, Lisa) Modified event title on 11/18/2018 (znmw). (Entered: 11/03/2018)
02/25/2019	24 R	ORDER granting in part and denying in part 16 Motion to Dismiss. See document for details. Signed by Judge Rudolph Contreras on 2/25/19. (lcrc1) (Entered: 02/25/2019)
02/25/2019	25 R	MEMORANDUM OPINION granting in part and denying in part 16 Motion to Dismiss. See document for details. Signed by Judge Rudolph Contreras on 2/25/19. (lcrc1) (Entered: 02/25/2019)
02/25/2019		MINUTE ORDER: It is hereby ORDERED that the parties shall meet, confer, and submit a joint report in accordance with Local Civil Rule 16.3 on or before March 11, 2019. SO ORDERED. Signed by Judge Rudolph Contreras on 2/25/19. (lcrc1) (Entered: 02/25/2019)

02/27/2019		Set/Reset Deadlines: Meet & Confer Statement due by 3/11/2019. (tj) (Entered: 02/27/2019)
03/11/2019	26	MEET AND CONFER STATEMENT. (Davisson, John) (Entered: 03/11/2019)
03/11/2019	27	ANSWER to Complaint (<i>as modified by the Court's Mem. Op. of Feb. 25, 2019 (ECF No. 25) and Order of Feb. 25, 2019 (ECF No. 24)</i>) by DANIEL K. ELWELL, FEDERAL AVIATION ADMINISTRATION, DAVID W. FREEMAN, UNITED STATES DEPARTMENT OF TRANSPORTATION. (Attachments: # 1 Exhibit A, # 2 Exhibit B, # 3 Exhibit C, # 4 Exhibit D)(Marcus, Lisa) (Entered: 03/11/2019)
03/13/2019		MINUTE ORDER: Upon consideration of 26 the parties' meet and confer statement, it is hereby ORDERED that any amended pleadings in this case shall be filed by May 31, 2019. It is FURTHER ORDERED that the parties can dispense with initial disclosures under Fed. R. Civ. P. 26(a)(1). It is FURTHER ORDERED that Defendants shall complete a reasonable search for any responsive DAC records that have not already been disclosed, and produce to Plaintiff any non-exempt portions of such records that do not need to be referred to third-parties pursuant to the FAA's submitter review process, on or before April 25, 2019. It is FURTHER ORDERED that the parties shall file a joint status report on or before May 9, 2019, at which point the parties can indicate a proposed schedule to govern further proceedings, including whether any discovery is appropriate and/or the schedule for briefing any dispositive motions. SO ORDERED. Signed by Judge Rudolph Contreras on 3/13/19. (lcrc1) (Entered: 03/13/2019)
03/15/2019		Set/Reset Deadlines: Amended Pleadings due by 5/31/2019. Status Report due by 5/9/2019 (tj) (Entered: 03/15/2019)
05/09/2019	28 R	Joint STATUS REPORT by DANIEL K. ELWELL, FEDERAL AVIATION ADMINISTRATION, DAVID W. FREEMAN, UNITED STATES DEPARTMENT OF TRANSPORTATION. (Attachments: # 1 Exhibit A)(Marcus, Lisa) (Entered: 05/09/2019)
05/10/2019		MINUTE ORDER: Upon consideration of the parties' 28 R joint status report, it is hereby ORDERED that the parties shall file another joint status report on or before May 30, 2019. SO ORDERED. Signed by Judge Rudolph Contreras on 5/10/19. (lcrc1) (Entered: 05/10/2019)
05/21/2019		Set/Reset Deadlines: Status Report due by 5/30/2019. (tj) (Entered: 05/21/2019)
05/30/2019	29 R	Joint STATUS REPORT by ELECTRONIC PRIVACY INFORMATION CENTER. (Davisson, John) (Entered: 05/30/2019)
05/31/2019		MINUTE ORDER: Upon consideration of the parties' 29 R joint status report, it is hereby ORDERED that the parties shall file another joint status report on or before June 13, 2019. SO ORDERED. Signed by Judge Rudolph Contreras on 5/31/19. (lcrc1) (Entered: 05/31/2019)
05/31/2019		Set/Reset Deadlines: Joint Status Report due by 6/13/2019 (hs) (Entered: 05/31/2019)
06/13/2019	30 R	Joint STATUS REPORT by ELECTRONIC PRIVACY INFORMATION CENTER. (Davisson, John) (Entered: 06/13/2019)
06/14/2019		MINUTE ORDER: Upon consideration of the parties' 30 R joint status report, it is hereby ORDERED that the parties shall file another joint status report on or before June 27, 2019. SO ORDERED. Signed by Judge Rudolph Contreras on 6/14/19. (lcrc1) (Entered: 06/14/2019)
06/14/2019		Set/Reset Deadlines: Status Report due by 6/27/2019. (tj) (Entered: 06/14/2019)

06/27/2019	31	Joint STATUS REPORT by DRONE ADVISORY COMMITTEE, DANIEL K. ELWELL, FEDERAL AVIATION ADMINISTRATION, DAVID W. FREEMAN, UNITED STATES DEPARTMENT OF TRANSPORTATION. (Marcus, Lisa) (Entered: 06/27/2019)
07/26/2019	32	Consent MOTION for Entry of Final Judgment by ELECTRONIC PRIVACY INFORMATION CENTER (Attachments: # 1 Text of Proposed Order)(Davisson, John) (Entered: 07/26/2019)
07/26/2019	33	ORDER granting 32 consent motion for entry of final judgment. See document for details. Signed by Judge Rudolph Contreras on 7/26/19. (lcrc1) (Entered: 07/26/2019)
09/03/2019	34	NOTICE of Change of Address by John L. Davisson (Davisson, John) (Entered: 09/03/2019)
09/04/2019	35	NOTICE OF APPEAL TO DC CIRCUIT COURT as to 33 Order on Motion for Entry of Final Judgment by ELECTRONIC PRIVACY INFORMATION CENTER. Filing fee \$ 505, receipt number 0090-6357029. Fee Status: Fee Paid. Parties have been notified. (Davisson, John) (Entered: 09/04/2019)
09/05/2019	36	Transmission of the Notice of Appeal, Order Appealed (Memorandum Opinion), and Docket Sheet to US Court of Appeals. The Court of Appeals fee was paid this date re 35 Notice of Appeal to DC Circuit Court. (ztth) (Entered: 09/05/2019)
09/11/2019		USCA Case Number 19-5238 for 35 Notice of Appeal to DC Circuit Court, filed by ELECTRONIC PRIVACY INFORMATION CENTER. (zrdj) (Entered: 09/13/2019)

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**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

ELECTRONIC PRIVACY INFORMATION	:	
CENTER,	:	
	:	
Plaintiff,	:	Civil Action No.: 18-833 (RC)
	:	
v.	:	Re Document No.: 16
	:	
DRONE ADVISORY COMMITTEE, <i>et al.</i> ,	:	
	:	
Defendants.	:	

MEMORANDUM OPINION

GRANTING IN PART AND DENYING IN PART DEFENDANTS' MOTION TO DISMISS

I. INTRODUCTION

This case involves a dispute over the public transparency obligations of the Drone Advisory Committee (“DAC”), an advisory committee created by the Federal Aviation Administration (“FAA”) to address the challenges associated with the integration of drones in the National Airspace System (“NAS”). Plaintiff the Electronic Privacy Information Center (“EPIC”) has a particular interest in the privacy concerns posed by drones, and has engaged the FAA on that issue on multiple occasions in the past few years. In this case, EPIC alleges that the DAC, its subcommittee (the DAC Subcommittee, or “DACSC”), and three DAC task groups active between 2017 and 2018 violated the public record requirements of the Federal Advisory Committee Act (“FACA”), 5 U.S.C. App. 2, by failing to make available records of their activities pursuant to the Act. EPIC also alleges that the DACSC and DAC task groups failed to comply with FACA’s open meeting requirements, by engaging in secret meetings closed to the public.

EPIC initially brought claims against the FAA, the Department of Transportation (“DOT”), FAA and DOT officials, the DAC, and the DAC’s parent advisory committee, the Radio Technical Commission for Aeronautics (“RTCA”) Advisory Committee, under FACA, the Administrative Procedure Act (“APA”), 5 U.S.C. § 701 *et seq.*, and the Declaratory Judgment Act (“DJA”), 28 U.S.C. § 2201(a). After EPIC voluntarily dismissed its claims against the RTCA, the remaining Defendants have now moved to dismiss all claims for lack of subject matter jurisdiction or failure to state a claim. For the reasons stated below, the Court finds that it lacks subject matter jurisdiction to consider EPIC’s FACA claims, APA open meetings claims, DJA claim, and APA claims against the DAC. The Court also finds that while EPIC’s complaint states a cognizable APA claim as to the DAC’s alleged failure to comply with its public records obligations, it fails to state a claim as to the public records obligations of the DACSC and the DAC task groups. The Court accordingly grants in part and denies in part the motion to dismiss.

II. BACKGROUND

A. Advisory Committee Transparency Obligations Under FACA

Enacted in 1972, the Federal Advisory Committee Act, Pub. L. No. 92–463, 86 Stat. 770 (codified at 5 U.S.C. App. 2), was intended to create more transparency around the multitude of advisory committees working with the executive branch. FACA defines an advisory committee as “any committee, board, commission, council, conference, panel, task force, or other similar group, or any subcommittee or other subgroup thereof,” which, *inter alia*, is “established or utilized by one or more agencies[] in the interest of obtaining advice or recommendations for the President or one or more agencies or officers of the Federal Government.” 5 U.S.C. App. 2 § 3(2). The Act imposes a number of transparency requirements on advisory committees,

including that advisory committee meetings be open to the public and that advisory committee records be publicly available.

With respect to the open meeting requirement, FACA provides that “[e]ach advisory committee meeting shall be open to the public,” *id.* § 10(a)(1), and that “timely notice of each such meeting shall be published in the Federal Register,” *id.* § 10(a)(2). And as to committee records, FACA mandates that the “records, reports, transcripts, minutes, appendixes, working papers, drafts, studies, agenda, or other documents which were made available to or prepared for or by each advisory committee” be made available for public inspection, subject only to the exceptions provided under the Freedom of Information Act, 5 U.S.C. § 552. 5 U.S.C. App. 2 § 10(b).

B. Creation of the DAC

Drone availability and use in the United States has steadily increased over the past few years. U.S. drone sales more than doubled between 2016 and 2017, with commercial drones representing a growing share of the drone market. Compl. ¶ 20, ECF No. 1. In response to this rapidly expanding drone use, the FAA announced the formation of the DAC in May 2016. *Id.* ¶ 24. The DAC was set up under the RTCA Advisory Committee, an advisory committee utilized by the FAA and DOT, *id.* ¶ 12, as a “broad based advisory committee that w[ould] provide advice on key unmanned aircraft integration issues,” *id.* ¶ 24 (quoting May 2016 FAA Press Release, Compl. Ex. 2, ECF No. 1-2). It held its first public meeting on September 16, 2016. *Id.* ¶ 26.

The FAA issued Terms of Reference to guide the operation of the DAC. *See id.* ¶ 28; DAC Terms of Reference at 1, Compl. Ex. 1. The Terms of Reference identified the DAC as a federal advisory committee subject to FACA reporting requirements, DAC Terms of Reference

at 6, and charged the DAC with “identify[ing] and recommend[ing] a single, consensus-based set of resolutions for issues regarding the efficiency and safety of integrating UAS [unmanned aerial systems] into the NAS and . . . develop[ing] recommendations to address those issues and challenges,” Compl. ¶ 28 (quoting DAC Terms of Reference at 2). The Terms of Reference also specified that while the DAC was an “open venue” designed to “ensure transparency” in the discussion of the various issues relating to integrating drones into the NAS, it would be supplemented by task groups “established to develop recommendations and other documents,” and by the DACSC, for which only “[s]ome meetings” would be open to the public. DAC Terms of Reference at 1–2. In its press release announcing the DAC’s first meeting on September 16, 2016, the FAA explained that the DAC would “conduct more detailed business through a subcommittee and various task groups” that would “help the FAA prioritize its activities.” August 31, 2016 FAA Press Release at 2, Compl. Ex. 3.

C. Operation of the DAC Between 2016 and 2018

The DAC officially met six times between September 2016 and March 2018. *See generally* Compl. ¶¶ 54–92. Each meeting of the DAC was announced in advance and held open to the public. *See generally id.* At DAC meetings, the committee discussed progress made on the various issues identified with drone integration, including work performed by the DACSC and three DAC task groups established to research particular topics identified by the FAA and the DAC.

1. September 16, 2016 to January 31, 2017

At the first meeting of the DAC on September 16, 2016, the Committee discussed a number of administrative matters, including regulatory issues and procedures it would follow going forward. *See generally* Sept. 16, 2016 DAC Meeting Minutes, Compl. Ex. 4. The DAC

identified several action items at the end of the meeting, including to “[e]stablish a standing DAC Subcommittee (DACSC) . . . [and] task the DACSC to establish a ranked set of priorities among the remaining drone integration issues the DAC identified at its inaugural meeting,” and to “[e]stablish a task group to develop a minimum set of requirements . . . that operators can follow to gain access to airspace.”

Following the meeting, the FAA published detailed Terms of Reference for the DACSC on October 28, 2016. DACSC Terms of Reference, Compl. Ex. 6. The DACSC Terms of Reference explained that the DACSC’s purpose was to “support the DAC in developing consensus-based recommendations to the FAA on issues related to the integration of UAS into the nation’s airspace.” *Id.* at 1. The DACSC, composed of subject-matter experts on drone and NAS integration issues, would “provide the staff work for the DAC, applying knowledge and expertise to forge consensus on critical issues and providing input to the DAC for public deliberation and the development of recommendations to be forwarded to the FAA.” *Id.*

The DACSC Terms of Reference also identified the DACSC’s role in monitoring the activities of the various task groups to be set up by the DAC. The DACSC was to “provide guidance and oversight to the Task Groups,” which the Terms of Reference defined as “shorter-lived groups established to forge consensus-based recommendations in response to specific taskings handed down from the DAC.” *Id.* at 2. The Terms of Reference identified a clear hierarchical structure, with the FAA issuing taskings to the DAC, which would then hand down task statements to the DACSC, with the DACSC coordinating the work of the DAC task groups. *See id.* The Terms of Reference also stated that the DACSC would “address issues as directed by the DAC,” with “[n]o recommendations . . . flow[ing] directly from the DACSC or DAC TGs

[task groups] directly to the FAA” and with all recommendations to be “vetted in a public DAC meeting and transmitted to the FAA upon approval by the DAC.” *Id.* at 3.

Between its first meeting on September 16, 2016 and its second meeting on January 31, 2017, the DAC also established its first two task groups, Task Group 1 and Task Group 2. Compl. ¶ 59. Task Group 1 was set up as the “Roles and Responsibilities” task group, charged with evaluating the relative roles and responsibilities of federal, state, and local government actors in regulating drones. *See* January 31, 2017 DAC Meeting Minutes at 3, Compl. Ex. 5. Task Group 2, the “Access to Airspace” task group, was charged with evaluating access to airspace requirements for drones. *See id.* at 5. During that time period, the DACSC, Task Group 1, and Task Group 2 engaged in official committee business, and held meetings that were not publicly noticed or announced to the public. Compl. ¶¶ 60–61.

2. January 31, 2017 to May 3, 2017

On January 31, 2017, the DAC held its second official meeting. *Id.* ¶ 62. At the meeting, both the DACSC, Task Group 1, and Task Group 2 delivered progress reports. *Id.* ¶ 63. Task Groups 1 and 2 also presented substantive recommendations to the DAC. *Id.* The recommendations were discussed publicly by the Committee and several changes were suggested to the tasking statements for both task groups, and to the recommendations of Task Group 2. *See* January 31, 2017 DAC Meeting Minutes at 3–7, 12–13. The DAC also discussed the creation of a third task group, Task Group 3 (the “Funding” task group), intended to evaluate the funding and costs associated with the DAC’s work over the next twenty-four months. *Id.* at 7–9. The FAA introduced a draft tasking statement that was discussed at the meeting and on which the DAC suggested modifications. *Id.* at 7, 12.

Following the January 31, 2017 meeting, the FAA issued final tasking statements for Task Group 1 and Task Group 2 on February 10, 2017. *See* Task Group 1 Tasking Statement, Compl. Ex. 7; Task Group 2 Tasking Statement, Compl. Ex. 8. Task Group 1 was asked to evaluate the relative role and responsibilities of the federal, state, and local governments in regulating drone operations in low-altitude airspace. Task Group 1 Tasking Statement at 1. The tasking statement suggested particular issues the task group could address, and sets of recommendations the task group could develop in response to its task. *See id.* at 2–3. The FAA asked for “an interim set of recommendations at the May 2017 DAC Meeting, followed by a final report no later than the October 2017 DAC Meeting.” *Id.* at 7. Similarly, the Task Group 2 Tasking Statement asked that Task Group 2 “provide recommendations on UAS operations/missions beyond those currently permitted, and define procedures for industry to gain access to the airspace.” Task Group 2 Tasking Statement at 1, Compl. Ex. 8. The FAA asked for recommendations on four sets of issues, and, as with Task Group 1, requested an interim set of recommendations by the May 2017 DAC meeting and a final report to be submitted no later than the October 2017 DAC meeting. *Id.* at 2.

On March 7, 2017, the FAA issued its final tasking statement for Task Group 3. The tasking statement asked that the DAC “evaluate and analyze potential mechanisms for UAS users to fund the activities and services required to safely integrate UAS into the NAS over the near term.” Task Group 3 Tasking Statement at 1, Compl. Ex. 9. The tasking statement noted that the recommendations would “be used to inform near term government action,” *id.*, with a target interim report to be submitted by the task group to the DAC by June 30, 2017 so that a final report incorporating any DAC feedback could be prepared by March 2018, *id.* at 2.

Between the January 31, 2017 and May 3, 2017 meetings of the DAC, both the DACSC and task groups 1, 2, and 3 conducted meetings and engaged in official committee business.

Compl. ¶ 65. None of the meetings were publicly noticed or announced. *Id.* ¶¶ 66–67

3. May 3, 2017 to April 11, 2018

Between May 3, 2017 and the filing of the Complaint on April 11, 2018, the DAC met another four times. *Id.* ¶¶ 68–92. At the May 3, 2017 meeting, all of the three DAC task groups delivered progress reports to the DAC. *Id.* ¶ 69. Both task groups 1 and 2 submitted recommendations, for which the DAC provided feedback and suggested changes. May 3, 2017 DAC Meeting Minutes at 9–14, 17, Compl. Ex. 10. At the July 21, 2017 meeting, task groups 1 and 3 delivered progress reports to the DAC, with Task Group 3 submitting its interim report on funding mechanisms for the introduction of drones into the NAS. Compl. ¶ 75. The DAC approved Task Group 3’s interim report and relayed feedback to Task Group 1 to “accommodate . . . more balanced TG membership” by better involving state and local authorities. July 21, 2017 DAC Meeting Minutes at 8–9, Compl. Ex. 11. At the November 8, 2017 meeting, the DACSC and all three task groups delivered progress reports, with Task Group 2 presenting a final report regarding access to airspace. Compl. ¶¶ 85–87. The minutes for the meeting reflect that there was substantial discussion of each task group’s report, and the Task Group 2 final report was approved after a clarifying amendment by the DAC. Nov. 8, 2017 DAC Meeting Minutes at 8–18, Compl. Ex. 12. The DAC met again on March 9, 2018. Compl. ¶ 92.

As with the prior meetings of the DAC, both the DACSC and the three DAC task groups conducted meetings and engaged in official committee business between May 3, 2017 and April 11, 2018. And while the DACSC and DAC task group reports provided at each public DAC meeting gave some insight into the work conducted by each, the DACSC and DAC task group

meetings remained unannounced and closed to the public during that time. Compl. ¶¶ 71–72, 79–80, 89–90.

D. Procedural History

On March 20, 2018, EPIC sent the FAA, DOT, DAC, and RTCA a request for all records of the DAC and DAC subcomponents required to be made available to the public under 5 U.S.C. App. 2 § 10(b). *Id.* ¶¶ 95–96. EPIC did not receive any response to its request. *Id.* ¶ 99. On April 11, 2018, the organization filed suit, naming as defendants the FAA, DOT, DAC, and RTCA, as well as FAA Acting Administrator Daniel K. Elwell and DOT Committee Management Officer David W. Freeman, the DOT employee responsible for supervising the DAC and RTCA. *Id.* ¶¶ 11–16. In the Complaint, EPIC brings two claims directly under FACA for violations of the Act’s open meeting and public record requirements, four APA claims linked to the alleged violations of FACA, and one claim for declaratory judgment pursuant to the Declaratory Judgment Act. *Id.* ¶¶ 102–139.

On June 25, 2018, EPIC filed a stipulation of dismissal with regards to the RTCA pursuant to Fed. R. Civ. P. 41(a)(1)(A). Pl.’s Stipulation of Dismissal at 1, ECF No. 13. On July 3, 2018, the government filed a motion to dismiss on behalf of all remaining defendants (“Defendants”).¹ Defs.’ Mot. Dismiss at 1, ECF No. 16. In their motion, Defendants argue that the Court lacks subject matter jurisdiction to address EPIC’s FACA claims, APA open meeting claims, DJA claim, and APA claims against the DAC. *See id.* Defendants also argue that the Complaint fails to state a claim as to all remaining claims. *See id.* EPIC filed its opposition on

¹ In the motion to dismiss, the government purports to also represent the RTCA and asks for dismissal of all claims against the RTCA. Defs. Mot. Dismiss at 1. However, EPIC having voluntarily dismissed its claims against the RTCA on June 25, 2018, the committee was no longer a defendant at the time of the filing of the motion to dismiss. The Court does not address any arguments made with respect to the RTCA.

July 17, 2018, Pl.’s Mem. Opp’n Mot. Dismiss at 1, ECF No. 18, and the government filed its reply on July 27, 2018, Defs.’ Reply at 1, ECF No. 20. On October 16, 2018, EPIC filed a notice of supplemental authority in support of its opposition, pointing to specific language in the FAA Reauthorization Act of 2018, Pub. L. No. 115-254, 132 Stat. 3, 186 (2018). Notice Supp. Auth. at 1, ECF No. 22. The government filed its response on November 3, 2018. Defs.’ Resp. at 1, ECF No. 23.

III. LEGAL STANDARD

A. Subject Matter Jurisdiction

Federal Rule of Civil Procedure 12(b)(1) provides for the dismissal of an action for lack of subject matter jurisdiction. Federal courts are courts of limited jurisdiction, and it is generally presumed that “a cause lies outside this limited jurisdiction.” *Kokkonen v. Guardian Life Ins. Co. of Am.*, 511 U.S. 375, 377 (1994). Accordingly, it is imperative that this Court “begin, and end,” with an examination of its jurisdiction. *Gen. Motors Corp. v. EPA*, 363 F.3d 442, 448 (D.C. Cir. 2004).

It is the plaintiff’s burden to establish that the court has subject matter jurisdiction over his or her claims. *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 561 (1992). In determining whether the plaintiff has met this burden, a court must accept “the allegations of the complaint as true,” *Banneker Ventures, LLC v. Graham*, 798 F.3d 1119, 1129 (D.C. Cir. 2015), and “construe the complaint liberally, granting the plaintiff the benefit of all inferences that can be derived from the facts alleged[.]” *Barr v. Clinton*, 370 F.3d 1196, 1199 (D.C. Cir. 2004) (internal quotation marks omitted). However, “the [p]laintiff’s factual allegations in the complaint . . . will bear closer scrutiny in resolving a 12(b)(1) motion’ than in resolving a 12(b)(6) motion for failure to state a claim.” *Grand Lodge of Fraternal Order of Police v. Ashcroft*, 185 F. Supp. 2d 9, 13-14

(D.D.C. 2001) (quoting 5A Charles A. Wright & Arthur R. Miller, Federal Practice and Procedure § 1350 (2d ed.1987)).

B. Failure to State a Claim

The Federal Rules of Civil Procedure require that a complaint contain a “short and plain statement of the claim,” Fed. R. Civ. P. 8(a)(2), that “give[s] the defendant fair notice of what the ... claim is and the grounds upon which it rests,” *Erickson v. Pardus*, 551 U.S. 89, 93 (2007) (per curiam) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555 (2007)) (internal quotation marks omitted). A motion to dismiss for failure to state a claim under Rule 12(b)(6) does not test a plaintiff’s ultimate likelihood of success on the merits; rather, it tests whether a plaintiff has properly stated a claim. *See Scheuer v. Rhodes*, 416 U.S. 232, 236 (1974). In considering such a motion, the “complaint is construed liberally in the plaintiff[’s] favor, and [the Court] grant[s] plaintiff[] the benefit of all inferences that can be derived from the facts alleged.” *Kowal v. MCI Commc’ns Corp.*, 16 F.3d 1271, 1276 (D.C. Cir. 1994). It is not necessary for the plaintiff to plead all elements of its prima facie case in the complaint to prevail on the motion. *See Swierkiewicz v. Sorema N.A.*, 534 U.S. 506, 511–14 (2002); *Bryant v. Pepco*, 730 F. Supp. 2d 25, 28–29 (D.D.C. 2010).

Nevertheless, “[t]o survive a motion to dismiss, a complaint must contain sufficient factual matter, accepted as true, to ‘state a claim to relief that is plausible on its face.’” *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (quoting *Twombly*, 550 U.S. at 570). This means that a plaintiff’s factual allegations “must be enough to raise a right to relief above the speculative level, on the assumption that all the allegations in the complaint are true (even if doubtful in fact).” *Twombly*, 550 U.S. at 555–56 (citations omitted). “Threadbare recitals of the elements of a cause of action, supported by mere conclusory statements,” are therefore insufficient to

withstand a motion to dismiss. *Iqbal*, 556 U.S. at 678. A court need not accept a plaintiff's legal conclusions as true, *see id.*, nor must a court presume the veracity of the legal conclusions that are couched as factual allegations. *See Twombly*, 550 U.S. at 555.

IV. ANALYSIS

Defendants move to dismiss EPIC's claims for lack of subject matter jurisdiction and failure to state a claim. *See* Defs.' Mot. Dismiss at 1. The Court first reviews Defendants' arguments that it lacks subject matter jurisdiction to consider EPIC's FACA claims, DJA claim, APA open meeting claims, and APA claims against the DAC, before reviewing Defendants' argument that the Complaint fails to state a claim as to the remaining APA claims. The Court ultimately agrees with Defendants' arguments on subject matter jurisdiction, but disagrees that EPIC fails to state a claim as to all of its remaining APA claims. The Court accordingly grants in part and denies in part the motion to dismiss.

A. Subject Matter Jurisdiction

First, Defendants move to dismiss EPIC's FACA claims, DJA claim, and APA claims premised upon the DACSC and DAC task groups' alleged failure to comply with FACA's open meeting requirements for lack of subject matter jurisdiction. *See* Defs.' Mem. Supp. Mot. Dismiss at 2, ECF No. 16-2. Defendants also argue that EPIC cannot bring claims against the DAC under the APA because the APA only provides for judicial review of "agency action." *Id.* at 27 (citing 5 U.S.C. § 702). The Court considers each argument in turn. Because it agrees with Defendants that it lacks subject matter jurisdiction to consider EPIC's FACA and DJA claims, the Court dismisses Counts I, IV, and VII of the Complaint. And because it finds that, as currently pled, EPIC lacks standing to bring its APA open meeting claims, the Court dismisses

counts II and III of the Complaint. Finally, the Court dismisses all claims against the DAC because it is not an agency under the APA.

1. FACA Claims

EPIC brings two claims for violation of FACA: Count I, for failure to open meetings to the public in violation of 5 U.S.C. app. 2 § 10(a)(1), Compl. ¶¶ 102–105; and Count IV, for failure to make records available for public inspection in violation of 5 U.S.C. app. 2 § 10(b), *id.* ¶¶ 118–123. Defendants argue that the Court lacks subject matter jurisdiction over the claims because there is no private right of action under FACA. The Court agrees.

In *Alexander v. Sandoval*, 532 U.S. 275 (2001), the Supreme Court clarified the framework for federal courts to follow when determining whether a statute provides a private right of action. *Id.* at 286. In evaluating whether a statute creates a private right of action, the Court in *Sandoval* explained that “[t]he judicial task is to interpret the statute Congress has passed to determine whether it displays an intent to create not just a private right but also a private remedy.” *Id.* “Absent statutory intent to create a cause of action, . . . ‘courts may not create one, no matter how desirable that might be as a policy matter, or how compatible with the statute.’” *Int’l Union, Security, Police & Fire Professionals of Am. v. Faye*, 828 F.3d 969, 972 (D.C. Cir. 2016) (quoting *Sandoval*, 532 U.S. at 286). Courts have recognized that, while clarifying which framework to apply, *Sandoval* has narrowed the set of circumstances under which a statute can be found to create a private right of action. *E.g. Klay v. Panetta*, 758 F.3d 369, 373 (D.C. Cir. 2014) (pointing to *Sandoval* as an illustration of the Supreme Court’s “shift toward disfavoring judicially implied causes of action”); *Gilstrap v. United Air Lines, Inc.*, 709 F.3d 995, 1002 (9th Cir. 2013) (noting that *Sandoval* “narrowed the framework for evaluating whether a statute implies a private cause of action”); *Lopez v. Jet Blue Airways*, 662 F.3d 593,

596 (2d Cir. 2011) (noting that *Sandoval* “strictly curtailed the authority of the courts to recognize implied rights of action”).

Defendants argue in their motion to dismiss that courts to have addressed the issue since *Sandoval* have “consistently held that ‘FACA does not provide a cause of action.’” Defs.’ Mem. Supp. at 19 (quoting *Ctr. for Biological Diversity v. Tidwell*, 239 F. Supp. 3d 213, 221 (D.D.C. 2017)). EPIC retorts that “the D.C. Circuit has long held that ‘members of the public possess enforceable rights to obtain information under FACA,’” Pl.’s Mem. Opp’n at 33 (quoting *Cummock v. Gore*, 180 F.3d 282, 289 (D.C. Cir. 1999)), and that the government is improperly relying on non-precedential district court decisions to suggest the opposite, *id.* at 34. The Court is unconvinced.

As Defendants point out in their reply brief, courts to have addressed the availability of a private right of action under FACA *after Sandoval* was decided have consistently found the statute not to create such a right. Defs.’ Reply at 23; *see, e.g., Ctr. for Biological Diversity*, 239 F. Supp. 3d at 221; *Dunlap v. Presidential Advisory Comm’n on Election Integrity*, 286 F. Supp. 3d 96, 104 n.3 (D.D.C. 2017); *Lawyers’ Comm. for Civil Rights Under Law v. Presidential Advisory Comm’n on Election Integrity*, 265 F. Supp. 3d 54, 66 (D.D.C. 2017). By contrast, almost all the circuit decisions EPIC cites predate *Sandoval*. *See* Pl.’s Mem. Opp’n at 33–34 (citing cases). And the one circuit case EPIC relies on that was decided after *Sandoval*, *Nat’l Res. Def. Council v. Johnson*, 488 F.3d 1002 (D.C. Cir. 2007), involved APA claims premised on violations of FACA rather than claims invoking a private right of action based directly on FACA. *See* Compl. ¶¶ 60–63, ECF No. 1, *Nat’l Res. Def. Council v. Johnson*, No. 05-340 (D.D.C.).

As discussed above, the Supreme Court’s decision in *Sandoval* both clarified and narrowed the framework for courts to evaluate claims of a private right of action under a statute. *Sandoval* makes clear that absent a clearly evinced intent to create a cause of action, courts “may not create one, no matter how desirable that might be as a policy matter.” *Int’l Union*, 828 F.3d at 972 (quoting *Sandoval*, 532 U.S. at 286). The Court concurs with the reasoning of others in this circuit that “FACA does not provide a cause of action, given that none is apparent from the statutory text.” *Ctr. for Biological Diversity*, 239 F. Supp. 3d at 221; *see also Lawyers’ Comm.*, 265 F. Supp. 3d at 66. Accordingly, the Court dismisses Counts I and IV of the Complaint for lack of subject matter jurisdiction.

2. DJA Claim

Count VII of the Complaint is a claim pursuant to the DJA. Compl. ¶¶ 138–39. Defendants argue that this DJA claim should be dismissed because the Declaratory Judgment Act does not provide a private right of action, but rather provides a judicial remedy premised on another judicially remediable right. Defs.’ Mem. Supp. at 18. The Court agrees.

The Declaratory Judgment Act does not provide an independent source of federal jurisdiction. *Ali v. Rumsfeld*, 649 F.3d 762, 778 (D.C. Cir. 2011) (noting that the DJA does not provide a cause of action and that “[i]t is a ‘well-established rule that the Declaratory Judgment Act is not an independent source of federal jurisdiction. Rather, the availability of [declaratory] relief presupposes the existence of a judicially remediable right.’” (quoting *C & E Servs., Inc. of Washington v. D.C. Water & Sewer Auth.*, 310 F.3d 197, 201 (D.C. Cir. 2002))). Accordingly, courts in this circuit have generally found that “[a] count for declaratory judgment ‘is not cognizable as a separate cause of action, but is more properly included in the[] prayer for relief.’” *Intelsat USA Sales Corp. v. Juch-Tech, Inc.*, 935 F. Supp. 2d 101, 120 (D.D.C. 2013) (alteration

in original) (quoting *Walpin v. Corp. for Nat. & Cmty. Serv.*, 718 F. Supp. 2d 18, 24 (D.D.C. 2010)); *see also, e.g., Wagdy v. Sullivan*, 316 F. Supp. 3d 257, 264 (D.D.C. 2018) (treating DJA claim as a request for relief in conjunction with other claims in complaint); *Malek v. Flagstar Bank*, 70 F. Supp. 3d 23, 28 (D.D.C. 2014) (noting that DJA count is not cognizable as a separate cause of action and more properly included in prayer for relief).

Defendants argue that EPIC's DJA claim should be dismissed for lack of subject matter jurisdiction because the DJA does not confer a private right of action. Defs.' Mem. Supp. at 18. EPIC retorts that it is "still entitled to seek [declaratory] relief on the basis of its remaining claims." Pl.'s Mem. Opp'n at 34. While that is true, such relief may be sought in EPIC's prayer for relief rather than as a separate claim. The Court accordingly dismisses Count VII of the Complaint and will simply construe EPIC's request for a declaratory judgment as a portion of its prayer for relief.

3. APA Open Meeting Claims

Next, EPIC brings two APA claims for violations of FACA's open meeting requirements, Counts II and III. Compl. ¶¶ 107–17. Defendants argue that EPIC does not have standing to bring those claims because EPIC did not formally request to attend, or otherwise attempt to attend, any meetings of the DACSC or DAC task groups. Defs.' Mem. Supp. at 17. EPIC argues that it has established informational standing to pursue its open meeting claims. Pl.'s Opp'n at 31. The Court is not entirely convinced by Defendants' arguments, but nonetheless finds that EPIC lacks standing because the Complaint does not allege that EPIC wanted or sought to attend any of the DACSC and task group meetings.

The Court begins with the familiar requirements to establish Article III standing. Standing is a "threshold question in every federal case" that asks "whether the plaintiff has

‘alleged such a personal stake in the outcome of the controversy’ as to warrant his invocation of federal-court jurisdiction.” *Warth v. Seldin*, 422 U.S. 490, 498 (1975) (quoting *Baker v. Carr*, 369 U.S. 186, 204 (1962)). To establish Article III standing, the plaintiff “must have suffered or be imminently threatened with a concrete and particularized ‘injury in fact’ that is fairly traceable to the challenged action of the defendant and likely to be redressed by a favorable judicial decision.” *Lexmark Int’l, Inc. v. Static Control Components, Inc.*, 572 U.S. 118, 125 (2014) (citing *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 560 (1992)). And to establish an informational injury, which both parties agree EPIC is alleging, *see* Defs.’ Mem. Supp. at 17; Pl.’s Mem. Opp’n at 32, a plaintiff must allege that “(1) it has been deprived of information that, on its interpretation, a statute requires the government . . . to disclose to it, and (2) it suffers, by being denied access to that information, the type of harm Congress sought to prevent by requiring disclosure,” *Friends of Animals v. Jewel*, 828 F.3d 989, 992 (D.C. Cir. 2016).

As the D.C. Circuit explained in *Friends of Animals*, what the plaintiff must show to establish that it suffers the type of harm Congress sought to prevent “may depend on the nature of the statutory disclosure provision at issue.” *Id.* With respect to FACA records requests, the Supreme Court has explained that all that is needed is for the plaintiff to seek and be denied agency records. *Public Citizen v. U.S. Dep’t of Justice*, 491 U.S. 440, 449 (1989) (“Our decisions interpreting the Freedom of Information Act have never suggested that those requesting information under it need show more than that they sought and were denied specific agency records. There is no reason for a different rule here.” (internal citations omitted)); *accord* *FEC v. Akins*, 524 U.S. 11, 21 (1998) (“[T]his Court has previously held that a plaintiff suffers an ‘injury in fact’ when the plaintiff fails to obtain information which must be publicly disclosed pursuant to a statute.” (quoting *Public Citizen*, 491 U.S. at 449)). In evaluating FACA claims,

the D.C. Circuit has accordingly found informational standing to be established when a plaintiff requests records from an agency that it believes it is entitled to under FACA and is denied access. *E.g. Byrd v. EPA*, 174 F.3d 239, 243 (D.C. Cir. 1999) (“[A] refusal to provide information to which one is entitled under FACA constitutes a cognizable injury sufficient to establish Article III standing.”); *Cummock*, 180 F.3d at 290 (finding particularized injury when Plaintiff “suffered an injury under FACA insofar as the Commission denied her requests for information that it was required to produce”).

Here, Defendants do not contest that EPIC has established standing as to its APA claims for failure to release records under FACA. However, Defendants argue that EPIC does not have standing on its open meeting claims because “EPIC did not ‘seek’ to attend any meetings or otherwise attempt to enforce FACA’s open meeting provisions; therefore, EPIC was not ‘denied’ information available at the meetings.” Defs.’ Mem. Supp. at 17. In essence, Defendants apply the same standard used for requests for records to the claim of injury for inability to attend meetings. The Court is not entirely convinced by this argument. As EPIC notes in its opposition, a person who seeks to attend advisory committee meetings may well be *de facto* denied information because it is impossible to “‘seek’ out subgroup meetings that the Government simply refuses to announce.” Pl.’s Mem. Opp’n at 31. The government points to one district court case, *Judicial Watch, Inc. v. U.S. Dep’t of Commerce*, 576 F. Supp. 2d 172 (D.D.C. 2008), where the plaintiffs specifically made a request to attend meetings they believed should be public pursuant to FACA. *Id.* at 177. But just because the request to attend was sufficient to confer standing in *Judicial Watch* does not mean that such a request is necessary to confer standing in all FACA open meeting claims.

At this juncture, the Court need not conclusively rule on the issue because it finds that, as currently pled, EPIC has not sought to attend the DACSC and task group meetings even under its broader theory of standing. EPIC argues that it sought to enforce the open meeting provisions when it sent its request for records to the FAA and RTCA. Pl.’s Mem. Opp’n at 31. But that request was made in March 2018, *after* the meetings EPIC identifies in its complaint and alleges should have been made open to the public. Compl. ¶ 95. The Complaint also makes clear that the request was specifically one for records, with EPIC “advis[ing] the FAA, DAC, and RTCA of its records disclosure obligations under the FACA.” *Id.* ¶ 98. By contrast, the Complaint does not allege that EPIC has tried to attend any DACSC or task group meetings, or even that EPIC, before it sent its letter, wanted to attend any such meetings but was prevented from doing so by the lack of information regarding them. *See generally* Compl.² As the government points out, recognizing that EPIC has standing to bring its open meeting claims here would imply that everyone has standing to bring those claims, when EPIC’s only allegations as to the DACSC and task group meetings are that meetings occurred, and that they should have been announced and open to the public. Defs.’ Reply at 21. Absent from the complaint are allegations of *particularized* harm to EPIC, *see Lujan*, 504 U.S. at 560, which at a bare minimum would require EPIC to indicate that it had an interest in attending the DACSC and task group meetings before they took place but was unable to attend because of a lack of information available on

² In its recital of Counts II and III, EPIC does state that by failing to open DACSC and DAC Task Group meetings to the public, Defendants “have frustrated Plaintiff’s longstanding mission to educate the public about the privacy implications of drone deployment and about the federal government’s efforts . . . to protect the public from drone surveillance.” Compl. ¶¶ 110, 122. But this general statement about Defendants frustrating EPIC’s mission, which is duplicated in Counts I and IV–VII, is not sufficient to establish the particularized injury needed to create standing.

when such meetings were to take place. The Court accordingly dismisses counts II and III of the Complaint for lack of subject matter jurisdiction.³

4. APA Claims against the DAC

Finally, Defendants move to dismiss all claims against the DAC itself, which they argue is not capable of “agency action” under the APA. Defs’ Mem. Supp. at 27 (quoting 5 U.S.C. § 702). The Court agrees. “An entity cannot be at once both an advisory committee and an agency.” *Freedom Watch, Inc. v. Obama*, 807 F. Supp. 2d 28, 33 (D.D.C. 2011) (citing *Heartwood, Inc. v. U.S. Forest Serv.*, 431 F. Supp. 2d 28, 36 (D.D.C. 2006)). In *Freedom Watch*, the court accordingly concluded that the APA “d[id] not provide a jurisdictional grant for Freedom Watch’s FACA claim” against an advisory committee, and dismissed the claims against the advisory committee for lack of subject matter jurisdiction. *Id.* EPIC does not challenge this argument, and instead contends that the DAC is properly named as a defendant “[b]ecause EPIC has stated two claims for relief under the FACA.” Pl.’s Mem. Opp’n at 35. But, as discussed above in Part IV.A.1., the Court finds that FACA does not provide a private right of action. The Court accordingly dismisses all claims against the DAC for lack of subject matter jurisdiction.

B. Failure to State a Claim

The Court next addresses Defendants’ motion to dismiss for failure to state a claim Counts V and VI of the Complaint, EPIC’s remaining APA claims tied to the DAC, DACSC, and DAC task groups’ alleged failure to comply with FACA’s public records requirements. Compl. ¶¶ 124–37. Defendants first argue that the DACSC and task groups are not advisory

³ The Court recognizes that EPIC may be able to sufficiently establish standing by amending the Complaint. However, as discussed below in Part IV.B., the Court separately finds that the DACSC and task groups 1, 2, and 3 are not advisory committees, and thus are not subject to FACA’s open meeting requirements. Accordingly, even if EPIC had standing to bring its APA open meeting claims, the Court would still dismiss them for failure to state a claim.

committees, and thus not subject to FACA's public records requirement. Defs.' Mem. Supp. at 21. Defendants next argue that the DAC itself has complied with FACA's public records requirements, withholding only those "preparatory" and "administrative" records that FACA does not require to be disclosed. *Id.* at 26. The Court addresses each argument in turn. The Court agrees that EPIC has not plausibly alleged that the DACSC and DAC task groups are advisory committees subject to FACA's public records requirements. However, the Complaint plausibly suggests that not all DAC records required to be made public have been produced, and the Court accordingly finds that EPIC has brought sufficiently plausible APA claims for violation of FACA. The Court accordingly denies the motion to dismiss Counts V and VI.

1. Records of the DACSC and DAC Task Groups

Defendants argue that the DACSC and DAC task groups are not advisory committees under FACA, and therefore are not subject to FACA's recordkeeping requirements. Defs.' Mem. Supp. at 21. EPIC makes two separate arguments in response: first, EPIC contends that all subcommittee records are records of their parent advisory committee under FACA, and therefore that it is entitled to all DACSC and DAC task group records because they are subgroups of the DAC, which Defendants agree is an advisory committee. Pl.'s Mem. Opp'n at 18. Second, EPIC argues that the DACSC and DAC task groups are themselves advisory committees, because they were established or utilized by the FAA and directly issued recommendations to the agency. *Id.* at 21. The Court first addresses, and rejects, EPIC's broader FACA argument, before reviewing whether the DACSC and DAC task groups are advisory committees under FACA. The Court concludes that they are not, and consequently that FACA does not require disclosure of DACSC and DAC task group records.

a. Subcommittee Records as Component of Parent Committee Records

EPIC argues that because the DACSC and DAC task groups are subgroups—or subdivisions—of the DAC, all records of the DACSC and DAC task groups are necessarily records of the DAC. Pl.’s Mem. Opp’n at 18. As a result, EPIC contends, all DACSC and DAC task group records must be made available to the public because the DAC is an advisory committee subject to FACA’s public records requirements. *Id.* at 18–19. Defendants retort that EPIC’s argument improperly construes FACA and its implementing regulations. Defs.’ Reply at 9–10. The Court agrees.

FACA defines an advisory committee as “any committee, . . . or any subcommittee or other subgroup thereof, which is . . . established or utilized by one or more agencies, in the interest of obtaining advice or recommendations.” 5 U.S.C. app. 2 § 3(2). And while FACA only mandates that advisory committee meetings be open to the public, *id.* § 10(a)(1), the Act requires the availability for public inspection of “the records . . . or other documents which were *made available to or prepared for* or by each advisory committee, *id.* § 10(b) (emphasis added). Interpretive regulations by GSA note that “[i]n general, the requirements of [FACA] . . . do not apply to subcommittees of advisory committees that report to a parent advisory committee and not directly to a Federal officer or agency.” 41 C.F.R. § 102-3.35. But while GSA regulations specifically note that subcommittee meetings need not comply with FACA’s openness requirements if the subcommittee reports to a parent advisory committee, *id.* § 102-3.145, they do not contain a similar exception with regards to records production, where the regulations note only that “records generated by or for an advisory committee must be retained,” *id.* § 102-3.175.

EPIC’s argument is based primarily on a textual interpretation of the statute. If the DACSC and DAC task groups are subgroups of the DAC, then, EPIC contends, any record

belonging to such subgroup necessarily belongs to the parent group. Pl.’s Mem. Opp’n at 18 (citing *Subgroup*, Collins English Dictionary (2018)). And a record “made available to or prepared for or by” a subgroup is thus necessarily “made available to or prepared for or by” the DAC itself. *Id.* at 19. While this “commonsense conclusion,” Pl.’s Mem. Opp’n at 19, may be intuitively appealing, the Court finds that it is not supported by the statute or regulations.

First, the statutory text itself does not support EPIC’s conclusion. “In construing a statute, we look first for the plain meaning of the text.” *United States v. Barnes*, 295 F.3d 1354, 1359 (D.C. Cir. 2002). Even taking EPIC’s definition of a subgroup, the Court disagrees that any record made available to or prepared for a subgroup (or subdivision of a group) is necessarily made available to or prepared for the parent group pursuant to 5 U.S.C. app. 2 § 10(b). Just because the DACSC and DAC task groups ultimately answer to the DAC does not mean that all of their documents are made available to or prepared for the DAC. For example, meeting minutes of any DACSC and DAC task group meetings would be prepared for those specific subgroups, rather than for the DAC as a whole. In addition, “the canons of statutory interpretation instruct courts to avoid construing the text of a statute to be contradictory; ‘our task is to fit, if possible, all parts into a harmonious whole.’” *Humane Soc’y of the U.S. v. McCarthy*, 209 F. Supp. 3d 280, 285 (D.D.C. 2016) (quoting *Roberts v. Seal-Land Servs., Inc.*, 566 U.S. 93, 100 (2012)). As Defendants point out, it would make little sense for FACA to provide for subgroups to separately qualify as advisory committees under § 3(2), and only for records “made available to or prepared for” an advisory committee to require public disclosure, 5 U.S.C. app. 2 § 10(b), if all subcommittee records were automatically considered records of an advisory committee. *See* Defs.’ Reply at 10.

Second, both EPIC and Defendants spend a significant portion of their briefs discussing various executive documents and regulations regarding the applicability of FACA to subcommittees. Relying on 41 C.F.R. § 102-3.35, Defendants argue that the GSA regulations “expressly exclude subcommittee records from FACA’s disclosure requirements.” Defs.’ Reply at 10. By contrast, EPIC relies on the lack of subcommittee exception to FACA’s public records requirements in the CFR for the proposition that those records are necessarily included in parent committee records. Pl.’s Mem. Opp’n at 20. EPIC also points to the National Archives and Records Administration’s (“NARA’s”) General Records Schedule 6.2, which provides for the permanent conservation as FACA records of “records that document the activities of subcommittees that support their reports and recommendations to the chartered or parent committee.” General Records Schedule 6.2 at 132, Compl. Ex. 15. And it points to a GSA training presentation that indicates subcommittee records should be publicly accessible. *See* GSA FACA Training Course at 192, Compl. Ex. 16.

On the balance, the Court finds that the supplementary authority discussed by the parties supports the government’s interpretation of the statute. The Court initially notes that it need not defer to interpretative regulations of a statute that were not promulgated pursuant to express statutory authority. *Judicial Watch, Inc. v. U.S. Dep’t of Commerce*, 736 F. Supp. 2d 24, 33 n.4 (D.D.C. 2010). In any event, and notwithstanding the lack of subcommittee records exception in the regulations, 41 C.F.R. § 102-3.35 makes clear that GSA’s interpretation is that subcommittees are not generally subject to FACA. NARA’s General Records Schedule also supports the notion that not all subcommittee records are records of an advisory committee, because the schedule specifically identifies as subject to FACA “records that document the activities of subcommittees *that support their reports and recommendations to the chartered or*

parent committee.” General Records Schedule 6.2 at 132 (emphasis added). And, regardless, a requirement that records be preserved is not the same as a requirement that they be made public. While the GSA training presentation EPIC points to appears to contradict GSA’s own interpreting regulations of FACA, that presentation does not “have the force of law sufficient to contradict its regulations.” Defs.’ Reply at 11.

b. Whether the DACSC and DAC Task Groups Are Advisory Committees

Next, EPIC argues that DACSC and DAC task group records must be made available to the public even if they are not automatically included as records of the DAC because the DACSC and DAC task groups are themselves advisory committees subject to FACA’s public records requirements. Defendants argue the Complaint does not show that the DACSC and DAC task groups were established or utilized by the FAA, or that they were intended to provide advice or recommendations directly to the FAA. Defs.’ Mem. Supp. at 21–26. EPIC, on the other hand, contends that it has shown that the DACSC and DAC task groups were established or utilized by the FAA and issued recommendations directly to the FAA. Pl.’s Mem. Opp’n at 21–30. The Court finds that, regardless of whether they were “established” or “utilized” by the FAA, the Complaint fails to plausibly allege that the DACSC and DAC task groups were established or utilized “in the interest of obtaining advice or recommendations for” the FAA.⁴ The Court accordingly concludes that neither the DACSC nor the DAC task groups are advisory committees, and as a result, that their records need not be made public.

⁴ Defendants devote a substantial portion of their motion, and EPIC of its opposition, to discussing whether the DACSC and DAC task groups were “established” or “utilized” by the FAA. *See generally* Defs.’ Mem. Supp. at 21–26, Pl.’s Mem. Opp’n at 21–28. The Court does not address the issue.

Pursuant to FACA, a committee (or subcommittee) becomes an advisory committee only when it is, *inter alia*, “established or utilized . . . in the interest of obtaining advice or recommendations for the President or one or more agencies or officers of the Federal Government.” 5 U.S.C. app. 2 § 3(2). The GSA’s interpretive regulations regarding FACA recognize this distinction, and note that FACA generally does not apply to “subcommittees of advisory committees that report to a parent advisory committee and not directly to a Federal officer or agency.” 41 C.F.R. § 102-3.35; *see also* 41 C.F.R. § 102-3.145 (noting that subcommittee meetings must be open to the public when “a subcommittee makes recommendations directly to a Federal officer or agency, or if its recommendations will be adopted by the parent advisory committee without further deliberations”).

Two cases in this Circuit have addressed the issue. In *Nat’l Anti-Hunger Coalition v. Exec. Comm.*, 557 F. Supp. 524 (D.D.C. 1983), the plaintiffs alleged, *inter alia*, that task forces set up under the subcommittee to the Executive Committee of the President’s Private Sector Survey were advisory committees. *Id.* at 529. Both the subcommittee and the Executive Committee were themselves advisory committees. *Id.* The Court explained that while the task forces were “intimately involved in the gathering of information about federal programs and the formulation of possible recommendations for the consideration of the [c]ommittee,” that was not enough to render them subject to FACA absent allegations that they provided advice directly to the President or any agency. *Id.* And because the evidence provided suggested that the task forces provided only staff functions to their parent committees rather than direct advice to the government, the Court dismissed the case. *Id.* at 530. The decision was upheld on appeal. *Nat’l Anti-Hunger Coalition v. Exec. Comm.*, 711 F.2d 1071 (D.C. Cir. 1983).

In *Ass’n of Am. Physicians & Surgeons v. Clinton*, 813 F. Supp. 82 (D.D.C.) *rev’d*, 997 F.2d 898 (D.C. Cir. 1993), the district court addressed claims that President Clinton’s Task Force on National Health Care Reform and its subordinate working group were advisory committees. *Id.* at 84, 88. The district court held that the Task Force was an advisory committee but dismissed the claims against the working group, relying on *Anti-Hunger*. *Id.* at 88–89. The circuit reversed, finding that the Task Force consisted solely of government officials and therefore was not an advisory committee, and rejecting the argument that the working group provided staff work for the Task Force not covered by FACA. *Ass’n of Am. Physicians*, 997 F.2d at 912–13. The circuit distinguished *Anti-Hunger*, which had involved a task force subordinate to a subcommittee and Executive committee that were themselves advisory committees under FACA. *Id.* In *Anti-Hunger*, there was “less reason to focus on subordinate advisers or consultants who [were] presumably under the control of the superior groups.” *Id.* at 913. By contrast, because the Task Force was entirely made up of government officials, the working group in *Ass’n of Am. Physicians* was directly subordinate to a government entity, and “it [was] the working group now that [was] the point of contact between the public and the government.” *Id.*

Defendants argue that “[t]he complaint contains no allegation that the FAA intended the DAC subgroups to operate as FACA advisory groups, [t]hat the DAC subgroups directly advised the FAA,” Defs.’ Mem. Supp. at 23, or that the subgroups’ “recommendations would be adopted by the DAC without further deliberations,” *id.* at 25. In their reply, Defendants further argue that, pursuant to *Anti-Hunger*, FACA should not apply to subcommittees like the DACSC and DAC task groups that only “provided information and recommendations for consideration to a parent committee.” Defs.’ Reply at 14 (citing *Anti-Hunger*, 557 F. Supp. at 529). By contrast,

EPIC asserts in the Complaint that “FAA officials have repeatedly circumvented the full DAC and worked directly with the [DACSC],” Compl. ¶ 31, as well as “personally directed, guided, participated in, and received the work and recommendations of the Task Groups,” *id.* ¶ 38. The Court agrees with Defendants that the facts alleged in the Complaint and its exhibits belie those assertions.

With respect to the DACSC, the Complaint alleges that the FAA has briefed, educated, and provided guidance and assistance to the DACSC, *id.* ¶ 32, while an FAA Designated Federal Officer (“DFO”) is “required by both the RTCA Charter and the FACA to be intimately involved in the proceedings of the DACSC,” including calling and adjourning meetings, approving DACSC agendas, and chairing meetings when directed to do so by the FAA Administrator, *id.* ¶ 33. But as Defendants point out, *see* Defs.’ Reply at 17, GSA regulations require that agencies designate a DFO to call and adjourn meetings, approve agendas, and chair meetings as requested, for *every* advisory committee and subcommittee. 41 C.F.R. § 102-3.120. The authority of the FAA DFO over DACSC and DAC task groups meetings therefore does not suggest that the FAA bypassed the DAC in obtaining advice and recommendations. And the fact that FAA officials may have briefed, educated, or provided guidance and assistance to the DACSC does not mean that the DACSC bypassed the DAC and advised the FAA directly. The exhibits to the Complaint suggest the opposite: the DACSC’s Terms of Reference indicate that its purpose was to “support the DAC in developing consensus-based recommendations to the FAA” by “provid[ing] the staff work for the DAC, applying knowledge and expertise to forge consensus on critical issues and providing input to the DAC for public deliberation and the development of recommendations.” DACSC Terms of Reference at 1. The Terms of Reference also made clear that the DACSC would act at the DAC’s direction, with all its recommendations to be vetted and

approved at DAC meetings. *Id.* at 3. And DAC meeting minutes included as exhibits to EPIC’s complaint confirm that the DACSC briefed the DAC on several occasions. *E.g.* January 31, 2017 Meeting Minutes; November 8, 2017 Meeting Minutes.

Here, EPIC has not alleged any fact that suggests the DACSC was established or utilized directly for the purpose of obtaining advice or recommendations for the FAA. Like the task forces in *Anti-Hunger*, the DACSC was set up specifically to conduct staff work for the DAC, with a clearly established hierarchical structure mandating for all recommendations to be approved by the DAC. And unlike the working group in *Ass’n of Am. Physicians*, the DACSC is subordinate to an advisory committee that forms “the point of contact between the public and the government.” 997 F.2d at 913. The DACSC provided reports of its activities at public DAC meetings, and so did its component task groups. Absent any allegation that the DACSC provided advice or recommendations directly to the FAA—beyond the conclusory assertion that “FAA officials have repeatedly circumvented the full DAC”—the Complaint does not plead sufficient facts to plausibly suggest that the DACSC was an advisory committee.

The facts alleged with respect to the DAC task groups dictate the same conclusion. EPIC alleges that the FAA issued detailed tasking statements for each task group, including fact-finding assignments, topics each task group should advise on, and deadlines to deliver recommendations and reports. Compl. ¶ 39. And it also alleges that because the task groups were subcommittees of the DAC, the designated FAA DFO had the same powers over them as over the DACSC. *Id.* ¶ 41. As discussed above, GSA regulations require agencies to designate a DFO with such authority over the meetings of every subcommittee of an advisory committee. *See* 41 C.F.R. § 102-3.120. And as with the DACSC, exhibits to the complaint indicate that the DAC task groups were established as, and functioned as, subordinate groups to the DAC. The

DACSC Terms of Reference, while noting that the DACSC would coordinate the work of the DAC task groups, DACSC Terms of Reference at 1, stated that “[n]o recommendations w[ould] flow directly from the . . . DAC TGs directly to the FAA,” *id.* at 3. The task groups presented reports and substantive recommendations for review by the DAC at multiple DAC meetings. *E.g.* Compl. ¶¶ 63, 75. These substantive recommendations were not simply rubber-stamped and accepted wholesale by the DAC; they were discussed and sometimes amended prior to final approval and forwarding to the FAA. *E.g.* January 31, 2017 DAC Meeting Minutes at 12–13; May 3, 2017 DAC Meeting Minutes at 9–14, 17.

Even more so than with the DACSC, these facts point to the conclusion that the DAC task groups did not provide advice or recommendations directly to the FAA and are therefore not advisory committees under FACA. As in *Anti-Hunger*, the task forces were subordinate to two layers of advisory committees. The D.C. Circuit’s suggestion that there is “less reason to focus on subordinate advisers or consultants who [were] presumably under the control of the superior groups,” *American Ass’n of Physicians*, 997 F.2d at 913, is thus even stronger. EPIC points to the significant work conducted by the task groups and to the limited discussion of some of their recommendations before approval at DAC meetings to argue that they did not merely provide staff work—and essentially that they were directly advising the FAA. Pl.’s Mem. Opp’n at 29. The Court is not convinced by the argument, when the DAC suggested changes to task group recommendations, *e.g.* May 3, 2017 Meeting Minutes at 17 (noting direction to Task Group 2 to adjust recommendation), and where some of the more contentious task group recommendations received extensive discussion, *e.g.* November 8, 2017 Meeting Minutes at 8–10 (discussing Task Group 1’s fragmented recommendations). And the Complaint does not allege that the DAC “rubber-stamped” or acted as a meaningless conduit between the DAC task groups and the FAA.

The Court accordingly finds that the Complaint fails to allege facts that plausibly support the claim that the DAC task groups are advisory committees under FACA.⁵

2. Records of the DAC

In their motion to dismiss, Defendants do not address EPIC's claims as they relate to records of the DAC. *See generally* Defs.' Mem. Supp. EPIC argues in its opposition that it has plausibly stated a claim with respect to DAC records, Pl.'s Mem. Opp'n at 14, while Defendants contend in their reply that the limited references to records of the DAC (as opposed to the DACSC and DAC task groups) in the Complaint are insufficient to state a claim, Defs' Reply at 3–9. The Court finds that EPIC has sufficiently pled its remaining APA claims as to the DAC for the claims to survive the motion to dismiss.

The Complaint contains only sparse reference to records of the DAC itself. EPIC asks for “[a]ccess to the[] nonpublic . . . records” of the DAC in the Complaint, Compl. ¶ 3, and contends that “the vast majority of DAC records . . . remain closed to the public,” *id.* ¶ 23. EPIC mentions that it requested DAC records from Defendants on March 20, 2018, and never received a reply. *Id.* ¶¶ 95–99. And in its recitation of Counts IV, V, and VI, EPIC states that Defendants have failed to make available records of the DAC, “including but not limited to records arising out of the DACSC and DAC Task Groups.” *E.g. id.* ¶ 125. In its opposition, EPIC also points to

⁵ In its Notice of Supplemental Authority, EPIC points to a section of the FAA Reauthorization Act of 2018, Pub. L. No. 115-254, 132 Stat. 3, 186 (2018), which charges the Comptroller General of the United States with conducting a study on possible fee-based mechanisms for recovering costs associated with regulating and providing air navigation services to drones. Pl.'s Notice of Supplemental Authority at 1. EPIC points out that the Comptroller General is explicitly required to consider the recommendations of DAC Task Group 3 as part of the study. *Id.* This supplemental authority does not change the Court's analysis because, as Defendants point out, exhibits to the Complaint indicate that Task Group 3's recommendations were discussed and approved at a full meeting of the DAC prior to submission to the FAA. *See* Defs.' Resp. at 2.

multiple records of the DAC referenced in exhibits to the Complaint, which it alleges have not been made available to the public. Pl.’s Mem. Opp’n at 16–18. These records include documents shared in an online workspace the DAC made available to its members “to facilitate the consensus process of the committee,” *id.* at 16, a legal fact sheet prepared by the FAA, *id.* at 17, RTCA SC-228 briefing materials, *id.*, and records of “listening sessions” meetings organized by Task Group 3 and attended by DAC members, *id.*

In their reply, Defendants argue that the limited reference to the records of the DAC in the Complaint is insufficient to support EPIC’s claims, because the allegations referencing the DAC are merely conclusory statements and “bald allegations” of a “conclusory nature.” Defs.’ Reply at 5 (quoting *Iqbal*, 556 U.S. at 681). Defendants point out that most of the references to DAC records in the Complaint are included as part of formulaic recitations of the types of documents required to be produced under 5 U.S.C. app. 2 § 10(b). *Id.* They argue that at least one, and potentially two, of the documents identified by EPIC in its opposition have already been produced. *Id.* at 6 n.2. And as to the other documents EPIC specifically points to in its opposition, Defendants argue that “it would be entirely consistent with FACA” if they were not released, *id.* at 7, because they are most likely “preparatory work” or “administrative work” not subject to FACA’s disclosure requirements pursuant to GSA’s interpretive regulations. *Id.* at 7–9 (citing 41 C.F.R. § 102–3.160).

The Court is unconvinced by Defendants’ arguments, for two reasons. First, while it agrees that the Complaint contains only very limited references to DAC records, the Court notes that EPIC alleges it made a request for DAC records that Defendants entirely ignored. *See* Compl. ¶¶ 95–99. Defendants argue that the Complaint and its exhibits “establish that numerous records of the DAC . . . were made available to the public,” which they contend “readily support

the legal conclusion that [D]efendants fully complied with FACA’s disclosure requirements.”

Defs.’ Reply at 4. But it would be difficult for EPIC to specifically identify records that were not published when those records are not public in the first place, and when Defendants refuse to provide the full list of records they believe are required to be published. Instead, EPIC identifies a request it has made for public inspection, to which Defendants failed to reply—other than with their assertion in briefs in this lawsuit that all required records have been made public. For the same reason that FOIA cases are “typically and appropriately . . . decided on motions for summary judgment,” *Defenders of Wildlife v. U.S. Border Patrol*, 623 F. Supp. 2d 83, 87 (D.D.C. 2009), because the Court can then identify what documents have been withheld and why, the failure to make available any DAC documents for review militates in favor of EPIC’s claims surviving the motion to dismiss stage.

Second, the Court does not find persuasive Defendants’ argument that it “would be entirely consistent with FACA” for them not to release the documents EPIC identified as improperly withheld from the public in its opposition. Defs.’ Reply at 7.⁶ Defendants rely on a regulation contained in Subpart D of GSA’s interpretive regulations of FACA, “Advisory Committee Meeting and Recordkeeping Procedures,” for the notion that preparatory and administrative records of advisory committees are not covered by FACA. *See* Defs.’ Reply at 8; 41 C.F.R. § 102–3.160. The regulation indicates that preparatory work and administrative work are excluded “from the procedural requirements contained in this Subpart.” 41 C.F.R. § 102–

⁶ Defendants separately argue that the FAA legal fact sheet identified by EPIC in its opposition is already publicly available on the FAA’s website, and provide a link to that fact sheet. *See* Defs.’ Reply at 6 n.2. The Court notes that the link is currently nonfunctional. *See* Page Not Found, FAA, https://www.faa.gov/uas/resources/uas_regulations_policy/media/uas_fact_sheet_final.pdf. Regardless, this is an argument better made on a full record at the motion for summary judgment stage.

3.160. However, § 102–3.160 is entitled “What activities of an advisory committee are not subject to *the notice and open meeting requirements* of the Act?” *Id.* (emphasis added). And “preparatory work” and “administrative work” are both defined as “[m]eetings of two or more advisory committee or subcommittee members” conducted for specific purposes. *Id.* (emphasis added). The Court is thus not convinced that § 102–3.160 actually justifies withholding records from publication under FACA because they are preparatory or of an administrative nature. In fact, the broad list of documents required to be made public by the statute, including preparatory documents such as drafts or agendas, suggests that there is no such exception. *See* 5 U.S.C. app. 2 § 10(b). And even if such an exception to the public records requirement is justified under the statute, the Court cannot determine that the exception applies simply by accepting the government’s unsworn arguments contained in a legal brief that all documents shared in the DAC workspace, and all documents created in connection with Task Group 3 listening sessions, were preparatory or administrative in nature. *See* Defs.’ Reply at 8–9.

Because EPIC has sufficiently pled its APA claims relating to Defendants’ failure to release DAC records, the Court denies the motion to dismiss as to counts V and VI.

V. CONCLUSION

For the foregoing reasons, Defendants’ Motion to Dismiss (ECF No. 16) is **GRANTED IN PART AND DENIED IN PART**. The Court dismisses Counts I, II, III, IV, and VII of the Complaint, and dismisses all claims against the Drone Advisory Committee. An order consistent with this Memorandum Opinion is separately and contemporaneously issued.

Dated: February 25, 2019

RUDOLPH CONTRERAS
United States District Judge

**UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

ELECTRONIC PRIVACY INFORMATION	:	
CENTER,	:	
	:	
Plaintiff,	:	Civil Action No.: 18-833 (RC)
	:	
v.	:	Re Document No.: 16
	:	
DRONE ADVISORY COMMITTEE, <i>et al.</i> ,	:	
	:	
Defendants.	:	

ORDER

GRANTING IN PART AND DENYING IN PART DEFENDANTS' MOTION TO DISMISS

For the reasons stated in the Court's Memorandum Opinion separately and contemporaneously issued, Defendants' motion to dismiss (ECF No. 16) is **GRANTED IN PART AND DENIED IN PART**. It is hereby:

ORDERED that Counts I, II, III, IV, and VII of the Complaint are dismissed for lack of subject matter jurisdiction; and it is

FURTHER ORDERED that all claims against the Drone Advisory Committee are dismissed for lack of subject matter jurisdiction.

SO ORDERED.

Dated: February 25, 2019

RUDOLPH CONTRERAS
United States District Judge

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

ELECTRONIC PRIVACY INFORMATION
CENTER,

Plaintiff,

v.

FEDERAL AVIATION ADMINISTRATION,
et al.,

Defendants.

Civil Action No. 18-833 (RC)

RC
PROPOSED ORDER

The Court is in receipt of Plaintiff's Consent Motion to Enter Final Judgment as to All Claims. Plaintiff Electronic Privacy Information Center ("EPIC") represents that—pursuant to this Court's March 13, 2019 order to search for and produce non-exempt portions of responsive Drone Advisory Committee ("DAC") records—Defendants have disclosed 652 pages of DAC documents and two DAC recordings to EPIC. EPIC further represents that, as a result of Defendants' production of DAC records, there is no substantive dispute remaining between the parties concerning the records of the DAC parent committee. However, EPIC states that it intends to seek appellate review of this Court's interlocutory ruling that records arising from the DAC Subcommittee and DAC task groups are not subject to disclosure under section 10(b) of the Federal Advisory Committee Act ("FACA"). Mem. Op. 22–31, ECF No. 25. Accordingly, EPIC requests that the Court enter final judgment as to Counts V and VI of EPIC's Complaint, ECF No. 1, which are the only claims remaining before this Court.

In view of EPIC's representations, and for the reasons set forth in this Court's February 25, 2019 Memorandum Opinion, it is hereby

ORDERED that Plaintiff's Consent Motion to Enter Final Judgment as to All Claims is GRANTED; and

ORDERED that Counts V and VI are dismissed as moot. The Clerk of Court is directed to close the case.

SO ORDERED.

This is a final, appealable order.

Dated: 7/26/2019



RUDOLPH CONTRERAS
United States District Judge

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA**

ELECTRONIC PRIVACY INFORMATION CENTER
1718 Connecticut Avenue, N.W.
Suite 200
Washington, D.C. 20009

Plaintiff,

v.

Civ. Action No. 18-833

DRONE ADVISORY COMMITTEE; FEDERAL
AVIATION ADMINISTRATION; DANIEL K.
ELWELL, in his official capacity as Acting Administrator
of the Federal Aviation Administration and Designated
Federal Officer of the Drone Advisory Committee and
RTCA Advisory Committee;
800 Independence Avenue, S.W.
Washington, D.C. 20591

RTCA ADVISORY COMMITTEE;
1150 18th Street, N.W.
Suite 910
Washington, D.C. 20036

UNITED STATES DEPARTMENT OF
TRANSPORTATION; DAVID W. FREEMAN, in his
official capacity as Committee Management Officer of the
Department of Transportation;
1200 New Jersey Avenue, S.E.
Washington, D.C. 20590

Defendants.

COMPLAINT FOR INJUNCTIVE RELIEF

1. This is an action under the Federal Advisory Committee Act (“FACA”), 5 U.S.C. app. 2; the Administrative Procedure Act (“APA”), 5 U.S.C. §§ 551–706; and the Declaratory Judgment Act, 28 U.S.C. § 2201(a), for injunctive and other appropriate relief to compel the Drone Advisory Committee (“DAC” or “Committee”) to comply with its transparency obligations.

2. Plaintiff Electronic Privacy Information Center (“EPIC”) specifically challenges (a) Defendants’ failure to make advisory committee meetings “open to the public,” as required by 5 U.S.C. app. 2 § 10(a)(1); and (b) Defendants’ failure to make “available for public inspection and copying” the “records, reports, transcripts, minutes, appendixes, working papers, drafts, studies, agenda, or other documents” of the DAC, as required by 5 U.S.C. app. 2 § 10(b).

3. Access to these nonpublic meetings and records would reveal how, if at all, the Drone Advisory Committee has addressed the threat that the deployment of Unmanned Aerial Vehicles (“UAVs” or “aerial drones” or simply “drones”) would pose to the privacy rights of persons in the United States.

Jurisdiction and Venue

4. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. § 1331, 5 U.S.C. § 702, and 5 U.S.C. § 704. This Court has personal jurisdiction over Defendants.

5. Venue is proper in this district under 5 U.S.C. § 703 and 28 U.S.C. § 1391.

Parties

6. Plaintiff EPIC is a nonprofit organization, incorporated in Washington, D.C., established in 1994 to focus public attention on emerging privacy and civil liberties issues. Central to EPIC’s mission is oversight and analysis of government activities that impact individual privacy. EPIC is a membership organization. The Members of EPIC’s Advisory Board include distinguished experts in law, technology, and public policy.

7. EPIC is the leading organization in the United States addressing the privacy issues that arise from the deployment of drones in the National Airspace System (“NAS”). As early as 2005,

EPIC warned the public and policymakers about the adverse impact that drone surveillance would have on individual privacy.¹

8. EPIC filed a petition with the FAA in 2012—joined by over 100 organizations, experts, and members of the public—demanding that the agency issue privacy regulations to safeguard the interests of the American public.² EPIC has also twice brought suit against the FAA to enforce the agency’s obligation to establish privacy protections against drone surveillance. EPIC first sued the FAA when the agency denied EPIC’s 2012 petition and failed to address privacy issues in its first drone rulemaking. *EPIC v. FAA*, 821 F.3d 39 (D.C. Cir. 2016). EPIC subsequently filed suit to challenge the FAA’s final rule on small drones, a case which is currently pending before the U.S. Court of Appeals for the D.C. Circuit. *EPIC v. FAA*, No. 16-1297 (D.C. Cir. argued Jan. 25, 2018).

9. EPIC recently filed a Freedom of Information Act (“FOIA”) suit against the Department of Homeland Security to obtain the agency’s drone policies, reports, and procedures. *EPIC v. DHS*, No. 18-545 (D.D.C. filed Mar. 8, 2018). In 2016, EPIC obtained key documents through a FOIA request concerning the work of the FAA’s Drone Registration Task Force.³ And in 2015, an EPIC FOIA case identified significant privacy and maintenance problems with the Department of Defense JLENS program, in which the Department conducted domestic surveillance using blimp-mounted radar and video equipment. *EPIC v. Dep’t of the Army*, No.

¹ EPIC, *Spotlight on Surveillance: Unmanned Planes Offer New Opportunities for Clandestine Government Tracking* (Aug. 2005), <https://epic.org/privacy/surveillance/spotlight/0805/>.

² EPIC, *EPIC Petition Demands that FAA Protect Privacy and Regulate Drones* (2012), <https://epic.org/2012/02/epic-petition-demands-that-FA.html>.

³ EPIC, *EPIC v. Department of Transportation - Drone Registration Task Force* (2016), <https://epic.org/foia/dot/drones/taskforce/>.

14–776 (D.D.C. filed May 6, 2014). After a JLENS surveillance blimp broke free, downed multiple power lines, and crash-landed in Pennsylvania, the program was eventually cancelled.⁴

10. EPIC maintains one of the most popular privacy websites in the world, <https://epic.org>, which provides EPIC’s members and the public with access to current information about emerging privacy and civil liberties issues. EPIC’s website includes extensive information about the privacy risks arising from drone surveillance. EPIC frequently posts documents obtained under the FOIA and other open government statutes in order to educate the public about the privacy implications of government programs and activities.

11. Defendant Drone Advisory Committee (“DAC”) is an advisory committee of the United States government within the meaning of 5 U.S.C. app. 2 § 3(2). Ex. 1 at 3.⁵ The DAC was established and is utilized by the Federal Aviation Administration (“FAA”) and the United States Department of Transportation (“DOT”). The DAC includes a Drone Advisory Subcommittee (“DACSC” or “Subcommittee”) and at least three task groups: Task Group 1, Task Group 2, and Task Group 3 (collectively, “DAC Task Groups” or “Task Groups”). The DAC, the DACSC, and the DAC Task Groups are all under and part of the RTCA Advisory Committee (“RTCA”).

12. Defendant RTCA Advisory Committee is an advisory committee of the United States government within the meaning of 5 U.S.C. app. 2 § 3(2). The RTCA is utilized—and was established as a federal advisory committee—by both the FAA and the DOT. The RTCA is also an umbrella organization comprising at least 26 constituent advisory committees, including the DAC.⁶

⁴ EPIC, *EPIC v. Army - Surveillance Blimps* (2017), <https://epic.org/foia/army/>.

⁵ RTCA, *Terms of Reference: Drone Advisory Committee (DAC)* (July 27, 2017).

⁶ DOT - 699 - RTCA Advisory Committee - Agency Authority - (Verify/Review By: None) Subcommittees, FACA Database, <https://www.facadatabase.gov/subcommittee/subcommittees.aspx?cid=619>.

13. Defendant Federal Aviation Administration is an agency within the meaning of 5 U.S.C. § 701, 5 U.S.C. § 551, and 5 U.S.C. app. 2 § 3(3). The FAA is also a sub-agency of the DOT.

14. Defendant Daniel K. Elwell is the Acting Administrator of the FAA. Mr. Elwell is also the Designated Federal Officer (“DFO”) of the DAC and the RTCA within the meaning of 5 U.S.C. app. 2 § 10(e)–(f).

15. Defendant United States Department of Transportation is an agency within the meaning of 5 U.S.C. § 701, 5 U.S.C. § 551, and 5 U.S.C. app. 2 § 3(3).

16. Defendant David W. Freeman is the Committee Management Officer (“CMO”) of the DOT within the meaning of 5 U.S.C. app. 2 § 8(b). Mr. Freeman is responsible for controlling and supervising the DAC, the RTCA, and the DFO of both committees (currently Mr. Elwell).

Id.

Facts

The Growing Privacy Risks Posed by Drones

17. The integration of drones into the National Airspace System will adversely affect millions of Americans. Reports of drones threatening the safety of aircraft, civilians, first responders, and law enforcement officers—as well as reports of surveillance by drones on private property and “drone stalking”—are increasing.⁷

⁷ See, e.g., Alan Levin, *Drone-Plane Near Misses, Other Incidents Surge 46% in U.S.*, Bloomberg (Feb. 23, 2017), <https://www.bloomberg.com/news/articles/2017-02-23/drone-plane-near-misses-other-incidents-surged-46-in-u-s>; Jonathan Lai, *In New Jersey, new rules on flying drones*, Philadelphia Inquirer (Jan. 19, 2018), <http://www.philly.com/philly/news/drone-law-nj-new-regulations-20180122.html>; Grant Schulte, *Bill Seeks to Stop Drone Use to Spy on People, Harass Cows*, Associated Press (Jan. 7, 2018), <https://www.apnews.com/3ec967603590495c870f5dd2065a218a>; Michael Chen, *Sunbathing woman outraged over ‘lingering’ drone over her backyard*, ABC2 (June 28, 2017), <https://www.abc2news.com/news/national/encinitas-sunbather-confronts-drone-in-her-yard>; Jamie Seidel, *Amazon wants to use delivery drones to stalk your house*, N.Y. Post (July 27, 2017), <https://nypost.com/2017/07/27/amazon-wants-to-use-delivery-drones-to-stalk-your-house/>; Nick Bilton, *When Your Neighbor’s Drone Pays an*

18. Many operators enable their drones to surreptitiously observe, record, or otherwise collect information from individuals without their knowledge or consent, even through walls or from thousands of feet in the air.⁸

19. Drones are routinely equipped with high definition cameras that greatly increase the capacity for domestic surveillance.⁹ Drones can also gather sensitive, personal information using infrared cameras, heat sensors, GPS, automated license plate readers, facial recognition devices, and other sensors.¹⁰ Drones are even “capable of locking-on to an individual and following them while shooting video and avoiding obstacles,” including in “a dense forest or urban environments like a warehouse.”¹¹

20. Drone use and drone sales are rapidly growing. U.S. drone sales more than doubled between 2016 and 2017,¹² and commercial drones are representing an ever-larger share of the worldwide drone market.¹³ Meanwhile, President Trump has taken steps to effect a “quick and dramatic expansion of drone use” in the NAS.¹⁴

Unwelcome Visit, N.Y. Times (Jan. 27, 2016), <https://www.nytimes.com/2016/01/28/style/neighbors-drones-invade-privacy.html>.

⁸ Petition for Rulemaking from EPIC to FAA at 2–4 (March 8, 2012) (FAA-2012-0306-0001), available at <https://epic.org/apa/lawsuit/EPIC-FAA-Drone-Petition-March-8-2012.pdf>.

⁹ *Id.* at 2.

¹⁰ *Id.* at 2–3.

¹¹ Lucas Matney, *Skydio’s \$2499 ‘self-flying’ drone knows where you are and where you’re going*, TechCrunch (Feb. 13, 2018), <https://techcrunch.com/2018/02/13/skydios-2499-self-flying-drone-knows-where-you-are-and-where-youre-going/>.

¹² April Glaser, *U.S. drone sales have more than doubled from last year*, Recode (Apr. 10, 2017), <https://www.recode.net/2017/4/10/15245234/us-drone-sales-doubled-from-last-year>.

¹³ *Commercial drones are the fastest-growing part of the market*, The Economist (June 10, 2017), <https://www.economist.com/news/technology-quarterly/21723003-most-drones-today-are-either-cheap-toys-or-expensive-weapons-interesting>.

¹⁴ Michael Laris, *Trump administration to allow quick and dramatic expansion of drone use*, Wash. Post (Oct. 25, 2017), https://www.washingtonpost.com/local/trafficandcommuting/trump-administration-establishing-innovation-zones-for-widespread-drone-use/2017/10/25/a004b400-b990-11e7-9e58-e6288544af98_story.html; see also *Unmanned Aircraft Systems Integration*

21. Despite these alarming trends, the FAA has refused to promulgate generally applicable regulations to address the privacy risks posed by drones—even ignoring a Congressional command to do so in the FAA Modernization and Reform Act of 2012.¹⁵

22. The Drone Advisory Committee, which directly advises the FAA on drone deployment, has the obligation to present to the FAA proposals and recommendations to address widespread and obvious public concerns about the impending risks of drone surveillance in the United States.

23. Yet there is no evidence that the DAC has fulfilled its essential responsibility to assess these risks to the public interest. References to privacy are extremely sparse in the few public DAC records, while the vast majority of DAC records and subcommittee meetings remain closed to the public in violation of the FACA.

The Formation and Structure of the DAC

24. On May 4, 2016, then-FAA Administrator Michael Huerta stated that the FAA was “establishing” the DAC, which he described as “a broad-based advisory committee that will provide advice on key unmanned aircraft integration issues.” Ex 2.¹⁶

25. The DAC was in fact “established” by the FAA on or before August 31, 2016. Ex. 3.¹⁷ The DAC was “formed under the RTCA federal advisory committee.” *Id.*

Pilot Program: Memorandum for the Secretary of Transportation, 82 Fed. Reg. 50,301 (Oct. 25, 2017).

¹⁵ Pub. L. 112-95, 126 Stat. 11 (2012); *see also* EPIC, *EPIC v. FAA* (2018), <https://epic.org/privacy/litigation/apa/faa/drones/>.

¹⁶ Press Release, FAA, FAA Administrator Makes Two Major Drone Announcements (May 4, 2016).

¹⁷ Press Release, FAA, Drone Advisory Committee to Hold Inaugural Meeting (Aug. 31, 2016).

26. The chairman and the original members of the DAC were appointed by the FAA on or before August 31, 2016. *Id.* The Committee held its first public meeting on September 16, 2016, in Washington, D.C. Ex. 4.¹⁸

27. As of March 2018, the DAC was comprised of thirty-two members. Ex. 14.¹⁹ Eighteen Committee members are affiliated with corporations or organizations engaged in the design, manufacture, operation, or management of drones. *Id.* Nine members are affiliated with traditional aircraft operators, airport authorities, or associations of aviation professionals. *Id.* Two members are university-affiliated researchers, and three members are public officials (only one of whom is elected). *Id.* No privacy, consumer safety, or other general public interest groups are represented on the DAC.

28. The DAC Terms of Reference—which the FAA “issued,” Ex. 10 at 4²⁰—charge the DAC with providing an “open venue” for Committee members to “identify and recommend a single, consensus-based set of resolutions for issues regarding the efficiency and safety of integrating UAS [unmanned aircraft systems] into the NAS and to develop recommendations to address those issues and challenges.” Ex. 1 at 2.

29. According to the FAA, DAC members are to “discuss key issues and challenges associated with integrating unmanned aircraft in the world’s busiest and most complicated airspace system.” Ex. 2. However, the Committee is to “conduct more detailed business through a subcommittee and various task groups that will help the FAA prioritize its activities, including the development of future regulations and policies.” *Id.*

¹⁸ RTCA, *DAC Meeting September 16, 2016 Meeting Minutes* (Sep. 26, 2018).

¹⁹ RTCA, *Drone Advisory Committee Membership* (Mar. 2018).

²⁰ RTCA, *Drone Advisory Committee May 3, 2017 Meeting Minutes* (May 15, 2017).

30. The DAC Subcommittee was established at some point between the first full DAC meeting (September 16, 2016), Ex. 4, and the second full DAC meeting (January 31, 2017), Ex. 5.²¹ The date of the Subcommittee’s first meeting, as with nearly all DACSC proceedings, was not announced and is not publicly known.

31. The DACSC Terms of Reference—which the FAA “issued,” Ex. 10 at 4—state that the Subcommittee’s role is to “support” the DAC, to “present findings to DAC,” and to “[f]orward recommendations and other deliverables to DAC for consideration.” Ex. 6 at 1, 3.²² However, contrary to the DACSC Terms of Reference, FAA officials have repeatedly circumvented the full DAC and worked directly with the Subcommittee.

32. For example, FAA officials have “brief[ed]” and “educat[ed]” the DACSC, Ex. 10 at 8; provided “guidance and assistance to the DAC Subcommittee,” Ex. 11 at 2;²³ and personally participated in multiple DAC meetings at which the Subcommittee delivered reports on its work. *See, e.g.*, Ex. 5 at 2–3; Ex. 10 at 3–4, 8; Ex. 12 at 2, 7.²⁴

33. Moreover, the DAC’s Designated Federal Officer—previously Acting FAA Deputy Administrator Victoria B. Wassmer, now Acting Administrator Elwell—is required by both the RTCA Charter and the FACA to be intimately involved in the proceedings of the DACSC. The “DFO or alternate” must “[c]all, attend, and adjourn all the committee/ subcommittee meetings”; “[a]pprove all committee/subcommittee agendas”; and “[c]hair meetings when directed to do so by the FAA Administrator.” Ex. 13 at 2–3;²⁵ *see also* 5 U.S.C. app. 2 § 10(e)–(f).

²¹ RTCA, *Drone Advisory Committee (DAC) Meeting Minutes* (Feb. 8, 2017).

²² RTCA, *Terms of Reference: Drone Advisory Subcommittee* (Oct. 26, 2016).

²³ RTCA, *Drone Advisory Committee (DAC) July 21, 2017 Meeting Minutes* (July 25, 2017).

²⁴ RTCA, *Drone Advisory Committee (DAC) November 8, 2017 Meeting Minutes* (Nov. 15, 2017).

²⁵ RTCA Charter, FAA Order No. 1110.77Y (Mar. 29, 2018).

34. The DAC also includes at least three “FAA-approved Task Groups,” each of which must “have a specific, limited charter” that is “approved by the FAA Administrator.” Ex. 1 at 2.

According to the FAA, the agency’s “traditional way of providing tasking” to Task Groups is to “finalize and approve the tasking statement and forward it to the [Committee] to execute.” Ex. 5 at 10.

35. Task Group 1 was established at some point between the first full DAC meeting (September 16, 2016), Ex. 4, and the second full DAC meeting (January 31, 2017), Ex. 5. The FAA instructed Task Group 1 to “[d]evelop a set of consensus based recommendations” concerning “the roles and responsibilities of federal, state, and local governments in regulating and enforcing drone laws.” Ex. 7 at 7.²⁶

36. Task Group 2 was also established at some point between the first full DAC meeting (September 16, 2016), Ex. 4, and the second full DAC meeting (January 31, 2017), Ex. 5. The FAA instructed Task Group 2 to “provide recommendations on UAS operations/missions beyond those currently permitted” and “define procedures for industry to gain access to the airspace.” Ex. 8 at 1.²⁷

37. Task Group 3 was established sometime between the second full DAC meeting (January 31, 2017), Ex. 5, and the third full DAC meeting (May 3, 2017), Ex. 10. The FAA instructed Task Group 3 to “develop recommendations as to the UAS community’s preferred method(s) for

²⁶ Tasking Statement from Victoria B. Wassmer, Acting Deputy Adm’r, FAA, to DAC Task Group 1 (Jan. 31, 2017).

²⁷ Tasking Statement from Victoria B. Wassmer, Acting Deputy Adm’r, FAA, to DAC Task Group 2 (Jan. 31, 2017).

funding Federal activities and services required to support UAS operations for the next two years, and beyond.” Ex. 9 at 1.²⁸

38. The DACSC Terms of Reference nominally require the Task Groups to perform their work “at the direction of the DACSC,” Ex. 6 at 3, rather than at the direction of FAA officials. In October 2017, Mr. Elwell, then the FAA Deputy Administrator, explained to the Washington Post: “If we [the FAA] meddle, if we get in there, they’re not advising us.” Ex. 20.²⁹ Nevertheless, FAA officials have personally directed, guided, participated in, and received the work and recommendations of the Task Groups.

39. For example, in early 2017, Acting Deputy Administrator Wassmer “issued” the detailed tasking statements for all three Task Groups. Ex. 10 at 4. The tasking statements included fact-finding assignments for each Task Group, topics that each Task Group should advise on, and deadlines by which each Task Group should deliver its recommendations and reports. *See* Ex. 7; Ex. 8; Ex. 9. As Wassmer made clear to the DAC, “tasking statements from the FAA should guide the work of the DAC, DACSC, and TGs.” Ex. 10 at 4.

40. Wassmer and Acting Administrator Elwell also personally attended DAC meetings at which the Task Groups delivered substantive recommendations and reports. *See, e.g.*, Ex. 10 at 2, 9–17; Ex. 11 at 1, 3–9; Ex. 12 at 2, 8–18.

41. And because the Task Groups constitute subcommittees of the DAC, Wassmer and Elwell were (or are) required to be intimately involved in the proceedings of the Task Groups in their capacity as Designated Federal Officer. Under the RTCA Charter, the “DFO or alternate”

²⁸ Tasking Statement from Victoria B. Wassmer, Acting Deputy Adm’r, FAA, to DAC Task Group 3 (Mar. 7, 2017).

²⁹ Michael Laris, *A U.S. drone advisory group has been meeting in secret for months. It hasn’t gone well.*, Wash. Post (Oct. 23, 2017).

must “[c]all, attend, and adjourn all the committee/ subcommittee meetings”; “[a]pprove all committee/subcommittee agendas”; and “[c]hair meetings when directed to do so by the FAA Administrator.” Ex. 13 at 2–3; *see also* 5 U.S.C. app. 2 § 10(e)–(f).

The Transparency Obligations of the DAC

42. The DAC, according to its Terms of Reference, must conduct its work in the “open, transparent venue of a federal advisory committee (FAC). As with all FACs, the Drone Advisory Committee (DAC) will be designed to: ensure transparency, include broad and balanced representation across the industry, encourage innovation and remain consistent with US anti-trust laws.” Ex. 1 at 1.

43. Under the FACA, the meetings of each advisory committee—defined as any “committee, board, commission, council, conference, panel, task force, or other similar group, or any subcommittee or other subgroup thereof” which is “established or utilized” by an agency—“shall be open to the public.” 5 U.S.C. app. 2 §§ 3(2), 10(a)(1).

44. The Charter of the RTCA—of which the DAC, the DACSC, and the DAC Task Groups are all part—confirms that “RTCA Advisory Committee and subcommittee meetings will be open to the public, except as provided by section 10(d) of the FACA and applicable regulations. Meetings will be announced in the Federal Register at least 15 days before each meeting, except in emergencies.” Ex. 13 at 3.

45. The DAC Terms of Reference further underscore that “The DAC functions as a Federal advisory committee with meetings that are open to the public, unless otherwise noted as authorized by section 10(d) of the FACA and applicable regulations” Ex. 1 at 3.

46. Under the FACA, “the records, reports, transcripts, minutes, appendixes, working papers, drafts, studies, agenda, or other documents which were made available to or prepared for or by

each advisory committee shall be available for public inspection and copying at a single location in the offices of the advisory committee or the agency to which the advisory committee reports until the advisory committee ceases to exist.” 5 U.S.C. app. 2 § 10(b).

47. The RTCA Charter confirms that “[s]ubject to the Freedom of Information Act, 5 U.S.C. § 552, records, reports, transcripts, minutes, or meeting summaries, and other materials presented to or prepared for the RTCA Advisory Committee are available for public inspection.”

Ex. 13 at 4.

48. The DAC Terms of Reference state that “[i]n accordance with the Federal Advisory Committee Act, meeting summaries and related information will be available to the public via RTCA’s website. Documents undergoing final review can be obtained by contacting RTCA.”

Ex. 1 at 6.

49. The RTCA Charter also states that the “records of the committee, formally and informally established subcommittees, or other work or task subgroup of the subcommittee, shall be handled in accordance with the General Records Schedule 6.2, or other approved agency records disposition schedule.” *Id.*

50. General Records Schedule 6.2 “covers Federal records created or received by Federal advisory committees and their subgroups pursuant to the Federal Advisory Committee Act (FACA) of 1972 (5 U.S.C., Appendix, as amended) and records related to the management of these committees by their sponsoring agencies or departments.” Nat’l Archives & Records Admin., *General Records Schedule 6.2: Federal Advisory Committee Records* 130 (Sep. 2016), Ex. 15.

51. General Records Schedule 6.2 requires the “[p]ermanent” preservation of “records related to the establishment of the committee”; “records related to committee membership”;

“records of committee meetings and hearings”; “records related to committee findings and recommendations”; “records created by committee members,” including “correspondence documenting discussions, decisions, or actions related to the work of the committee”; “records related to research collected or created by the committee”; “documentation of advisory committee subcommittees”; “records that document the activities of subcommittees that support their reports and recommendations to the chartered or parent committee.” *Id.* at 130–32.

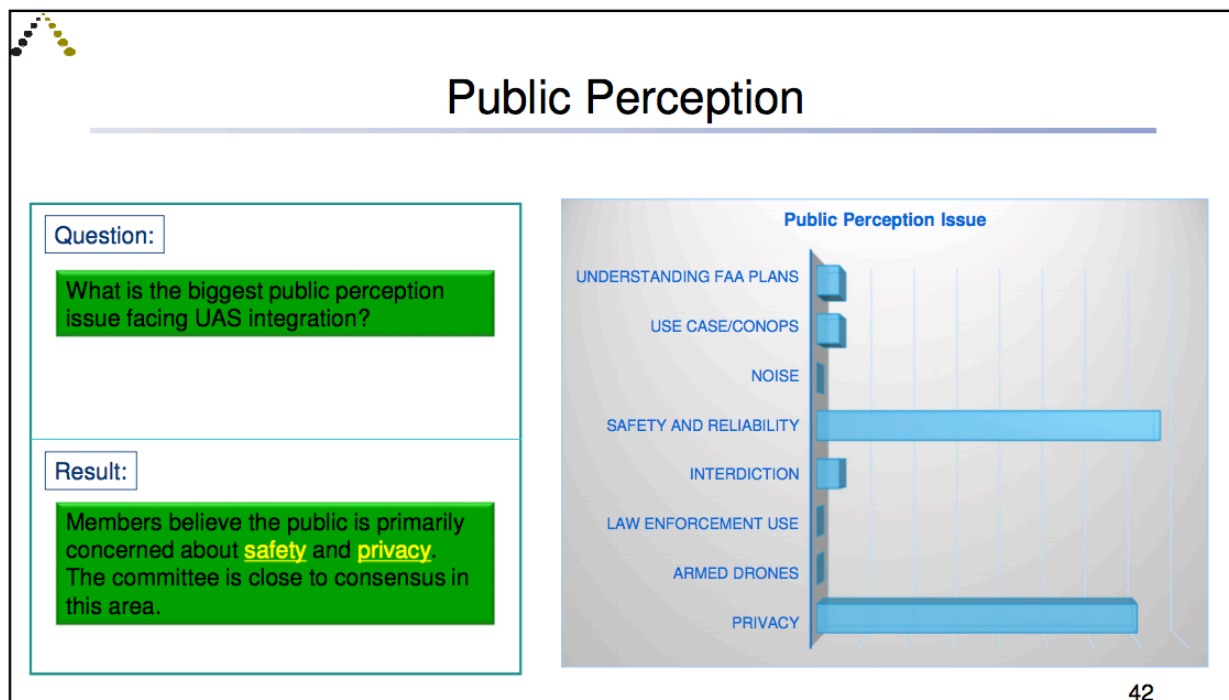
52. The General Services Administration, which is “responsible for all matters relating to advisory committees,” and “prescribe[s] administrative guidelines and management controls applicable to advisory committees,” 5 U.S.C. app. 2 § 7, instructs that: “Whether subcommittees are open to the public or not, the agency must . . . [c]omply with recordkeeping requirements (i.e., minutes)” and “[a]llow public access to subcommittee records.” *Federal Advisory Committee Act Training Course* 192 (2017), Ex 16.

53. FACA regulations also dictate that a committee or agency “may not require members of the public or other interested parties to file requests for non-exempt advisory committee records under the request and review process established by section 552(a)(3) of FOIA.” 41 C.F.R. § 102-3.170.

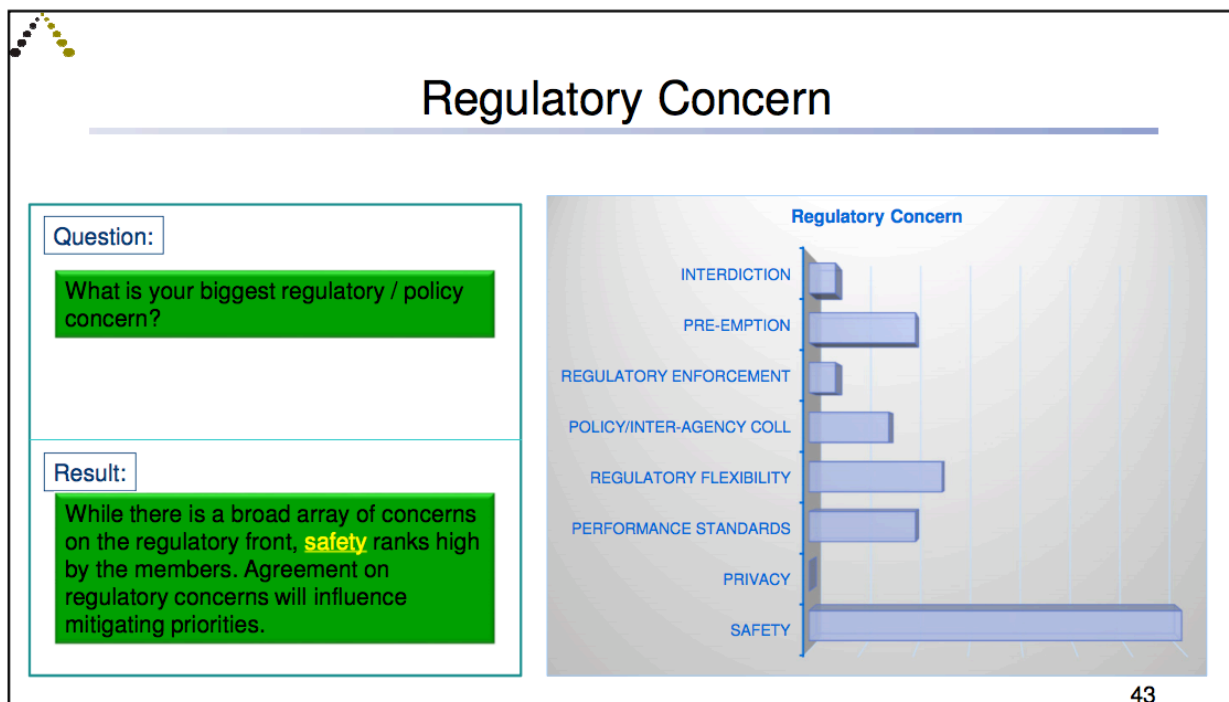
The Activities of the DAC and DAC Subcomponents

54. On September 16, 2016, the DAC held its first full Committee meeting in Washington, D.C. Ex. 4. Acting Deputy Administrator Wassmer, then the Committee’s DFO, attended the meeting and delivered remarks. *Id.* at 1.

55. DAC Secretary Al Secen presented the results of a survey of DAC members at the September 2016 meeting. *DAC members identified privacy as the second-highest public concern around drones, narrowly trailing safety and reliability:*



56. Yet in the same survey, DAC members ranked privacy dead last among their regulatory and policy concerns:



57. During the September 2016 meeting, the DAC identified as an action item: “Establish a WG to describe the privacy concerns, and to identify the respective roles and responsibilities for dealing with privacy concerns across local, state, regional and federal entities.” However, there is no public record of the DAC ever forming a working group focused on privacy.

58. During the same meeting, the DAC also identified “[e]stablishing a standing DAC Subcommittee,” “[e]stablish[ing] a task group” as action items. Ex. 4 at 2.

59. Between the DAC’s September 2016 and January 2017 meetings, the DACSC, Task Group 1, and Task Group 2 were formed and began engaging in official Committee business. *See* Ex. 5 at 2–7.

60. Although members of the DACSC and the Task Groups met and conferred during this period, *see id.*, Defendants failed to publicly notice or announce any such meetings.

61. Defendants have also failed to make any DACSC or Task Group records from this period available for public inspection, apart from limited information presented to the DAC at its January 2017 meeting.

62. On January 31, 2017, the DAC held its second full Committee meeting in Reno, Nevada. Ex. 5. Acting Deputy Administrator Wassmer, then the Committee’s DFO, attended the meeting and delivered remarks. *Id.* at 1.

63. The DACSC, Task Group 1, and Task Group 2 each delivered a progress report to the DAC at the January 2017 meeting. *Id.* at 2–7. Task Group 1 and Task Group 2 discussed their substantive recommendations to the FAA. *Id.* at 3–7. The DAC also “approved the DACSC to go through the process of creating TG3 [Task Group 3]” based on the tasking statement issued by the FAA. *Id.* at 10.

64. According to the publicly available records of the January 2017 meeting, the privacy implications of drones were referenced only once in passing.

65. Between the DAC's January 2017 and May 2017 meetings, the DACSC, Task Group 1, and Task Group 2 continued engaging in official Committee business. *See* Ex. 10 at 8–14. Task Group 3 was also formed during this period and began engaging in official Committee business. *See id.* at 14–16.

66. Although members of the DACSC and the Task Groups met and conferred during this period, *see* Ex. 10 at 8–16, Defendants failed to publicly notice or announce any such meetings.

67. Defendants have also failed to make any DACSC or Task Group records from this period available for public inspection, apart from limited information presented to the DAC at its May 2017 meeting.

68. On May 3, 2017, the DAC held its third full Committee meeting in Herndon, Virginia. Ex. 10. Acting Deputy Administrator Wassmer, then the Committee's DFO, attended the meeting and delivered remarks. *Id.* at 1.

69. The DACSC and each of the Task Groups delivered a progress report to the DAC at the May 2017 meeting. *Id.* at 8–16. Task Group 1 and Task Group 2 discussed their substantive recommendations to the FAA. *Id.* at 8–14.

70. According to the publicly available records of the May 2017 meeting, the privacy implications of drones were referenced only twice in passing.

71. Between the DAC's May 2017 and July 2017 meetings, the DACSC and the Task Groups continued engaging in official Committee business. *See* Ex. 11 at 3–9.

72. Although members of the DACSC and the Task Groups met and conferred during this period, *see id.*, Defendants failed to publicly notice or announce any such meetings.

73. Defendants have also failed to make any DACSC or Task Group records from this period available for public inspection, apart from limited information presented to the DAC at its July 2017 meeting.

74. On July 21, 2017, the DAC held its fourth full Committee meeting via digital conference. Ex. 11. Mr. Elwell, then the FAA Deputy Administrator, attended the meeting as the Committee's newly appointed DFO. *Id.* at 2. Elwell also delivered remarks during the meeting. *Id.* at 2–3.

75. Task Group 1 and Task Group 3 both delivered a progress report and recommendations to the DAC at the July 2017 meeting. *Id.* at 3–9. Task Group 3 also presented an interim report intended for the FAA concerning funding mechanisms for the introduction of drones into the NAS. *Id.* at 3–7.

76. San Francisco Mayor Ed Lee, who served on the DAC until his death in December 2017, sent a representative to the July 2017 meeting to speak on his behalf. The representative told the DAC that Mayor Lee “remained concerned about privacy and ensuring broader input in the [DAC] discussion from partners such as law enforcement agencies and other local government representatives. The desire is to have an equal, one-to-one representation of local government to industry members.”

77. According to the publicly available records of the July 2017 meeting, Mayor Lee's statement was the sole reference made by the DAC to the privacy implications of drones.

78. During the July 2017 meeting, the DAC approved the interim funding report presented by Task Group 3. The RTCA officially delivered the Task Group 3 report to then-Deputy

Administrator Elwell on September 11, 2017. Ex. 17.³⁰ The RTCA Advisory Committee does not appear to have collectively reviewed or approved the Task Group 3 report before transmitting it to the FAA.

79. Between the DAC's July 2017 and November 2017 meetings, the DACSC and the Task Groups continued engaging in official Committee business. *See* Ex. 12 at 8–18.

80. Although members of the DACSC and the Task Groups met and conferred during this period, *see id.*, Defendants failed to publicly notice or announce any meetings.

81. Defendants have also failed to make any DACSC or Task Group records from this period available for public inspection, apart from limited information presented to the DAC at its November 2017 meeting.

82. On October 23, 2017, the Washington Post published a report that Task Group 1—a group that includes “industry insiders with a financial stake in the outcome” of the Committee process—“has been holding confidential meetings to shape U.S. policy on drones, deliberating privately about who should regulate a burgeoning industry that will affect everything from package delivery to personal privacy.” Ex. 21.³¹

83. The Washington Post also reported that the Task Group 1 process had “been riven by suspicion and dysfunction” and that “[m]onths of tensions came to a head” when “an FAA contractor that manages the group told members they had to sign a far-reaching confidentiality agreement to keep participating. After some raised concerns, several groups were blocked from

³⁰ Letter from Margaret Jenny, President, RTCA, to Daniel K. Elwell, Deputy Adm'r, FAA (Sep. 11, 2017).

³¹ Michael Laris, *Federal Drone Advisory Panel Knocked for 'Lack of Transparency and Poor Management'*, Wash. Post (Nov. 8, 2017).

receiving draft documents meant to represent their own ‘common ground’ positions, emails show.” *Id.*

84. On November 8, 2017, Mayor Ed Lee sent a letter to DAC Chairman Brian Krzanich warning that “Task Group 1’s process has been marred by a lack of transparency and poor management,” including “lack of agendas, last minute rescheduling of meetings, failure to have minutes of any proceedings, conflicting advice and guidance by RTCA and Requirements to sign documents that public employees cannot sign.” Ex. 19 at 1. Mayor Lee added: “Additionally, there is a stark imbalance of perspectives and viewpoints favoring industry interests at the expense of local and state governments and members of the public. Because the process was flawed, the recommendations produced by that process are also flawed.” *Id.*

85. On the same day—November 8, 2017—the DAC held its fifth full Committee meeting at the Amazon Meeting Center in Seattle, Washington. Ex. 12. Mr. Elwell, then the FAA Deputy Administrator, attended the meeting and delivered remarks. *Id.* at 2–6.

86. The DACSC and each of the Task Groups delivered a progress report to the DAC at the November 2017 meeting. *Id.* at 7–18. Each Task Group discussed its substantive recommendations to the FAA. *Id.* at 8–14.

87. Task Group 2 also presented a final report intended for the FAA concerning drone access to airspace. *Id.* at 12–16. The DAC approved the report. *Id.* at 16.

88. According to the publicly available records of the November 2017 meeting, the privacy implications of drones were referenced only four times: once in a question posed to Task Group 2 and three times in a presentation about local government views on drone deployment.

89. On information and belief, the DACSC and the DAC Task Groups have continued to meet, confer, and engage in official Committee business since the November 2017 meeting.

90. Defendants have failed to publicly notice or announce any meetings of the DACSC or the DAC Task Groups from this period.

91. Defendants have also failed to make any DACSC or Task Group records from this period available for public inspection.

92. On March 9, 2018, the DAC held its sixth full Committee meeting in McLean, Virginia. *Sixth Drone Advisory Committee (DAC) Meeting*, 83 Fed. Reg. 7,284, 7,284 (Feb. 20, 2018).

93. To date, Defendants have failed to release minutes from the March 2018 meeting. However, Acting Administrator Elwell was scheduled to attend and speak at the meeting as the Committee's DFO. *Id.*

94. The DAC's next full Committee meeting is scheduled for July 17, 2018. *Drone Advisory Committee (DAC)*, RTCA (2018).³²

EPIC's Attempts to Obtain DAC Records

95. On March 20, 2018, EPIC sent a records request via email to Acting FAA Administrator Elwell, DOT Committee Management Officer David W. Freeman, DAC Secretary Al Secen, and the RTCA's general information email address. Ex. 18.

96. In its request, EPIC stated that it wished to access "all 'records, reports, transcripts, minutes, appendixes, working papers, drafts, studies, agenda, or other documents which were made available to or prepared for or by' the DAC or any DAC subcomponent. 5 U.S.C. App. 2 § 10(b)." *Id.*

97. EPIC asked the agency and Committee recipients to "direct EPIC to the URL or location where the full collection of DAC and DAC subcomponent records is available for public inspection and copying." *Id.*

³² <https://www.rtca.org/content/drone-advisory-committee>.

98. EPIC also advised the FAA, DAC, and RTCA of its records disclosure obligations under the FACA. *Id.*

99. As of April 11, 2018, EPIC has received no response to its request.

100. On April 6, 2018, EPIC Counsel John Davisson called and left a voicemail message for DAC Secretary Al Secen. Mr. Davisson reiterated EPIC's desire to obtain access to DAC records and left a return number for Mr. Secen to call.

101. As of April 11, 2018, EPIC has received no response to this message.

Count I

Violation of the FACA: Failure to Open Meetings to the Public

102. Plaintiff asserts and incorporates by reference paragraphs 1–101.

103. Defendants have failed to open meetings of the DACSC and DAC Task Groups to the public.

104. Defendants' failure to open DACSC and DAC Task Group meetings to the public is a violation of 5 U.S.C. app. 2 § 10(a)(1).

105. Plaintiff is adversely affected, aggrieved, and injured in fact by Defendants' violation of 5 U.S.C. app. 2 § 10(a)(1). By failing to open DACSC and DAC Task Group meetings, Defendants have frustrated Plaintiff's longstanding mission to educate the public about the privacy implications of drone deployment and about the federal government's efforts (or lack thereof) to protect the public from drone surveillance.

106. Plaintiff has exhausted all applicable administrative remedies.

Count II

Violation of the APA: Agency Action Unlawfully Withheld

107. Plaintiff asserts and incorporates by reference paragraphs 1–101.

108. Defendants have failed to open meetings of the DACSC and DAC Task Groups to the public, as required by 5 U.S.C. app. 2 § 10(a)(1).

109. Defendants' failure to make these meetings open to the public constitutes agency action unlawfully withheld or unreasonably delayed in violation of 5 U.S.C. § 706(1).

110. Plaintiff is adversely affected, aggrieved, and injured in fact by Defendants' violation of 5 U.S.C. § 706(1). By failing to open DACSC and DAC Task Group meetings, Defendants have frustrated Plaintiff's longstanding mission to educate the public about the privacy implications of drone deployment and about the federal government's efforts (or lack thereof) to protect the public from drone surveillance.

111. Plaintiff has exhausted all applicable administrative remedies.

Count III

Violation of the APA: Unlawful Agency Action

112. Plaintiff asserts and incorporates by reference paragraphs 1–101.

113. Defendants have held numerous nonpublic meetings of the DACSC and DAC Task Groups in violation of 5 U.S.C. app. 2 § 10(a)(1).

114. By holding nonpublic meetings, Defendants have engaged in conduct that is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law under 5 U.S.C. § 706(2)(a) and short of statutory right under 5 U.S.C. § 706(2)(c).

115. Defendants' conduct constitutes final agency action under 5 U.S.C. § 704.

116. Plaintiff is adversely affected, aggrieved, and injured in fact by Defendants' actions. By holding nonpublic DACSC and DAC Task Group meetings, Defendants have frustrated Plaintiff's longstanding mission to educate the public about the privacy implications of drone

deployment and about the federal government's efforts (or lack thereof) to protect the public from drone surveillance.

117. Plaintiff has exhausted all applicable administrative remedies.

Count IV

Violation of the FACA: Failure to Make Records Available for Public Inspection

118. Plaintiff asserts and incorporates by reference paragraphs 1–101.

119. Defendants have failed to make “available for public inspection and copying” numerous “records, reports, transcripts, minutes, appendixes, working papers, drafts, studies, agenda, or other documents which were made available to or prepared for or by” the DAC, including but not limited to records arising out of the DACSC and DAC Task Groups. 5 U.S.C. app. 2 § 10(b).

120. Plaintiff sought to inspect and copy these records, but Defendants did not make them available to Plaintiff.

121. Defendants' failure to make these records available for inspection and copying is a violation of 5 U.S.C. app. 2 § 10(b).

122. Plaintiff is adversely affected, aggrieved, and injured in fact by Defendants' violation of 5 U.S.C. app. 2 § 10(b). By failing to make numerous DAC records available for public inspection, Defendants have frustrated Plaintiff's longstanding mission to educate the public about the privacy implications of drone deployment and about the federal government's efforts (or lack thereof) to protect the public from drone surveillance.

123. Plaintiff has exhausted all applicable administrative remedies.

Count V

Violation of the APA: Agency Action Unlawfully Withheld

124. Plaintiff asserts and incorporates by reference paragraphs 1–101.

125. Defendants have failed to make “available for public inspection and copying” numerous “records, reports, transcripts, minutes, appendixes, working papers, drafts, studies, agenda, or other documents which were made available to or prepared for or by” the DAC, including but not limited to records arising out of the DACSC and DAC Task Groups. 5 U.S.C. app. 2 § 10(b).

126. Plaintiff sought to inspect and copy these records, but Defendants did not make them available to Plaintiff.

127. Defendants’ failure to make these records available to Plaintiff constitutes agency action unlawfully withheld or unreasonably delayed in violation of 5 U.S.C. § 706(1).

128. Plaintiff is adversely affected, aggrieved, and injured in fact by Defendants’ violation of 5 U.S.C. § 706(1). By failing to make numerous DAC records available for public inspection, Defendants have frustrated Plaintiff’s longstanding mission to educate the public about the privacy implications of drone deployment and about the federal government’s efforts (or lack thereof) to protect the public from drone surveillance.

129. Plaintiff has exhausted all applicable administrative remedies.

Count VI

Violation of the APA: Unlawful Agency Action

130. Plaintiff asserts and incorporates by reference paragraphs 1–101.

131. Since September of 2016, Defendants have held multiple meetings of the DAC, the DACSC, and the DAC Task Groups; engaged in substantive deliberations within and between the DAC, the DACSC, and the DAC Task Groups; issued official recommendations, reports, findings, and conclusions on behalf of the DAC, the DACSC, and the DAC Task Groups; assigned “action items” on behalf of the DAC to the FAA, the RTCA Advisory Committee, the DACSC, and the DAC Task Groups; and undertaken other official DAC business.

132. Defendants have engaged in this conduct without making “available for public inspection and copying” numerous “records, reports, transcripts, minutes, appendixes, working papers, drafts, studies, agenda, or other documents which were made available to or prepared for or by” the DAC, including but not limited to records arising out of the DACSC and DAC Task Groups. 5 U.S.C. app. 2 § 10(b).

133. Plaintiff sought to inspect and copy these records, but Defendants did not make them available to Plaintiff.

134. By undertaking official Committee business without publicly disclosing records covered by U.S.C. app. 2 § 10(b), Defendants have engaged in conduct that is arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law under 5 U.S.C. § 706(2)(a) and short of statutory right under 5 U.S.C. § 706(2)(c).

135. Defendants’ conduct constitutes final agency action under 5 U.S.C. § 704.

136. Plaintiff is adversely affected, aggrieved, and injured in fact by Defendants’ actions. By undertaking official Committee business without publicly disclosing numerous records covered by U.S.C. app. 2 § 10(b), Defendants have frustrated Plaintiff’s longstanding mission to educate the public about the privacy implications of drone deployment and about the federal government’s efforts (or lack thereof) to protect the public from drone surveillance.

137. Plaintiff has exhausted all applicable administrative remedies.

Count VII

Claim for Declaratory Relief Under 28 U.S.C. § 2201(a)

138. Plaintiff asserts and incorporates by reference paragraphs 1–101.

139. Plaintiff is entitled under 28 U.S.C. § 2201(a) to a declaration of the rights and other legal relations of the parties with respect to the claims set forth in Counts I–VI.

Requested Relief

WHEREFORE, Plaintiff requests that this Court:

- A. Order Defendants to preserve all records prepared for or by the DAC, including but not limited to records arising out of the DACSC and DAC Task Groups;
- B. Order Defendants to produce an index of all records prepared for or by the DAC, including but not limited to records arising out of the DACSC and DAC Task Groups;
- C. Order Defendants to make available for inspection and copying all records prepared for or by the DAC, including but not limited to records arising out of the DACSC and DAC Task Groups;
- D. Order Defendants to notice and open to the public all future meetings of the DACSC, DAC Task Groups, and any other DAC subcomponent hereafter established;
- E. Enjoin the DAC, DAC subcomponents, DAC officers, and DAC members from holding meetings; conducting deliberations; issuing recommendations, reports, findings, or conclusions; and engaging in other official DAC business until Defendants are in full compliance with 5 U.S.C. app. 2 § 10(a)(1) and § 10(b);
- F. Hold unlawful and set aside any actions, findings, and conclusions of the DAC, the DACSC, and the DAC Task Groups which predate Defendants' full compliance 5 U.S.C. app. 2 § 10(a)(1) and § 10(b);
- G. Award EPIC costs and reasonable attorney's fees incurred in this action; and
- H. Grant such other relief as the Court may deem just and proper.

Respectfully Submitted,

MARC ROTENBERG, D.C. Bar #422825
EPIC President and Executive Director

/s/ Alan Butler
ALAN BUTLER, D.C. Bar #1012128
EPIC Senior Counsel

JOHN DAVISSON, D.C. Bar #1531914³³
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Attorneys for Plaintiff EPIC

Dated: April 11, 2018

³³ Application to the bar of this Court pending since April 11, 2018.



TERMS OF REFERENCE

Drone Advisory Committee (DAC)

Committee Leadership

Role	Name or Title	Organization
Chairman	Brian Krzanich	Intel
FAA Lead	Administrator	FAA
Designated Federal Officer	Deputy Administrator	FAA
Subcommittee Oversight	Director, UAS Integration Office	FAA
Secretariat Oversight	Director, UAS Integration Office	FAA
Secretariat	VP of Aviation Technology and Standards	RTCA
Support	Program Director	RTCA

Background

Unmanned Aircraft Systems (UAS) offer the United States the opportunity to lead a completely new and expanded vision of aviation. The FAA seeks to establish a venue and process to enable stakeholders to advise the FAA on the needs of these new and expanding users of the National Airspace System (NAS) while identifying the strategic regulatory priorities and structure that simultaneously promote innovation, safety, efficiency and rapid integration of UAS into the NAS.

The best mechanism to leverage all the resources, expertise and energy to achieve the FAA and industry's goals of safe and timely integration of all categories of UAS into the airspace, is through an open, transparent venue of a federal advisory committee (FAC). As with all FACs, the Drone Advisory Committee (DAC) will be designed to: ensure transparency, include broad and balanced representation across the industry, encourage innovation and remain consistent with US anti-trust laws.

Purpose and Scope

The purpose of the DAC is to provide an open venue for FAA and UAS stakeholders to work in partnership to identify and recommend a single, consensus-based set of resolutions for issues regarding the efficiency and safety of integrating UAS into the NAS and to develop recommendations to address those issues and challenges. The DAC will also provide the FAA with recommendations which may be used for tactical and strategic planning purposes. The DAC is comprised of executive leaders from key unmanned aircraft stakeholders as well as key stakeholders in the manned aviation community. The DAC will track and report progress and activities of FAA-approved Task Groups, provide suggested guidance for their work, and will coordinate final products for submittal to the FAA Administrator. Each FAA-approved Task Group will have a specific, limited charter that is developed by the DAC and is approved by the FAA Administrator. Unless otherwise stated, Task Groups will be sunset upon completion of deliverables as documented in their respective charter(s). Task Groups may be cancelled prior to completion of specified deliverables in accordance with the terms in their respective charter(s).

Structure of the Committee:

The DAC will conduct its deliberations on recommendations to be provided to the FAA in meetings that are open to the public. To meet the criteria described above, the Committee structure will be two-tiered with subordinate Task Groups (TG) established to develop recommendations and other documents for the Committee.

Adjunct to the DAC is a Subcommittee (DAC Subcommittee or DACSC) comprised of members with broad knowledge and expertise related to the integration of drones into the airspace system. Some meetings of the DACSC will be open to the public to provide an early opportunity to identify potential concerns associated with draft recommendations.

The DAC may establish TGs to accomplish specific tasks as described above. Depending upon the type of tasking, TG products will either be presented to the DACSC for review and deliberation, then forwarded to the DAC or they might be presented directly to the DAC. Members of TGs will be appointed by the DACSC Co-Chairs in consultation with the RTCA President and DAC Chairman and DFO. TG meetings will not be open to the public. For each TG group that is established, the DAC will approve Terms of Reference defining the objective, scope, membership, specific tasks and deliverables with a schedule. Unlike the DAC and DACSC, members of TG do not represent a particular affected entity and are selected for their expertise in the subject matter rather than their affiliation. TG will disband upon delivery of their recommendations as appropriate.

Responsibilities

- a) Drone Advisory Committee (DAC)
 - 1. Overall direction of Committee
 - 2. Review and approve recommendations to FAA
 - 3. Field requests from FAA
 - 4. Review and approve creation of Work Groups, as appropriate
 - 5. Meet three times per year in Plenary (open to public)
 - 6. Direct work of DACSC

b) DAC Subcommittee (DACSC)

1. Staff to Advisory Committee
2. Guide and review selected work of TGs, present findings to DAC
3. Meet bi-monthly or as needed (not all open to public)
4. Forward recommendations and other deliverables to DAC for consideration

c) Task Groups

1. Created to address specific tasking
2. May be short-term or standing activities

Intended Use of DAC Outputs

The end goal of the work done by the FAA and industry, in response to DAC recommendations is to lead to the timely, safe and efficient integration of all categories of UAS into the NAS. The output of the committee will inform the FAA of industry consensus on the areas of FAA tasking. Based on the FAA's response to the committee's recommendations, additional tasks could be assigned to the committee, the committee's working groups and task groups, or outside committees and groups such as ARCs, Standards Committees and research organizations.

Membership and Designation

RTCA provides DAC membership recommendations to the DAC chair and FAA Administrator. Final membership selections, including the DAC chair, are at the discretion of the FAA Administrator. The committee is structured to ensure a balance of various UAS and manned aviation stakeholders. Additional members may be added at the discretion of the FAA Administrator. The DAC functions as a Federal advisory committee with meetings that are open to the public, unless otherwise noted as authorized by section 10(d) of the FACA and applicable regulations, with records subject to Freedom of Information Act, 5 U.S.C §552(b).

The DAC will be comprised of CEO/COO-level executives from key UAS stakeholder organizations. The DAC will leverage the RTCA expertise, and state-of-the-art facilities and tools to enable responsive and inclusive coordination across stakeholders with a wide range of philosophical positions and based in many different geographic locations.

To ensure that the DAC brings together the key stakeholders in the integration of UAS into the national airspace system, DAC Membership recommendations should include the following considerations:

- a) Who are the stakeholders of the UAS Community?
- b) What are the areas of interest for the UAS Community?
- c) Membership must be fairly balanced in terms of the points of view represented and the functions to be performed by the advisory committee
- d) Membership must be justifiable to the public and elected officials.
- e) In addition to the above requirements DAC membership must have the following characteristics:
- f) Executive level membership who can speak for and commit their organizations

- g) Flexibility to reach out to necessary segments of the aviation community to answer specific requests from the FAA
- h) Membership may not exceed 35 voting members, unless approved by the FAA Administrator
- i) Ability to partner with other UAS stakeholders through substantive dialog and the capability to reach timely consensus on recommendations
- j) Appropriate expertise as reflected in the following areas of interest:
 - 1) UAS Manufacturers (all sizes)
 - 2) UAS Operators (all sizes)
 - 3) Drone Hardware Component Manufacturers
 - 4) Drone Software Application Manufacturers
 - 5) Traditional Manned Aviation Operators
 - 6) Airports and Airport Communities
 - 7) Labor (controllers, pilots)
 - 8) R&D, Academia
 - 9) Local Government
 - 10) Navigation, Communication and Surveillance and Air Traffic Management Capabilities Providers
 - 11) Other specific areas of interest as determined by the Administrator

Other stakeholders might be added later if appropriate. Non-voting members selected by the Administrator who may attend as observers and have access to the committee's online workspace managed by RTCA, will include:

- 1) Other Federal Agency personnel
- 2) Other FAA personnel

Ongoing Tasking – Development of Recommendations

DAC recommendations must:

- Inform the FAA of consensus industry positions on specific topics that will advance UAS integration into the NAS.
- Increase safety, security, system capacity, and efficiency
- Be consensus based and articulate required resources
- Define requirements for joint private/public partnership activities

As with any federal advisory committee, the FAA is not obligated to act on any of the DAC's recommendations. However, the FAA will issue written response for DAC recommendations within 60 days of receipt. FAA's response to DAC recommendations may result in the establishment of Aviation Rulemaking Committee(s) to address rulemaking requirements, the assignment of specific activities to Task Groups through the DAC, or other actions as approved by the FAA Administrator.

Considerations and Questions for the development of DAC recommendations

DAC recommendations should include the criteria or address the questions listed below:

- a) Must be actionable, with a specific stated recommended outcome or end state
- b) Must include an accurate and comprehensive characterization of the suggested capability or policy development; provisions for the "use of service" or "concept of operations"; and the FAA's role (e.g. provide service, qualify service providers, have a "hands off" approach)

- c) Are the operational concepts flexible enough to apply to a broad range of business applications?
- d) Will the recommendation inform the development of minimum performance standards?
- e) Will the recommendation impact safety, efficiency, manufacturing, or innovation?
- f) What are the interoperability concerns, among competing technologies and between industry automation and FAA automation?
- g) What is the duration or longevity of the proposed recommendation?
Whether additional rulemaking makes sense for the community

Operating Norms

- The charter for the DAC will be for a two-year term and may be extended or revised at the discretion of the FAA Administrator. If the Administrator elects not to renew the DAC charter at the end of the two year period, the DAC will terminate.
- The term of the DAC chair will be for two years; the chair may be invited by the FAA Administrator to serve multiple consecutive terms.
- DAC Committee members are appointed for two-year terms. Members may be invited by the FAA Administrator to serve multiple consecutive one-year terms after the initial two-year term. Members may also be removed from the DAC by agreement between the DAC Chair and FAA Administrator.
- The FAA DFO, DAC Chairman, and RTCA President will review DAC Committee membership yearly to ensure balanced representation that equitably represents, to the extent feasible, the UAS stakeholder community.
- Membership is based on the ability to represent the interests of an organization or constituency authoritatively and effectively.
- The DAC will be expected to meet schedule deadlines and members will be expected to work toward consensus to the greatest extent possible. The DAC will follow RTCA guidance for handling dissenting opinion(s). If consensus is not reached within the timeframe dictated for each product, the DAC shall document majority and dissenting recommendation(s) and deliver to the FAA UAS Board.
- The DAC will hold at least three plenary meetings per year (open to the public), as well non-public preparatory telecons to ensure continuity and good preparation for public meetings
- Task Groups meet as specified in their individual charters.
- As appropriate, Task Groups will reach out to individual experts and other outside groups to assist in developing UAS integration related recommendations

DAC Subcommittee (DACSC) Oversight

The Director of the FAA UAS Integration Office will oversee the DAC Subcommittee and will function as the liaison to the FAA lines of business that have key roles to play in the integration of UAS into the NAS.

Secretariat

- The FAA's UAS Integration Office will oversee the execution of DAC Secretariat functions
- RTCA will function as the Secretariat for the DAC and any Task Groups and will work with the FAA's UAS Integration Office and others within the FAA, including the DFO or the UAS Board, for scheduling meetings, assembling agenda(s), taking meeting minutes, keeping records on

costs, coordinating meeting logistics, and publishing of Federal Register Notices and meeting minutes.

- Proposed agenda items with approximate duration are to be submitted to Secretariat at least 30 days prior to the scheduled date of a meeting. The Secretariat, in consultation with the UAS Integration Office, the DAC Chair, and the DFO, shall refine the scheduled duration of the meeting and promulgate the meeting agenda to the Committee members.
- The Secretariat will also coordinate the writing and approval by both the FAA and the DAC Chair for any media releases or public statements.
- RTCA will maintain an online workspace to facilitate the consensus process of the committee. Content of the DAC workspace will include calendar, roster, documents created by the DAC, documents under review, background materials for meetings, meeting minutes among other things. Workspace will also be used to facilitate document review and commenting in the final stages of the consensus process.

Conduct of Meetings

- Advisory Committee members will receive all information needed to prepare for the meeting (e.g., Task Group progress reports; Task Group products and recommendations for Committee action) at least fifteen (15) calendar days prior to the meeting from the DAC Secretariat
- With the exception of routine administrative items, agenda items will generally be supported by written reports or formal briefing material as appropriate.
- In accordance with the Federal Advisory Committee Act, meeting summaries and related information will be available to the public via RTCA's website. Documents undergoing final review can be obtained by contacting RTCA. Members of the public may also submit comments on documents undergoing final review.

External Coordination: The DAC will consult with and consider the work of the following groups (at a minimum) to avoid overlaps and gaps:

- NASA UTM Program
- NASA "UAS in the NAS" Program (for validation and verification support as appropriate)
- Other FAA ARCs as appropriate or directed by the FAA
- Other RTCA Special Committees, e.g., SC-228
- Other Standards bodies tasked by the FAA
- Inter-agency SARP
- FAA UAS Test Sites
- FAA Pathfinder Program
- FAA Center of Excellence for UAS (COE UAS)
- UAS ExCom
- Other Task Groups or Teams established by the FAA
- Others as appropriate



Federal Aviation Administration

FAA Administrator Makes Two Major Drone Announcements

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Speaking today at the AUVSI annual conference in New Orleans, FAA Administrator Michael Huerta announced the agency is establishing a [broad-based advisory committee](#)

(http://www.faa.gov/uas/programs_partnerships/dac/) that will provide advice on key unmanned aircraft integration issues. He also announced plans to make it easier for [students to fly unmanned aircraft](#) (http://www.faa.gov/uas/resources/uas_regulations_policy/media/Interpretation-Educational-Use-of-UAS.pdf) (PDF) as part of their coursework.

Huerta said the drone advisory committee is an outgrowth of the successful stakeholder-based UAS registration task force and the MicroUAS aviation rulemaking committee.

Those panels were set up for a single purpose and for limited duration. In contrast, the drone advisory committee is intended to be a long-lasting group. It will help identify and prioritize integration challenges and improvements, and create broad support for an overall integration strategy.

"Input from stakeholders is critical to our ability to achieve that perfect balance between integration and safety," Huerta said. "We know that our policies and overall regulation of this segment of aviation will be more successful if we have the backing of a strong, diverse coalition."

Huerta said he has asked Intel CEO Brian Krzanich to chair the group.

Huerta also announced the FAA will start allowing students to operate UAS for educational and research purposes today.

As a result, schools and students will no longer need a Section 333 exemption or any other authorization to fly provided they follow the rules for model aircraft. Faculty will be able to use drones in connection with helping their students

“Schools and universities are incubators for tomorrow’s great ideas, and we think this is going to be a significant shot in the arm for innovation,” Huerta said.

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Federal Aviation Administration

Press Release – Drone Advisory Committee to Hold Inaugural Meeting

For Immediate Release

August 31, 2016

Contact: Laura Brown or Les Dorr/laura.j.brown@faa.gov, les.dorr@faa.gov

Phone: 202-267-3883

WASHINGTON – The newly established Drone Advisory Committee (DAC) will hold its inaugural meeting on September 16 as the Federal Aviation Administration (FAA) continues to build on its strong record of collaborating with the aviation community to safely integrate unmanned aircraft into the nation's airspace.

In May, FAA Administrator Michael Huerta asked Brian Krzanich, Chief Executive Officer of Intel Corp., to chair the advisory committee and to partner in the process of choosing members that represent a broad base of aviation users. Nearly 400 people and organizations expressed interest in becoming part of the committee.

After reviewing the expressions of interest, the FAA invited members to serve on the committee. These members represent a wide array of stakeholders, including unmanned aircraft manufacturers and operators, traditional manned aviation groups, labor organizations, radio and navigation equipment manufacturers, airport operators and state and local officials.

"Safety is a shared responsibility in which each of us plays a vital role," said Huerta. "We know from experience that the FAA's policies and overall regulation of small unmanned aircraft will be more successful if we involve a strong and diverse coalition."

"Drones will be one of the great computing platforms of the future. It's an honor to serve as the Chair of the Drone Advisory Committee. I look forward to promoting innovation in drone technology that will improve people's lives while spurring economic growth," said Krzanich.

The DAC was formed under the RTCA federal advisory committee and will meet at least three times a year. Members will discuss key issues and challenges associated with integrating unmanned aircraft in the world's busiest and most

complicated airspace system. The committee will conduct more detailed business through a subcommittee and various task groups that will help the FAA prioritize its activities, including the development of future regulations and policies.

The Drone Advisory Committee is modeled on the highly successful NextGen Advisory Committee, which regularly consults on the ongoing development of the NextGen Air Transportation System. NextGen is a multi-year, multi-billion dollar program to modernize the National Airspace System through the use of satellite-based navigation procedures and advanced computer and communications technology.

The FAA sent a notice to the Federal Register providing details about the first meeting of the newly established Drone Advisory Committee (DAC). The notice is expected to be published in the Federal Register this week. The membership of the DAC will be posted on the RTCA website at www.rtca.org

Drone Advisory Committee Meeting:

The inaugural Drone Advisory Committee Meeting will occur at 9:00 a.m. on Sept. 16 at the Center for Strategic and International Studies, 1616 Rhode Island Avenue, NW, Washington, DC, 20036.

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**DAC Meeting September 16, 2016 Meeting Minutes**

- Call to order
- Margaret Jenny, President of RTCA welcomed participants
- The Designated Federal Official (Victoria Wassmer) read the DFO statement
- FAA Administrator Michael Huerta delivered opening remarks
 - Mr. Huerta welcomed the members of the DAC to the meeting and thanked them for agreeing to serve on the committee. He stressed the need for a faster process for innovation to get into the NAS. The FAA has made great strides in integrating UAS through the UAV Registry and Part 107 rules release. The Drone Advisory Committee is modeled on the successful NextGen Advisory Committee and is expected to provide guidance to the FAA on what's important to the industry. The DAC has a mix of representatives to strengthen it and reflect the diversity of NAS users. Stating the DAC should create its own "to-do" list, he encouraged the committee to discuss the things that are most important to the industry as a whole.
- DAC Chairman Brian Krzanich delivered opening remarks for the committee
 - Over 400 applicants applied for the committee. The diversity of the selected members is a strength. The work the FAA has done to date to facilitate the integration of drones into the airspace must be recognized and the DAC work aligned with what came before: Registration ARC, Pilot Certification rules, Part 107 release, and the 333 Waivers. The next steps will help shape the UAS integration effort of the future. There will be quick wins, but the real work will be reaching consensus with such a diverse group of stakeholders. As Chair, he will ensure every voice is heard. That does not mean that everyone will get 100% of what they want, but that all members will have a chance to shape the recommendations to the FAA and so should also support what is recommended.
- The members then introduced themselves and the organization that they represent
- RTCA president Margaret Jenny then gave a brief overview for the Federal Advisory Committee Act (FACA) including:
 - Overview of RTCA & Federal Advisory Committees
 - FACA Guidelines & Principles
 - Consensus Process
 - Dissenting Opinion
 - Key Committee Positions
 - Terms of Reference: Charter for the Committee
 - Operating Norms
 - FAA Guidelines for Recommendations
 - FAA Response to DAC Recommendations



- Expectations of Committee Members
- Collaboration Workspace
- Chairman Krzanich then addressed his expectations for the members. The committee is a forum for ideas to be introduced and heard. Listen to comments from fellow members and act as a team. Consensus is the goal in all recommendations. The DAC is strictly an advisory committee. This first meeting will establish the goals of the committee
 - Hear what was done to date
 - Review the results of the DAC member survey
 - Set priorities for moving forward
- Mr. Marke “Hoot” Gibson of the FAA presented
 - The Objectives for the First Meeting
 - Develop a functioning team
 - Understand Federal Advisory Committee Act (FACA) rules
 - Review current UAS landscape
 - Discuss UAS activities in FAA Reauthorization
 - Review survey results and through discussion, drive toward focus areas for subcommittee work
 - Objectives for the First Year
 - Maintain working knowledge of FAA’s UAS integration strategy and its constraints
 - Advise the Administrator on gaps in the FAA UAS integration strategy & provide recommendations
 - Provide a consensus position on the FAA’s five-year UAS CONOPS and its priorities
 - Given FAA UAS integration plan advise on legislative strategy and priorities
- Mr. Earl Lawrence of the FAA presented the current landscape for drone integration, including:
 - Current Regulatory Environment
 - Growing Stakeholder Community
 - Unmanned vs. Manned Aircraft Registration
 - Part 107 Daily Recap – September 14
 - Remote Pilot Forecast
 - Small UAS (non-model) Fleet
 - UAS Strategic Priorities
 - FAA UAS Integration Strategy
 - Key 2016 and Key 2017-18 Milestones



- Consensus-Building is Key to Speed
- FAA Assistant Administrator of Policy, International Affairs & Environment Jennifer Solomon then delivered an address on the current FAA Reauthorization Act. Including:
 - Since the expiration of that law last year, the FAA has had three short term extensions. Most recently, on July 15th, the President signed the HYPERLINK "
 - ·And while the authorization is short, it's also packed with new requirements that the agency must complete on the compressed timeline. Roughly 20% of the law is devoted to new UAS policy.
 - ·These provisions were not developed in a vacuum. Some reflect the concerns and fears articulated in front page stories about drones near airports or UAS interfering with wildfire suppression, others seek to address very specific industry interests, and others stem from ideas over how the federal government should prepare for future growth in the industry.
 - ·When you hear the FAA speak about the importance of building consensus around priorities for drone integration, it's helpful to remember that the FAA is working with finite resources, and the budget is a zero sum game.
 - ·New taskings that do not come with new resources will draw directly from ongoing work, slowing or stopping progress in those areas.
 - ·It behooves all of us to work together to identify clear priorities, elevate the best solutions, and build broad consensus to support those objectives. That will enable the FAA to execute drone integration in the most effective manner possible.
 - ·Another key element of success for the FAA, or for any large, operational organization, is a stable and predictable environment. A focal concern with the most recent authorization is that it extends the FAA's authorities by less than 15 months, which does not provide the agency with the long term stability needed to effectively manage and implement our key initiatives.
 - Chief among the FAA's priorities is the passage of a long-term reauthorization that ensures stable and predictable funding. ·This overarching priority enables the FAA to move forward with other priorities. Not all of these will apply to each segment of the aviation community, but the FAA provides an airspace system to all users, and improvements in one area offer benefits to many.
 - Congress is very interested in the UAS question; Solomon reminded the committee that before the FAA can act on any direction from Congress, funding must be secured and allocated; Authorization extends out less than 15 months which gives little ability to set long term goals. Nearly 20% of the Reauthorization wording is devoted to UAS. Her final message was that the best way to move the needle on UAS integration is through the DAC venue, and not through legislative direction.
- RTCA Vice President and DAC Secretary Al Secen then presented a summary and analysis of the results of the DAC Survey that members completed prior to the meeting. The survey was created to gain insight into members' priorities, sensitivities, and organizational goals. The



survey asked members to weigh in on Top Priority Issues the DAC should tackle. A summary of their input follows:

- There is near consensus on perceived public concerns; FAA strategic plan alignment and top technological concerns for industry
- Consensus is yet to be reached on: Pace of integration efforts; Focus of priorities going forward; Top three issues facing UASs in the airspace
- Access to airspace is a priority;
- Safety is essential and must be addressed;
- Drone applications are many and diverse;
- Operational priorities include low altitude BVLOS, VLOS;
- The most pressing public perception issues are: safety and privacy;
- DAC members raised a broad array of regulatory concerns, with safety assurance high;
- In the technology arena: collision avoidance ranked #1;
- Most members are seeking access in 6 months to one year;
- The pace of integration is between appropriate and too slow

The committee members discussed what they should tackle with respect to certification, and agreed it included Certification; BVLOS Conops; Performance Standards; Software/Hardware; Autonomous Operations. Ms. Jenny also reiterated the FAA and DAC Chairman's belief that they should quickly establish DAC Subcommittee staffed with a representative from each DAC member along with additional member organizations from pool of DAC applicants and others as appropriate to address high priority issues. The first meeting should be scheduled prior to the end of October. Ms. Jenny provided an example of a similar advisory committee, the NextGen Advisory Committee, and how its subcommittee operates. It was suggested that the first task for the DAC Subcommittee would be to prioritize the remaining list of issues for the DAC to take on.

- The committee then discussed the survey results. Key points of the dialogue are captured below:
 - Safety is very important and the privacy of the public must be maintained
 - Basic guidelines for UAS use are needed because there are no clear guidelines for what can fly and how
 - Pathfinders are nimbler and of greater value to the UAS community than large efforts or contracts
 - Initiatives on specific outcomes need to be addressed: challenges abound; research efforts not regulatory efforts are needed
 - The DAC need to think like futurists: autonomy and UAS will intersect earlier than later. There needs to be a social science view to integration
 - Safety and trust are mutually agreed upon by all members: the public wants these two aspects to be front-and-center to any integration effort
 - There needs to exist a list of questions that, when answered, will indicate if a UAS design or operator is ready to integrate into NAS. A checklist of items that can be answered



Yes/No, or short answer that will give a clear indication to operators/manufacturers of whether they are cleared to fly

- Many UAS users are not educating themselves to be good citizen UAS operators; More education is required
 - Safety and cybersecurity are tightly bound in the airspace integration problem space
 - Public perception is evolving; aviation is an enviably safe industry, but is very cautious. Those two attributes are linked; Quick and innovative necessarily clashes with safety culture. We must determine what the country wants
 - How will the public be engaged in this discussion? The whole scope of UAS must be addressed and, if the DAC finds it necessary, may engage the public in some way yet to be determined.
 - There is concern among the innovators that the FAA will be too conservative and restrictive
 - The issue of pre-emption was introduced: the FAA has the authority to control the airspace; the public reasonably expects peace and privacy: UAS conflict with that; Local officials representing constituents shared that people want a clear Federal pre-emption process to allow localities to set UAS rules – this needs to be answered
 - The survey provides insight but is not exhaustive or scientific, and so additional work must be done to identify the top priorities for the DAC
- The committee broke for lunch at 12:00
 - Upon return from lunch, the committee began the discussion to identify issues with the direction that they not SOLVE the issues, simply identify them. Discussion areas included:
 - Certification
 - Certification means different things to different people and can cover many areas. The DAC members listed the following as pertinent to drones and therefore areas the DAC should consider. Beyond Visual Line of Sight; Performance Standards; Software/Hardware issues; Federal Pre-emption; Privacy; Cybersecurity; and autonomous operations
 - The DAC is not limited by size or class of UAS in its discussions
 - Collaborative versus non collaborative UAS have to be addressed, perhaps developing specific Detect and Avoid scenarios
 - A regulatory framework that is easy to navigate would be beneficial
 - Roles and responsibilities of the various players in the UAS industry and NAS must be discussed
 - An “appropriate level of safety” must be defined, risk averse versus risk tolerance
 - Don’t ignore software issues as it’s a significant component of UAS and the ground control
 - Should system safety requirements be commensurate with the size of the aircraft?



- What are the relative roles of certification and minimum operational performance standards (MOPS)? Could MOPS help with certification?
- Lost link procedures have to be taken into account by any safety assessment
- Reuse existing frameworks as much as possible
 - It is felt that reusing manned aircraft certification frameworks would be onerous to UAS
 - There needs to be a tailoring mechanism for the size and capabilities of the UAS – Global companies build UAS, so there needs to be global harmonization
 - The existing framework “buckets” are valid – we just need to tailor them
 - A safety certification philosophy, not prescription, will allow innovation to prevail
- We should consider the need not only for minimum performance standards, but also more prescriptive interoperability standards where necessary to ensure that many drones can operate at the same time in shared airspace.
- Privacy Pre-Emption
 - The committee discussed the privacy issues and the question of who has jurisdiction over them
 - It was noted that the FAA only regulates for safety – not the use of the vehicle
 - Many members felt that the DAC should try to provide some clarity to prevent future problems regarding roles and responsibilities with respect to privacy
 - There are over 280 State bills affecting UAS – chaos results when too many local laws are enacted – a strong federal role is needed
 - There is a strong need to work with local and state government and outreach to educate and inform
 - There needs to be a national guideline created that local government can use to set policy
 - Where do federal agencies enter into the effort when an airport is forced to investigate a UAS sighting in their airspace?
 - Helicopters operate in airspace that is similar in nature to UAS operations. They often must deal with local laws and governments – the helicopter industry understands and supports federal oversight of the rules
 - Can technology be used to answer the question? Blackout maps and geo-fencing?
 - Data gathering by UASS are of great public concern
 - If necessary, the DAC will need to interface with the proper federal agency in this space, explain our role and concerns and let them take the lead
 - The DAC should review the output of NTIA as a starter for any work in this area.



- Beyond Visual Line of Sight (BVLOS). The DAC discussed the desire to move from Visual Line of Sight (VLOS) to BVLOS. Numerous questions were posed that the DAC felt need to be answers, including:
 - How will BVLOS be prioritized in the NAS?
 - What are the operations going to look like? Segmented airspace? How will efficiency of Passenger and Cargo flights be measured against UASS? There has to be a hierarchy of priorities
 - Can/should we develop a set of operations concept to drive any standards?
 - It was suggested that regulations should be tied to Tiers of risks of applications and operations and the ops concepts should document the level of risk.
 - The communications links required to maintain control of the UAS will have to be encrypted
- Several members offered additional direction to the subsequent task groups that will be established to address the top two priorities:
 - Certification and access to the airspace: is there a short list of to-do's (a recipe) that can be put together that make it clear to a potential operator what he/she has to do to gain access without a waiver?
 - Must address how do we (FAA and industry) will pay for it?
 - There should be a list of questions for operators: if they answer YES to all, they can fly
 - Develop minimum standards (performance and more proscriptive as necessary for interoperability) to have UASs interoperate and avoid conflicts
 - Determine how this will scale to bigger aircraft and higher density or more complex airspace
 - Need to be mindful of resources required to address reauthorization-related directions to the FAA and what resources are needed to implement DAC recommendations
- Action Items:
 1. Establish a standing DAC Subcommittee (DACSC) to include a representative from each DAC-member organization and additional members from among those who applied for the DAC as well as other stakeholders and expertise needed for the DACSC to accomplish its mission. Task the DACSC to establish a ranked set of priorities among the remaining drone integration issues the DAC identified at its inaugural meeting
 2. Draft a task statement to define: "What Will it Take to Gaining Access for Drone Operations?" –
 3. **Establish a task group** to develop a minimum set of requirements, a recipe, that operators can follow to gain access to airspace for a specific set of



operations/applications. As a part of this task, the WG should establish a tiered grouping of operations/applications from low to high risk and make a set of recommendations for the lower tiers. We will incorporate all the inputs that we captured from the discussion among the DAC members during the meeting. Note that the FAA plans to provide briefings and educational materials to the TG at its onset to ensure the members are aware of completed and ongoing work relevant to the task.

4. Draft a task statement to define: Pre-Emption and Privacy: Roles and Responsibilities –
 5. **Establish a WG** to describe the privacy concerns, and to identify the respective roles and responsibilities for dealing with privacy concerns across local, state, regional and federal entities. Make recommendations regarding pre-emption. Note that the FAA plans to provide briefings and educational materials to the TG at its onset to ensure the members are aware of completed and ongoing work relevant to the task.
- FAA Assistant Administrator of Communications Lisa Jones provided a recap of the key messages, including:
 - The energy around the room today has been very positive. By coming together as the Drone Advisory committee with industry and other stakeholders and the FAA, the DAC can find consensus and speak as one voice.
 - Given the changing nature of public opinion on our integration activities, it is important to get public insights and feedback. Everyone here today has agreed that safety is paramount, but the trust of the public is also important.
 - The Administrator has asked the DAC to begin to develop a To Do list. Although the list is long, it will help us begin to prioritize the next steps.
 - It was clear that this group of individuals are committed to coming together to work through issues and are not reluctant to openly discuss their points of view. We expect to hear different opinions but we know that this group has the energy and commitment to find consensus to help move us forward.
 - The Next Meeting is tentatively planned for January 4, 2017 location TBD
 - Following meetings tentatively planned for June 2017 and October 2017
 - RTCA will set dates for 2017 DAC meetings within next couple weeks
 - Meeting adjourned by the chairman at 4:00 PM



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RTCA Paper Number: 046-17/DAC-005

Drone Advisory Committee (DAC) Meeting Minutes January 31, 2017 – University of Nevada at Reno

List of Attachments:

- Attachment 1 – Attendees
- Attachment 2 – FAA Update Slides
- Attachment 3 – Task Group 1 (Roles and Responsibilities) Tasking Statement Presentation Slides
- Attachment 4 – Task Group 2 (Access to Airspace) Tasking Statement Presentation Slides
- Attachment 5 – Written statement from the Honorable Ed Lee, Mayor of San Francisco, CA
- Attachment 6 – Task Group 3 (UAS Funding) Tasking Statement Presentation
- Attachment 7 – FAA DFO Remarks

Opening Remarks:

The second meeting of the DAC was called to order at 9:00 AM on January 31, 2017, in Reno by Chairman Brian Krzanich of Intel, who thanked the FAA for creating the forum. Mr. Krzanich stated that Federal Aviation Administration (FAA) Administrator Michael Huerta was unable to attend and sends his regrets. He thanked FAA leaders Earl Lawrence, Hoot Gibson, Lynn Ray, and others for their support and dedication to this initiative. He also thanked the hosts: Reno Airport Authority (DAC member, Marily Mora) and University of Nevada, and welcomed new DAC member, James Burgess of [X]. He recognized the DAC Subcommittee (DACSC) Co-Chairs Bryan Quigley and Nancy Egan for leading the creation of the Task Groups (TG) 1 and 2 and thanked the leads (Brendan Schulman of DJI and Dr. John Eagerton of the Alabama DoT - TG1; Rob Hughes of Northrop Grumman Corporation and Sean Cassidy of Amazon Prime Air – TG2). He then introduced the TG3 leads (Mark Aitken of AUVSI and Howard Kass of American Airlines). He called for the session to be interactive - asking the members to be active in the conversation.

Designated Federal Official (DFO) Statement

The DFO statement was read by Victoria Wassmer, Acting Deputy Administrator of the FAA at 9:06 AM.

Approval of Minutes

The minutes of the previous meeting were unanimously approved as distributed.



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FAA Update

Presenters: Ms. Victoria Wassmer, FAA Acting Deputy Administrator, Mr. Earl Lawrence, Director, Unmanned Aircraft Systems (UAS) Integration Office; Hoot Gibson, Senior Advisor, UAS

- Victoria Wassmer provided opening remarks. Her remarks included an update on FAA and transition activities as well as the FAA budget and reauthorization. She discussed the FAA record of achievement on unmanned aircraft to date and upcoming work on drones, including operations over people. She stressed the importance of the DAC to build consensus around our work and the DAC's opportunity to shape the future of unmanned aircraft in America. She mentioned the work done since the September DAC meeting has provided a framework for future discussions. She then introduced the Task Group working with Roles and Responsibilities, the Task Group working Access to Airspace, and Task Group that will be working Funding.
- Earl Lawrence provided an update on the UAS Integration efforts.
- Mr. Lawrence discussed the management of stakeholder engagement, the Unmanned Aircraft Safety Team education and registration statistics, part 107 webinars, air traffic facility maps and the pending certification basis.
- Mr. Gibson provided a discussion of the UAS ExCom, airport detection, and DAC Meeting objectives as introduced at the first DAC Meeting.
- Victoria Wassmer's remarks and the FAA presentations are attached to this summary.

DACSC Co-Chair Overview of Work and Task Statements

Presenters: Bryan Quigley, DACSC Co-Chair, and Chief Pilot, United Airlines; and Nancy Egan, DACSC Co-Chair, Advisor to CEO, 3D Robotics

Summary

- Mr. Quigley and Ms. Egan introduced themselves and discussed the purpose and scope of the DACSC.
- Co-Chair Quigley introduced the member organizations and the leadership of the DACSC. He explained the accomplishments of the DACSC and summary of the activities of the DACSC. He then explained the DAC starting point and how the TGs were formed from the survey results of the first DAC.
- Co-Chair Quigley asked Mr. Gibson to address "interdiction" and how it maps to the FAA core competencies. Mr. Gibson reported that the FAA is in aviation safety business, not counter



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measures against drones, but and is joining forces with other agencies to address the issue. FAA has a role in identification and tracking of UAS but not necessarily in interdiction.

- Co-Chair Egan explained how risk-based paradigm informed the recommendations to keep the DACSC products relevant and timely. Co-Chair Egan indicated that the DACSC is breaking the work into incremental pieces - they don't want to jump too far ahead or be too far behind. The team is using the evolutionary construct to keep recommendations relevant and timely.

Report out of DACSC TG1 (Roles and Responsibilities)

Presenters: Brendan Shulman, TG1 Co-Chair, and Vice President of Policy & Legal Affairs; John Eagerton, TG1 Co-Chair, and Chief, Aeronautics Bureau Alabama Department of Transportation.

Summary

Brendan Schulman and Dr. John Eagerton provided a brief of the TG1 recommendations

- The Co-Chairs introduced themselves and the members of TG1 and discussed the purpose of the TG.
- Co-Chair Schulman discussed the approach that the TG took to complete its work, including the research they conducted.
- Co-Chair Eagerton discussed the TG1 findings that came out of the research efforts. He also discussed the draft tasking statement deliverable of the TG.
- Co-Chair Schulman and Eagerton alternately provided a summary of the draft task statement recommendations in low altitude UAS navigable airspace; relative roles and responsibilities of Federal, state, local governments; enforcement; education; technological tools and solutions; and local government operational issues.
- Co-Chair Schulman presented the expected activities in the near-term, intermediate-term, long-term, and interim time frames.

Discussion of Recommendations TG1

- Comment: For material to be ready for a May DAC Meeting, material must be ready by the end of March.

Response: TG1 accepts the challenge to get it all ready by March.

- Question: Co-Chairs asked whether the DAC could meet more frequently than three times a year.
- Response: This is not likely to happen. Dates are set for 2017.
- Question: Is there an opportunity to create a survey for state and local governments to gather input on what they see as their high-priority challenges?



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- Response: This will be put on the agenda for the next TG1 meeting.
- Question: Does a DAC-sponsored poll require approval by the DAC?
- Response: No. RTCA will assist in developing a public poll.
- Question: We don't have a clear understanding of the state and local governments' real concern or interests; their number one concern. We need to prioritize first, then address high priority topics. (e.g., FAA – centralized operations, request for waivers. Who do I need to inform (local police?) to get an operations approved from FAA in Washington, DC? A gap exists between FAA and state and local governments. We want to see more information/data on the priorities state and local governments want us to address.
- Response: Important questions raised – more work is required to answer this. The result of a closer look at these questions and the results of the survey could become a report out at the next DAC meeting.
- Question: There is concern with the volume of current and potential legislation for UAS - what will prevent the legislation from morphing into laws that affect manned aircraft? What is the FAA's view of this situation where municipalities are creating rules that affect navigable airspace?
- Response (from FAA) - Many good questions are being raised. We have a system that works today.
- Comment: Recommendations can be written to apply only to unmanned aircraft. No presupposition of changes in roles, but the recommendations should be written to only apply to unmanned vehicles.
- Response: The FAA has issued a legal fact sheet that provides regional contacts when questions arise. FAA will make that fact sheet available to RTCA to post on the DAC and DACSC Workspace website.
- Comment: A member expressed the need to define a set of high level tenets to which all on the DAC could agree and that could serve as guidance to the work of the TGs. For example, there is a need to look at impact of UAS in the airspace, and ask if there is an overall net positive. For example, a car driving to pick up or deliver a package is louder than a drone. Drones that inspect roofs are safer than a person climbing on one. Can you identify these tradeoffs? A list of tenets would enable us to address some ethical questions.
- Response: It was agreed that the DACSC would develop a set of tenets to bring back to the next DAC meeting. Gur Kimchi of Amazon Prime Air, will develop an initial set as input to this process. Others on the DAC agreed to provide inputs as well.
- Question: One of the recommendations was for a public statement - Is a motion required for that to take place?
- Response: Yes. We will have a discussion of the content of that potential message as part of "other business" later in the agenda.
- It was mentioned that the FAA had already released a public statement about the DAC. It was requested that RTCA make that statement available to the DAC members.



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- **ACTION:** Make the FAA press release available to the DAC members – RTCA to post that today.
- Question: The issues of counter-measures were not mentioned in the slides - why?
- Response (from FAA): Review of the Task Statement (page 7) **Counter measures and other Active Responses.** The FAA does not want this issue addressed by the DAC. The FAA is working with other agencies to determine the most appropriate way forward, including how to engage industry. Mr. Gibson indicated that counter-UAS includes all spectrums of risk: 1) detection, 2) tracking, 3) identification, and 4) mitigation (kinetic or non-kinetic) and he reiterated that the FAA is not involved in interdiction. Going forward, the FAA will provide updates to the DAC from the ExCom.
- **ACTION:** It was agreed that the reference to counter-UAS should be deleted from the draft tasking statement for TG1.
- Question (audience member): How will the DAC handle risk?
- Response: The FAA indicated that for counter-UAS there is a full spectrum of risk from detection, to tracking, identification and mitigation (kinetic and non-kinetic). The FAA will not address the mitigation aspects.
- **CONSENSUS:** The Chairman asked for a motion to approve the tasking statement with the language deleted (and other caveats). The motioned carried. RTCA will include the modified tasking statement in a formal response to the FAA from this meeting.
- A statement from Mayor Lee from San Francisco was read by the director of San Francisco Airport. The statement encouraged input from local governments in structuring an Unmanned Traffic Management System. The statement is attached.

Report out of DACSC TG2 (Access to Airspace)

Presenter: Rob Hughes, Co-Chair, TG2, and Senior Policy Advisor, Office of Independent Airworthiness, Northrop Grumman Aerospace Systems

Co-Chair Hughes presented the purpose of the TG, a listing of the member organizations, the approach that was taken in development of the material presented, a high-level calendar of deliverables and resources (Co-Chair Sean Cassidy, Amazon Prime Air, was unable to attend the meeting). The presentation is attached.

Co-Chair Hughes discussed the areas of recommendations the TG will provide, which include: 1) Roles and responsibilities, 2) Expedited UAS airworthiness and operations approvals for near-term (within 24 months) UAS missions, 3) Expedited minimum essential aircraft equipment, 4) Public/private infrastructure needs and operational requirements beyond those currently permitted under 14 CFR parts 101/107 to include information flow and interoperability considerations, and 5) Use of spectrum for command and non-payload communications.



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Discussion of Recommendations TG2

- Question: Is the TG ready to achieve a very aggressive schedule to deliver by the end of March?
- Response: Yes.
- Question: How is the TG going to work out the integration of small/large at the same time?
- Response: The FAA has a roadmap of integration based on a functional approach. FAA does not look at altitude to decide rules. It is the function (and associated risk) of the vehicle that drives level of oversight for certification.
- Question: With regards to levels of service, is there an effort to allow early wins using a risk-based approach that will allow predicted levels of safety to be validated?
- Question: Can the timescale be shortened?
- Question: How does scalability work when introducing it into the real-world, and can small unmanned aerial vehicle (UAV) rules be scaled to the larger UAVs? The 24 month timeframe was picked to allow that analysis.
- Response: FAA is not slowing the authorization of operations (BNSF, CNN, etc.) to accommodate the DAC.
- Question: What data can BNSF provide to make your job easier?
- Response: The Co-Chairs indicated that they could not currently answer this question. Work needs to be done to: 1) determine how to reach-out to industry, 2) identify and resolves issues with data collection and analysis, and 3) determine whether we can use collected data for to predict issues.
- Question from the Chairman: Do you have the right members on your team?
- Response: Yes, but there is always room for more subject matter experts and observers, and we will reach out for them as needed.
- Response from FAA: The FAA set up three webinars to educate the members on Pathfinder Programs, and we plan to do more.
- Comment: The slides say expedited processes (24 months), but near-term should be shorter than 24 months. Are waivers only granted for companies that have Pathfinder programs? If Pathfinders are needed to get a waiver, we need to be clear about that. The minimum-viable products process could be dramatically improved by the FAA. The waiver process needs improvement and that could and should be done in the near-term, meaning 3 or 6 months.
- Question: Is there a thought to have a communication plan from TG2?
- Response: That's a question left up to the DAC.
- Question: Is there a commitment to get a piece of spectrum allocated to the UAS?



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- Response: International Telecommunications Union (ITU) decided this already. Is there other spectrum available that can be used?
- Question: Can other spectrum be repurposed? Is TG2 looking broadly at this issue?
- Response: The TG is narrowly focused.
- Response from the Chairman: The DAC would like shorter term wins - less than 6 or 12 months.
- Comment: Alternative spectrum discussion should be incorporated (performance and robustness requirements).
- Comment: If spectrum is added by default, it will limit autonomous operations in the future.
- Question: What are the communication requirements and methods needed to accomplish this?
- Comment: This spectrum could be a foundational piece that allows the progression from initial to full integration. It can be considered an enabler. We should refer to it as the broader term, communication, so we do not limit flexibility of solutions.
- Comment: Electromagnetic spectrum is a resource that is stressed; National Telecommunications and Information Administration process should be included.
- Comment: Spectrum issues already decided at the 2012 and 2015 World Radio-Communications Conference. We might need to look at how to repurpose spectrum.
- **ACTION:** Change "use of spectrum" to "methods of communications" in item 4 of the tasking statement.
- Question from the Chairman: How do we find early wins for quick adoption?
- **ACTION:** Change "aircraft" to "UAS" in item 1.
- **CONSENSUS:** The Chairman asked for a motion to approve the tasking statement with the language modified (and other caveats). The motioned carried. RTCA will include the revised tasking statement in a formal response to FAA from this meeting.

Presentation of DACSC TG3 Task Statement (Funding)

Presented: Nan Shellabarger, Executive Director of FAA Policy and Plans

Ms. Shellabarger presented the draft TG3 Tasking Statement. Ms. Shellabarger explained that this is a more traditional way of providing tasking to a Federal advisory committee like the DAC. After receiving DAC feedback on the draft TG3 Tasking Statement, the FAA will finalize and approve the tasking statement and forward it to the DAC to execute. Ms. Shellabarger then explained the task details, the FAA funding structure, and offered the DAC items to think about before discussing the tasking statement. She highlighted the questions that will be asked of TG3:

- How much, for what, in what time frame?
- Who should pay for what?



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- What kinds of mechanisms can be implemented?
- Do these set up incentives, or create unintended consequences?
- Can we reach consensus?

Task Refinement and Discussion

- Question: How do we establish funding so the FAA's UAS work does not impact certification and oversight of manned aviation?
- Comment: One member warned that the term "user fees" will result in resistance from some and should be avoided.
- Response: Ms. Shellabarger explained that the government has definitions of "taxes" and "fees". Fees are levied on a specific set of users who will receive a benefit. Taxes require legislation. Typically, the FAA's annual appropriation bill carries a prohibition on new user fees.
- Question: What part of the FAA's overhead is getting "costed" to the UAS effort. It would be helpful to see that. How do we amortize development costs over time (e.g. with NextGen), and how can we learn from those models in this space?
- Response: Government does not do accrual accounting - planning for this is being laid out for future years. FAA does not have an approved 2017 budget and is currently operating on 2016 budget. The FAA is preparing now for 2018 and 2019, but government disruptions, such as sequestration, can impact the FAA's budget and programs.
- Question: Should a tenet be that the FAA should allow industry to build as much as possible of the new capabilities, such as Unmanned Traffic Management? The FAA does not have to do everything. We can federate.
- Comment: How funding was done in the past may not be applicable to how it is done in the future.
- Comment: We need to establish a logical model of what the FAA should fund and how.
- Comment: The government does not run internet or cell networks; industry should figure this out. There is much that industry can do that FAA does not have to own.
- Comment: It might be hard for this industry to do because the industry is figuring it out too. They must do this holistically and not just concentrate on commercial drones. Consumer drones are being used for commercial purposes. We should avoid segmentation of the industry.
- Question: Can the FAA shed more light on the schedule of the task, and when they need responses from the DAC?
- Response: The FAA wants information to inform the debate on any discussion on FAA funding and structure.
- Question: Are we relying on FAA to implement these, or industry stakeholders as well?



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- Question from the Chairman: Can this be broken into a couple of pieces? Is the real scope that, we need a system that gets funded using a mechanism that this industry will support, and you want TG3 to assist in defining that? If so, the description needs to be made simpler for the TG to work.
- Question: Why would the budget for drones be even close to the one for NextGen? Can't industry do some of this?
- Response from Ms. Shellabarger: This is why we posed the first question the way we did. It takes a lot of FAA resources to implement rules (e.g. part 107). Even UTM must integrate with, and talk to, FAA systems. That costs money.
- Question: Are you looking to define a 5th fund separate from the others?
- Response: It will be integrated into the existing structure.
- Question: Do we know what the costs are fundamentally? The cost for NextGen was much better defined, and there is much to be learned from these past efforts. Do we even have a handle on what the costs are going to be? Isn't that the question we should be asking?
- Response: We need to know the system to be implemented as well as the costs. It may be too much to ask at this point.
- Comment: This group may be "out of its element" in answering this task. There is a level of work that must be done before we take this on. A Member countered that the timeline is crucial to influencing upcoming FAA reauthorization, and needs to be discussed in this forum. Congress is already talking about new entrants, and the DAC is here and the best forum to weigh in.
- Question: Why does FAA need our input by May?
- Response: A timeline is crucial for upcoming legislation. This work will inform the FAA authorization in September 2017. We are not looking for specific amounts of funding needed by May, but rather what kinds of things to work on and what is not worth working on.
- Comment: The DAC needs to understand what it actually costs the FAA to do a proper job of this tasking.
- Comment: One member pointed out that we know how the airlines pay for services.
- Comment: This is coming one way or the other. If this body wants input in shaping it, we should start looking at the issue.
- Comment: We need to get started on it because the reauthorization cycle is coming. We should be cautious about burdening the user. We need to know how much needs to be raised and how much can be raised with commercial operators.
- Comment: There are unknowns, but there are many resources on the committee and we should at least try to answer the FAA. The FAA can be used to gather information. The timeframe is a concern; the May meeting may be too early - perhaps put in another meeting between May and October and dedicate it to this issue.
- **ACTION:** Virtual meeting on just this topic is allowed. RTCA will plan that.



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February 8, 2017

RTCA Paper Number: 046-17/DAC-005

- Comment from the Chairman: The Chairman summarized that the DAC needs to look at what it costs, and look at sources for funding. We should look at what industry could take over to unburden the FAA. This might be a separate TG, to make the task of TG3 simpler. Specifically, the Chairman summarized the following:
 1. 24-month timeframe: 1) what resources are needed? 2) what can industry do instead of the FAA? and 3) what fees would be needed to get that money? (only for the next 24 months);
 2. Schedule a virtual meeting in August, only on this topic;
 3. Have TG3 finish points 1 and 2, and start to work on structuring; this not burdened by the current methods; and
 4. Work with the FAA to make modifications to the TG3 tasking statement.
- The DAC approved the DACSC to go through the process of creating TG3.
- Action: Add SC-228 briefing to the DAC agenda for May (obtain related materials presented to Subcommittee and then post on the DAC Workspace website).

Public Statement Discussion

The Chairman led a discussion on whether the DAC should issue its own press release regarding the work on roles and responsibilities of TG1, to inform state and local entities that this work is going on to slow the pace of local legislation regarding drones. The DAC discussed alternative approaches to communications including: 1) an FAA public statement, 2) an RTCA public statement, 3) posting on the RTCA website, or 4) TG1 to issue a public statement. A member asked other members if they would support a DAC-originated public statement. FAA statements must go through a time-consuming vetting process. The DAC could release a consensus statement, but needs to be clear that it is an advisory committee and it is up to the FAA how it acts on the DAC's advice.

CONSENSUS: After the discussion, the Chairman summarized the following:

- The DAC will not issue its own public statement;
- The FAA should publish statements (e.g., press releases or "News and Updates");
- Per its normal process of operating as a Federal advisory committee, RTCA will post summaries of the DAC meetings on its website;
- DAC members can spread the FAA press releases or "News and Updates" amongst their respective communities; and
- National Association of Counties will ensure anything that was discussed at the DAC meeting will be forwarded to the communities.

New Business

No new business introduced.



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Date for Next Meeting

- The next (fourth) meeting of the DAC will be in Washington, DC on May 3, 2017, followed by a fifth DAC meeting on November 8, 2017, location TBD.
- The DAC will add a virtual meeting July 21st to discuss TG3 interim recommendations.



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Action Items:

Action	Responsible Party	Schedule	Status
RTCA will assist in developing a public poll to assist TG1 in determining the State and Local government concerns and priorities	RTCA		
Post the FAA legal fact sheet that provides regional contacts	RTCA		Complete
Post the FAA press release to DAC members	RTCA		Complete
Remove references to Counter-UAS from TG1 tasking	RTCA		Complete
Develop set of basic tenets with input from Gur Kimchi, Amazon Prime Air	DACSC	May DAC	
Change "use of spectrum" to "methods of communications" in Item 4 of TG2 recommendations	RTCA		Complete
Change the word "aircraft" to "UAS" in item 1 of TG2 recommendations	RTCA		Complete
TG3 – work for this TG will include short-term and longer-term work; near term work would include determining the timeframe and determine resources that are needed, what industry can do instead of the FAA, and what fees would be needed to get that funding	TG3		
RTCA schedule virtual meeting in July only on the topic of TG3	RTCA		
FAA to make modifications to TG3 and send to RTCA to share with DAC	FAA	Week of Feb 6	
Once RTCA has received tasking letter from FAA, develop and send ballot to DACSC to	RTCA	Week of Feb 6	



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Action	Responsible Party	Schedule	Status
solicit interest in serving on TG3; Begin the process selecting TG3 after the poll closes			
Add SC-228 briefing to DAC on the agenda for May (get materials presented to Subcommittee onto DAC workspace)	RTCA		Complete
DAC direction on public statements is that FAA should publish; RTCA will post to the RTCA website; DAC members can spread the release amongst the communities	All		RTCA posted high-level summary on website - 2/4/17

Adjournment:

In closing remarks, Ms. Wassmer, FAA DFO, thanked the University of Nevada, the Reno Airport Authority, and Ms. Mora for hosting the event. She thanked the members for their time and involvement in the meeting. She summarized the meeting events surrounding the Task Group 1 approval of the tasking statement and Task Group 2 task statement. She noted the work associated with creating the Task Group 3 task statement and thanked the committee for their deliberations. She continued that this was her first trip to Reno, and the natural beauty and the welcome the DAC received made everyone feel like honored guests, which contributed to the success of the meeting.

Chairman Krzanich echoed those sentiments and at 3:30 PM, adjourned the meeting. The next general meeting will be at 9:00 AM on May 3rd, 2017 in Washington, DC.

Minutes submitted by - Al Secen
Vice President Aviation Technology and Standards
Secretary of the Drone Advisory Committee



TERMS OF REFERENCE

Drone Advisory Committee Subcommittee (DACSC)

Subcommittee Leadership:

Position	Name	Organization	Telephone	Email
Co-Chair	Nancy Eagan	3D Robotics	(408) 628-3593	nancy@3drobotics.com
Co-Chair	Bryan Quigley	United	(571) 606-1723	bryan.quigley@united.com
Secretary	Al Secen	RTCA	(202) 330-0647	asecen@rtca.org

Background

Unmanned Aircraft Systems (UAS) offer the United States the opportunity to lead a completely new and expanded vision of aviation. The FAA seeks to establish a venue and process to enable stakeholders to advise the FAA on the needs of these new and expanding users of the National Airspace System (NAS) while identifying the strategic regulatory priorities and structure that simultaneously promote innovation, safety, efficiency and rapid integration of UAS into the NAS.

The best mechanism to leverage all the resources, expertise and energy to achieve the FAA and industry's goals of safe and timely integration of all categories of UAS into the airspace, is through an open, transparent venue of a federal advisory committee (FAC). As with all FACs, the Drone Advisory Committee (DAC) will be designed to: ensure transparency, include broad and balanced representation across the industry, encourage innovation and remain consistent with US anti-trust laws.

The DAC Subcommittee (DACSC) will support the DAC in carrying out its task as defined in this Terms of Reference.

Purpose and Scope

The purpose of establishing a subcommittee of the DAC is to support the DAC in developing consensus-based recommendations to the FAA on issues related to the integration of UAS into the nation's airspace. The DACSC will be representative of the DAC membership (defined below) along with any other expertise that is deemed necessary to carry out its tasks.

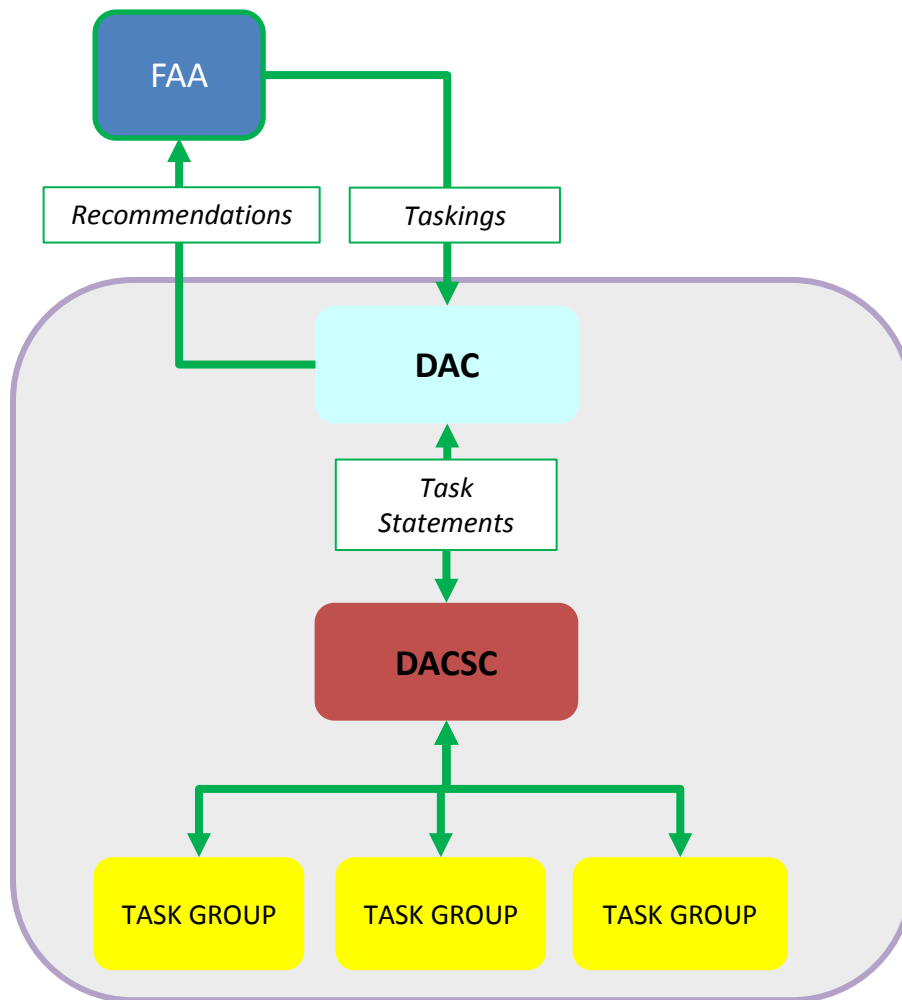
Specifically, the DACSC supports the DAC by providing a group of experts on UAS operations, applications, regulations, certification, performance, technical standards, and NAS operations, as well as the perspective of those affected by UAS operations. In essence, the DACSC will provide the staff work for the DAC, applying knowledge and expertise to forge consensus on critical issues and providing input to the DAC for public deliberation and the development of recommendations to be forwarded to the FAA.

The DACSC will provide guidance and oversight for the Task Groups (TGs), which will be shorter-lived groups established to forge consensus-based recommendations in response to specific taskings handed down from the DAC and disbanded upon completion of their work.

Committee Structure

The DACSC will report to the DAC and will provide guidance and oversight to the DAC Task Groups.

Figure 1: DAC Committee Structure and Work Flow



Responsibilities

- **Drone Advisory Committee (DAC)**
 - Overall direction of Committee
 - Develop, review, and approve recommendations to FAA
 - Field requests from FAA
 - Review and approve creation of Task Groups, as appropriate
 - Meet three times per year in Plenary (open to public)
 - Direct tasking of DACSC
- **DAC Subcommittee (DACSC)**
 - Staff to DAC
 - Guide and review selected work of Task Groups, develop draft recommendations, and present findings to DAC
 - Meet bi-monthly or as needed (generally not open to public)
 - Forward recommendations and other deliverables to DAC for consideration
- **Task Groups**
 - Created to address specific taskings at the direction of the DACSC
 - Should be of specified duration
 - Forward recommendations and other deliverables to DACSC

Operating Guidelines

The DACSC will address issues as directed by the DAC. If in the conduct of their work, the DACSC feels it would be beneficial to provide advice to the FAA on other topics, they may request that the DAC task them to develop those recommendations and bring them to the DAC. DACSC meetings are not open to the public. No recommendations will flow directly from the DACSC or DAC TGs directly to the FAA. All must be vetted in a public DAC meeting and transmitted to the FAA upon approval by the DAC.

DACSC Representation

The DACSC membership will represent the following stakeholders:

- Appropriate expertise as reflected in the following areas of interest:
 - UAS Manufacturers (all sizes)
 - UAS Operators (all sizes)
 - Drone Hardware Component Manufacturers
 - Drone Software Application Manufacturers
 - Traditional Manned Aviation Operators
 - Airports and Airport Communities
 - Labor (controllers, pilots)
 - R&D, Academia
 - Local Government

- Navigation, Communication and Surveillance and Air Traffic Management Capabilities Providers
- Legal
- Other specific areas of interest as determined by the DAC Designated Federal Official (DFO)

Other stakeholders may be added later if appropriate. Approval for these additional stakeholders will be by the DACSC Co-chairs in consultation with the RTCA President and approval by the DAC Chairman and DAC DFO. Non-voting members selected by the DFO, who may attend as observers and have access to the committee's online workspace managed by RTCA, will include:

- Other Federal Agency personnel
- Representatives from the UAS ExCom
- Other FAA personnel

DACSC Membership

The DACSC will utilize a combination of one-year and two-year terms for the initial appointments. Membership can be renewed.

Members: As with the DAC itself, members of the DACSC must be able to speak for and commit their organizations to the consensus of the committee, and have working knowledge and expertise of the FAA, UAS-related programs, technologies and operations. Members have full voting rights (see exceptions below). Members are expected to be present at all meetings. Their designated Alternate may attend no more than twice per year. Co-chairs will review committee structure annually and take committee participation into account for ongoing membership.

Alternates: One designated Alternate for a Member may be identified by submitting a single person for approval by the DACSC co-chairs in consultation with the RTCA President, to serve the same term as the member. Like a Member, an Alternate is selected based on his/her knowledge, experience, position in their company and ability to speak for and commit their organization to the consensus of the group. A designated Alternate may attend in place of a DACSC Member, but not more than twice per year.

Non-voting Members: FAA and other Federal Agency personnel. They will take part in the DACSC's deliberations and provide input to final products; however, they do not represent affected user groups in reaching consensus.

All participants on the DACSC, regardless of position, are expected to keep their organization's representative on the DAC (if applicable) informed of the DACSC work.

Task Groups

Task Groups will be established as outlined below. Task Group products—including recommendations, where appropriate—are presented to the DACSC for review and deliberation, and if so directed by the DACSC, presented to the DAC for consideration at its public meetings. Members of Task Groups will be appointed by the DACSC Co-chairs in consultation with the RTCA President and approval by the DAC Chairman and DAC DFO. Task Group meetings are not open to the public.

Unlike the DAC and the DACSC, members of the Task Groups do not represent a particular affected entity and are selected for their expertise in the subject matter rather than their affiliation. Task Groups develop draft recommendations for consideration by the DACSC. Task Groups work from a Task Assignment Document developed by the DACSC in response to a request from the FAA.

DACSC Meetings

The DACSC will meet bi-monthly or as needed. Because the DACSC and its associated Task Groups are not Federal advisory committees, its meetings are not required to be open to the public; nor can the DACSC make recommendations directly to the FAA. While not required, some meetings of the DACSC may be open to the public to provide an early opportunity to identify potential concerns associated with draft recommendations. Such determination to make DACSC meetings open to the public will be made by the DAC Chair and the DAC DFO.

Specific Tasks and Deliverables

The DACSC will deliver its consensus output to the DAC at least fifteen (15) days in advance for deliberation in meetings open to the public. It is expected that the DACSC will utilize Task Groups to develop products and bring them to the DACSC for consensus. These are further defined in the Task Groups' Task Assignment Document.



U.S. Department
of Transportation
**Federal Aviation
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**Drone Advisory Committee (DAC) – Task Group (TG) 1
Recommended Tasking on Roles and Responsibilities
January 31, 2017**

ACTION: Topics for discussion and analysis for DAC Subcommittee (DACSC) TG on governing roles and responsibilities.

SUMMARY: The Federal Aviation Administration (FAA) is presenting to the DACSC topics for discussion and analysis regarding whether the rapid advent of Unmanned Aircraft Systems (UAS) (or “drones”) warrants consideration of the relative roles and responsibilities of the Federal and of state/local governments for regulating certain UAS operations in low-altitude airspace as compared to the Federal government’s exclusive role and responsibility for regulating all aspects of manned aircraft operations.

Since 1926, when the United States declared exclusive Federal sovereignty of the airspace (as supplemented by aviation statutes in 1938 and 1958), a statutory and regulatory framework vests in the Federal Government exclusive authority for regulating all aspects of manned aviation, whether fixed wing aircraft or rotorcraft/helicopters. With the exception of takeoff and landing, most manned aircraft operations are conducted at “minimum safe altitudes,” which generally have not been defined to include low-altitude airspace. However, the rapid development and increasing use of UAS in low-altitude navigable airspace and their unique operating characteristics (*e.g.*, can be launched anywhere, typically fly at low altitudes, ease of use) raises important regulatory policy questions as to the role of state and local governments relative to the role of the Federal Government.

Currently, existing statutory and regulatory rules do not permit state and local governments directly or indirectly to regulate aircraft flight operations, aviation safety or efficient use of navigable airspace. They do have the authority through their police powers to promulgate and enforce rules of general applicability; however, increasingly state and local governments desire to exercise more direct authority over UAS operations in low-altitude navigable airspace to accommodate a broad array of sometimes competing national and community interests.

BACKGROUND: In response to the proliferation of UAS, many state and local governments have begun to enact a variety of laws regulating UAS operations in low-altitude navigable airspace. Virginia, Arizona, Delaware, Rhode Island, Michigan, Oregon, and Maryland prohibit local government regulation of UAS, instead vesting sole authority in the state legislature. Other states, such as Tennessee, California, Nevada, and Minnesota, declare state sovereignty of the airspace unless granted to the Federal Government pursuant to a constitutional grant from the people of the state. T.C.A. § 42-1-102; Ann.Cal.Pub.Util. Code § 21401; N.R.S. 494.030; M.S.A. § 360.012.

Still other state and local governments enacted legislation regulating the time, place, manner and/or purpose for which private parties may use UAS in their jurisdictions. Specific examples of enacted or proposed legislation include:

- Minimum altitude rules;
- Geo-fencing technology;
- Overflight without property owner's permission;
- Curfews/designated hours of flight;
- Restricted flight over critical infrastructure, public assemblages, and first responder activity;
- Reckless interference with an aircraft;
- Restricted use from public property;
- Accident or incident reporting;
- Registration;
- Advance notice of flight;
- Insurance requirements;
- Voyeurism or capturing an image without consent; and
- Civil and/or criminal enforcement mechanisms

Notwithstanding the enactment of such legislation, since the Air Commerce Act of 1926, Federal law has provided the United States Government exclusive sovereignty of airspace of the United States and that citizens have a public right of transit through the same. By statute, the FAA has exclusive authority to regulate:

- Safety;
- Efficient use of the airspace;
- Protection of people and property on the ground;
- Air traffic control; navigational facilities; and
- Aircraft noise at its source.

49 U.S.C. §§ 40103, 44502, and 44701-44735. To implement that authority, Congress has directed the FAA to:

- Develop plans and policy for the use of the navigable airspace and assign by regulation or order the use of the airspace necessary to ensure the safety of aircraft and the efficient use of airspace.” 49 U.S.C. § 40103(b)(1); and
- Prescribe air traffic regulations on the flight of aircraft (including regulations on safe altitudes)” for navigating, protecting, and identifying aircraft; protecting individuals and property on the ground; using the navigable airspace efficiently; and preventing collision between aircraft, between aircraft and land or water vehicles, and between aircraft and airborne objects. 49 U.S.C. § 40103(b)(2).

In furtherance of these statutory commands, the FAA has established a comprehensive regulatory scheme, governing, among other things, the registration and certification of aircraft; certification of airports, pilots and mechanics; aircraft equipage; air traffic control systems; aviation navigation and communication; airspace classifications as well as minimum safe altitudes,

cruising altitudes or flight levels, minimum altitudes for instrument flight rules operations, and specific flight altitude rules for large and turbine-powered multiengine airplanes.

Because FAA regulation occupies the entire field of aviation safety, management and efficient use of airspace, air traffic control, and flight management, state and local regulation is impermissible. As noted by the U.S. Supreme Court, the FAA's primary statute, the Federal Aviation Act of 1958 (now codified at 49 U.S.C. §§ 40101, et seq.):

[R]equires a delicate balance between safety and efficiency, and the protection of persons on the ground ... The interdependence of these factors requires a uniform and exclusive system of federal regulation if the congressional objectives underlying the Federal Aviation Act are to be fulfilled.

Burbank v. Lockheed Air Terminal Inc., 411 U.S. 624, 638-639 (1973).

Indeed, the Supreme Court has ruled that even complimentary state regulation parallel to federal regulation is impermissible: "Where Congress occupies an entire field . . . even complimentary state regulation is impermissible. Field preemption reflects a congressional decision to foreclose any state regulation in the area, even if it is parallel to federal standards." *Arizona v. U.S.*, 567 U.S. ___, 132 S.Ct. 2492, 2502 (2012).

A consistent regulatory system for aviation and use of airspace ensures the highest level of safety for all aviation operations, including the operation or flight of aircraft. Without exclusive Federal regulation, "[t]he likelihood of multiple, inconsistent rules would be a dagger pointed at the heart of commerce – and the rule applied might come literally to depend on which way the wind was blowing." *British Airways Board v. Port Authority of New York and New Jersey*, 558 F.2d 75, 83 (2d Cir. 1977), *aff'd, as modified*, 564 F.2d 1002 (2d Cir. 1977) (referring specifically to aircraft noise control).

Noise-related cases seem particularly relevant because most local noise ordinances necessarily implicate the FAA's authority over flight operations and paths. For example, in *Allegheny Airlines v. Village of Cedarhurst*, 238 F.2d 812 (2d Cir. 1958), the court invalidated an ordinance which prohibited aircraft flights over the village at altitudes of less than 1,000 feet; and in *American Airlines v. Town of Hempstead*, 398 F.2d 369 (2d Cir. 1968), *cert. denied* 393 U.S. 1017 (1969), the Court invalidated a noise ordinance that prohibited overflights of a town by aircraft that did not meet certain noise standards because compliance would have required the alteration of FAA-promulgated flight patterns and procedures.

Nevertheless, in crafting their recent legislation, some state and local governments no doubt have been cognizant of the United States Supreme Court's 1946 decision in *United States v. Causby*, 328 U.S. 256, 264 (1946), holding that property owners have limited airspace rights as an incident to ownership of the land. The court declared:

[I]f the landowner is to have full enjoyment of the land, he must have exclusive control of the immediate reaches of the enveloping atmosphere [A]s we have said, the flight of airplanes, which skim the surface but do not touch it, is as much an appropriation of the use of the land as a more conventional entry upon it.

In the context of repeated and regular overflights of government-owned aircraft, the court held that a flight glide path passing over property at 83 feet, which was 67 feet above the house, 63 feet above the barn, and 18 feet above the highest tree constituted an unlawful taking of an air easement for which the landowner was entitled to compensation.

In 1962, the Supreme Court affirmed that “the use of land presupposes the use of some of the airspace above it. Otherwise no home could be built, no tree planted, no fence constructed, no chimney erected. An invasion of the ‘superadjacent airspace’ will often ‘affect the use of the surface of the land itself.’” *Griggs v. Allegheny County*, 369 U.S. 84 (1962). The court held that flight patterns between 30 feet to 300 feet over the landowner’s residence constituted an unlawful taking of an air easement.

Indeed, the teaching of *Causby* and *Griggs* may well be reflected in those state statutes that make unlawful the flight of aircraft over lands and waters of the state where (1) it is at a low altitude that interferes with the existing use to which land, water or space over the land or water is put by the owner, or (2) it is conducted in a manner that is imminently dangerous to persons or property lawfully on the land or water beneath the flight. A.R.S. § 28-8277; N.C.G.S.A. § 63-13; A.C.A. § 27-116-102; MD Code § 5-1001; I.C. § 21-204. See also, *Brenner v. New Richmond Regional Airport Commission*, 343 Wis.2d 320 (2012); *Schronk v. Gilliam*, 380 S.W.2d 743 (Ct. Civ. App. Tex. 1964).

Drones are an increasingly important part of many businesses with significant potential to dramatically change many different industries. Drones currently are used for many applications and jobs such as inspection of critical infrastructure, aerial surveillance, cinematography, security, inspection, and package delivery. Whether in classroom settings or less formal sporting activities, they are also becoming established as a tool to educate and excite young people about topics in science, robotics, technology and aeronautics, potentially inspiring new generations to pursue careers in important industries including aviation. The characteristics of unmanned aircraft, what makes them particularly serviceable for many of the applications for which they are used today, are the same characteristics that raise the question of the appropriate role of state and local governments in regulating where and when unmanned aircraft should be permitted to fly. Again, drones can be relatively small, easy to fly, take off or land nearly anywhere, are capable of flying at very low altitudes, and can access many locations inaccessible to manned aircraft.

TASK: The FAA suggests the TG evaluate and analyze state or local government interests identified in this document, and other state or local interests identified by the TG. This analysis could form the basis for recommendations to the DAC reflecting a consensus view that could be used to inform future agency action related to the relative role of state and local governments in regulating aspects of low-altitude UAS operations.

Fact Finding and Analysis

The TG could review and evaluate the following concerning state and local regulatory responses to UAS operations, including the enforcement of applicable rules and regulations:

State and Local Interest in, and Responses to, UAS

- Identify the specific state/local governmental interest being vindicated in their legislative responses; Assess the strength of such interest and its impact on the FAA's core roles and responsibilities;
- Assess the likely impact of state/local governmental response on civil use and access to airspace, interstate commerce, technological innovation and commercialization of such innovation, and the role of partnerships; and
- Identify possible alternative legislative responses to achieve desired state/local governmental interest.

Enforcement of Federal Safety and Airspace Rules and Regulations

- Relative role and responsibility of state and local governments for responding to, investigating non-compliance with and enforcing state and federal UAS-related rules and regulations;
- Whether state and local governments should be encouraged to develop parallel or complimentary enforcement mechanisms;
- Efficacy of existing parallel/complimentary enforcement mechanisms; and
- Efficacy of alternative federal/state enforcement schemes applicable to other Federal transport modes.

Develop Recommendations

The TG could develop recommendations as to:

Defining Low-Altitude UAS Navigable Airspace Susceptible to State/Local Governmental Interests

- The extent to which a definition of "low-altitude airspace" (perhaps as a type of boundary line) in the context of UAS operation is susceptible to allocation, or cooperative, concurrent, or delegated jurisdiction among State and local governmental interests.
- Is there a non-federal interest in operations of UAS in airspace that is other than "low-altitude airspace"?
- Is there analog to "minimum safe altitude" for UAS?
- Consider the contemporary relevance of traditional authorities such as the American Law Institute's Restatement of Torts, Second, 159(2), which summarizes the general principle of *Causby* and *Griggs* as follows:
 - Flight at 500 feet or more above the surface is not within the "immediate reaches,"
 - Flight within 50 feet, which interferes with actual use, clearly is, and
 - Flight within 150 feet, which also so interferes, may present a question of fact.

Relative Roles and Responsibilities of the Federal, State and Local Governments

- Whether the existing framework of Federal exclusivity for regulation of low-altitude UAS operations should be reconsidered in light of state and local governmental interests identified by the TG;
- If so, what modifications would better integrate important state and local governmental interests with important Federal interests in ensuring safety as well as efficient management of and access to airspace;
- Roles and responsibilities for interests other than aviation safety; and
- What oversight or regulatory mechanisms are appropriate to vindicate Federal interests in ensuring safety of UAS operations as well as efficient management and access to low-altitude navigable airspace?

Enforcement

- Whether to change the relative role and responsibility of state and local governments for enforcement of any aspects of rules and regulations governing low-altitude UAS operations;
- If so, what changes should be made;
- What specific mechanisms would achieve the recommended change; and
- Whether additional data collection is necessary for Federal/state enforcement and/or to inform future agency policy and rulemaking. Any data obtained would also assist in FAA's mandate to safely and efficiently integrate UAS into the National Airspace System (NAS).

Education

- What training and education is needed if local authorities or officials are asked to assist with, implement, or otherwise address federal statutes and regulations?
- Who should conduct that training? How can consistency of enforcement and implementation be achieved across jurisdictions?
- What funding might be needed by non-FAA enforcement agencies and adjudicative bodies?

Technological tools and solutions

- Are there existing or future technologies that may be utilized in connection with the roles and responsibilities of government?
- What tools are on the horizon that may address governing concerns and interests? How might they be effectively implemented?

Local Governmental Operational Issues

- How can government facilitate the use of UAS, during emergency response efforts and other government operations, including issuance of approvals, and prohibit UAS interference with manned aircraft?

- Recommendations on how FAA should respond to the emerging state and local regulations in this space. What are the roles of the FAA and state or local government in authorizing operations in emergency situations?

SCHEDULE: The FAA requests an interim set of recommendations at the May 2017 DAC Meeting, followed by a final report no later than the October 2017 DAC Meeting. The FAA will make subject matter expertise available to the DAC upon request.

FOR FURTHER INFORMATION CONTACT: Victoria Wassmer, Acting Deputy Administrator (ADA-1) and DAC Designated Federal Official, at 202-267-8111.

Issued in Washington, DC, on February 10, 2017.

A handwritten signature in black ink, appearing to read 'V. Wassmer', is written over a horizontal line.

Victoria B. Wassmer
Deputy Administrator (A), Chief NextGen Officer
and DAC Designated Federal Officer



U.S. Department
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**Federal Aviation
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**Drone Advisory Committee (DAC) – Task Group (TG) 2
Recommended Tasking on Access to Airspace
January 31, 2017**

ACTION: Topics for discussion and analysis for DAC Subcommittee (DACSC) TG on access to airspace.

SUMMARY: As you know, the Federal Aviation Administration (FAA) has developed a roadmap to ensure the safe and efficient integration of Unmanned Aircraft Systems (UAS) into the National Airspace System. During the past several years, the agency has been fully engaged working toward the integration across a variety of platforms, multiple types of operations, and different classes of airspace to provide a structured approach to UAS integration. Since the agency established the DAC last fall, the aviation community has expressed interest in working with the DAC to develop and provide the FAA consensus-based recommendations on issues related to UAS based on discussion at the DAC's September 2016 "kickoff" meeting, the FAA requests the DAC's assistance in developing consensus recommendations regarding the operational priorities to achieve full integration of UAS.

Specifically, we seek greater input on a range of guidance material, and we believe that the DACSC is an appropriate forum to obtain industry input and perspective. We understand the DACSC, in response to direction from the DAC, has established an Access to Airspace TG. The tasking outlined in this letter is intended to facilitate the DACSC's focused and sequential review of UAS integration/access issues. It is intended that follow-on taskings will be provided as needed for additional focus and direction in order to achieve measurable progress on airspace access issues by the end of 2017.

TASK: Create an Access to Airspace TG to provide recommendations on UAS operations/missions beyond those currently permitted, and define procedures for industry to gain access to the airspace. These additional operations should be achieved within the next 24 months through a risk-based approach to gaining operational approval and certification based on FAA regulations and guidance. The near-term recommendations should be easily achievable and use existing public/private infrastructure to the greatest extent possible. The TG should provide additional recommendations on expanded access for UAS operations/missions that may require public/private infrastructure, rulemaking, and or other changes that would extend implementation beyond the 24-month time frame (*e.g.*, missions/operations in Class-B Airspace requiring interactions with Air Traffic Management (ATM) systems).

Important for the TG's frame of reference is an awareness that the FAA aircraft certification philosophy is evolving to make it more responsive to rapidly changing technology and using a risk-based approach to accommodate new mission types. To facilitate completion of the work, the TG will reference material produced by RTCA, NASA and the FAA; including UAS

operational scenarios, the UAS Traffic Management (UTM) pilot project, Pathfinder progress to date; appropriate RTCA special committee Minimum Aviation System Performance Standards (MASPS)/Minimum Operations Performance Standards for Global Positioning System (MOPS), and recommendations; and the like.

Develop Recommendations

The TG will:

1. Provide recommendations for roles and responsibilities for the UAS, the remote pilot, the operator, and air navigation service provider;
2. Provide recommendations for safe, expedited UAS airworthiness and operational approvals where required, for the various near-term (within 24 months) UAS missions;
3. Provide recommendations on minimum essential aircraft equipage, public/private infrastructure needs, and operational requirements beyond those currently permitted (such as under 14 Code of Federal Regulations Parts 101 and 107) to include information flow and interoperability considerations; and
4. Provide recommendations on methods of communications for command and non-payload communications – specifically, how these requirements may vary among the likely near-term UAS missions.

SCHEDULE: The FAA requests an interim set of recommendations at the May 2017 DAC Meeting, followed by a final report no later than the October 2017 DAC Meeting. The FAA will make subject matter expertise available to the DAC upon request.

FOR FURTHER INFORMATION CONTACT: Victoria Wassmer, Deputy Administrator (A), Chief NextGen Officer and DAC Designated Federal Official, at 202-267-8111.

Issued in Washington, DC, on February 10, 2017.



Victoria B. Wassmer
Deputy Administrator (A), Chief NextGen Officer
and DAC Designated Federal Officer



U.S. Department
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**Federal Aviation
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**Drone Advisory Committee (DAC) – Task Group 3
Tasking on Unmanned Aircraft Systems (UAS) Funding
March 7, 2017**

ACTION: Tasking on UAS funding.

SUMMARY: The Federal Aviation Administration (FAA) asks the DAC to provide recommendations for options on how to fund the activities and services required both by government and industry to safely integrate UAS operations into the National Airspace System (NAS) over the near and longer terms. The FAA would welcome consideration of a broad array of options, including industry assuming a lead role for certain aspects, or public-private partnerships between government and industry. This would include an evaluation of which activities and services are more efficiently done by the government, which could be performed effectively by industry, and considerations of short-term practicality and eventual scalability.

Most of the FAA's funding comes from aviation users, through a series of excise taxes on airline passengers and shippers, fuel taxes, and user fees for registration, aeronautical charting, and overflights of U.S. airspace. As the UAS sector is growing, so are its demands on FAA staffing and other resources. What will be required to safely integrate UAS will be an ongoing conversation between government and industry, but it is important to note that this work will be added on to FAA's already constrained budget. The FAA is committed to full integration of UAS into the NAS, which requires additional resources to support the required new and ongoing activities. The FAA has a draft plan describing the activities needed over the next two to five years to facilitate the integration of UAS into the NAS. Progress on integration is essential to maintain U.S. competitiveness in this field while also sustaining the exemplary aviation safety record.

TASK: The FAA tasks the DAC to evaluate and analyze potential mechanisms for UAS users to fund the activities and services required to safely integrate UAS operations into the NAS over the near term. The DAC is to make recommendations to the FAA reflecting a consensus view that could be used to inform near-term government action. In the event of failure to reach consensus, majority and minority reports may be submitted. FAA subject matter experts will be available to assist as needed.

Develop Recommendations

The Task Group should develop recommendations as to the UAS community's preferred method(s) for funding Federal activities and services required to support UAS operations for the next two years, and beyond. Multiple options may be explored and analyzed. The report should address:

1. Who should be responsible for conducting the identified activities and services needed to support the safe integration of UAS operations into the NAS?
 - Are there activities and services that could be performed by industry in the near-term or longer-term, or through a public/private partnership?
2. For the activities the FAA should perform, what level of funding resources are needed to support the safe integration of UAS operations into the NAS?
 - If funding is insufficient, which activities or services have the highest priority?
3. What funding mechanisms should be used to support these activities and services?
 - What activities and services should the Federal Government perform using traditional funding methods (such as taxes or fees)?
 - Should different Federal activities or services be paid for differently?
 - Should different types of UAS pay different amounts or via different mechanisms?
4. How could the funding mechanisms be implemented for the near-term, and how might they change as the industry evolves?
 - Is there a recommended phased or incremental approach?
 - What are the implementation issues and costs?
 - What incentives or unintended consequences might result?
5. What options were explored and rejected? Why were they rejected?

SCHEDULE: The Task Group's interim recommendation report should be submitted to the Drone Advisory Committee no later than June 30, 2017 to enable DAC consideration via teleconference in July. The Task Group should then consider feedback from the DAC, as well as the longer term evolution of funding, in a report by March 2018.

FOR FURTHER INFORMATION CONTACT: Victoria Wassmer, Acting Deputy Administrator and Chief NextGen Officer (ADA-1), and DAC Designated Federal Official (DFO) at (202) 267-8111; or Earl Lawrence, Director, Unmanned Aircraft Systems Integration Office (AUS-1) and DAC Sub Committee Federal Lead at (202) 267-0168.

Issued in Washington, DC, on March 7, 2017.



Victoria B. Wassmer
Deputy Administrator (A), Chief NextGen Officer
and DAC Designated Federal Official

BACKGROUND:

The FAA faces challenges of budget instability, budget inadequacies, and lack of management flexibility. In order to facilitate the introduction, integration and on-going operations of UAS throughout the United States, the FAA requires new resources to be devoted to this task. The UAS Implementation Plan lays out the myriad UAS activities of the Agency over the next few years and many of them require additional funds.

Up to this point, the FAA's UAS efforts have been funded primarily by reallocating personnel and shifting internal funds to support these activities, which include standing up the UAS Integration Office, developing the Agency's framework for UAS integration into the NAS, and conducting the initial implementation of the Small UAS Rule (14 CFR part 107). Absorbing these costs is impacting the FAA's ability to meet its other responsibilities. While the FAA received funding for some UAS work in prior years, the requirements to meet UAS needs is outpacing the Agency's resources. Without additional funds, the FAA will not be able to keep pace with the dramatic growth in public, industry, and business demands for UAS operations.

For example, after one month of implementing the Small UAS Rule, the demand for UAS operations had already overwhelmed our traditional systems and manual processes. The current processing and backlog of Waivers to Airspace Authorizations are similar to the issues with the exemption process for Section 333 of the FAA Modernization and Reform Act of 2012 (FMRA), which grants the Secretary of Transportation the authority to determine whether an airworthiness certificate is required for a UAS to operate safely in the NAS. However the backlog of waivers is worse due to an even higher public and industry demand. The FAA does not have the funding necessary to build automation systems that would allow the agency to meet public demand. Requirements from the recent reauthorization legislation (FAA Extension, Safety, and Security Act of 2016, P.L. 114-190) may also be impacted. For example, while the FAA will be able to conduct the pilot program on airspace hazard mitigation using unmanned aircraft detection systems required under Section 2206 of the reauthorization legislation (Public Law 114-190 (July 15, 2016)), the development and implementation may need third party investment, perhaps through a public-private partnership. This situation will grow more urgent as the FAA continues through the next phase of its rulemaking activities, such as enabling operations over people or beyond line of sight. And while significant UAS traffic management efforts may be borne by the private sector, integrating operations into the FAA's air traffic control automation systems will require significant capital investment. Further, any services required to respond to the growth of UAS activities, whether counter-UAS, airspace management, or other types of service will most likely require additional investment and operational funding.

Looking beyond currently planned activities, if additional funding cannot be found, progress will be greatly impacted. All related activities required for FAA to fully integrate UAS operations into the NAS over the long-term – rulemaking, developing safety standards, conducting safety oversight, developing automation and other IT systems, and conducting research – will be impacted by limitations of FAA's current funding. For example, in order to incorporate UAS into the NAS, current systems such as En Route Automation Modernization (ERAM) and Terminal Automation Modernization and Replacement (TAMR) might require significant modifications and this will require more funding.

Industry Funded Models

In terms of industry funded activities, the ARINC model provides a good example. ARINC, established in 1929 as Aeronautical Radio, Inc., is a major provider of transport communications and systems engineering solutions to commercial airlines and airports. It provides fee-based services to the aviation industry. It was chartered by the Federal Radio

Commission (which later became the Federal Communications Commission (FCC)) in order to serve as the airline industry's single licensee and coordinator of radio communication outside of the government. Through most of its history, ARINC was owned by airlines and other aviation-related companies such as Boeing, until the sale to The Carlyle Group in October 2007, and then to Rockwell Collins in 2013.

ARINC took on the responsibility for all ground-based, aeronautical radio stations and for ensuring station compliance with FCC rules and regulations. ARINC expanded to support transport communications, as well as the commercial aviation industry and U.S. military. ARINC also helps develop consensus-based, voluntary technical standards for the aviation industry.

Other examples of industry-led activities include the FAA's Designee program, where the FAA designates qualified technical people who are not FAA employees to perform certain exams, tests, and inspections necessary to comply with applicable standards. Industry conducts these activities using its own resources under FAA oversight.

The FAA does not charge U.S. manufacturers for aircraft certification; however, there are international models where authorities such as the European Aviation Safety Agency, (EASA) impose fees on applicants seeking EASA certificates of airworthiness.

FAA Funding Today

The FAA today is largely funded through a series of excise taxes imposed on aviation users. These revenues are collected in the Airport and Airway Trust Fund (Aviation Trust Fund). Congress appropriates funds for the FAA's four budget accounts from two principal sources: the Aviation Trust Fund revenues, and contributions from the General Fund of the U.S. Treasury. Though the funds in the Aviation Trust Fund are generated by users of the airspace, they cannot be used by the FAA unless first authorized and appropriated by Congress.

The FAA has experienced a continuing resolution (CR) at the beginning of each fiscal year for the last 20 years, three instances of furloughs or shut downs in the last five years, and a series of authorization extensions (23 extensions of the last reauthorization, and currently on our third extension). Without certainty about funding levels each year, long term planning becomes extremely difficult. When operating under a CR, agencies must be careful not to overspend, so programs might not move forward as quickly as desired or expected. There is also a prohibition on "new starts" during a CR, limiting FAA's ability to be quickly responsive to emerging issues.

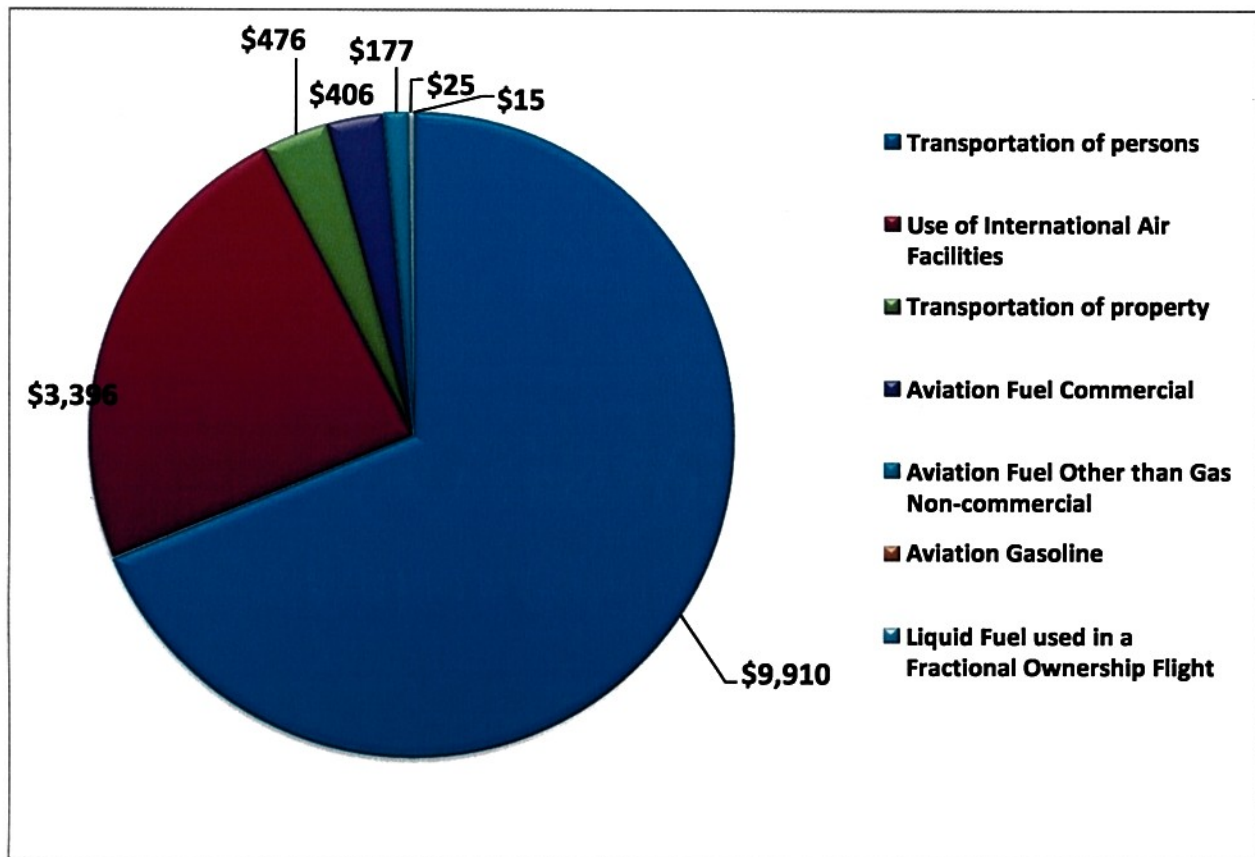
Airport and Airway Trust Fund (Aviation Trust Fund)

Created in 1970, the Aviation Trust Fund constitutes the primary funding source for FAA programs. Each year since Fiscal Year (FY) 2012 the Aviation Trust Fund has provided no less than 71 percent of the FAA's annual funding. In FY 2016, the Aviation Trust Fund constituted 87.8 percent of the FAA's funding.

The Trust Fund receives revenues from a variety of excise taxes paid by users of the NAS. Aviation excise taxes are imposed on domestic passenger tickets, domestic flight segments, international passenger arrivals and departures, and on purchases of air travel miles for frequent flyer and similar programs. In addition, taxes are imposed on domestic air cargo waybills and aviation fuel purchases. These taxes fall into four broad categories: (1) domestic transportation of persons; (2) use of international air facilities; (3) domestic transportation of property (air cargo); and (4) domestic aviation fuel taxes.

Aviation Trust Fund Excise Tax Structure

Trust Fund Excise Tax Revenue Sources	Rates effective as of January 1, 2017
Domestic passenger ticket tax	7.5 percent
Domestic flight segment tax (excluding flights to or from rural airports)	\$4.10 per passenger per segment; indexed to the Consumer Price Index
Tax on flights between the continental United States and Alaska or Hawaii (or between Alaska and Hawaii)	\$9.00 per passenger; indexed to the Consumer Price Index
International arrival and departure tax	\$18.00 per passenger; indexed to the Consumer Price Index
Tax on mileage awards (frequent flyer awards tax)	7.5 percent of value of miles
Domestic commercial fuel tax	4.3 cents per gallon
Domestic general aviation gasoline tax	19.3 cents per gallon
Domestic general aviation jet fuel tax	21.8 cents per gallon Note: Effective after March 31, 2012 a 14.1 cents per gallon surcharge for fuel used in fractional ownership flights
Tax on domestic cargo or mail	6.25 percent on the price paid for transportation of domestic cargo or mail

Total FY 16 excise tax revenues \$14,406 M**General Fund**

The General Fund of the U.S. Treasury also provides resources for the Agency's Operations account. In FY 2016, it accounted for \$1.9 billion of the \$9.9 billion appropriated to that account. Over the past ten years, the General Fund appropriation has ranged from a low of \$1.1 billion in FY 2015 to a high of \$5.4 billion in FY 2010.

A funding option would be to consider the UAS industry an "infant industry" in need of special protections. The infant industry argument for tax (or regulatory) relief is typically invoked in cases where a nation sees the existence of potentially large external benefits from the growth of an industry, or the potential for other important non-economic benefits. With this consideration, Congress would need to be asked for additional General Fund support explicitly for the FAA's UAS-related resource requirements in the absence of any kind of tax or fee revenues from UAS.

Charging Mechanisms

The Congressional Budget Office defines a user fee as "money that the Federal Government charges for services or for the sale or use of federal goods or resources that generally provide benefits to the recipients beyond those that may accrue to the general public." User fees assign

part, or all of the costs, of programs and activities to readily identifiable users of those programs and activities.

One purpose for having user fees as a funding mechanism is equity, as they help ensure that government services are paid for--at least partly--by those who use them. A principal advantage of user fees over many other funding mechanisms is that they may foster production efficiency by increasing awareness of the costs of publicly provided services and therefore increase incentives to reduce costs where possible. One challenge of user fee funding is that this method may have difficulty achieving revenue adequacy if the basis of cost recovery relies on historic costs and the costs of providing services increase over time.

The FAA currently collects a variety of fees: overflight fees, registration fees, and aeronautical information services (aeronautical charting products) fees. The FAA also collects fees for the services of Flight Standards Service (AFS) Aviation Safety Inspectors (ASI) outside the United States; these fees recover the costs of certification services and approvals. Overflight fees are charges for costs of providing air navigation services for aircraft flights that transit U.S.-controlled airspace, but neither land in nor depart from the United States. The FAA charges separate fees for en route and oceanic airspace services; the fees charged reflect FAA cost accounting and air traffic activity data. Overflight fees fund the Department of Transportation's Essential Air Services program and do not support any FAA activities or operations.

The FAA also charges fees for aircraft registration and airmen (replacement) certification. The current fees were established in the 1950s and 1960s and have never been updated. Under the 2012 FAA Reauthorization, the FAA was directed by Congress to update fees and to begin charging fees for three additional activities (airmen certificates, airmen medical certificates, and legal opinions related to aircraft registration). At the present time, the FAA is in rulemaking to establish new and updated fees.

Since 1926, the Federal Aeronautical Charting Program has been a fee-based service. Congress transferred the program from the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) to the FAA in October 2000. Public Law 106-181, dated April 5, 2000, provided for the FAA to charge user fees to recover the full costs of the compilation, production and distribution of both electronic and paper charts. Recently, with the rise of digital formats for our navigation and charting products and the corresponding reduction in paper sales, the Agency has faced challenges in fully recovering these costs.

In comparison with fees, a tax has the primary purpose of raising revenue. Taxes are unrequited in the sense that benefits provided by the government to taxpayers are not normally in proportion to their payment. Tax represents revenue that a government collects; such revenue typically comes from an individual or business when they perform a particular action or complete a specific transaction. Such a tax is often assessed as a percentage of an amount of money involved in the transaction e.g., a tax is often placed on the sale of goods or services, such as the aviation excise taxes explained above.

Sometimes the line between user fees and taxes is blurred, as in the case of federal gasoline excise taxes being used to fund the Interstate Highway System. This tax system is based on the

“user pays” principle in which the costs of the construction and maintenance of roadways are paid by the individuals and firms that use and benefit from the service through taxes. Like user fees, Congress can – and sometimes does – choose not to make the full amount of taxes available to a Federal agency for expenditure and the balances in a dedicated trust fund (like the Aviation Trust Fund) may accumulate and go unspent.

UAS users and operations could be taxed for FAA services in varied ways. For example, a UAS purchaser could incur a sales excise tax with the rationale that there is a likely to be a tie-in between the expected future operations of the UAS and the use of government (FAA) services. Alternatively, an excise tax could be levied on the price paid for commercial services rendered by UAS operations. This tax could be analogous to the excise tax on the price paid for the transportation of domestic air cargo. Either of these taxes (a tax on the good purchased or a tax on the service provided) would require new, and potentially, substantial federal tax administration.

Implementation Considerations

Legislative authority is required in order to provide federal revenue through user fees, taxes or the General Fund. Taxes generally fall under the jurisdiction of the tax committees, while user fees can be handled through authorizations and/or appropriations. For many years, the FAA has had an annual appropriations law prohibition on instituting new user fees, which would need to be addressed. In addition, obtaining new funding from Congress involves navigating its inherent political nature and political challenges.

Congress could set fees in statute but rulemaking may be necessary if Congress is not prescriptive enough or establishes cost-recovering user fees. For example, the FAA is currently promulgating rules updating overflight fees and for establishing new and updated aircraft and airman registry fees. If user fees are established, the FAA would most likely be the billing and collection agency for the fees. Federal excise sales taxes are administrated by the Internal Revenue Service (IRS).

Fees and taxes can also change behaviors by creating disincentives or friction. For example, a transaction-based fee charged as a condition of receiving a specific service may cause people to avoid the service. This is undesirable for fees that have potential safety implications. In contrast, a point-of-sale retail tax appears to the user as essentially bundled into the retail price, and so appears simple. Its impact on the purchase decision will be influenced by its size relative to the purchase price and the overall price sensitivity of the purchaser.

Any funding mechanism will have impacts on those charged as well as practical considerations for implementation. The administrative burdens vary both for entities paying and charging. There are costs and time processes associated with establishing and collecting fees, as well as with enforcing compliance. As UAS are further integrated into the NAS, industry environment will continue to change along with the regulatory landscape. The funding solution needs to be flexible and scalable to accommodate these changes.

Lastly, options for a funding structure for UAS should not be constrained by the current traditional aviation funding structure. At the same time, as funding structure for UAS should not be expected to alter the current structure of funding for traditional aviation.



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Drone Advisory Committee May 3, 2017 Meeting Minutes



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Drone Advisory Committee Meeting Minutes:

May 3, 2017- Herndon, VA

List of Attachments

- Attendees
- Agenda
- Presentations

Summary

The third meeting of the Drone Advisory Committee (DAC) convened on May 3, 2017, and was led by Brian Krzanich, DAC Chairman and CEO of Intel Corporation (Chairman Krzanich), and Designated Federal Officer (DFO) and Acting FAA Deputy Administrator, Victoria Wassmer (DFO Wassmer). The DAC received status reports from the three task groups (TGs). TG2, *Access to Airspace*, highlighted their progress on narrowing the scope of the large task of finding methods to allow operations/missions beyond those currently permitted for drones and defining procedures for industry to gain access to the airspace. Following TG2 was a report from TG1, *Roles and Responsibilities*, on the relative roles and responsibilities of the Federal, state, and local governments for regulating certain Unmanned Aircraft Systems (UAS) operations in low-altitude airspace as compared to the Federal government's exclusive role and responsibility for regulating all aspects of manned aircraft operations. Lastly, TG3, *UAS Funding*, reported on the status of their work evaluating potential mechanisms for funding the activities and services required both by government and industry to integrate UAS safely into the National Airspace System (NAS).

Host Welcome

The meeting was hosted by the Air Line Pilots Association (ALPA) at their Herndon, Virginia Headquarters. Captain Tim Canoll, President of ALPA, began the day by welcoming everyone to the facility and providing background information about ALPA.

DFO Statement

The DFO statement was read by DFO Wassmer at 9:04 AM.



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Chairman's Welcome

Chairman Krzanich welcomed everyone to the meeting and reviewed the agenda noting that there was much work to be done during the day.

Approval of Minutes from Previous Meeting

The minutes of the previous meeting were unanimously approved as distributed.

Chairman's Report

Chairman Krzanich offered remarks to begin the day's sessions. He offered thanks to FAA Administrator Huerta and DFO Wassmer for their leadership and to the FAA for forming and supporting the DAC. He further thanked the FAA staff and management of the David J. Hurley Air Traffic Control System Command Center in Vint Hill, VA for a tour of their facility and the National Air Traffic Controllers Association staff for hosting the previous evening's dinner. He thanked Captain Canoll of ALPA for hosting the meeting at their Herndon headquarters. He lauded ALPA's history of safety and recommended the DAC learn from and emulate that record. The Chairman then welcomed three new DAC members: George Kirov of Harris Corporation, Michael Chasen of PrecisionHawk, and Rich Hanson of the Academy of Model Aeronautics.

The chairman then drew the committee's attention to the progress the TGs were making. He reminded the committee of the three TGs and their taskings. He thanked the TG leaders and members as well as the membership of the entire DAC Subcommittee (DACSC).

The chairman encouraged everyone on the committee to participate and engage in the discussion and make sure their sentiments are heard and understood.

The chairman mentioned that he heard some member constituencies feel their voice is not being heard. He encouraged anyone who feels that way to let the DAC leadership know so that it can be addressed.

FAA Update

Victoria Wassmer, FAA Acting Deputy Administrator, Chief NextGen Officer, and DAC DFO

DFO Wassmer welcomed everyone and thanked them for attending. She described the second annual FAA UAS Symposium held in Reston the previous month. She thanked the industry partners who assisted in the planning and execution of that symposium. She described the numbers of attendees, panels, and panelists. She described the FAA's first ever "Twitter chat" as a great success. She



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mentioned the need for the FAA to engage with a variety of stakeholders and the need for the FAA to continue its work in education and outreach efforts.

DFO Wassmer then provided an overview of the January 2017 DAC meeting and the important safety issues that must be addressed as they expand the use of drones in the airspace. An example is what happens to people on the ground if a drone flies overhead and fails? She discussed that the FAA's Center of Excellence (COE) completed the first in a series of a research projects on this topic and released the results the previous Friday. She also mentioned that there are also security concerns and the need for drones to avoid secure facilities and sensitive sites. She referenced overseas use of drones for ill-intent in combat theaters and stressed the need to ensure that does not happen here. She stated that the FAA requires assistance in answering these questions.

She mentioned two recently announced initiatives that enable the FAA to work with industry, law enforcement and national security counterparts to address these security concerns. The FAA is in the process forming a new aviation rulemaking committee (ARC) for remotely identifying and tracking UAS. The desire is that the recommendations from this ARC will pave the way for UAS identification and tracking rulemaking which will then promote future rulemaking for beyond visual line-of-sight (BVLOS) and flight over people operations. The FAA will be hosting an unmanned aircraft security roundtable to be held with transportation and national security leaders and the drone industry. This will allow a mutual understanding of security concerns and allow the best ideas to come forth. Just like the DAC, it is important that everyone with "skin in the game" have a seat at the table.

DFO Wassmer presented two slides that show the progress made by the FAA and the DAC. The first slide, entitled "History of the Drone Advisory Committee" illustrated the flow and dates of when the FAA has issued the terms of reference for the DAC, DACSC, and TGs as well as the dates of the meetings. The second slide depicted the flow of how the work that is done by the TGs gets vetted, through the consensus process, through the DACSC and the DAC, before any final recommendations are sent to the FAA. Victoria emphasized that RTCA is an advisory committee that provides advice and recommendations to the FAA. She emphasized the importance of the work being done and reiterated her thanks to the DACSC and the TGs. She encouraged the DACSC to stay focused on the tasks at hand, and to speak up and speak often, especially if there is disagreement, because as the slides show, consensus at each level should be obtained before materials are put forward to the next level. She referenced the slide shown on the screen which depicted how the tasking statements from the FAA should guide the work of the DAC, DACSC, and TGs. While the process may seem cumbersome, the dialogue is important. The policy issues being considered and society's acceptance of the technology are very important. She reminded participants that everyone has a voice and a responsibility to speak up for their constituents, and there should be no silent minority – please. To get this right, the FAA



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needs each and every one of the committee members. She closed by saying she looks forward to a productive meeting.

Earl Lawrence, Executive Director, UAS Integration Office

Mr. Lawrence provided an update on FAA activity since the January 2017 DAC meeting. Over 800,000 people have registered and more than 43,000 applicants have obtained their Remote Pilot Certificate. The Remote Pilot Knowledge exam pass rate has increased from 89% to 92%. Assisting pilots to fly safely under part 107 rules remains a focus area for the FAA. The FAA is continuing work on an automated authorization and waiver process to be deployed in the near future. Finally, the FAA is working hard to meet the demands for airspace access. The number of airspace waivers and authorizations has increased from 1,500 in January to 3,900 and more than 650 non-airspace waivers have been issued (up from 300 in January). At the last DAC, concerns that Pathfinder partners were receiving preferential treatment for BVLOS waivers were discussed. At the May 3rd meeting Mr. Lawrence assured the DAC that is not the case. The most recent waiver was for BVLOS and flight over people and was issued to FLIR Systems, Inc. The UAS is small and FLIR has implemented the appropriate safety mitigations. Diana Cooper of PrecisionHawk helped educate BVLOS applicants at the FAA UAS Symposium. Updates to the waiver portal expected after the Office and Management and Budget review this spring. Updates will assist operators in obtaining waivers.

Other notable accomplishments cited by Mr. Lawrence included: 1) attendance at the 2017 UAS Symposium, where over 600 stakeholders convened and over 250 attendees made use of the FAA's resource center; 2) FAA support for external conferences by airport associations, agricultural community, remote pilots, and local law enforcement; 3) addressing Congress twice (Senate Committee on Commerce, Science, and Transportation and House Subcommittee on Aviation); 4) Briefing the DACSC, TG3 specifically, on how the FAA is funded and operates, and the offer to present additional webinars and presentations if they will be valuable to the DAC/DACSC; 5) Facilitated the announcement of new ground collision severity research findings conducted by the Alliance for System Safety of UAS through Research Excellence (ASSURE) program. The research results may be found on the FAA UAS Integration website and the ASSURE website; 6) Continued partnerships with other government agencies, such as the Departments of Energy (DOE), Justice (DOJ), Defense (DoD), Homeland Security (DHS), Interior (DOI) and the Secret Service; and 7) the formation of the remote identification aviation rulemaking committee to look into available and emerging technology to aid in identifying UAS. Mr. Lawrence closed by sharing thoughts on what the FAA is looking for in DAC recommendations: they should be policy-focused, performance-based, achievable and realistic, specifies an action or approach, and addresses the appropriate entity (FAA or larger US Government) as well as prioritized.



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Lynn Ray, Vice President, Mission Support Services, Air Traffic Organization

Ms. Ray briefed on the work the Air Traffic Organization (ATO) is conducting to support UAS integration. ATO is using section 99.7 temporary flight restrictions (special security instructions) to address national security concerns at select sensitive locations across the NAS, starting with 133 sites identified by the DoD that are now displayed on an Esri website. The ATO is continuing to work with other Federal partners (DOI, DHS, and DOE) to identify about 10-20 additional sites, and the United States Air Force is looking at 700 additional sites. This is a short-term solution; the long-term solution, as required by section 2209 of the FAA Extension, Safety, and Security Act of 2016, will likely be some form of rule-making action.

Another capability found on the Esri website is interactive maps to allow applicants for part 107 authorization to find out altitude and proximity guidance in respect to airports. The capability does not provide an authorization to fly; it merely streamlines the part 107 process.

Ms. Ray then discussed a new prototype capability coming online called Low Altitude Authorization and Notification Capability (LAANC). FAA does not intend to own this system in the long run. This is a way to exchange information with operators in the near term. LAANC automates the authorization for operations and can also be used by hobbyists.

The last thing Ms. Ray discussed is an upcoming UAS in Controlled Airspace ARC. This ARC builds on the original Small UAS ARC that dealt with more high-altitude airspace. This ARC will work over a 12-15 month period to produce recommended scenarios encompassing most desired operations, identifying gaps in research and development to inform integration, recommend prioritized changes/additions to policies and capabilities to achieve integration.

Marke "Hoot" Gibson, Senior Advisor on UAS Integration

Mr. Gibson provided updates in the Federal and security realm. He discussed (as Mr. Lawrence noted) that he testified before the House Subcommittee on Aviation with another FAA employee located at the William J. Hughes Technical Center. They provided data on FAA status, what Congress can do to build a 21st century aviation infrastructure that can support and enable innovation, and provided an update on work at the William J. Hughes Technical Center, COE. He fielded questions from the committee on how the FAA was working across lines of business and on the operations concept for hazardous airspace mitigation around airports. He provided an update on the UAS ExCom (DoD, DHS, National Aeronautics and Space Administration, Department of Commerce, DOJ, Office of Science Technology and Policy, and the National Security Council), which is a committee of Federal Government agencies designed to increase UAS security coordination.



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Mr. Gibson stated the ExCom is finalizing its draft counter UAS operations concept to determine roles and responsibilities for operators operating near airports and other critical infrastructure. The draft report is scheduled to be presented on June 9, 2017 at the next ExCom meeting. The ExCom continues to be greatly concerned about operations near airports. Work began 16 months ago, driven by language in the FAA reauthorization. Mr. Gibson reported on his work with airports such as Atlantic City, John F. Kennedy, Eglin Air Force Base, Denver, and his trip to Helsinki (and federal prison tour). The FAA concluded testing in Dallas/Fort Worth Airport in the last two weeks. The FAA is not the only agency working on UAS detection around airports. DHS partnered with US Army and FAA observed a test in New Orleans. Most of the Army system encountered problems including line-of-sight radio detection system problems, high density radio-frequency environment interference, zero Doppler radar for slow moving UAS, and masking when in and around other vessels.

Comment: A DAC member was approached by the Tappan Zee Bridge Project and advised that they could not conduct drone operations. The issue is that local law enforcement cannot tell when a drone is authorized and when it is not. A “No Drone Zone” will not work for this reason.

RTCA Update

Margaret Jenny, President

RTCA walked the committee through the process of the Federal Advisory Committee Act (FACA) that drives the work of Federal Advisory Committees (FAC) and provided additional material to supplement DFO Wassmer’s presentation.

Ms. Jenny discussed the roles and responsibilities of the FAA, RTCA, and the FACs. She showed a slide that graphically depicted the organizational process flow among the principle roles (FAA, RTCA, and committee) in the development of recommendations.

She further led a discussion on what consensus means. She emphasized that consensus is not voting, but rather a means to ensure that all voices are heard and all offer constructive inputs. With consensus, not everyone gets everything of what s/he wants. Everyone contributes to the outcome and comments include constructive alternatives. To be specific, consensus means that everyone can live with and support the results. If there are dissenters, the non-concurs are documented and transmitted along with the committee rational for disagreement with non-concur.

Comment: There has been some discussion that there are gaps in representation and it is important for the DAC to understand who is not represented and to fill those gaps.

Question: Is there any learning from the DAC domain survey?



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Answer: We are still receiving responses and when it is completed and compiled we will identify gaps and begin to work to fill them.

Question: A DAC member representing an association alerted the FAA that a member of his association served on an ARC and has been subpoenaed and wanted to know the policy covering that.

Answer: The FAA is working this issue will follow up with the member.

DAC Subcommittee Co-Chair Report

Bryan Quigley, Managing Director and System Chief Pilot, United Airlines and
Nancy Egan, Advisor, 3D Robotics

Captain Quigley began the co-chair report by thanking ALPA and Mr. Lawrence. He recognized the efforts of the RTCA program director. He then reviewed his background and the background of his co-chair, Nancy Egan. He thanked DFO Wassmer, Mr. Lawrence, Ms. Ray, and Mr. Gibson for providing guidance and giving him the chance to serve. He also thanked Chairman Krzanich and the TGs for their hard work. He indicated he is looking forward to giving actionable advice to the FAA. He then reviewed the TG roles and indicated that the pace of DACSC meetings may seem slow and methodical. Despite that, he wanted the DAC to know that they are moving quickly, which occasionally results in some not being able to participate. He briefly reviewed the roles of various members (members, subject matter experts, observers) and the role of FAA briefers in the education of the DACSC. He closed with an observance that what is needed is active participation on the TGs. He stated that members must be actively involved – this is not a spectator sport.

Ms. Egan expressed similar views on what she wishes the DACSC to achieve. She addressed the issue of state and local folks feeling they have not been heard. She stated she has begun an outreach program. She said likes to encourage "aha" moments and had one of her own. Originally, the discussion was unmanned versus manned; those groups are coming together over the past 2 years; now they need to bring in a third voice as state and local folks approach things differently. We are all learning – we need to remain flexible and ensure that everyone participates.

Captain Quigley then recognized the DACSC by asking them to identify themselves. He stressed that the perspectives of the member shapes the engagement on the TGs and the resulting recommendations.



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TG 2 – Access to Airspace Report Out

Rob Hughes, Senior Policy Advisor, Northrup Grumman Corporation and Sean Cassidy, Director, Safety and Regulatory Affairs, Amazon Prime Air

Mr. Hughes began the report with thanks to ALPA, RTCA, and the DAC members as well as FAA colleagues. He reviewed the make-up of the TGs. He observed that much has been done in 2 months and asked the committee to provide comments on whether the TG is headed in the right direction and what should be the next steps. He indicated that the TG is focused on building consensus and as co-leaders, he and Mr. Cassidy have a desire to engage responsibly. The task statement is the touchstone for the group and they have developed assumptions and guiding principles to help steer the work being done.

Mr. Cassidy reviewed the TG2 methodology and approach, which was to collaborate and educate, build and leverage consensus, and make rapid progress. To that end, they have developed five issue papers and draft recommendations.

He stated the recommendations should not reflect a single view and should be a multi-party effort. The TG organically developed into five focus subgroups:

1. Low altitude operations within the Mode C Veil
2. Equipage requirements
3. Leveraging existing cellular networks for command and control (C2)
4. Operational and airworthiness certification requirements for commercial UAS BVLOS operations
5. Future needs for airspace access beyond the 24-month timeframe.

With the assistance of MITRE, the TG looked at use cases to narrow the focus of the problem space. The current draft recommendation groups from TG2 include:

- Prioritize sUAS BVLOS operations within the Mode C Veil below 400 ft
- Develop technology-neutral navigation performance requirements
- Evaluate the existing cellular networks to meet low-altitude UAS C2 requirements
- Establish a CFR 14 Part 135 regulatory pathfinder program for commercial UAS low-altitude BVLOS operations
- Beyond 24 month timeframe recommendations.

Question: Public acceptability – is the TG thinking about how to roll this out and gain public trust first?

Answer: The TG also began to develop guiding principles and tenets – the core message that safety is of upmost importance is primary. Ushering in changes to accommodate UAS with safety as a paramount metric, (risk controlled mechanisms) allows for a slow, steady increase in complexity and diversity of



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operations. The evolution begins with defining the process path and articulating the minimum required safety for each operation.

Question: In looking at full integration, do you envision any issue with scalability?

Answer: That drove several recommendations of the TG. Namely, recommendation 4 (part 135) led to recommendation number 5. The use of land-mobile networks takes 7 different standards groups and aligns them – resulting in a scaled capability.

Question: Assuming unmanned aircraft will eventually go above 400 feet – did you examine the carrying of passengers? There are UAS vehicles that are now full production (optionally piloted) aircraft. Did the recommendations take that into account?

Answer: In response to the production aircraft question, you need an airworthiness certification for commercial on-demand operations (e.g., firefighting). The FAA must identify the minimum design and performance standards (through a risk-based lens) for type certification requirements. Using a risk-based approach, the safety case will determine the certification requirements. Operational supply chain, and recurring training and auditing functions for continuing operations all need to be considered.

Question: Will UAS integrate into the existing airspace as another aircraft type? Will manned aircraft not be denied access to airspace?

Airspace: That is a logical conclusion for an end-state – there may be intermediate stages that lead to that. That may be better answered by the FAA.

Question: Are you discounting visual Line-of-Sight (VLOS) by focusing on BVLOS?

Answer: No - there are rules in place for VLOS.

Comment: As you look at the 24-month horizon, the ADS-B mandate should help around the airports for BVLOS.

Question: Did you consider what it will take for FAA to scale up the waiver request? Part 135 is held to higher standard over part 91 - any potential victim was a by-stander. Why should commercial operations be held to a higher standard than private operations?

Answer: FAA is not saying they should be held to a higher standard; rather minimum standards to perform and operation will be less. LAANC automates the manual process. The automated process is



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derivative and expeditious of the waiver process. A similar part 135 process should be developed eventually.

Question: For the third recommendation (developing the cellular network), did you consider the impact on 911 and emergency network?

Answer: There is an evaluation ongoing and the 911 system is included in that evaluation.

Question: Recommendation 3 seems very detailed in the technology - shouldn't we be looking at a more generic technology?

Answer: Agree it is a concern. The team didn't declare this single technology would be used but is representative of the technology to be used. This study explored how the C2 requirement could be used, but doesn't mean they will be the only answer. The recommendation is to evaluate the spectrum for aviation application. RTCA SC-228, Minimum Operational Performance Standards for UAS, is looking at other technologies: 3G, 4G and 5G are also being looked at.

Comment: SC-228 is being neutral in developing a Minimum Operational Performance Standards (MOPS). Suggest changing the language to say an assessment is being done and don't list the specific technology.

Comment: The section of navigation was generic and specified integrity; communication should be equally vague and only specify availability/reliability.

Comment: Looking across the FAA's broader vision of what NextGen will need, it's important that we think about the period of time and synchronize it with what NextGen is thinking about (along with the NextGen Advisory Committee).

Comment: NextGen is important – airports' current efficiency and safety/capacity must not be compromised and systems of today and the future for airports should continue to be a focus.

Summary: The chairman summarized the discussion to say recommendation 3 should be adjusted to be more of a performance-standards based approach and less about technology. The section should address technologically-neutral components. RTCA will summarize the comments received for each task group and submit for their review and consideration.



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TG1 – Roles and Responsibilities Report Out

Brendan Schulman, Vice President of Policy and Legal Affairs, DJI Technology and Dr. John Eagerton, Chief, Aeronautics Bureau, Alabama Department of Transportation/National Association of State Aviation Officials (NASAO)

Dr. Eagerton, representing NASAO, thanked ALPA for hosting the meeting and observed they are a gold-standard aviation group that to which all others admire. He noted that TG1 is looking at not only how to integrate drones into the airspace, but also integrate into society. All levels of government are involved will be touched as this industry expands. He further complimented TG2 on the great work they've completed so far.

Mr. Schulman echoed those comments. He noted that TG1 has worked very hard and a lot of work is still ongoing. Not all their work will be seen today. TG1 is addressing an important and challenging set of issues and there is significant and appropriate interest in the roles and responsibilities question. He believes we should think creatively, not about pre-emption and zoning, but rather look at what's required to meet the needs of local government and FAA. How can we conceptualize the airspace differently and the relative roles and responsibilities of FAA and local government? Drones are more personal than airplanes and will be managed differently with respect to enforcement, education, and technological tools and solutions. He then reviewed the TG1 work to date.

Dr. Eagerton then explained the methodology used to set priorities. The DAC wanted the TG to move forward and address the priorities and add method and structure to the tasking. The TG decided to use a method called Analytic Hierarchy Process (AHP). The benefits of this method are multi-stakeholders help prioritize issues. He then described how AHP works and the criteria used to determine priorities. He further explained how they were applied to the issue areas:

- Importance of issue area
- Relevance of the UAS problem
- Foundational nature of the issue
- Timely consideration on recommendations.

Mr. Schulman noted that in the desire to identify the highest priority issue, the results indicated the foundational nature of the issue was most important and there was less desire to rush to recommendations and conclusions. He then outlined the ordered priorities as:

- Enforcement
- Relative roles and responsibilities
- Enforcement of federal safety and airspace rules and regulations



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- state and local interest in and response to UAS
- Education
- Defining low-altitude UAS navigable airspace susceptible to state and local government interests
- Tech tools and solutions.

The group has undergone an extensive education campaign, bringing in many subject matter experts to brief them. Additional time is necessary to come to a consensus-based solution. The next steps are to obtain the DAC's thoughts on what has been done and should be done in the future, continue to receive feedback from stakeholders and subject matter experts, address stakeholder interests in the work, (all voices are welcome) and welcome state and local input and will report more details at the July DAC.

Question: Helicopter Association International understands and respects zoning control by cities. There are hundreds of laws being written. We are now wondering at what altitude a local government can regulate aircraft. Drones are considered by FAA to be aircraft. It appears state and municipal authorities are breaching the pre-emption rules with their laws. Will helicopter pilots need to know the patchwork of laws? State and local governments should coordinate with FAA just like they do with manned aircraft. The ability of every city/state to manage drones will lead to bigger aircraft. This is a major question that must be resolved. What are the FAA thoughts on what their action will be and why they aren't exerting control of their role?

Comment: It used to be that I assigned aviation issues to the airport director. Entire cities are transformed by drones to be airports in and of themselves. There is much interest by mayors across the country concerning altitudes, zoning, enforcement, information control. Mayor Lee embraces the desire to get city and county thoughts as there will be resistance to drones. The mayor requests that cities be engaged in the conversation. Mayors are dealing with many issues (e.g., homelessness, housing, crime, jobs). Ask mayors across the country and invite more intense dialogue in this area. Mayors are becoming airport directors because of this technology.

Comment: I congratulate the TG for taking on this huge task. Prioritization exercise discussion - enforcement QueryQuery and relative roles are tied together. FAA currently knows and understands how to handle the existing system, but lacks the clarity of understanding on what state and local governments want to regulate. This is not a black-and-white issue - this tasking should help define how those co-exist. Cities decide where the airport is located, then, the FAA defines how it is to operate. Co-existence is what we're after in this space. Cities can't be considered airports; FAA inspectors can't adjudicate homeowner's complaints for use of their property. We need a uniform system over all. Need to create space on this TG to bring definition on where there might be consensus.



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Discussion continued on the role of cities in regulating UAS and if that will eventually be applied low-altitude manned aircraft. The resultant responses indicated that more work needs to be done to answer this question and the city/state governments need to be in the discussion. Engagement of cities/states could be through a poll (discussed previously, but time constraints prevented one from being developed). Use cases to help define the scope of the problem space, and gap analysis. To help narrow the conversation, Marily Mora and Robert Boyd suggested that the DAC help facilitate relevant organizations getting invited to attend the US Conference of Mayors convention in June and the National Association of Counties convention in July and both educate and solicit more feedback from the participants there.

The topic of how UAS increase employment was introduced. It was observed that drone operations could have a negative effect on employment, while the industry believes it will be positive. Some commented that the jobs created will require different skills than the jobs lost due to drone.

The chairman summarized the discussion and added that technology does not always decrease employment rather new skills are required. Mayors are responsible for navigating cities through the introduction of drones. The TG may be focusing on enforcement before the DAC knows what the state and local interest is. So, TG1 should re-look at priority 4 (State and Local Interest in and Response to UAS) with more attention. The DAC can help educate legislators at the upcoming local conferences.

How can the DAC help at the two conventions discussed? RTCA is to help identify DAC members who wish to assist in addressing the county and city conventions and to assist in defining what output they can produce that will benefit the two conventions and also to work with member Mayor Lee's office and Robert Boyd to get on the agendas of (or include focus group sessions) at both conventions.

TG3 – UAS Funding Report Out

Mark Aitken, Director of Government Relations, AUVSI, and Howard Kass, Vice President of Regulatory Affairs, American Airlines

It was observed that TG3 started later than the others and the co-chairs thanked everyone for their patience. TG leaders observed that future success of the drone industry depends on government and private sector funding to support and facilitate the integration and operations of drones in the NAS. Current FAA funding levels and mechanisms will not support timely integration. The UAS Implementation Plan lays out the myriad UAS activities over the next few years.



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The co-chairs then reviewed the tasking statement and determined 3 possible mechanisms for funding: government, industry, or a hybrid partnership approach. The assumptions and guiding principles and timeframes of the TG were reviewed and set the tone for the discussion of how the group will approach its work. The July meeting is for short-term recommendations with longer-term recommendations coming in November.

The mechanism for decision making was reviewed by the co-chairs (Decision Lens' AHP) that led to a ranking of the activities to be reviewed. A lot of help from the FAA was received in identifying these activities. There appears to be a natural synergy with TG2 (Access to Airspace) as they identify technology required and when, and TG3 as they identify how to fund that technology in the same timeframe.

The next steps for the TG are to:

- Collect and consider DAC feedback
- Engage subject matter experts and the FAA
- Analyze the data reduction and trade study results
- Assign focus groups with writing assignments
- Present the work and short term funding options at July 21, 2017 DAC virtual meeting.

The group currently believes that the FAA has to find new funding resources.

Question: With regards to FAA transformation - are you considering a transformative, risk-based approach from heavy certification to risk-based?

Answer from FAA: Yes - there are several efforts that include privatization. Aircraft certification is being reorganized with the part 23 rewrite. Performance based standards and requirements are desired by the FAA and there is more organizational delegation. It is not believed these efforts will affect the work of TG3.

Question: Are there resources that communities can bring on to support the activities. Where will the funding come from?

Answer from the FAA: TG3 brought up law enforcement needs and the FAA does not want to create unfunded mandates – it is critical that this be addressed.

Question: The National Academy of Sciences held a symposium on public-private partnerships (PPP) with NASA and government - how can these methods help fund these activities?

Question: Whether it will be a Cooperative Research and Development Agreement or PPP won't be part of what can be done to define the funding stream. There must be viable methods to do it, however.



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Answer: An informal survey was initially done to capture the group's thoughts for where each activity fell in funding mechanism spectrum. That may need to be revisited.

Question: How do you ensure, with an in-place architecture that is great but aging, the economic funding makes the right assumptions for technology of the future based on today? Assuming technology is improving, how can it be leveraged today rather than developing new technology (make the current system more scalable)?

Answer: The TG is looking at next 2 years. Technology won't advance enough to help in that timeframe. Some of what is done to help UAS will eventually help manned aviation; where that convergence is, no one knows but we believe it is many years away. The group does not want to do anything to degrade the current safety level of the system.

Comment: Manned aviation can benefit from unmanned aviation.

Comment: NextGen air traffic control was introduced as transformational technology more than a decade ago, yet it has not been effectively deployed because of a year-to-year budget cycle. When we think about what we'll do, we should think differently (e.g., lobbying for appropriations, adding fees on users of drones).

Comment: The current strategy in NextGen is to employ a best-equipped-best-served approach. The big challenge is to make that happen. Technology comes fast but current infrastructure has benefits that won't be replaced easily.

Comment: Thinking outside the box was part of this TG's assignment.

Comment: The future involves helping the FAA rewrite the rules to help industry move at the pace they wish to move.

New Business

No new business was presented.

Dates and Agenda (if known) for Next 2 Meetings

- The next (fourth) meeting of the DAC will be a virtual meeting scheduled for July 21, 2017.
- The fifth DAC meeting is scheduled for November 8, 2017 at a TBD location.



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Action Items

Action	Responsible Party	Schedule	Status
ACTIONS OPEN FROM PREVIOUS MEETING			
None			
NEW ACTIONS			
TG2 to adjust recommendation 3 to be more standards based and less about technology	TG2	July	OPEN
RTCA to summarize the comments received for each TG and submit for their review and consideration	RTCA	ASAP	OPEN
TG1 re-look at priority 4 (state and Local Interest In and Response to UAS) with more attention	TG1	July	OPEN
RTCA to help identify DAC members who wish to assist in addressing county and city conventions, and to assist in defining what output can be produced that will benefit the two conventions; and work with members Mayor Lee's office and Robert Boyd to get on the agendas or set up focus group sessions at their conventions	RTCA	July	OPEN
RTCA to coordinate a webinar for SC-228 that can be reviewed by all DAC members	RTCA & SC-228	ASAP	OPEN
FAA to determine if members of committees and ARCs are required to divulge discussion material due to being subpoenaed	FAA	ASAP	OPEN

Attachments



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July 25, 2017

RTCA Paper Number: 195-17/DAC-009

Drone Advisory Committee (DAC) July 21, 2017 Meeting Minutes

List of Attachments

- Attachment 1: Attendees
- Attachment 2: Agenda
- Attachment 3: Presentations

Summary

The July 21, 2017 DAC Meeting was a virtual meeting, with several members attending at RTCA headquarters, 1150 18th Street, NW, Suite 910, Washington, DC 20036. The DAC received presentations from two Task Groups (TGs): TG1 – Roles and Responsibilities and TG3 – Unmanned Aircraft Systems (UAS) Funding. TG2 – Access to Airspace – did not present at this meeting. The co-chairs of TG3 presented a summary report of TG3's interim recommendations, including the background of the tasking statement as well as the guiding principles, methodology, and workflow used to develop the interim recommendations. TG3 leadership also outlined the next steps for refining the interim report into the final report to be delivered in November. The DAC also heard from TG1 on the status of evaluating State or local government interests that could form the basis for recommendations to the DAC for future Federal Aviation Administration (FAA) action. These actions are related to the relative role of State and local governments in regulating aspects of low-altitude UAS operations. The meeting discussions are summarized below.

Designated Federal Officer Statement

Dan Elwell, Deputy Administrator and Chief NextGen Officer, FAA

The Designated Federal Officer (DFO) statement was read by FAA Deputy Administrator Dan Elwell at 11:02 AM.

Chairman's Remarks

Brian Krzanich, CEO, Intel

DAC Chairman Brian Krzanich welcomed everyone to the virtual meeting and expressed his hope that the virtual meeting format would not be a hindrance to communications. He thanked the out-going DFO, Victoria Wassmer, for her service and welcomed incoming DFO Dan Elwell to the DAC. He then



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thanked the rest of the FAA executive team for their guidance and assistance to the DAC Subcommittee (DACSC) and TGs, and finally he thanked the TGs and DACSC for their progress to-date.

Chairman Krzanich briefly recounted the events that led to the virtual DAC meeting, starting with the January 31, 2017 DAC meeting held in Reno, Nevada, where the TG1 and TG2 tasking statements were approved by the DAC. Since TG3 received their tasking statement after the January 31, 2017 DAC Meeting, this supplementary July Meeting was added (after the already-scheduled May 3, 2017 DAC Meeting) to the schedule to give them more time to prepare their input for the DAC. Chairman Krzanich said the DAC would hear updates from TG1 to make sure they are going in the “right direction,” in preparation for the November 8, 2017 DAC Meeting, and would hear from TG3. TG2 would report their recommendations in November. Chairman Krzanich reiterated that the virtual meeting was to ensure the November meeting would be as productive as possible. Note: RTCA provided instructions for participants on the virtual call to be recognized by Chairman Krzanich.

Approval of Minutes from Previous Meeting

The minutes of the previous meeting were unanimously approved as distributed.

RTCA Remarks

Margaret Jenny, President, RTCA, Inc.

Margaret Jenny introduced the incoming DFO, Dan Elwell. Mr. Elwell was with the FAA under the Bush Administration from 2006-2008 as the Assistant Administrator for Policy and Environment. After that, he was in Vice President positions at the Aerospace Industries Association (AIA) and Airlines for America (A4A). He has over 6,000 hours as a military and commercial airline pilot, with over 20 years of flying experience. He also served as a legislative fellow for the late Senator Ted Stevens (R-Alaska). Most recently, he served as Secretary Chao’s (DOT) Senior Advisor on Aviation. He was sworn in as the Deputy Administrator on June 26, 2017, and is the new DAC DFO.

FAA Remarks

Dan Elwell, Deputy Administrator and Chief NextGen Officer, FAA

Mr. Elwell thanked Ms. Jenny for the introduction. He stated that he knows many of the committee members. He echoed Chairman Krzanich’s thanks to Victoria Wassmer for her service as the FAA’s Acting Deputy Administrator and previous DAC DFO. Mr. Elwell thanked Ms. Wassmer, Ms. Jenny, and those who have dedicated their time and energy to the DAC. He stressed that his previous work with the FAA and other organizations has highlighted the importance of listening. He indicated his eagerness to hear about the work of the TGs during the meeting and noted the recommendations being developed by the DAC will be an important factor in the unmanned aircraft policies that the FAA will institute, and



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that the importance of the work being done by the DAC cannot be overstated. The FAA will build on the DAC's work presently being done and the work to be done in the future. Mr. Elwell mentioned that the Aviation Rulemaking Committee (ARC) for identification and tracking of drones during flight met for the first time on June 21, 2017. This ARC has formed three working groups: 1) existing and emerging technologies, 2) security and law enforcement, and 3) implementation. The FAA expects to receive recommendations from the ARC by September 30, 2017. The FAA has also signed a charter for an additional ARC that will help prioritize activities to integrate drones successfully into controlled airspace. These actions come as Congress, in both the House and Senate chambers, considers legislation that addresses unmanned aircraft. This underscores the importance and timeliness of the work being done by the DAC and the ARC, which has implications at the very basic levels of government and even at the constitutional level (interpretively).

TG3 – UAS Funding Report Out

Mark Aitken, Director of Government Relations, AUVSI, and Howard Kass, Vice President of Regulatory Affairs, American Airlines

Chairman Krzanich thanked Mr. Elwell for his remarks and invited the leadership of TG3 to make their presentation. Co-Chair Mark Aitken began by thanking the DAC for the opportunity to report their interim (near-term) recommendations for UAS Funding. Because the team briefed at the last DAC meeting, it was expected that today's presentation would go quickly. The second phase of the task will be focused on longer-term funding activities.

Mr. Aitken presented TG3 assumptions and guiding principles:

- 1) There will be a combination of government, industry, and shared funding across the integration efforts.
- 2) Options for funding should not be constrained by the current traditional aviation funding structure, although in the near-term, a new model may be difficult to implement.
- 3) The recommended funding structure should not alter the current structure of funding for traditional, manned aviation.

TG3 used "Decision Lens" to rank all FAA UAS activities against a common set of criteria. The key take-away is the criteria that were decided upon by the team. The top criteria were safety among UAS operators, for people and property on the ground, followed by enabling UAS operations, and finally, economic benefits.

The team examined activities that the FAA conducts to integrate UAS into the airspace safely. TG3 was challenged by having to look across many lines of business within the FAA for their work. The prioritization exercise did not result in a large difference among ranked priorities. This led the group to



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believe that all priorities are (relatively) of equal importance in achieving the goal of safe UAS integration.

TG3 reported that they had divided the group into teams that considered their prioritized results to define the short-term government, industry, and collaborative efforts to fund these activities, and then provided written (draft) recommendations. The reports were circulated and discussed, and consensus was reached on the recommendations. The groups also considered the following recommendations from TG2 to ensure there was common guidance across all three TGs:

- Prioritization of UAS beyond visual line of sight (BVLOS) operations within the Mode C Veil below 400 feet above ground level (AGL).
- Development of technology neutral navigation performance requirements.
- Evaluation of the ability of existing networks to meet low altitude UAS Command and Control requirements.
- Establishment of a 14 Code of Federal Regulations (CFR) part 135 regulatory pathfinder program for commercial UAS low-altitude BVLOS operations.
- Recommendations for a timeframe beyond 24-months.

TG3s interim recommendations, as reported, are:

- All regulations, policies, and standards necessary in the next 24 months should be developed primarily by the FAA with significant industry input. Congress should appropriate additional funding and increase FAA staffing to address this ambitious work schedule.
- The research and development, and system development necessary in the next 24 months, should be shared between government and industry.
- Communications, outreach, and training necessary in the next 24 months should be shared between government and industry, depending on the activity.
- Any recommended funding structure should not alter the current structure of funding for traditional, manned aviation.
- In the future, the UAS industry may be expected to pay for the operation, maintenance, and modernization of an automated Unmanned Traffic Management (UTM) system through a yet-to-be-created “pay-for-what-you-use” funding model.

Co-Chair Howard Kass stated that the regulatory framework is already underway to enable the commercialization of drone operations. Several ARCs have been established, and the FAA has held several meetings with other government agencies on the topic of UAS integration. These inter-agency meetings have included counter-drone discussions.

Mr. Kass noted that the FAA would normally carry the burden of cost for development of the policies and standards for drones, but the team believes that industry has a role to play in helping to pay for this activity. He observed that exciting work is underway in systems engineering and research and development (R&D). The industry has considerable experience conducting R&D and many activities can



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be leveraged from these efforts (e.g., infrastructure build-out). The government track record in R&D is inadequate and so this may be an area where industry and government can collaborate, with industry leading the activities necessary to implement technology for the integration of UAS.

Outreach and training is an area where the FAA and industry both have extensive experience. As such, both government and industry will both have a role to play in paying for the outreach and education of their traditional constituents.

Mr. Kass acknowledged the efforts of Congress to aid in funding FAA activities in the Fiscal Year (FY) 2017 FAA Reauthorization Bill. There is concern that an FAA reauthorization bill will not be approved and enacted before the end of September 30, 2017.

Mr. Kass then described the future activities for TG3. At the May 3, 2017 DAC Meeting, the DAC instructed TG3 to divide its activities into near-term (24-month horizon) and long-term (5-year horizon). The long-term questions are more complicated, such as cost accounting measures. TG3 will consider options and identify self-sustaining and scalable funding sources. They will consider both government and industry funding sources. Further, they will work to identify a funding option for the UAS industry that is segregated from the mechanisms that funds manned aviation (it could be similar in structure, but they won't cross-pollinate). TG3 is cognizant of the possibility of far-reaching structural and governance changes that could affect the funding for UAS integration. The group will consider new sources of funding for the long term, including user fees, taxes, and/or similar pay-for-what-you-use services. Lastly, Mr. Kass reported that on July 14, 2017, the TG3 had a "listening session" to discuss long-term issues. It was open to the entire DACSC for as many options and voices to be expressed and heard. A priority issue that surfaced in addition to funding, was that the structure of the FAA will have an impact on the integration of UAS into the National Airspace System.

Ms. Jenny offered specific thanks to FAA's Aviation Policy and Plans Executive Director Nan Shellabarger for extraordinary assistance in educating and assisting TG3 on how the FAA budget works, as well as the intricacies of fees and taxes. The co-chairs agreed wholeheartedly with that recognition and offered their thanks as well.

Question: Did the team think about establishing a UAS Trust Fund similar to the Airport and Airways Trust fund?

Response: That will be addressed in the long-term focus work that will be tackled next, but has been mentioned in past discussions.

Question: It appears that the team is looking at the manned aviation funding and recommending changes to that mechanism as opposed to developing a whole new one. With Air Traffic Control



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privatization efforts underway in Congress, has the team considered how its recommendations might be altered if privatization becomes reality?

Response: The team was very sensitive to possible structural change within the FAA. They intend to keep that possibility as a “reality” that any ideas must be weighed against. Given the uncertainty of the effort, nothing could be recommended against it.

Question: What are the team’s thoughts on the manned aviation funding mechanism of today and trying to have an effective change on those? Is that where we’re heading versus just concentrating on how the initiative for integration of UAS are going to be funded and leave the manned funding alone right now?

Response: The team’s focus is looking at the unmanned space.

Question: The concept of “pay as you go”, assumes there is a service to which an operator must be connected. If you break funding into: what is required to operate automated systems below 400 feet; no interoperability with manned aviation; what policy making, governance, and auditing is required to be in place; when interoperability is required between manned and unmanned aviation, that requires funding on FAA side. Decouple funding from architecture discussion. Industry may be better suited to introduce other architectures that are cheaper, more quickly.

Response: These comments align with why TG2 was consulted – fee for service models will be dictated by available services and those required to operate (i.e., command and control communications services). Additionally, scalability of operations plays an important part. Part 107 is only the tip of the iceberg for what commercial operators would like to see implemented. It will be hard to justify paying for services that aren’t available or tie in to ATC services that are not allowed in the operational environment. As we get a better understanding for what’s on the immediate regulatory horizon, it will help frame what should be pursued for funding.

Comment: Clarify: funding should be driven by the technology capabilities and the scenarios rather than what funding looks like in today’s system. The concept of segregation and integration should be understood that many DAC members believe in deeply integrating one set of standards for everyone in the air. The concept of separation of these activities is not a good idea. We may need tasking statement clarifications or high-level tenets to ensure this is maintained.

Response: As the team looks to all sizes of UAS, leading to full integration will help to inform the work stream (along the 5-year mark). The work done by TG2 will inform the work of TG3.

Comment: There was a reference to operations below 400 feet with no interaction with manned aircraft – helicopters operate below 400 feet routinely and will need the interaction.



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Comment: Chairman Krzanich complimented the team on a great job and great progress, and is looking forward to the discussion in November.

TG1 – Roles and Responsibilities Report Out

Brendan Schulman, Vice President of Policy and Legal Affairs, DJI Technology and Dr. John Eagerton, Chief, Aeronautics Bureau, Alabama Department of Transportation/National Association of State Aviation Officials (NASAO)

Chairman Krzanich called upon TG1 to provide a status update on their efforts. Co-Chair Brendan Schulman apologized on behalf of Co-Chair Dr. John Eagerton who was unable to attend the meeting due to a prior commitment. Mr. Schulman led the presentation for TG1 and briefed the DAC members on the history of the tasking statement and progress made since the May 3, 2017 DAC meeting. Since May, the team has incorporated guidance received from the DAC, namely, to set aside work on enforcement for now and focus more on roles and responsibilities task item. He reported that RTCA has added new member and observer participants (local/state government). The TG has conducted three days of in-person TG meetings (May 25 and July 10-11) and a conference call (June 14), and held extensive discussions on governing models (local, State, or Federal) based on altitude. Observing the number of public observers at this meeting, Mr. Schulman invited new members to join to help work on the TG's interesting and complex work.

Specific actions taken to inform the issues being worked included development of a "matrix" of existing roles and responsibilities ("This is a creative exercise – don't look at what exists today but on creative solutions that may not resemble today's reality."), fact gathering from two additional law enforcement subject matter experts, and an altitude drone flight observations "field trip."

TG1 continues to work towards developing consensus recommendations against their tasking. The discussion is spirited and thoughtful. The group's timeline will proceed with urgency, and work to deliver initial recommendations by the November 8, 2017 DAC Meeting, with further guidance from the FAA and DAC as to what is most useful.

Question: There was discussion at the last DAC meeting introduced by the local government representative, Mayor Lee, about a local representative's feelings that they were not being heard in the TG1 discussions. Have you worked with the mayor to develop a process to collect their comments?

Response: Mayor Lee's representative has been added to the TG. There are also efforts to reach out to the National League of Cities (NLC). When we started the DAC, it was very important to not meet just 3 or 4 times a year, but that there should be interaction and discussions outside of the DAC meetings (through subcommittee and TG meetings) and that has been taking place.



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Question: American Legislative Executive Council – State Legislators discuss local issues. Which national state organization might exist that might be consulted? State legislators represent a great educational opportunity.

Response: We have engaged the National Conference of State Legislatures (NCSL), the National Association of Counties (NACo), and have a member of the Rhode Island legislature on the TG. Also, NASAO is represented as the co-chair on the TG.

Comment: The DFO requested information on who existed on the TG and who was added.

Response: RTCA took the action to provide the roster and history of the membership of TG1.

Comment: A member observed he is currently at the NACo convention and is participating in a MITRE effort to coordinate and educate NACo members.

Responses: RTCA clarified that this is not an RCTA initiative and we have received no feedback on this or a similar initiative by MITRE, MIT, and FAA at the Miami Beach, FL U.S. Conference of Mayors (USCM) annual meeting.

Response: Mr. Schulman mentioned he will be on a panel at the NCSL Legislative Summit in Boston, MA.

Comment from a representative of Mayor Lee: Mayor Lee was unable to participate in the virtual DAC meeting and sent a representative. The representative mentioned they were only observers on the TG. Mayor Lee wanted to reiterate his commitment to focus on local authority to make reasonable time/manner/place restrictions in low altitude airspace to ensure public safety. He remains concerned about privacy and ensuring broader input in the discussion from partners such as law enforcement agencies and other local government representatives. The desire is to have an equal, one-to-one representation of local government to industry members. The mayor introduced a resolution at the USCM Transportation and Communications Committee meeting that there are calls for State and local authority to regulate time/manner/place of drone operations within 200 feet of the ground. That resolution was approved by the USCM and was sent to Congress and the Administration as part of the USCM policy agenda. It received bipartisan support. He has encouraged fellow mayors to reach out and express their concerns so they can be passed on to the FAA.

Response: Ms. Jenny made a point of clarification that the mayor's representatives were added as members of the TG originally but were asked to be made observers only. She further went on to say that RTCA was very happy the mayor was undertaking an outreach and look forward to hearing from anyone who wished to become engaged. We have discussion in general about the difficulties securing resources to be involved that makes it difficult for cities to be actively engaged. We will be looking at



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other innovative ways to get that input and how often and for how long the group meets. The mayor's office has given us good feedback which we are relaying to the TG leadership to accommodate that more balanced TG membership. This is a challenging work-in-progress.

Comment: The mayor is member of the DAC and is trying to engage other mayors, but the time commitment to take part in the TG is too great for most mayors. RTCA is encouraged to find additional mayors.

Response: RTCA has been in discussion with a few elected officials and also talking to associations that represent cities and mayors. It is good to have large cities represented (like Mayor Lee's), but to get the engagement, we may need to rely on mayors of smaller cities who may have more time available to support the DAC.

Any local or state government has been offered an opportunity to join. Sometimes associations (e.g., NLC or NCSL) can devote someone if the city or state cannot. Most associations have been offered a position but have declined. This TG has a variety of stakeholders that represent many disparate interests – manned, unmanned, airports, etc. Virtual meetings aid in allowing distant persons to attend.

After the conclusion of the TG1 discussion, the DAC revisited the TG3 presentation to accept the group's interim report formally. Chairman Krzanich called for any last comments on TG1's presentation, and there was none. He then called for additional comments and motion for acceptance of TG3 material. A motion to approve TG3's update was made and seconded, and was adopted with no objections.

New Business

A call for new business was made by Chairman Krzanich.

Question: Given the uncertainty with the 2018 FAA reauthorization, is it appropriate, and is there a need, for long-term funding, or to have someone advocate for the DAC to allow continued work in the future?

Response: To reword the question, as the legislation moves forward is there a placeholder in there for UAS? That would be considered as part of the TG3's work, and they will account for the FAA funding overall in the development of their recommendations.

In terms of a placeholder, in the House version of the FAA bill, there is a section asking for a report out on these types of funding issues. TG3 remains mindful of what is happening in the bills as they go forward.



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Dates and Agenda (if known) for Next 2 Meetings

November 8, 2017: Seattle, WA.

Action Items

Action	Responsible Party	Schedule	Status
ACTIONS OPEN FROM PREVIOUS MEETING			
RTCA to summarize the comments received for each TG and submit for their review and consideration.	RTCA	ASAP	CLOSED
TG1 re-look at priority 4 (State and Local Interest In and Response to UAS) with more attention.	TG1	July	CLOSED
RTCA to help identify DAC members who wish to assist in addressing county and city conventions, and to assist in defining what output can be produced that will benefit the two conventions; and work with DAC member Mayor Lee's office and Robert Boyd to get on the agendas.	RTCA	On-Going	OPEN
RTCA to coordinate a webinar for SC-228 that can be reviewed by all DAC members.	RTCA & SC-228	ASAP	CLOSED
NEW ACTIONS			
RTCA to send a roster of the government attendees to the DFO including add-date.	RTCA	July	CLOSED

Closing Remarks

Chairman Krzanich expressed his thanks to the members for their preparation and participation. He believes that the committee is well-positioned for the November meeting.



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Mr. Elwell also thanked the TGs for their time, hard work, and participation in the meeting. He expressed appreciation for the work being done on the country's behalf in this new technology. There are many activities involving UAS happening in Washington DC, and the FAA is providing assistance to Congress as the reauthorizations bills before them are worked. Between now and November 8, 2017, there may be new things to incorporate into the committee's work and the FAA looks forward to the next meeting and report of progress. On Administrator Huerta's behalf, he thanked all the members.

Ms. Jenny observed the extraordinary work of TG2, who although they did not report during this meeting, has submitted their final report to the DAC for review in November.

The meeting was adjourned at 12:35 PM EDT.

Attachments



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Drone Advisory Committee (DAC) November 8, 2017 Meeting Minutes

List of Attachments

- Attachment 1: Attendees
- Attachment 2: Agenda
- Attachment 3: Presentations

Summary

The November 8, 2017 DAC meeting was hosted by Amazon at the Amazon Meeting Center in Seattle, WA. The DAC heard presentations from The MITRE Corporation and three Task Groups (TGs): TG1 - Roles and Responsibilities, TG2 - Access to Airspace, and TG3 - Unmanned Aircraft Systems (UAS) Funding. Michael Guterres of The MITRE Corporation presented the results of a local government outreach effort conducted by MITRE and Juan Alonzo, DAC member and Stanford University Professor. The outreach efforts gathered feedback from local government officials on the desired role of local governments in regulating low-altitude drone operations. MITRE conducted focus-group sessions on this topic at the annual conferences of the U.S. Conference of Mayors, and the National Association of Counties.

The Co-Chairs of TG1 presented a summary report of nine common principles developed by the TG. Of the nine principles presented, five gained group consensus. The language of the four remaining principles was disputed and as a result, two versions of the four non-consensus principles were presented. TG2 presented five final recommendations intended to guide future activities necessary to provide access to airspace for drones. With several small editorial changes suggested by the DAC, the Committee unanimously approved the recommendations for submission to the FAA. TG3 provided a summary of their work completed since their July 2017 interim report. They plan to present final recommendations to the DAC at its first meeting in 2018. The meeting discussions are summarized below.

All times noted below are Pacific Standard Time (PST).



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Official Statement of the Designated Federal Officer Dan Elwell, Deputy Administrator and Chief NextGen Officer, FAA

The Designated Federal Officer (DFO) statement was read by FAA Deputy Administrator Dan Elwell at 9:02 AM.

DAC Chairman's Report Peter Cleveland, Vice President, Government and Policy, Intel Corporation

DAC Chairman Brian Krzanich was unable to attend the meeting. Mr. Peter Cleveland, Vice President, Government and Policy Group for Intel, led the meeting in his place. Mr. Cleveland welcomed everyone to the meeting and thanked Amazon (specifically Gur Kimchi, Sean Cassidy, Ben Gielow, and Naomi Duprey) for hosting the previous evening's event. He complimented Amazon on the meeting space and thanked them for hosting the committee. He noted that much has happened since July in the drone space. The wildfires and hurricanes over the past months demonstrated the usefulness of drones. Mr. Cleveland acknowledged the FAA for moving quickly to allow drone technology to be used, stating that the constructive approach of advising and partnering with the FAA leads to the best results. He commented that Dan (Elwell) is gaining experience in his new position and that he is appreciated. Mr. Cleveland noted that Ethan Klein of the White House Office of Science and Technology Policy (OSTP) would be making a presentation on the newly created UAS Integration Pilot Program, in addition to the MITRE and TG reports. Next, Mr. Cleveland recognized the efforts of TG1 (Co-Chairs Brendan Schulman and John Eagerton) and commended RTCA's rebalancing efforts in support of the group. He noted that TG1 has developed a list of Common Principles and will present a status update on that work. He then recognized TG2's (Co-Chairs Sean Cassidy and Rob Hughes) efforts in developing their final recommendations for DAC consideration. Next, he acknowledged TG3 (Co-Chairs Mark Aitken and Howard Kass) and highlighted that they would provide a status update as the final presentation for the day. TG3 is mid-task and is working on identifying alternative funding mechanisms as options for funding efforts to integrate drones in the airspace.

Mr. Cleveland recognized the excellent leadership of outgoing DAC Subcommittee co-chair, Bryan Quigley, and welcomed his replacement, John Allen, of jetBlue Airline. He emphasized John's experience and credibility as a leader. Following this, Mr. Cleveland emphasized that the DAC conducts a transparent process and its meetings are open to the public. He verified with DAC secretary Al Secen that no public comments had been requested to be made during the meeting.

Approval of Minutes from Previous Meeting

The minutes of the previous meeting were unanimously approved as distributed.



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FAA Remarks

Dan Elwell, Deputy Administrator, and Chief NextGen Officer, FAA
Ethan Klein, Policy Advisor, White House Office of Science and Technology
Policy
Earl Lawrence, Executive Director, FAA UAS Integration Office
Teri Bristol, Chief Operating Officer, FAA Air Traffic Organization

Please see attachment 4 for the FAA Deputy Administrator and Chief NextGen Officer's remarks.

Mr. Ethan Klein presented a slide that introduced the new UAS Integration Pilot Program. The Administration sees this pilot program as a priority. Mr. Earl Lawrence also presented additional information on the pilot program and informed the DAC that an announcement of the program was officially released in the Federal Register, thus opening the application window for the program. Mr. Lawrence outlined the sequence of events for applying and being awarded a role in the pilot program. He reviewed the application process and indicated there had been substantial interest already shown. He further noted that additional information is available online on various websites.

Ms. Teri Bristol spoke about the success of LAANC (Low Altitude Authorization and Notification Capability) in reducing the time of approving authorizations for drone operators from days to minutes. The LAANC program is a partnership between the industry and FAA. It provides an automated process that reduces the approval time from 60-80 days, to 15 seconds.

Question: What role will the DAC play in the pilot program process?

Response: That was alluded to in opening remarks of the Deputy Administrator. There is an expectation of a re-tasking of TG1 to assist with the pilot program. That full tasking is expected soon. The websites set up by the FAA have FAQs and information about the pilot program. There is a helpdesk and social media presence. But before a new tasking for TG1 can be released it must be reviewed to ensure there will not be an organizational conflict of interest (OCI) for companies that wish to serve on the DAC and participate in the pilot program.

Question: How is the pilot program addressing liabilities?

Response: There have been no proposals received yet. The FAA wants to be surprised and hear things that are important. Liabilities have been discussed in reference to local communities with respect to drone operations. The FAA is looking for these projects to help determine answers to these questions. The White House is making sure that the FAA is working with local authorities to address these issues. Additionally, the FAA is looking to dive down into those tough questions to identify responsibilities. Other federal agencies are involved in the pilot program and will provide their expertise.



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Question: Can the FAA elaborate on whether airport authorities can apply as a lead for a proposal?

Response: Yes, they can apply. Several already have.

Question: Will there be any public review period to allow comment on the proposals?

Response: No, because this is a contracting opportunity and there is a Screening Information Request (SIR) that lays out exactly how the proposals will be evaluated. There is no expectation of the public reviewing the material. Additionally, the FAA has direction from the Presidential Memo to coordinate with DoD, DHS, and NASA to get input on applicants. The decision to award lies with the Secretary of Transportation.

Question: Does this mean that only government will review for safety and security?

Response: Yes, But the FAA is soliciting community involvement as well. Applicants should coordinate with the public to determine their interest. If the public citizens of the locality applying for the program are not interested in having the program go forward, it will score lower in evaluations. There are a maximum number of applications (1,000) and it is expected that some of them will address drone operation time/use/manner questions, or zoning regulations affecting take-off and landing. Involving communities in the development of the proposal will serve as the community vetting process.

Question: Is there any federal funding for the pilot program?

Response: There will be no federal funding.

Question: Data will be very important in this endeavor. Is there a plan for what data will be collected, how data will be collected, and to whom and how the data will be disseminated?

Response: The FAA has been preparing for this program for a while. The planning office in the FAA is proceeding in a methodical way to define data required and data-gathering steps. The FAA is building on the existing Mission Logging System for test centers but will not set forth data requirements ahead of time. Those requirements will be articulated in the MOA agreements approved regarding what data will be collected (technical, information, community established criteria, etc.)

Question: Will there be any commitment to make the data collected available to everyone?

Response: Yes – all collected data will be available in the presidential report. A decision on releasing in any other form has not yet been made.

Question: Authorizations and pilot authorizations have been victims of our success. Automation is key. Help us understand the data collection process and how the data is going to be used--how state and



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local officials can participate? How is this going to be automated, and how this will come together over time?

Response: FAA will be focusing on automating the system. Applicants need criteria and the local communities will teach them what they need. A sheriff can call [FAA] ATC and request a flight restriction. Many forget that. What criteria do they use to request airspace restriction? If we can automate that, it would be very helpful and will also help with the UTM concept. How we put it all together will be key in moving forward.

Question: (Follow up question) In manned aviation we have had great success in collaborating on safety cases. We have done so working as a team (labor, private, operators). This seems to be different. I am encouraged by the [pilot program] initiative but am concerned the process could exclude insights from some stakeholders.

Response: Are you referring to the Commercial Aviation Safety Team program? (Questioner: Yes, In part).

Response: I misunderstood the previous question as asking if all stakeholders would be involved in the selection (award) process. What you are describing is exactly what we want for the conops of the future. They would not be involved in the selection, but we would expect the proposal to address safety.

Question: Do you see the lead applicants being grouped by mission, or use cases, or by institutional affiliation? Will priority be given to certain use cases?

Response: The memo outlines the objectives. Geographic diversity (and others) will be a selection criterion. The criteria are also outlined in the memo (technological advancements, balancing of local and federal authority, what is the interaction among them). UTM, BLOS, etc. will be prioritized. We are looking for diversity among the projects selected. Proposals should assume using existing authorities and resources. Also, this is a rolling program, in which we will initially tee up at least 5 projects for the Secretary to endorse. The final number will be driven by resources (i.e., the larger the projects, the fewer there will be (and vice versa) due to resource limitations).

Question: Regarding liability and safety, how does the safety responsibility get delegated to local authorities?

Response: Everything is predicated on existing laws and regulations. Any project that requires BVLOS requires the appropriate exemption and waivers from FAA. BVLOS site projects will get priority because we are trying to advance those particular activities. However, the proposed operation still must be safe. The idea is to not bypass safety requirements.



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Question: What altitudes are involved in pilot program?

Response: The presidential memorandum opens up to 200 feet and allows up to 400 feet for operations.

Question: How would you view any overlapping or layering of local governments applying for the pilot program?

Response: We would welcome multi-jurisdictional applications that are being cooperative among multiple jurisdictions.

Question: Who will ensure coordination among levels?

Response: We are learning more and more about overlapping authorities. The FAA has learned that some local authorities can't apply to the pilot program because their state pre-empts them. The FAA is learning how this works and is not quite sure how this will be covered. We will take applications at face value, judging applications on information received. We expect that coordination among local jurisdiction will be done prior to application with FAA. We are moving forward with the underlying assumption that if a city is applying for something they have the legal authority to do so.

Comment: This presentation has been very helpful to the DAC and TG1 also. We expect data gathered will feed back into our future tasking.

MITRE Presentation on Local Outreach

Michael Guterres, Principal, Navigation & Unmanned Aircraft Systems, The MITRE Corporation

Mr. Guterres presented findings from their focus sessions with city and county representatives at the US Conference of Mayors Conference and the National Association of Counties Conference (refer to the slide material for the details of the presentation). The main topics discussed included input from participants on opportunities, challenges and issues facing local authorities, and communities with respect to the drones in the airspace. Mr. Guterres presented information in the following areas: background information; county and city representatives; state map outline; major findings; jurisdiction and enforcement; outreach; education and training; major concerns; benefits and positive feedback; differences between mayors' and county officials' feedback; and recommendations and next steps.

Comment: A member noted the tactical perspective of the counties and the strategic perspective of the mayors. The existence of a consistent data model of perspectives is encouraging.



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Question: Is education and training a topic that the DAC will take on this afternoon or is it being tabled until TG1 is re-tasked?

Response: There were thoughts of asking the DAC to incorporate education and training into their recommendations going forward. The focus sessions conducted by MITRE alerted local officials to an existing monthly FAA telcon with law enforcement. We need to get that word out more.

Question: Did the study reveal any interest in local authorities regulating manned aircraft?

Response: No. The concern was brought up (i.e., a patchwork of rules). Some stated it could perhaps be managed like 911 (the emergency phone number). There was general recognition of the challenge, but not many solutions. Many are looking at drones as extended ground assets.

Comment: (Non-DAC member) Tom Odell, representing the NLC, stated the NLC has already been getting letters about drones. He commended MITRE for their presentations and encouraged them to include NLC in their research.

Response: RTCA noted that Brittney Kohler is a working with them to ensure they have the right representatives on the DAC TGs, and she, in fact, recommended that Mr. Odell attend this meeting.

DAC Subcommittee Co-Chairs

Nancy Egan, Consultant, 3DRobotics, and John Allen, Vice President of Safety, jetBlue Airways

Mr. Cleveland introduced Nancy Egan and John Allen as the Co-Chairs of the DAC Subcommittee. Ms. Egan thanked the FAA and member organizations of the DAC who helped with the California wildfires this summer. She further thanked the FAA, Dan Elwell and Earl Lawrence for providing encouragement to the DACSC to bring the best thinking forward, including alternate views so the FAA gets the benefit of the best substantive thinking. Ms. Egan thanked the leaders and members of TG1, TG2 and TG3, who have put in many hours and produced incredible work. She also welcomed new Co-Chair, John Allen.

John thanked Ms. Egan and Bryan Quigley (outgoing DACSC Co-Chair) for their work. He stated that a regulator should be an enabler for new technology and to make new technologies work. This means we should not be risk averse and we should build trust. They then introduced TG1 Co-Chairs, Brendan Schulman and John Eagerton.



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TG1 – Roles and Responsibilities Report Out

Brendan Schulman, Vice President of Policy and Legal Affairs, DJI Technology and Dr. John Eagerton, Chief, Aeronautics Bureau, Alabama Department of Transportation/National Association of State Aviation Officials (NASAO)

The Co-Chairs presented the work completed since May. The TG has refocused on the Roles and Responsibilities, moving away from initial focus on enforcement. They provided a description of the meetings and exercises conducted by TG1, which included a field exercise looking at UAS altitude and the ability for ground observers to determine a UAS altitude accurately. The outcome of the field trip experiment served as input to the common principles.

The field exercise was conducted to provide operational data to understand the technology and its impact on ground observers. Following this, a “line in the sky” thought experiment was conducted to determine the efficacy of defining the line in the sky [below which local jurisdiction could manage drone operations]. Two teams were formed to advocate for the opposite view they held for the “line in the sky” argument. This required members to adopt and understand views they would normally not accept. The experiment produced excellent discussion and was a flexion point in the discussions to date. These experiments resulted in the formation 9 common ground principles.

Teams self-formed to flesh out the principles into papers. By late September, it was obvious consensus on the papers was not possible in the time remaining, so the team refocused on just getting consensus on the principles themselves. A smaller team was formed to reach this consensus.

In bringing the 9 principle statements (5 in agreement and 4 in disagreement) to the DAC, the members should recognize that the principles, although presented singularly, should be considered in total.

Please see the slide material of TG1 for the presentation details of the 9 principles.

The 9 Principles as presented are:

- (1) Public Process to support reasonable outcomes for Local UAS Ordinances/Laws (Consensus)
- (2) UAS Operations Impact on Private Property and Interests (Non-consensus)
- (3) Common Ground Not Applicable to Manned Aviation (Consensus)
- (4) Takeoff and Landing (Non-consensus)
- (5) Initial UAS State and Local Model Policy or Guidance (Consensus)
- (6) Altitude Estimation Challenges (Non-consensus)
- (7) FAA’s Role in Aircraft Certification (Non-consensus)



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- (8) Unjust or Unreasonable Discrimination (Consensus)
- (9) Generally applicable state criminal law and state tort law (Consensus)

The Co-Chairs concluded by welcoming new tasking from FAA and thanking those who attended the meetings and assisted in developing the work to date.

Comment: Mr. Cleveland thanked the TG1 leadership for their hard work.

Comment: A letter from the Mayor of San Francisco (DAC Member, not in attendance) was summarized by the Mayor's aide. The representative thanked the Co-Chairs for the presentation and clarified that where there is an alternative opinion, it is a unified response from all city/state/local representatives on TG1.

The representative then summarized the letter from Mayor Lee. The letter is attached.

First member response: A member responded that he respectfully could not disagree more with the letter and its characterization of the intent behind the TG, the way TG1 worked. Numerous invitations were extended to the state, local, and county representatives. A list of the names of the members from local, state, county representatives including several from the San Francisco Mayor's office that attended the kickoff meeting for the creation of the common principles was presented. In fact, San Francisco was better represented at the meeting than any other stakeholder and attended both sessions of the thought experiment despite the request from the exercise organizers to take part in only one. Invitations to join and participate in the TG had been made many times. The member then read from an email from the San Francisco representative in early July in which San Francisco was offered membership and San Francisco replied that they should NOT be listed as a member, but would be willing to act as an observer. The work of the members was in good faith, and the number of in-person meetings shows that this was not an attempt to drive through a single view or option. The member took personal and professional exception to the accusations from the Mayor's representative and others not familiar with the group's work as to what the team was trying to do and the good work done to get to this point.

Second member response: Several members of TG1 recognized early the need to re-balance the group, adding more local voices, and the member commended the work that RTCA conducted reaching out to and attempting to bring in additional groups, particularly from local governments. The challenge for the Co-Chairs regarding newly added participants is to bring them up to speed on the past work accomplished before they arrived; to keep the process moving without interruption, yet bring new members aboard. The leaders tried very hard to accommodate that reality via information distribution and communication mechanisms. They attempted to find dates for meetings that met most people's schedules through polling. They did their best to pick time/place/venues to have all participate. Meeting notes and data are all posted to Workspace for members to review. All members have other



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jobs and are working hard - there are challenges and the TG has done as good a job as they could with the challenges they faced.

Third member (DFO) response: Appreciate both answers from the Co-Chairs. The FAA seeks recommendations and consensus, but the FAA found the options to be edifying and the discussion of how they were reached very interesting. He thanked the Co-Chairs for characterizing the alternative opinion as options and noted that he did not hear the output characterized as consensus and “minority rebuttal”, saying it was gracious of the Committee to do that. He acknowledged that he has been working with RTCA on the reconstituted TG makeup that he hopes will be more balanced. He recognized the many requests for additional community involvement and will keep working to maintain that balance.

Question: Hypothetically, if the TG balance had been closer to 50/50 in makeup [local government to industry], would the makeup of the principles have been substantively different?

Response: The experience of the Co-Chairs has been that the ratio of representatives is not as important as the attempt to make a thoughtful, good idea to gain support. One person can offer an excellent idea. The exercise to develop the principles was to “put yourself in the other world”, which means we had two, roughly, equal numbers of people in each group.

Comment: From manned aviation perspective, having a variety of opinions is normal. The public must buy-in to any change in accepting drones. We should all keep that in the forefront of the process. Every opinion is important, and we should not undermine public confidence.

Comment: The process is moving along. The previous comment regarding active involvement is right on. Our organization (National Association of Counties) supports the process and will be an active and thoughtful participant going forward.

Comment: In the case of law enforcement, that role is a unique public role and we need to have the right numbers to address these unique concerns. They have been present as subject matter experts, but should be brought on as members for the entirety.

Question: What are the mayor’s thoughts on what consensus is?

Response from Mayor’s Representative: If the goal is to have consensus, you have to come to agreement on something. That may be impossible and that is recognized. But this process was not consensus as the principles were not presented as balanced. When options were presented, Option 1 was shown as the work of the TG and Option 2 was shown as a subset of the whole group. We don’t support that view.



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Comment (DFO): As a DAC Member, I did not interpret what I heard that way. The leadership did a very nice job of presenting the material as option 1 and option 2, and it's very clear that option 2 is also not consensus. Option 2 is the view of a narrower group than what option 1 represents. We have to be careful to say that when this is presented, the leaders are not biasing this one way or another. What's coming out is something very different than that.

Comment: It is important to note these are not recommendations. Option 1 was the result of the thought experiment and discussion by the group as a whole. Option 2 was a submitted alternative that was not subject to discussion by the group. So, the two options are actually different, but neither one is being reflected as consensus or a recommendation.

Question: Is there a new direction for TG1?

Response (DFO): The new tasking is being refined. It will be closely aligned with the pilot project and the DAC can help inform the pilot project. TG2 may also be better aligned to support the pilot project.

Question: Can the Co-Chairs comment more on the experiment on the line in the sky and can it help the DAC establish airspace going forward?

Response: Principle 2 deals with the Line in the Sky experiment. It was thought by most members that, if there is a line, (below which is owned and managed by local authorities rather than the FAA) it matters where you put it. Putting the line too low is a concern for privacy and can be handled by privacy laws or other constructs. Putting the line too high begins to intrude on useful airspace operations that save lives and transmit the news and other operations recognized as beneficial. It will matter where that line goes, and the higher the more flexible the regulation has to be (exceptions, presumptions, etc.). Perhaps the pilot program can help here (this was discussed during the TG1 field trip).

Question: Most language in the principles is about privacy and trespass, but what about safety - where does that come into play in the discussion?

Response: The TG had guiding principles developed a year ago and safety was paramount. After the prioritization exercise early on, the group focused on enforcement. The tasking statement asked what the interests of the government in UAS integration were.

Safety, if not explicit, is implicit in everything we discuss. Flying over people and flying low raises safety concerns.

Comment: Every time we look at recommendations, we should look at them with safety lens. How does each principle increase or decrease safety, and that increase or decrease can be changed based on the different perspectives?



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Comment: The pilot program and the structure of the data to be collected needs to be looked at closely. Policy issues need to be thought of in terms of data that can be collected.

Outcome: TG1's presentation of Common Principles was accepted by the DAC. TG1 will be reconstituted for follow-on taskings.

TG2 – Access to Airspace Report Out

Sean Cassidy Director, Safety & Regulatory Affairs, Amazon Prime Air, and Rob Hughes, Senior Policy Advisor, Northrop Grumman Corporation

Mr. Cleveland introduced TG 2 Co-Chairs and noted that their work has been reviewed by the DAC previously (at the May meeting). The TG was given instructions to update their material and that has been done and brought back to the DAC for approval. The recommendations delivered to the DAC today will be voted on for transmission to the FAA. This has gone through an iterative process over the past few months.

Mr. Cassidy began by extending regrets for Mr. Hughes, who could not attend the meeting. He then reviewed the process the TG used to create the deliverables. The group began with a deep dive of the tasking statement from the FAA, establishing the boundaries of the activities to make sure the deliverables would be timely. It also set the boundaries for the group in terms of scope, namely, what they were not going to do as well as what they were going to do.

The process should define deliverables that can be implemented within 24 months. The TG examined the current state of affairs and the current framework for the airspace. The group also developed assumptions and guiding principles. As an example, the group did not focus on anything that would be covered by Part 107 exemptions. Then, they examined market demand to narrow the focus to low-altitude operations, beyond line-of-sight, primarily below 400 ft. Looking at detailed desired use cases allowed the group to identify how current operating rules affect those use cases. Smaller groups were then formed within the TG and papers written that became the deliverables to the DAC. That foundation facilitated full consensus on all the issue papers. The industry players involved represented a diverse group bringing forward many opinions and concerns.

The results of TG2 were the highest priorities for what operations should be given access to the airspace next. The group proposes to continue their work, developing recommended mechanisms for implementing the recommendations.



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The group felt a peak market demand would be in Class B airspace surrounding the 37 largest airports in the United States and the 30 mile “mode-C veil” airspace that surrounds the Class B areas. Agreeing that that airspace should be the subject of the recommendations, the group focused on how operations could be enabled safely. Most aircraft operating in the given airspace have requirements for communications equipment/capabilities. The group would like to address how that fact can be accounted for in the recommendations.

The final report and presentation are attached.
 The recommendations are summarized as follows:

1. **Prioritize sUAS BVLOS operations within the Mode C Veil below 400 ft AGL:** operations below the altitude where most vehicles operate, but are equipped to allow their location to be positively conveyed through standard communications interfaces (and when needed, with ATC) and understand where everyone else in the volume of airspace is. (This recommendation lead to cascading ideas that are all related.) These operations would allow close flight near airports if the flights do not cross the arrival/departure corridors for the runways.
2. **Develop technology-neutral navigation performance requirements:** This volume of airspace will require a framework that allows performance-based beyond visual line-of-sight operations that is agnostic to technology (equipment) and focuses on the performance requirements for operating in that airspace and allows industry to innovate to meet those requirements.
3. **Evaluate the minimum requirements needed to meet low altitude UAS command and control (C2) operations.** Thinking in terms of performance based requirements, we should be thinking about ways of managing command and control that are not necessarily the same as traditional aviation (aviation protected spectrum). How can we leverage cell phones and the networks that support them, if that can be done safely? How can Wi-Fi be used similarly to how dedicated short-range communications in the automotive industry are used for anti-collision devices?
4. **Establish a FAR Part 135 regulatory “pathfinder” program for commercial UAS low-altitude (<400’) BVLOS Operations: because Part 107 explicitly excludes air carrier operations (commercial operations) and specifically prohibits beyond line-of-sight operations and common carriage.** How can these operations be enabled? Meetings were held with FAA representatives on the regulatory requirements that revealed many rules that relate only to manned operations (PIC time, supplementary oxygen). We should be looking at existing rules and developing similar rules specific to UAS operations in the low-altitude regime. This can be done by identifying existing rules that must be complied with, and those that shouldn’t hinder UAS operations, but might have an alternate means of compliance.
5. **Develop Beyond 24-month Timeframe Recommendations:** Even though the initial tasking order was to develop recommendations that could be implemented within 24 months, the end goal must look at beyond 24 months as a result of the recommendations being made. The



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recommendations made here will need to be examined for the mechanisms that should be put in place to implement these recommendations.

The final report incorporates changes requested by the DAC during the May 2017 meeting.

Question: Thank you for the recommendations. The wording of recommendation 1 may be unclear – does it refer to flight within the Mode C veil below 400 ft.?

Response: Yes. It refers only to flights below 400 ft.

Comment: Recommendations 3 and 4 are forward looking and complimentary with the integration pilot program and the pilot project can help inform answers.

Question: On the conventional aviation side, there are many good aspects of the recommendations. For example, Required Navigation Performance (RNP) and Required Communication Performance (RCP) should not be prescriptive. There seems to be a natural tension between technology and interoperability. How do we manage that tension?

Response: We need to pursue standards and guidelines that define performance. This can be done through interoperability standards and performance-based standards and by using performance-based standards that allow moving away from specific technology [i.e. are not too proscriptive].

Question: Is that similar to ADS-B, having two frequencies to operate? In other words, the technology (frequency) is not prescribed, but the performance of the ADS radio is?

Response: Yes.

Comment: Returning to the previous question about the Mode C Veil, the language "which includes Class B airspace" seems to be ambiguous and may lead to confusion. Recommend striking the clause from recommendation 1 for clarity before forwarding final report to the FAA.

Response: This goes back to the assumptions and guiding principles of the TG. Where is the market demand that needs to be met? Think of this in terms of stepping stones and make safety a priority. This needs to be scoped down to actionable recommendations.

Question: If we are making a recommendation from the DAC, public perceptions are important. In terms of priorities, is it more important to reach for rural access first? Would that make this initiative more successful? We should be mindful of where the lesser risk is.



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Response: The TG considered where the point of entry for the recommendations is. These started with the FAA. If you are outside of the Mode C Veil, it does not speak to the market demand. These operations are already occurring under Part 107 waivers (for rural operations), and the TG wanted to examine beyond the current rules.

Question: When you say BVLOS, are you including all operations over people and nighttime operations, or focusing on a subset of those flight profiles?

Response: The TG was focusing on those use cases that are not part of Part 107 and this does include nighttime operations and flights over people. TG2 identified the BVLOS and nighttime operations as the framework of future use cases.

Question: Was there any discussion in the Subcommittee of moving the bar too quickly? Should we only allow one change at a time (e.g., BVLOS; nighttime operations; flights over people), or all three at once?

Response: The TG felt that would be a question for the next tasking. The Pilot Program will answer some of those questions also.

Question: Thinking about the future and what is appearing in draft legislation, what might be useful to the FAA going forward (in Part 135 or other places)? How can the DAC be useful going forward?

Response: *Recommend the next step is to have the DAC stand up a tiger team of SMEs to define within the category of aircraft what is applicable to UAS* [in Part 135]. What needs to be done to establish an alternate means of compliance and what are things that are clearly out of bounds (like oxygen requirements)? Having guidance for applicants would greatly benefit the industry.

Question: Does TG2 have a reasonable timeframe in mind for implementing these recommendations?

Response: We considered 24 months (as detailed in the tasking letter), and this is why the group stayed away from some items (e.g., rewriting Part 107; redo airspace rules). The TG looked at using technologies that were available and operations that were within the current airspace rules.

Comment: For the record, in looking back when the DAC first received this tasking, the idea was to enable services for the operators within a reasonable amount of time with the reasonable regulation.

Response: Taking things in small pieces and resolving them, codifying it and moving on is the way to go.

Question: When it says, "Recommend FAA prioritize BVLOS UAS Operations", do we mean prioritize the rules to allow it or prioritize it over manned operations?



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Response: No, the recommendation is to make the development of rules or operating guidelines a priority for unmanned systems; not to prioritize one set of operations (unmanned) over another (manned).

Question: Are you recommending focusing on BVLOS before and at the exclusion of flight over people or at night?

Response: These recommendations are not that granular. The TG does not envision BVLOS that precludes flight over people and nighttime operations. So, no, it does not preclude those other operations.

Comment: At the time the DAC was tasked [with this work], the team consciously skipped ahead because they thought they were on the verge of having rules in place that would cover some of these situations [because there was a Flight Over People ARC in place]

Final Comment: With clarifying amendment, call for motion to approve the recommendations

Outcome: Mr. Cleveland called for motion to approve the recommendation. It was so moved and seconded. The document was approved.

TG3 – UAS Funding Report Out

Mark Aitken, Director of Government Relations, AUVSI, and Howard Kass, Vice President of Regulatory Affairs, American Airlines

Mr. Cleveland introduced TG3 Co-Chairs, Mark Aitken and Howard Kass.

Howard Kass commented that the timing of the DAC couldn't be better. The group has made great progress through listening sessions and in-person meetings. As industry makes investment decisions, the question of the right mechanism for paying for things is in the forefront.

Before proceeding, the TG leadership thanked the DAC members for allowing their staff to participate on TG3 and recognized Nan Shellaberger (FAA) and her staff on the excellent support they have provided to TG3.

One caveat on the presentation material was stated, namely that it had to be prepared and proved 4-6 weeks prior to this meeting and so some material might be out-of-date.



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The success of the industry depends on a strong private sector and government collaboration. The FAA is funded primarily from money from airline ticket taxes and fuel taxes and money appropriated by Congress (the latter being a small part of the budget). All the interest it has generated by the pilot program, proves that the FAA needs to have its required resources funded to keep up with the pace of progress of the drone industry. TG3 submitted short-term recommendations in July 2017, and long-term recommendations are due in March 2018. The listening sessions held by TG3 were open to the entire DAC (not just the TG) and focused on: 1) how should these activities be funded, and 2) a little bit on how should the FAA organize. The FAA is currently organized to support one very broad client base: manned aviation (notwithstanding commercial space). As mentioned earlier, a new chapter in the history of aviation is being written. While this is happening, the book is not being closed on previous chapters. The listening sessions have provided great input and generated great conversation on both of these activities.

The principles upon which the TG bases its finding are equity and scalability (to allow for growth). TG3 members are concerned that dollars spent are dollars being taken away from manned aviation. Funding mechanisms include taxes and fee-for-service. Taxes can be based on size/weight/operation of the user. These items do not represent final recommendations but have been discussed in the listening sessions.

The TG has been grappling with what is “equitable” in funding. The TG has expressed numerous questions it intends to answer. The current administration has indicated the safe and expeditious introduction of drones into the airspace is a priority for them and Congress has acted to put forth resources to accomplish that. TG3 believes there should not be a negative ramification for manned aviation as this effort moves forward.

There are many activities that need to be prioritized within the FAA. Who is shouldering the cost for the activities (industry/government/shared)? The group is struggling with the concept of sharing the costs (between government and industry) and what activities lend themselves to cost-sharing. What is the ratio of costs for industry and government and can this cost ratio change in relation to activity?

The TG is trying to think creatively. The TG will now break into smaller groups to fill in the details. What might fit in the next 3-5 years? The most “out of the box” thought is for classes of airspace as defined in the UTM concept (similar to the framework the FCC uses for spectrum allocation). We are unsure if the UTM concept is analogous with FCC spectrum options. The task is to explore options and that is what the group is doing.

Lately, the group has been focusing on the current landscape (LAANC and UTM). The next few meetings will be to provide finer details for the DAC to consider.

One of the challenges the TG faces is the lack of good data on what future costs are. The FAA should consider establishing a cost accounting system.



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The industry is spending and building out infrastructure and the FAA must regulate that build-out. How should that be paid for? Since no one is flying today, industry is being asked to pay for something they can't use.

Question: Are organizational structure options within the bounds of the scope?

Response: Not explicitly, but the money flow of the FAA touches on that. It won't have equal weighting with funding issues, but suggestions may be driven out by the funding responses.

Question: In manned aviation today, support activities are certification, oversight, and then operations. Are you using existing cost buckets for what it should look like? Follow-on question: Based on that, can you use current resources to predict the future costs?

Response: Yes, we are looking at current cost accounting categories (operations, research and development, and facilities and equipment). For the second question, applying manned rules to drones can be complicated (e.g., number of pilots for airline aircraft versus for drones; the growth of the drone numbers is unknown.) The past three FAA budget cycle numbers were examined and have been flat. Manned aviation cost is measured in the billions and unmanned aircraft costs are measured in the 10's of millions per year. There could be a significant ramp-up in the near future. TG3 has been looking to the work of TG2 to see what those costs might be (based on their recommendations). This group has to make many assumptions and they are looking to the DAC for boundaries and input.

Question: Have you looked at models for access-based fees versus a usage-based model?

Response: We have had that discussion (but haven't looked at the numbers). There has been discussion of a tax paid at the point of purchase. It has not been seen as favorable by many in the drone industry. There is no data to look at per se, but approaches such as an annual registration fee have been discussed.

Question: Drones are analogous to Wi-Fi devices (device came first, then networks followed, as opposed to the network being built first and then the devices being produced).

Response: The TG has spent a lot of time on the network model (the cell phone analogy is raised often).

Comment: Drone operators should offer data to the FAA. We assume industry will carry the bulk of expense for operations.

Outcome: Final report is due in March 2018. Set up today has been very good. Looking forward to the final report.



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New Business

The Acting Chair called on the DAC members to identify new business for the DAC. No new business was identified.

Action Item Review

Action	Responsible Party	Schedule	Status
Action	Responsible Party	Schedule	Status
ACTIONS OPEN FROM PREVIOUS MEETING			
RTCA to summarize the comments received for each TG and submit for their review and consideration.	RTCA	ASAP	CLOSED
TG1 to re-look at priority 4 (State and Local Interest In and Response to UAS) with more attention.	TG1	July	CLOSED
RTCA to help identify DAC members who wish to assist in addressing county and city conventions, and to assist in defining what output can be produced that will benefit the two conventions; and work with DAC member Mayor Lee's office and Robert Boyd to get on their agendas.	RTCA	OBE	CLOSED
RTCA to coordinate a webinar for SC-228 that can be reviewed by all DAC members.	RTCA & SC-228	ASAP	CLOSED
ACTIONS OPEN FROM CURRENT MEETING			
Strike "which includes Class B airspace" from TG2's recommendation 1 for clarity before forwarding final report to the FAA. Modify the Mode C Veil language.	RTCA/TG2	Nov 2017	OPEN



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Action	Responsible Party	Schedule	Status
DAC to establish a TG2 Tiger Team of SME's to define what is applicable to UAS in the existing rules.	DAC/DACSC	TBD	TBD
Re-task and reconstitute TG1.	FAA/RTCA	Spring 2018	OPEN
Future DAC Agenda item for DAC procedures and meeting tenets.	DAC/RTCA	Spring 2018	OPEN
Coordinate DAC 2018 Meeting Schedule.	RTCA	Dec 2017	OPEN

Closing Chairman Remarks

Mr. Cleveland thanked the DAC members for attending and participating in the DAC meeting. He also thanked Administrator Huerta for his leadership and accessibility to the aviation industry. He commented that Administrator Huerta has been an incredibly effective link between government and industry.

FAA DFO Closing Remarks

The Deputy Administrator thanked Amazon for being great hosts. He said he was encouraged by the attendance at the meeting. He reiterated the Unmanned Aircraft Systems (UAS) Integration Pilot Program numbers mentioned earlier in the day and referenced the White House presidential memo on the Pilot Program. He stated that the FAA welcomes any ideas going forward within the confines of the OTA structure and are open to more discussion and training on how this is going to progress. The Pilot Program will inform this nascent industry, so they want to get it right.

He continued that he couldn't emphasize enough his thanks to TG1 for the group's efforts, and it is not a failure or a flaw that there are alternate options; it was edifying and educational, and with more time they could have reached consensus. He thanked TG2 for their recommendations. He found them to be superb and he believes many of those recommendations will complement the Pilot Program. In referring to the TG3 work, he expressed his concern that the recommendations of funding and budget is outside of the control of the FAA. The FAA is not as interested in those recommendations as they have little say in how to implement recommendations.

He observed that this is possibly the first advisory committee he has sat through where the FAA reauthorization was not discussed, and he reminded the group that the FAA is on an extension until the



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Washington, DC 20036
Phone: (202) 833-9339
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November 15, 2017

RTCA Paper Number: 306-17/DAC-010

end of March. Since this is a high-profile part of FAA, there are things that may happen in the legislative process until March. There is a controversial proponent of the house bill to move ATO out of the FAA. If that were to become a reality, that would change the complexion of these discussions quite a bit. There is much going on outside this room that will affect the work being done by this group and subgroups.

He said that the next time the DAC is together, he hopes for progress on those fronts. He closed by thanking everyone for taking time to attend and provide input.

Adjournment

The meeting was adjourned at 4:30 PM.

DRAFT



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

ORDER

1110.77Y

Effective Date:

3/29/2018

SUBJ: RTCA Charter

1. Committee's Official Designation. RTCA Advisory Committee.

2. Authority. The Federal Aviation Administration (FAA) finds that it is in the public interest to utilize the RTCA advisory committee in connection with the duties of the FAA under law, and in accordance with the provisions of the Federal Advisory Committee Act (FACA), as amended, Pub. L. 92-463, 5 U.S.C. App 2.

3. Objectives and Scope of Activities. RTCA, Inc. is a private, not-for-profit association that is utilized as a federal advisory committee by the FAA. The RTCA Advisory Committee, composed of RTCA members appointed by the Secretary, works in response to requests from the FAA, providing recommendations from the aviation community on issues/challenges involving: air transportation concepts, requirements, operational capabilities, the associated use of technology, and related considerations to operations that affect the future of the Air Traffic Management System and the integration of new technologies by providing recommendations in these areas. As requested by the FAA, the RTCA Advisory Committee provides advice on topics including but not limited to: Next Generation Air Transportation System (NextGen), Tactical Operations, new entrants such as Unmanned Aircraft Systems (UAS) and other technical requirements for the FAA. The RTCA Advisory Committee does not exercise program management responsibilities and makes no decisions directly affecting the programs on which it provides advice.

4. Audience. This order applies to the FAA and all members of the RTCA Advisory Committee that participate in advisory activities for the FAA.

5. Where to Find This Order. You can find this order on the FAA.GOV website under the "Regulations & Policies" tab and select "Orders & Notices" or on the My FAA Employee website. Use "Tools & Resources" tab and select "Orders & Notices."

6. This Order Cancels. FAA Order 1110.77X, RTCA, Inc. (Utilized as an advisory committee), Effective Date: September 29, 2017.

7. Description of Duties. The objective of the RTCA Advisory Committee is to assist the FAA with seeking resolution and/or investigating options for resolution. At the request of the FAA, this committee will perform the following advisory duties:

Distribution: Electronic

Initiated By: ANG-A1

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3/29/2018

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a. Develop recommendations to meet government and industry common objectives and responsibilities, taking into account aviation system user and provider requirements.

b. Analyze and recommend solutions to the challenges the aviation community faces as it continues to increase safety, security, system capacity, and efficiency.

c. Develop consensus recommendations on solutions to meet user and provider requirements, including developing recommendations of minimum operational performance standards for electronic systems and equipment that support aviation.

d. Facilitate planning between government and industry to achieve a consensus-based set of recommendations on issues that include, without limitation, those that are critical to setting international standards, ensuring successful implementation of NextGen, Air Traffic Management System modernization, and new entrants into the National Airspace System (NAS).

e. Support FAA by providing recommendations for: (1) investment priorities and (2) minimum performance standards, reports, and guidance documents.

8. Agency or Official to Whom the Committee Reports. The RTCA Advisory Committee reports to the Secretary of the Department of Transportation (DOT) through the FAA Administrator.

9. Support. FAA will provide support for the RTCA Advisory Committee and its subcommittees. The FAA will participate and provide requirements, review and consider guidance. In addition, the Designated Federal Officer (DFO) (see paragraph 11) for the RTCA Advisory Committee and subcommittees will determine appropriate FAA participation to ensure proper understanding of the subject matter.

10. Estimated Annual Operating Costs and Staff Years. The FAA's operating costs to support RTCA Advisory Committee and its subcommittees for the period and scope specified by the charter shall not exceed \$250,000 and 9.5 full time equivalent (FTE).

11. Designated Federal Officer. The FAA Administrator, on behalf of the Secretary, designates full-time or part-time employees, appointed in accordance with agency procedures, as the DFO (or alternate DFO) for the RTCA Advisory Committee and subcommittees.

a. The DFO or alternate will ensure compliance with FACA, and any other applicable laws and regulations

b. The DFO or alternate must be present at all the RTCA Advisory Committee and subcommittee meetings

c. In accordance with the FACA, the DFO or alternate must perform the following duties:

1) Call, attend, and adjourn all the committee/subcommittees meetings

2) Approve all committee/subcommittee agendas

3/29/2018

1110.77Y

- 3) Maintain membership records
- 4) Ensure efficient operations
- 5) Maintain required records for availability to the public
- 6) Provide copies of RTCA Advisory Committee reports to the Committee Management Officer (CMO) for forwarding to the Library of Congress
- 7) Adjourn any meeting in coordination with the committee chair when doing so would be in the public interest; and
- 8) Chair meetings when directed to do so by the FAA Administrator

12. Estimated Number and Frequency of Meetings. Committee and subcommittee meetings will comply with the following applicable provisions of FACA:

a. The RTCA Advisory Committee will meet at least annually, as required, to carry out its responsibilities. The Program Management Subcommittee will meet quarterly, as required, to carry out its responsibilities. The NextGen, Tactical Operations and Drone Advisory Subcommittees will meet three times a year to ensure continuity and good preparation for public decision-making meetings. Special subcommittees meet as their workload requires.

b. RTCA Advisory Committee and subcommittee meetings will be open to the public, except as provided by section 10(d) of the FACA and applicable regulations. Meetings will be announced in the Federal Register at least 15 days before each meeting, except in emergencies. Additionally, the FAA may use other forms of notice, such as press releases and web site notifications for committee and subcommittee meetings.

c. Anyone interested may attend meetings and appear before the RTCA Advisory Committee or subcommittees within reasonable limits of space and time. Additionally, anyone interested may file written statements with the committee/subcommittees. RTCA Advisory Committee will provide public web access to committee/subcommittee meeting agendas, summaries and other appropriate materials. This includes documents that are in the Final Review and Comment (FRAC) period.

13. Duration. The period of performance for this charter is March 29, 2018 through May 29, 2018. All subcommittees will be on a continuing period of performance for the duration of the charter, unless its tasks are completed prior to the two months.

14. Termination. The charter shall terminate 2 months after its filing date unless renewed in accordance with FACA and other applicable regulations.

If RTCA Advisory Committee is terminated the FAA will give as much advance notice as possible of such action to all participants.

15. Membership and Designation. The Secretary will appoint members based on the recommendations of the FAA. The membership varies to address the complexity of the topic.

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Membership includes FAA regular government employees, special government employees, and various representative members from the aviation sector, including manufacturers of aircraft and aircraft systems; airports and air traffic management; dispatchers, pilots and operators; state/local government; and others in the aviation industry.

Members also may be drawn from FAA's Office of NextGen, Security and Hazardous Materials Safety, Air Traffic Operations, Aviation Safety, Airports Division, Policy, International Affairs and Environment Office, as well as MITRE Inc.

In addition, the chair of any subcommittee may request that the RTCA Advisory Committee invite experts in a non-represented subject matter, if it is determined essential to the successful completion of its function.

a. The RTCA Advisory Committee has approximately 24 members, NextGen Advisory Subcommittee has approximately 43 members, Drone Advisory Subcommittee has approximately 79 members, Tactical Operations Subcommittee has approximately 18 members, and Program Management Subcommittee has approximately 21 members. Membership is determined by the topic.

b. Non-government representatives will serve without government compensation. The employing organization bears all costs related to its participation. They must represent a particular interest of employment, education, experience, or affiliation with a specific aviation-related organization (reference Department of Transportation (DOT) Order 1120.3B, Committee Management Policy and Procedures, Ch. II, 10.a).

16. Subcommittees. The FAA has the authority to create and dissolve subcommittees, as needed. All subcommittees, must report to the RTCA Advisory Committee and must not provide advice or work products directly to the agency unless operating under the authority and requirements contained in FACA, §102-3.145.

17. Recordkeeping. The records of the committee, formally and informally established subcommittees, or other work or task subgroup of the subcommittee, shall be handled in accordance with the General Records Schedule 6.2, or other approved agency records disposition schedule.

The committee/subcommittee chair must certify the accuracy of the minutes. Meeting summaries are available to the public and are posted on the RTCA web site at <http://www.rtca.org>.

a. Subject to the Freedom of Information Act, 5 U.S.C. § 552, records, reports, transcripts, minutes or meeting summaries, and other materials presented to or prepared for the RTCA Advisory Committee are available for public inspection.

18. Filing Date. This charter is effective March 29, 2018, the date on which it was filed with Congress.

3/29/2018

1110.77Y

19. Distribution. This order is distributed as referenced in Paragraph 5 of this Order.

A handwritten signature in black ink, appearing to read "D. Elwell", is written over the printed name.

Dan Elwell
Acting Administrator



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Drone Advisory Committee Membership – March 2018

Domain	Member
Designated Federal Officer	Dan Elwell , Deputy Administrator, FAA Federal Aviation Administration
Chair	Brian Krzanich , CEO, Intel
UAS Manufacturers	Linden Blue , CEO, General Atomics Aeronautical Systems, Inc. James Burgess , Product and Systems Lead for Project Wing, X Nancy Egan , Advisor to the CEO, 3D Robotics Martin Gomez , Facebook Gur Kimchi , Co-Founder and Vice President, Amazon Prime Air Brendan Schulman , VP of Policy & Legal Affairs, DJI Technology Michael Chasen , CEO, PrecisionHawk USA Inc.
UAS Operators	Greg Agvent , Senior Director of National News Technology, CNN Todd Graetz , Director, Technology Services, UAS Program, BNSF Railway
UAS Hardware Component Manufacturers	Nan Mattai , Senior Vice President, Engineering & Information Technology, Rockwell Collins, Inc. Phil Straub , Executive Vice President and Managing Director, Aviation Division, Garmin, Ltd.
UAS Software Application Manufacturers	Jaz Banga , Co-Founder & CEO, Airspace Systems, Inc.
Traditional Manned Aviation Operators	Mark Baker , President and CEO, Aircraft Owners and Pilots Association Robert Isom , President American Airlines Group, American Airlines Houston Mills , Global Aviation Strategy & Public Policy Director, United Parcel Service (UPS) Steven Rush , President, Professional Helicopter Pilots Association Matthew Zuccaro , President and CEO, Helicopter Association International (HAI)
Airports and Communities	Deborah Flint , CEO, Los Angeles World Airports Marilyn Mora , President and CEO, Reno-Tahoe Airport Authority
Labor (controllers, pilots)	Tim Canoll , President, Air Line Pilots Association Trish Gilbert , Executive Vice President, National Air Traffic Controllers Association (NATCA)
R&D, Academia	Juan Alonso , Professor in the Department of Aeronautics & Astronautics, Stanford University Nancy Leveson , Professor of Aeronautics and Astronautics, Massachusetts Institute of Technology



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Domain	Member
	Robie Samanta Roy , Vice President Lockheed Martin Corporation
Local Government	Robert Boyd , County Commissioner, Riley County, Kansas David Greene , Wisconsin Department of Transportation, Bureau of Aeronautics
CNS and Air Traffic Management Capabilities	Christopher Penrose , Senior Vice President, Internet of Things, AT&T George Kirov , Vice President & General Manager Commercial UAS Solutions, Harris Corporation
Other Stakeholders	Brian Wynne , President and CEO, Association for Unmanned Vehicle Systems International (AUVSI)
Other	Rich Hanson , President Academy of Model Aeronautics

Transmittal No. 26
September 2016

General Records Schedule 6.2

GENERAL RECORDS SCHEDULE 6.2: Federal Advisory Committee Records

This schedule covers Federal records created or received by Federal advisory committees and their subgroups pursuant to the Federal Advisory Committee Act (FACA) of 1972 (5 U.S.C., Appendix, as amended) and records related to the management of these committees by their sponsoring agencies or departments.

If a committee is a Presidential advisory committee, check with the agency's General Counsel before applying this schedule. If records are determined to fall under the Presidential Records Act, this schedule does not apply.

For convenience, the term "committee" is used in this schedule to mean "advisory committee" pursuant to FACA.

Item	Records Description	Disposition Instruction	Disposition Authority
Committee Records			
010	<p>Substantive Committee Records (Non-Grant Review Committees)</p> <p>Exclusion: This item does not include records of committees whose sole purpose is grant review. See item 030 for these records.</p> <p>Records documenting the establishment and formation of committees and their significant actions and decisions. Refer to agency administrative procedures to ascertain if these records are held by the CMO, GFO, or DFO. Only one copy of each record is considered permanent. Not all records described below are necessarily created for all committees. Records may include:</p> <ul style="list-style-type: none"> records related to the establishment of the committee: <ul style="list-style-type: none"> charters (original, renewal, re-establishment, and amended) enacting legislation explanation of committee need, when required filing letters to Congress organization charts committee specific bylaws, standard operating procedures, or guidelines any other materials that document the organization and functions of the committee and its components records related to committee membership: <ul style="list-style-type: none"> memos or similar documentation of how and/or why individual members were selected 	<p>Permanent. Transfer when records are 15 years old or upon termination of committee, whichever is sooner.</p>	DAA-GRS-2015-0001-0001

Transmittal No. 26
September 2016

General Records Schedule 6.2

Item	Records Description	Disposition Instruction	Disposition Authority
	<ul style="list-style-type: none"> ○ membership balance plans ○ membership rosters ○ appointment letters, and all sub-categories of appointment letters, such as renewals, thank you letters, etc. ○ Resignation or termination letters • records of committee meetings and hearings: <ul style="list-style-type: none"> ○ agency head's determination that a meeting or portion of a meeting may be closed to the public ○ agendas ○ materials presented to or prepared by or for the committee, such as briefing books, background materials, reports (including drafts), and presentations ○ meeting minutes ○ public comments ○ testimony received during hearings ○ transcripts of meetings and hearings (NOTE: If transcripts do not exist, audio/visual recordings are permanent under item 020) • records related to committee findings and recommendations: <ul style="list-style-type: none"> ○ one copy each of final reports, memoranda, letters to agency, studies, and pamphlets produced by or for the committee ○ responses from agency to committee regarding recommendations ○ committee presentations or briefings of findings • records created by committee members: <ul style="list-style-type: none"> ○ correspondence documenting discussions, decisions, or actions related to the work of the committee (excluding administrative or logistical matters), including electronic mail, exchanged between one or more committee members and/or agency committee staff (such as the Designated Federal Officer) • records related to research collected or created by the committee: <ul style="list-style-type: none"> ○ records relating to research studies and other projects, including unpublished studies, reports, and research materials (may include electronic data) ○ raw data files created in connection with research studies and other projects where the information has been consolidated or aggregated for analyses, reports, or studies • documentation of advisory committee subcommittees (i.e., working groups, or other subgroups): <ul style="list-style-type: none"> ○ records relating to the formation of the subcommittee or working group, if they exist 		

Transmittal No. 26
September 2016

General Records Schedule 6.2

Item	Records Description	Disposition Instruction	Disposition Authority
	<ul style="list-style-type: none"> ▪ decision documents ▪ membership ▪ statement of purpose or other documentation of duties and responsibilities ○ records that document the activities of subcommittees that support their reports and recommendations to the chartered or parent committee. This documentation may include, but is not limited to: <ul style="list-style-type: none"> ▪ meeting minutes ▪ transcripts ▪ reports ▪ briefing materials ▪ substantive correspondence, including electronic mail, exchanged between one or more subcommittee members, any other party that involves the work of the subcommittee, and/or agency committee staff (such as the Designated Federal Officer) ▪ background materials • records related to committee termination (i.e., email, letter, memo, etc.). • other records documenting decisions, discussions, or actions related to the work of a committee, including information on committee websites not captured elsewhere in committee records. <p>Note: Sponsoring agencies need to designate the recordkeeping copy of permanent committee records. Only one copy of the records should be the official recordkeeping copy that is transferred to NARA. Committee records should be arranged by committee, not by the type of record (e.g. NARA should not receive a collection of charters for multiple committees; original charters should be transferred with the other permanent records related to the committee, regardless of where they are maintained).</p>		
020	<p>Substantive Audiovisual Records (Non-Grant Review Committees)</p> <p>Exclusion: This item does not include records of committees whose sole purpose is grant review. See item 030 for these records.</p> <p>Records include:</p> <ul style="list-style-type: none"> • audiotapes, videotapes, and/or other recordings of meetings and hearings not fully transcribed • captioned formal and informal analog or digital photographs, and any related finding aids, of committee members and staff, meetings, or hearings • posters (2 copies) produced by or for the committee 	Permanent. Transfer when records are 3 years old or upon termination of committee, whichever is sooner.	DAA-GRS-2015-0001-0002

Transmittal No. 26
September 2016

General Records Schedule 6.2

Item	Records Description	Disposition Instruction	Disposition Authority
030	<p>Grant Review Committee Records</p> <p>Committee establishment, membership, and meeting records related to FACA committees whose only activity is review of grant proposals. (See item 010 for further definition of committee records.) This also includes digital and analog recordings of meetings, photographs, posters and other audiovisual materials.</p> <p>Note: If the committee performs additional functions or activities other than review for grants, it should apply the items for all other FACA committee records.</p>	Temporary. Destroy upon termination of committee.	DAA-GRS-2015-0001-0003
040	<p>Committee Accountability Records</p> <p>Records that document financial and ethics accountability, such as records documenting financial expenditures associated with the functioning of the committee and financial disclosure and conflict of interest documents.</p> <p>Records include:</p> <ul style="list-style-type: none"> • travel costs • committee member payments • meeting room costs • contractor costs • Federal Register notice costs <p>Exclusion: Forms filed under the Ethics in Government Act (see note).</p> <p>Note: Forms filed under the Ethics in Government Act are scheduled in GRS 2.8, Employee Ethics Records. These forms may apply to committee members designated as special Government employees (SGEs).</p>	Temporary. Destroy when 6 years old. Longer retention is authorized if required for business use.	DAA-GRS-2015-0001-0004
050	<p>Non-substantive Committee Records</p> <p>Records related to specific committees that are of an administrative nature or are duplicative of information maintained elsewhere.</p> <ul style="list-style-type: none"> • drafts and copies of Federal Register notices • audiotapes and videotapes of committee meetings and hearings that have been fully transcribed or that were created explicitly for the purpose of creating detailed meeting minutes (once the minutes are created) • photographs of committee social functions, routine award events, and other non-mission-related 	Temporary. Destroy when superseded, obsolete, no longer needed, or upon termination of the committee, whichever is sooner.	DAA-GRS-2015-0001-0005

Transmittal No. 26
September 2016

General Records Schedule 6.2

Item	Records Description	Disposition Instruction	Disposition Authority
	<p>activities</p> <ul style="list-style-type: none"> records relating to logistical or administrative aspects of committee meetings and activities such as meeting location and access, phone line or internet connections, IT support concerns, etc. routine correspondence: <ul style="list-style-type: none"> correspondence (including intra-agency, with committee members, or the public) regarding logistics (e.g., agenda planning, meeting arrangements, administrative issues) public requests for information Non-substantive committee membership records, including: <ul style="list-style-type: none"> Resumes, curriculum vitae, or biographical information for individuals who are considered or nominated for a committee but are never appointed or invited to serve on a committee Member credentials (resumes or biographies) Member files (personnel-type records) Non-substantive web content <p>Note 1: Consult with the appropriate agency staff (i.e., records officials, general counsel) to ensure the records designated in this category are accurately designated as administrative.</p> <p>Note 2: Records on agency websites that are duplicative of records maintained elsewhere and that are not designated as the recordkeeping copy may be destroyed subject to GRS 5.1, item 020.</p>		
Committee Management Records			
060	<p>Committee Management Records</p> <p>Records created and/or maintained by Committee Management Officers (CMOs) and their staff related to the overall management of committees for an agency. These records may pertain to specific committees or to the committee management function in general. Records include:</p> <ul style="list-style-type: none"> agency guidelines correspondence requests for approval of committee nominees copies of records about committees maintained for reporting purposes, such as: <ul style="list-style-type: none"> information provided to GSA Secretariat for annual comprehensive reviews statistical data files and reports annual reports to the Library of Congress describing the agency's compliance with the 	<p>Temporary. Destroy when 3 years old, 3 years after submission of report, or 3 years after superseded or obsolete, as appropriate. Longer retention is authorized if required for business use.</p>	DAA-GRS-2015-0001-0006

Transmittal No. 26
September 2016

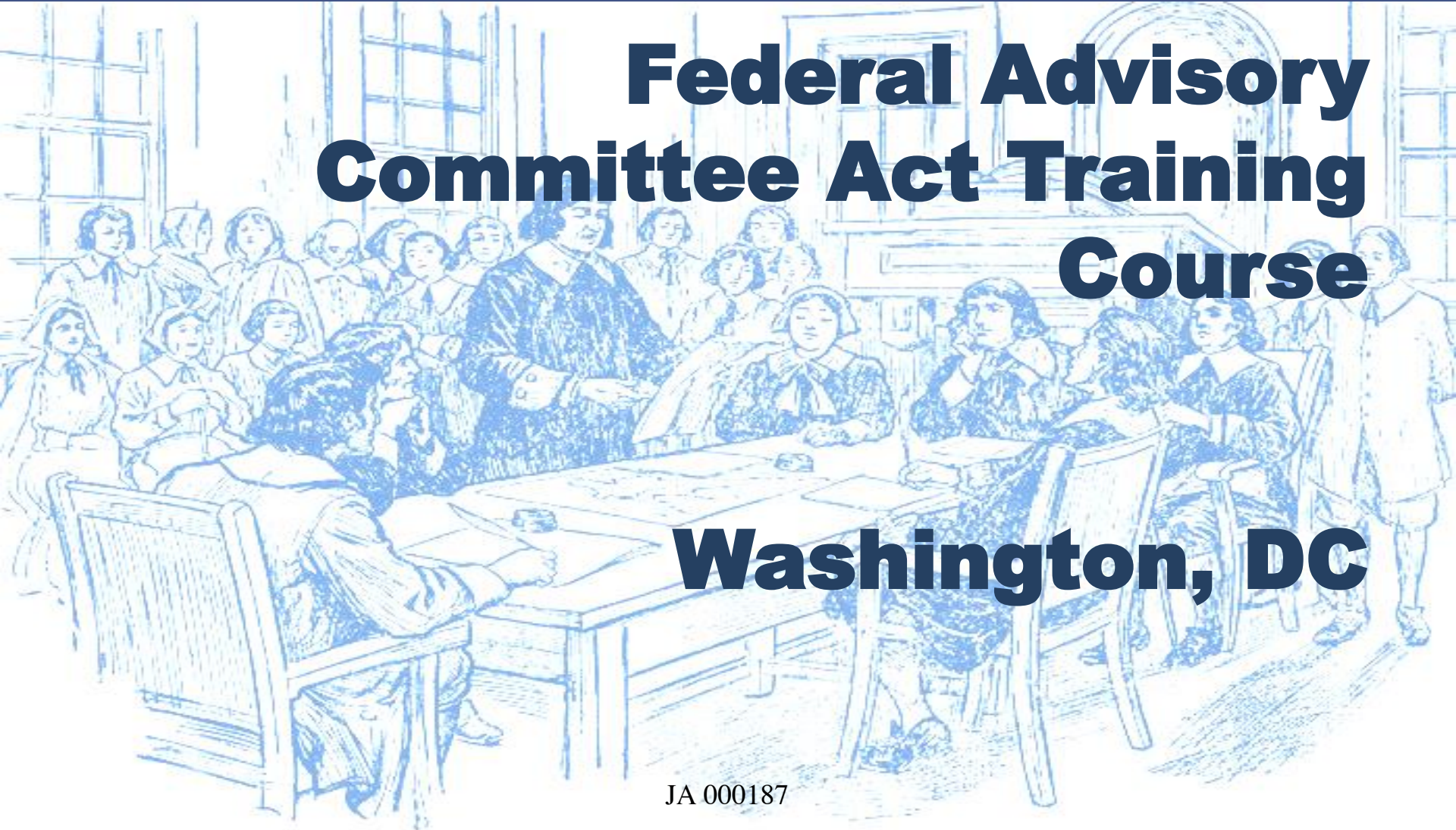
General Records Schedule 6.2

Item	Records Description	Disposition Instruction	Disposition Authority
	<p>Government in the Sunshine Act</p> <ul style="list-style-type: none">○ financial operating plans and final cost accountings <p>Note: This item does not apply to the reporting database or records maintained by the General Services Administration (GSA) Committee Management Secretariat for oversight purposes.</p>		



Federal Advisory Committee Act Training Course

Washington, DC



JA 000187

Subcommittees

- **Whether subcommittees are open to the public or not, the agency must:**
 - **Designate a subcommittee DFO**
 - **Appoint subcommittee members**
 - **Comply with recordkeeping requirements (i.e., minutes)**
 - **Allow public access to subcommittee records**



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September 11, 2017

Daniel Elwell, Deputy Administrator/Chief NextGen Officer
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Dear Deputy Administrator Elwell:

On behalf of Drone Advisory Committee (DAC) Chairman, Brian Krzanich, President & CEO of Intel Corporation, I am pleased to convey the interim recommendations from the July 21st meeting of the DAC.

The attached interim report (including the recommendations) was approved during the meeting (and is attached). This interim report primarily makes recommendations about funding sources for the next 24 months (defined as “near term”), considers what activities should be prioritized, and who should be responsible for funding UAS integration activities (Appendix 1). Consensus was reached on the following points, (included in the attached report):

- All regulations, policies, and standards necessary in the next 24 months should be developed primarily by the Federal Aviation Administration (FAA), with significant industry input. We recommend that Congress appropriate additional funding and increase FAA staffing to address this ambitious work schedule.
- The research and development, and system development necessary in the next 24 months, should be shared between government and industry.
- Communications, outreach, and training necessary in the next 24 months should be shared between government and industry, depending on the activity.
- Any recommended funding structure should not alter the current structure of funding for traditional, manned aviation.
- In the future, the UAS industry may be expected to pay for the operation, maintenance, and modernization of an automated Unmanned Traffic Management (UTM) system through a yet-to-be-created “pay-for-what-you-use” funding model.

The final version of this report will include “long-term” recommendations and is set to be finalized in early 2018. The DAC continues to develop recommendations for the FAA that will be reviewed at the next Drone Advisory Committee meeting in November of 2017. We look forward to working with you and your office in the ongoing work related to integration of unmanned systems into the National Airspace System.

Sincerely,

A handwritten signature in black ink, appearing to read 'Margaret Jenny', with a stylized flourish at the end.

Margaret Jenny
President

Letter to Deputy Administrator, Dan Elwell

July 17, 2017

Attachments:

- Interim Report of the Drone Advisory Committee on *Funding the Integration of UAS into the National Airspace*

From: John Davisson davisson@epic.org
Subject: EPIC Drone Advisory Committee Records Inquiry
Date: March 20, 2018 at 5:09 PM
To: daniel.elwell@faa.gov, david.w.freeman@dot.gov, asecen@rtca.org, info@rtca.org
Cc: Alan Butler butler@epic.org, Jeramie Scott jscott@epic.org, Marc Rotenberg rotenberg@epic.org

Dear Mr. Elwell (or current Drone Advisory Committee DFO),

I am writing on behalf of the Electronic Privacy Information Center ("EPIC") to obtain access to the records of the Drone Advisory Committee ("DAC") and DAC subcomponents.

Specifically, EPIC is seeking to access all "records, reports, transcripts, minutes, appendixes, working papers, drafts, studies, agenda, or other documents which were made available to or prepared for or by" the DAC or any DAC subcomponent. 5 U.S.C. App. 2 § 10(b). Under the Federal Advisory Committee Act ("FACA"), such records must be made "available for public inspection and copying[.]" *Id.*

Section 10(b) of the FACA also requires the DAC to proactively make such records available. *Id.* A committee or agency "may not require members of the public or other interested parties to file requests for non-exempt advisory committee records under the request and review process established by section 552(a)(3) of FOIA." 41 C.F.R. § 102-3.170; *see also Food Chem. News v. HHS*, 980 F.2d 1468, 1469 (D.C. Cir. 1992).

Please note that the FACA's disclosure mandate applies to the records of the Drone Advisory Subcommittee ("DACSC"), DAC Task Groups, and any other subcomponent of the DAC. See FAA, *Charter for RTCA, Inc.* ¶¶ 8, 14 (2017); NARA, *General Records Schedule 6.2: Federal Advisory Committee Records* (2016); GSA, *Federal Advisory Committee Act Overview* 192 (2017) ("Whether subcommittees are open to the public or not, the agency must . . . Comply with recordkeeping requirements (i.e., minutes)" and "Allow public access to subcommittee records.").

EPIC is aware that a handful of DAC records have been published at <https://www.rtca.org/content/meeting-archives-dac>. However, these records constitute only a small subset of the records which the DAC is obligated to make available. For example, [rtca.org](https://www.rtca.org) lists no meeting minutes or agendas for the DACSC or the DAC's working groups.

Please direct EPIC to the URL or location where the full collection of DAC and DAC subcomponent records is available for public inspection and copying. Thank you for your prompt attention to this matter.

Sincerely,
 John Davisson

--
 John Davisson
 Counsel*
 Electronic Privacy Information Center
 1718 Connecticut Ave. NW
 Washington, DC 20009
 Office: 202.483.1140 x120
 Cell: 202.997.2254
<https://www.epic.org/>

*Member of New York bar; serving as Counsel under D.C. Ct. App. R. 49(c)(8) while application to District of Columbia bar is pending.

Office of the Mayor
City & County of San Francisco



Edwin M. Lee

November 8th, 2017

Brian Krzanich
Chair, Drone Advisory Committee
c/o RTCA
1150 18th Street NW, Suite 910
Washington, DC 20036

Dear Mr. Krzanich,

Regrettably, I will not be able to attend this meeting of the Drone Advisory Committee in Seattle, but Andres Power, a senior member of my staff, will appear on my behalf.

As my office has communicated to members of Task Group 1, the DAC subcommittee, and RTCA on multiple occasions, I have strong concerns over the process guiding Task Group 1's work and the recommendations produced as a result. As such, I urge the DAC to send back Task Group 1's work product and urge that the Task Group be reconstituted to better reflect a balance of perspectives.

Over the past year, Task Group 1's process has been marred by a lack of transparency and poor management. These concerns include a lack of agendas, last minute rescheduling of meetings, failure to have minutes of any proceedings, conflicting advice and guidance by RTCA and requirements to sign documents that public employees cannot sign. Additionally, there is a stark imbalance of perspectives and viewpoints favoring industry interests at the expense of local and state governments and members of the public. Because the process was flawed, the recommendations produced by that process are also flawed.

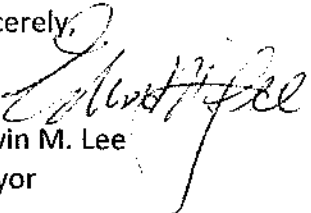
San Francisco supports innovation. This has been an important tenant of my administration. But in supporting innovation, we must also be mindful that the real interests of our residents are protected. The ability to reasonably regulate to ensure public safety, privacy, and to minimize public nuisance are cornerstones of the role of local government, and I do not believe that the Common Principles, as presented to the DAC, adequately ensure that this cornerstone is protected. In fact, by calling these principles "Common Principles," RTCA and the subcommittee ignore the fact that all entities representing state and local interests dissented on four of the most significant nine principles. The DAC, in its inaugural meeting, provided clear direction that the work produced and advanced to the FAA ought to be consensus in nature. Of the nine common principles, four had no consensus.

For these reasons, I cannot support the language being presented at today's meeting of the DAC. Although we worked closely with Task Group 1 in an effort to further develop consensus, the work has been misrepresented. Despite assurances that only consensus views would be presented, areas of disagreement have been presented and relegated to an alternative position. The language developed by some Task Group 1 stakeholders – which largely excludes any local voices – instead advanced as the majority position. This is not what a consensus process should be and I would strongly encourage that any report forwarded to the FAA remove any mention of consensus in Task Group 1.

In San Francisco, we believe that an inclusive process leading to recommendations is as equally important as the recommendations themselves. Without that inclusiveness, there is little chance for widespread support of outcomes.

I encourage the DAC, in the spirit of the original mandate of the FAA, to reconstitute its participant bodies to better reflect the real and legitimate interests of an array of stakeholders, including local and state government. Furthermore, I ask that a more structured, transparent, and equally accessible process be put in place to guide the development of broadly supported recommendations.

Sincerely,


Edwin M. Lee
Mayor

The Washington Post**Transportation**

A U.S. drone advisory group has been meeting in secret for months. It hasn't gone well.

By Michael Laris October 23, 2017

A government advisory group has been holding confidential meetings to shape U.S. policy on drones, deliberating privately about who should regulate a burgeoning industry that will affect everything from package delivery to personal privacy.

The federal group includes industry insiders with a financial stake in the outcome and is co-chaired by a lobbyist for DJI, a Chinese drone maker that dominates the U.S. market. In January, the Federal Aviation Administration asked the group to figure out what influence state and local governments should have over drones in their communities.

The closed proceedings are billed as a way to promote thoughtful and unguarded exchanges — and eventual consensus — among government, community and industry interests. Instead, the process has been riven by suspicion and dysfunction, according to internal documents and emails obtained by The Washington Post, and interviews with participants.

One U.S. official, who spoke on the condition of anonymity to discuss the group's inner workings, said he found it “very bizarre” to have a representative of a “multibillion-dollar Chinese drone manufacturer” helping guide such a sensitive U.S. policy exercise

— and doing it “out of the public eye.”

“I don’t think it set a wonderful tone,” the official said.

The group — formally known as Task Group 1 of the Drone Advisory Committee — is now teetering. Months of tensions came to a head recently when an FAA contractor that manages the group told members they had to sign a far-reaching confidentiality agreement to keep participating.

After some raised concerns, several groups were blocked from receiving draft documents meant to represent their own “common ground” positions, emails show.

“Please do not distribute this material to other TG1 members,” an executive from the FAA contractor wrote in an email.

In response to this and other issues, John Eagerton, chief of Alabama’s aeronautics bureau and a co-chair of the group; San Francisco Mayor Edwin M. Lee (D); a representative of the University of Oklahoma; the National League of Cities; the National Association of Counties; and the National Conference of State Legislatures emailed a “statement of dissent” to other group members last month.

“Despite good faith efforts to engage in Task Group 1, many of us have been obstructed from meaningful participation and we all have serious concerns about the recommendations included in the draft reports,” they wrote.

Melanie Sloan, a former federal prosecutor and senior adviser for the accountability group American Oversight, said the closed-door approach appears to violate open-meetings provisions of the Federal Advisory Committee Act.

“Americans should be aware of the advice the government is relying on in making decisions that affect us all. That’s why the advisory committee rules require transparency, so we are in on the process,” she said.

In a statement, the FAA said the act requires that a committee’s recommendations, and the meeting where they are presented to the FAA, be public. But it said there is a

legal distinction between a “committee” and a subcommittee or task group. Lower-level panels generally “keep their conversations confidential to encourage open discussions and debate among the members,” it said.

Since early last century, the federal government has ruled the United States’ “navigable airspace.” But the proliferation of cheap and powerful drones that can buzz through the air much closer to the ground than a Boeing or a Cessna has spawned a fundamental debate over who should control the airspace at “ultra-low altitude” — under 400 feet.

The policy issue at the heart of the discord is whether Washington should cede localities the power to regulate when, where and under what conditions drones can fly. Cities and states generally are prohibited by federal law from doing so, although there are exceptions, according to the FAA.

The FAA says measures such as altitude restrictions and flight bans are under its control. But local and state governments have long-standing “police powers,” so banning voyeurism using drones or requiring police to get a warrant for overhead surveillance are appropriate for a city or state lawmakers, it says.

That leaves a lot of gray.

The Trump administration is preparing to launch “a pilot program designed to let local communities try different regulatory concepts for controlling drone activity,” Transportation Secretary Elaine Chao told a drone conference in Fargo, N.D., in May.

Details of the pilot program could be disclosed soon.

Task Group 1 was assigned a difficult and high-pressure job, said Dan Elwell, who advised Chao on aviation and is now FAA deputy administrator.

The FAA “gave them the ocean and said, ‘Boil it,’ ” Elwell said. But it is not the agency’s role to manage the inner workings of the advisory group, he said. “We let them do their

thing. If we meddle, if we get in there, they're not advising us."

The deliberations have at times been ugly.

"This process feels like a sham, and highlights the fact that this is the full time job for the industry lobbyists, while the rest of us, myself included, have other jobs," wrote James L. Grimsley, director of the Center for Applied Research & Development at the University of Oklahoma, and a member of the task group.

In an April email, Grimsley said drone behemoth DJI — whose lobbyist, Brendan Schulman, co-chairs the task group — has financial and lobbying ties with other group members, essentially creating a voting bloc with shared positions.

He said industry interests were overrepresented and pointed to the role of PrecisionHawk, a DJI partner and drone-technology firm, and Amazon, which is aggressively pursuing airborne package delivery. Amazon declined to comment. (Amazon chief executive Jeffrey P. Bezos owns The Washington Post.)

Grimsley, an associate vice president at the university, also helped found a drone-technology company. In an interview, he said he regrets that his email, written in frustration, became public, and said that it is "probably not a fair perspective on the entire task group."

University lawyers wrestled with the confidentiality agreement for weeks before finally allowing him to sign, he said. "There is a problem with some state and local governments signing" such agreements, because of open meetings laws in their jurisdictions, he said. "If you don't see the documents, you have a hard time having the conversations."

The materials have since been released to all members, whether or not they signed, according to the FAA consultant. Members are preparing to report to the FAA's broader drone advisory committee at a public meeting Nov. 8, hosted by Amazon in Seattle.

Other task group members have included Facebook, which is developing drones to

provide Internet service; American Airlines; and representatives of airports, airport executives, aerospace industries, air traffic control advocates, private pilots, hobbyists and others.

Grimsley was not alone in focusing on Schulman. Margaret Jenny, the president of RTCA, Inc., the contractor that oversees the task group for the FAA, sought unsuccessfully this year to oust Schulman from his role as co-chair. She wrote that her rationale was “to decrease the chance that the final product could be questioned.”

In an interview, Jenny said the decision to try to remove Schulman had been made jointly with the FAA and was spurred by a “perception issue.” It would be better, they concluded, “if we had somebody who was representing a U.S. firm” and whose “main role” was not that of a lobbyist, she said.

The group voted to keep Schulman in place.

Schulman, in an April email to the group, said Grimsley’s missive was “riddled with falsehoods and is frankly offensive.”

“It is no secret or sham that my job is to work on drone policy; it is in my title,” Schulman, vice president for policy and legal affairs for DJI, wrote. “I think that’s why I have useful expertise in trying to solve problems, and am motivated to work hard with other stakeholders on consensus solutions.”

Schulman declined to answer questions about Task Group 1 but said broadly: “We advocate for responsible regulations around the world and at different levels of government, and if we consider something to be unreasonable we may engage in advocacy. That’s true for any company in any industry.”

Some cities have jumped into the breach to test federal limits.

Newton, Mass., passed an ordinance last year banning drone flights below 400 feet over private property, and above city property at any altitude, without permission. It is

one of hundreds of laws touching on drones around the country.

Given community concerns about drones whirling overhead and the nation's need to facilitate air travel, "where does the right to travel bump up against the city's ability to protect its residents from harm?" said Newton assistant city solicitor Maura O'Keefe.

She got a partial answer last month when a federal judge tossed out the restrictions.

Having a single, clear authority over the nation's airspace has for decades generally been viewed as a good thing, both for commerce and the safety of the flying public. But millions of drones have now been sold, and they look to become more pervasive.

"Really, the crux of this is: How do we allow a fascinating and very useful and worthwhile technology to grow safely and with the proper level of oversight and security?" the FAA's Elwell said. "We have to be very, very careful not to be so burdensome that it stifles the industry and it goes out of our borders to find success — or to be so sort of laissez-faire with it that we end up with unintended consequences."

Some in Congress, including Sen. Dianne Feinstein (D-Calif.), have sought to guarantee that local and state governments have power to impose "reasonable restrictions" on drones below 200 feet, or within 200 feet of a structure.

That could include limits or bans on flights near public or private property and to protect privacy or lessen noise pollution, according to Feinstein's Drone Federalism Act.

Industry advocates say that allowing a "patchwork" of thousands of local regulations would snuff out the promising commercial drone industry. The Association for Unmanned Vehicle Systems International and the Consumer Technology Association, both members of Task Group 1, filed a court brief opposing the law in Newton.

Drone industry representatives, meanwhile, have sought federal legislation further limiting what states are allowed to regulate and have pushed states to enact their own "preemption" laws preventing their cities or counties from regulating drones.

“Rhode Island is a small place. You don’t want to shut the door to a new technology,” said Stephen Ucci, a state legislator and member of Task Group 1 who supported the state’s preemption law so there would be “one uniform standard” for a technology that is both promising and polarizing.


“People either view things as cool or creepy. The ‘creepy’ people don’t want them anywhere around, and the ‘cool’ people want to see them everywhere,” said Ucci, a corporate lawyer. Task Group 1 put “really smart people in a room that know a lot about this topic,” and their deliberations “are great for the country and the industry,” he added.

Jenny, in a Sept. 22 email circulating among some members, said organizers should “stand down” Task Group 1 and give its materials to a “newly constituted group” with a new mandate.

“I’m not willing to continue down this painful path that cannot lead to a good outcome with an unbalanced group,” she wrote.

 **72 Comments**

Michael Laris writes about the transformation of the U.S. transportation system. He previously covered government accountability and was a reporter based in Beijing.

 Follow @mikelarlis

The Washington Post

Transportation

Federal drone advisory panel knocked for 'lack of transparency and poor management'

By **Michael Laris** November 8, 2017

Federal advisers met Wednesday to try to advance U.S. drone policy, with some offering concrete suggestions for opening the nation's skies and others decrying months of dysfunction and mismanagement they say has tainted the advisory process and some of the materials being presented.

The meeting of the Drone Advisory Committee — whose charge is to advise the Federal Aviation Administration on the burgeoning industry — comes two weeks after President Trump signed a memorandum intended to broadly expand how drones are used in the United States using a new pilot program.

San Francisco Mayor Edwin M. Lee (D), in a sharply worded letter distributed to the group headed by Intel chief executive Brian Krzanich, cited the “lack of transparency and poor management” of one of the committee's subgroups. In January, the FAA gave that panel, known as Task Group 1, the difficult job of determining what role federal, state and local officials should play in regulating drones buzzing over communities at low altitudes.

“There is a stark imbalance of perspectives and viewpoints favoring industry interests at the expense of local and state governments and members of the public,” Lee's letter

said. "Because the process was flawed, the recommendations produced by that process are also flawed."

The Washington Post reported last month that Task Group 1 has held months of confidential meetings, which some critics said could violate the Federal Advisory Committee Act, and that the proceedings had been riven by distrust and accusations of outside industry influence.

A presentation prepared for Wednesday's meeting, posted on the advisory committee website and marked "final," listed nine "common principles" developed by Task Group 1. But there was no consensus on four of those principles, participants said.

Those four — covering how drones could impact private property rights, how takeoffs and landings should be regulated, how altitude measurements might be taken, and the role of local governments in overseeing safe drone equipment and operations — were each, confusingly, listed a second time in the presentation as a "common principle" with an "alternate opinion response."

That prompted Lee to allege that "the work has been misrepresented."

A representative of RTCA, a contractor that manages the group for the FAA and bills itself as a public-private expert in developing consensus on aviation, declined to answer questions.

But responding to an outpouring of criticism from members of Task Group 1, RTCA created a second version of the final slide presentation for display at the session Wednesday, with clearer language listing "Option 1" and "Option 2" on principles where there was disagreement.

The damage was done, however.

"This is not what a consensus process should be," Lee wrote. "The ability to reasonably regulate to ensure public safety, privacy, and to minimize public nuisance are cornerstones of the role of local government," and the principles presented do not protect that cornerstone, he said.

After a top Lee aide read parts of the letter, Brendan Schulman, a lobbyist with Chinese drone manufacturer DJI who co-chairs Task Group 1, rejected the mayor's critique. Schulman describes his leadership role as constructive and inclusive. "The mayor's letter couldn't be more wrong about the task group process," Schulman said in a statement. "We have been welcoming of broad participation from the beginning."

The issues at stake are vast, touching on questions of federalism, surveillance and security — and an industry worth billions. While the federal government controls the nation's "navigable airspace," local officials have long had police powers over such crimes as voyeurism and control over land-use issues. Finding the balance between those without suppressing innovation or undercutting public safety has been a major challenge.

FAA Deputy Administrator Dan Elwell told the advisory committee, which was hosted by Amazon in Seattle, that Task Group 1 had been given "a seemingly impossible task."

"The lack of consensus with Task Group 1 was neither unexpected nor a fatal flaw. Congress itself couldn't reach agreement on many of the questions we asked of you," Elwell said.

Elwell said Task Group 1 will be reconstituted and given a new job away from policy and politics. Instead, it will be asked to provide "the technical and operational recommendations we need to implement the pilot program" Trump administration officials announced last month.

Under the pilot, states and localities, teamed with industry, can apply to do things with drones that are not generally allowed under FAA rules. Those include flying at night, over people or out of the range of what the operator can see.

Elwell said the pilot "will create a mechanism for the private sector and state, local and tribal governments to make experience-based and data-driven contributions to integrating drones."

An FAA official said Wednesday that 633 entities — among them cities, counties, academic institutions and emergency responders — have indicated they plan to apply

for the pilot program.


Task Group 1 members have included Amazon, which is pursuing drone package delivery; Facebook, which is developing drones as part of an Internet service; American Airlines; which has assorted aviation industry interests; and representatives of state and local governments. (Amazon chief executive Jeffrey P. Bezos owns The Washington Post.)

One point of agreement amid the discord on the group was that a public process, including things such as hearings and notices, should be used to make sure any possible regulations are reasonable.

A second Drone Advisory Committee panel, Task Group 2, pushed forward Wednesday with its recommendations that the FAA create a program easing the way for companies to fly drones far beyond a controller's "line of sight." Such operations are required for the kind of delivery services and other commercial efforts that have captured the imagination of industry.

 **5 Comments**

Michael Laris writes about the transformation of the U.S. transportation system. He previously covered government accountability and was a reporter based in Beijing.

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**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

NextGen Organization

Charter for RTCA, Inc.

ORDER

1110.77V

Effective Date:

04/01/2015

SUBJ: RTCA, Inc. (Utilized as an Advisory Committee)

- 1. Committee's Official Designation.** RTCA, Inc. (Utilized as an Advisory Committee).
- 2. Authority.** This order renews the charter for using the RTCA, Inc. (referred to as RTCA throughout) and some of its components as an advisory committee in accordance with the provisions of the Federal Advisory Committee Act (FACA), as amended, Pub. L. 92-463, 5 U.S.C. App. RTCA benefits the public interest and supports the Federal Aviation Administration (FAA) in performing its duties and responsibilities under Subtitle VII, 49 U.S.C. § 40101.
- 3. Purpose of This Order.** The FAA and other Government members of the RTCA will use components of RTCA, for example, the NextGen Advisory Committee (NAC), Program Management Committee (PMC), Tactical Operations Committee (TOC), Special Committees (see Appendix A) and as a Federal Advisory Committee (FAC). The FAA may decide to form additional committees, as it deems necessary during the term of this charter. These advisory committees will function under section 3(2)(C) of the FACA.
- 4. Audience.** This order applies to all members of the RTCA Advisory Committees and the FAA director level organizations at the Washington, D.C., Headquarters, and the William J. Hughes Technical Center in Atlantic City, NJ.
- 5. Where to Find This Order.** You can find this order on the FAA website under "Regulations & Policies" and select "[Orders & Notices](#)". This order can also be found on the MyFAA Employee website, using "Tools & Resources" tab and select "[Orders & Notices](#)."
- 6. This Order Cancels.** FAA Order 1110.77U, RTCA, Inc. (Utilized as an Advisory Committee), Effective Date: 04/01/2013.
- 7. Objective and Scope of Activities.** The objective of the advisory committee is to seek resolution of issues and challenges involving air transportation concepts, requirements, operational capabilities, and the associated use of technology and related considerations to aeronautical operations that affect the future Air Traffic Management System.
 - a.** To achieve this, specific objectives include the following:
 - (1) Combine aviation system user and provider requirements in a manner that helps Government and industry meet their common objectives and responsibilities.

Distribution: Electronic

Initiated By: ANG-A15

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(2) Analyze and recommend solutions to the challenges the aviation community faces as it continues to increase safety, security, system capacity, and efficiency.

(3) Develop consensus on relevant solutions to meet user and provider requirements, including the development of minimum operational performance standards for electronic systems and equipment that support aviation.

(4) Aid in developing the appropriate material on which to base U.S. positions for the International Civil Aviation Organization (ICAO) and other international organizations, when requested.

(5) Provide a venue where the FAA can solicit a single, consensus-based set of recommendations on issues that (1) are critical to the successful implementation of NextGen and Air Traffic Management System modernization and (2) require a commitment of resources and/or synchronized planning between Government and industry to achieve the intended outcome.

b. RTCA provides the following two categories of recommendations:

(1) Broad-gauged policy and investment priority recommendations used by the FAA when considering policy and program decisions.

(2) Minimum performance standards, reports, and guidance documents used by the FAA in regulatory decisions and rulemaking. Government regulatory and procurement practices reference or use the RTCA standards (with or without change). The RTCA recommendations are used in the private sector as the basis for development, investment, and other business decisions.

c. The advisory committee will not aid in the coordination or review of safety and certification issues that are inherently governmental.

8. Description of Duties. Components of the RTCA must serve as an advisory committee performing the following duties under the RTCA operating structure and methodology described below:

a. The FAA Air Traffic Organization Chief Operating Officer, the Assistant Administrator for NextGen, the Associate Administrator for Aviation Safety, and the Assistant Administrator of Policy, International Affairs and Environment, serve as the FAA *ex officio*, nonvoting members of the RTCA Policy Board.

b. The FAA will keep participation in all levels of the RTCA committees to a minimum, serving in an *ex officio* capacity as nonvoting members. The Designated Federal Officer (DFO) for the various committees will determine appropriate FAA participation to ensure further understanding of the subject matter. The FAA officials will not serve as chair or co-chair of any committee. Exceptions for Special Committees will require approval of the FAA members of PMC.

c. The RTCA President and the FAA members of the RTCA Policy Board will review the NAC, the PMC and the TOC membership yearly to ensure a balanced and equitable

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representation of the points of view and roles performed by the committees and to the extent feasible of the aviation community. Recommended membership changes to the NAC, PMC, and TOC will be presented to the RTCA President and respective DFOs for review and approval.

9. Agency or Official to Whom the Committee Reports. The RTCA Advisory Committee must report to the Secretary of Transportation through the FAA Administrator.

10. Support. The FAA will provide support to the RTCA NAC, PMC, Special Committees, TOC, and any other Federal advisory committee established under this charter.

11. Annual Operating Cost: FAA annual funding commitment to support RTCA operating costs for the period covered by the charter shall not exceed \$1,100,000.

12. Designated Federal Officer. The FAA Administrator, on behalf of the Secretary, designates full-time government employees as DFO and alternate for the NAC, PMC, and TOC.

a. The DFO or alternate must be present at all of the NAC, PMC, TOC and Special Committee meetings.

b. In accordance with the FACA, the DFO or alternate must be assigned to each committee to perform the following duties:

- (1) Call, attend, and adjourn committee meetings;
- (2) Approve agendas, maintain required records on costs and membership;
- (3) Ensure efficient operations;
- (4) Maintain records for availability to the public, provide copies of committee reports to the Committee Management Officer for forwarding to the Library of Congress; and
- (5) Close any advisory committee meeting, in coordination with the chairperson, when so doing would be in the public interest.

13. Estimated Number and Frequency of Meetings. The PMC will meet quarterly, as required, to carry out its responsibilities. The NAC and TOC will meet three times a year to ensure continuity and good preparation for public decision-making meetings. Special Committees meet, as their workload requires. The NAC, PMC, TOC and Special Committee meetings must comply with all applicable provisions of the FACA, including the following:

a. The NAC, PMC, TOC and Special Committee meetings must be open to the public and a notice must appear in the *Federal Register* at least 15 days before each meeting, except in emergencies. The notice must include the name of the advisory committee, the time, place, purpose of the meeting (including a summary of the agenda), and a statement that the meeting will be open to the public. The FAA may use other forms of notice, such as press releases.

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b. Anyone interested can attend meetings and appear before the committee subject to reasonable limits of space and time. Additionally, anyone interested may file written statements with the committee.

(1) Meetings may be closed to the public only as authorized by section 10(d) of the FACA and applicable regulations.

(2) All RTCA advisory committees will follow the regular advisory committee process in making recommendations to the FAA, and will not make recommendations directly to FAA program offices.

(3) The FAA has determined that continued use of RTCA and its components as an advisory committee is in the public interest for responsibilities imposed on FAA by law.

14. Duration: Continuing.

15. Termination: There is not a termination date.

a. However, FAA may terminate the charter incorporated in this Order if the following conditions occur:

(1) RTCA disbands; the use of RTCA components by FAA ceases;

(2) RTCA operations as covered by the FACA do not comply with FACA or implementing regulations, and RTCA cannot, or will not, achieve compliance;

(3) RTCA refuses membership to a qualified applicant; or

(4) FAA determines that, as to important aspects of its operations, the role of RTCA as an advisory committee cannot be upheld.

b. The FAA will give as much advance notice as possible of such action to the RTCA and all participants. Such action by the FAA would not prevent another Government Agency from chartering RTCA under the Federal Advisory Committee Act.

16. Membership and Designation: The RTCA PMC has approximately 19 members. The PMC members, with the exception of the RTCA President, are volunteers appointed by the RTCA President and serve with concurrence of their parent organization. Selection of PMC members is managed to ensure an appropriate balance of Government and industry perspectives and coverage for all disciplines addressed by Special Committees. The criterion for selecting a PMC member includes the ability to provide the requisite executive management and support of Special Committee activities.

a. The PMC, using Special Committees, manages most of the Federal advisory committee-related business of the RTCA related to the development of minimum performance standards and guidance material. The PMC establishes Special Committees in response to needs identified by government and industry. The RTCA President, in consultation with the FAA DFO, recommends the chair or co-chair for each committee. The PMC approves the terms of reference

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for the Special Committee; approves the chairs; approves recommendations; monitors progress; reviews reports; and approves, modifies, returns for additional work, or disapproves these reports. The PMC meetings are open to the public and are announced in the *Federal Register*.

b. Special Committees along with policy committees, such as the NAC and TOC are a principal means for RTCA to carry out its mission for the FAA. The PMC invites the RTCA member organizations to recruit and name qualified persons to serve on Special Committees. The Special Committee urges any organization materially affected by work of Special Committees to participate to create a balanced membership. In addition, the chair of any Special Committee may invite non-members of the RTCA having expertise in the subject matter to participate. The duration of the Special Committee depends upon the assigned tasks. The RTCA will publish notices in the *Federal Register* when plenary meetings are open to the public.

c. The RTCA NAC has approximately 28 members. Committee membership includes representatives from the following stakeholders: Air Traffic Management Automation Providers, Aircraft Manufacturers, Airports, Avionics Manufacturers, Department of Defense (DoD), Environmental Interest, Finance, Labor, General Aviation, Air Carriers, Business Aviation, and the Transportation Security Administration. The FAA (NextGen Office, Air Traffic Operations, Aviation Safety, Airports, and Policy, International Affairs and Environment), MITRE, and RTCA are non-voting members of the committee.

d. The RTCA TOC has approximately 17 members. Committee membership includes representatives from the following stakeholders: Airline Pilots, Airports, Business Aviation, Commercial Air Carriers, Controllers (NATCA), Dispatchers, DoD, General Aviation, and Regional Air Carriers. The FAA, MITRE, and RTCA are nonvoting members of the committee.

e. Representatives of non-Government RTCA member organizations serve on the committees without Government compensation. The employing organization bears all costs related to its participation on such RTCA committees. Appointed members of the RTCA Policy Board, Board of Directors, NAC, PMC, chairpersons of Special Committees and TOC serve as “representative” members. They must represent a particular interest of employment, education, experience, or affiliation with a specific aviation-related organization (reference Department of Transportation (DOT) Order 1120.3B, Committee Management Policy and Procedures, Ch. II, 10.a.).

f. To identify clearly and provide proper disclosure of their specific affiliation or professional interest, appointed members will complete an Advisory Committee Candidate Biographical Information Request, Form DOT F 1120.1 (as described in the DOT Order 1120.3B, Committee Management Policy and Procedures, Ch. II, 11b(1)). Members must complete a new form DOT F 1120.1 when a change in affiliation occurs.

17. Subcommittees. The Department of Transportation has the authority to create subcommittees. All RTCA advisory subcommittees or work groups must report to the parent Federal advisory committee and must not provide advice or work products directly to the agency.

18. Recordkeeping. RTCA will publish the minutes of each NAC, PMC, Special Committee, and TOC meeting. The official minutes must include the following: time and place of the

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meeting; a list of all attendees, including members, staff, and public observers; a summary of matters discussed and conclusions reached; reference to reports issued or approved by the committee; and a description of public participation, including verbal or written statements. The committee chair must certify the accuracy of the minutes. Meeting summaries are available to the public and are posted on the RTCA web site at <http://www.rtca.org>.

a. Yearly, RTCA must provide information to FAA on its committees, including, but not limited to the following: the number of meetings of each committee; the total number of meetings; meeting attendance for FAA, other Government, and non-Government participants; the name and organizational affiliation of each RTCA committee member; report titles and dates; and dates of all meetings.

b. This order complies with the requirements in section 9(c) of the FACA for charters for PMC and Special Committees or other advisory committee task forces.

c. Appendix A provides a list of the current Special Committees. A new charter action is not required to assign a new tasking to an existing Special Committee so long as the new tasking is within its topical responsibility. These committees must comply with all requirements and implementing regulations covered in section 10 of the FACA.

d. The NAC, PMC, TOC and Special Committees formally and informally established subcommittees, or other subgroups of the committee, will handle their records in accordance with General Records Schedule 26, Item 2, or other approved Agency records disposition schedule.

e. Subject to the conditions of the Freedom of Information Act, 5 U.S.C. § 552(b), records, reports, transcripts, minutes or meeting summaries, and other documents are available for public inspection or purchase from RTCA. Copies of FAA documents are available to the public according to the fee schedule published in title 49, part 7, of the Code of Federal Regulations.

19. Filing Date. Renewal of the RTCA charter and its components, listed in Appendix A, is effective April 1, 2015, which is the filing date of the charter. Using RTCA components as advisory committees will continue for two (2) years, unless sooner terminated or renewed by proper authority.

20. Distribution. This order is available electronically as described in paragraph 3.



Michael P. Huerta
Administrator

04/01/2013

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Appendix A

Appendix A. RTCA Special Committees

The following is a list of RTCA Special Committees as of September 2014. You can find the most current list and descriptions of RTCA Special Committees at www.rtca.org.

SC-135	Environmental Testing
SC-147	Traffic Alert & Collision Avoidance System (TCAS)
SC-159	Global Positioning System (GPS)
SC-186	Automatic Dependent Surveillance-Broadcast (ADS-B)
SC-206	Aeronautical Information Services (AIS) Data Link
SC-209	ATCRBS & Mode S Transponder
SC-213	Enhanced Flight Vision Systems & Synthetic Vision Systems (EFVS/SVS)
SC-214	Standards for Air Traffic Data Communication Services
SC-216	Aeronautical Systems Security
SC-217	Aeronautical Databases
SC-222	AMS(R)S
SC-223	Aeronautical Mobile Airport Communication System
SC-224	Airport Security Access Control Systems
SC-225	Rechargeable Lithium Batteries & Battery Systems
SC-227	Standards of Navigation Performance
SC-228	Minimum Operational Performance Standards for Unmanned Aircraft Systems
SC-229	406 MHz Emergency Locator Transmitters (ELTs)
SC-230	Airborne Weather Detection Systems
SC-231	Terrain Awareness Warning Systems (TAWS)
SC-232	Airborne Selective Calling Equipment

CHANGE

**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

**ORDER
1110.77V
CHG 1**

Effective Date

Charter for RTCA, Inc.

08/31/16

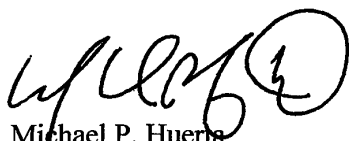
SUBJ: RTCA, Inc. (Utilized as an Advisory Committee)

1. **Purpose.** This is required to add new scope in paragraph 7d and add the drone advisory committee in appendix B; increase operating costs for the second year of the charter from \$1,100,000 to \$1,500,000 respectively; and add committees to Appendix A. RTCA Special Committees.
2. **Who this change affects.** Aviation Safety and NextGen.
3. **Explanation of Policy Change.** None.
4. **Disposition of Transmittal Paragraph.** Retain this transmittal sheet until the directive is cancelled by a new directive.

PAGE CHANGE CONTROL CHART

Remove Pages	Dated	Insert Pages	Dated
2 through 7	04/01/15	2 through 8 Appendix B, Page 9	08/31/16 08/31/16

5. **Administrative Information.** The content on pages 2 through 8 will have new page numbers to accommodate the paragraph 7d insertion on page 2. Appendix B is inserted on page 9. This order change will only be distributed to Aviation Safety Office (AVS) and the NextGen Office (ANG) for review and concurrence.


Michael P. Huerta
Administrator

Distribution: Electronic

Initiated By: ANG-A15



**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

NextGen Organization

Charter for RTCA, Inc.

ORDER

1110.77V

Effective Date:

04/01/15

SUBJ: RTCA, Inc. (Utilized as an Advisory Committee)

- 1. Committee's Official Designation.** RTCA, Inc. (Utilized as an advisory committee).
- 2. Authority.** This order renews the charter for using the RTCA, Inc. (referred to as RTCA throughout) and some of its components as an advisory committee in accordance with the provisions of the Federal Advisory Committee Act (FACA), as amended, Pub. L. 92-463, 5 U.S.C. App. RTCA benefits the public interest and supports the Federal Aviation Administration (FAA) in performing its duties and responsibilities under Subtitle VII, 49 U.S.C. § 40101.
- 3. Purpose of This Order.** The FAA and other Government members of the RTCA will use components of RTCA (for example, the NextGen Advisory Committee (NAC), Program Management Committee (PMC), Tactical Operations Committee (TOC), and the Special Committees) as a Federal advisory committee. The FAA may decide to form additional committees, as it deems necessary during the term of this charter. These advisory committees will function under section 3(2)(C) of the FACA.
- 4. Audience.** This order applies to all members of the RTCA advisory committees and the FAA director level organizations at the Washington, D.C., Headquarters, and the William J. Hughes Technical Center in Atlantic City, NJ.
- 5. Where to Find This Order.** You can find this order on the FAA website under "Regulations & Policies" and select "Orders & Notices". This order can also be found on the MyFAA Employee website, using "Tools & Resources" tab and select "Orders & Notices."
- 6. This Order Cancels.** FAA Order 1110.77U, RTCA, Inc. (Utilized as an advisory committee), Effective Date: 04/01/2013.
- 7. Objective and Scope of Activities.** The objective of the advisory committee is to seek resolution of issues and challenges involving air transportation concepts, requirements, operational capabilities, and the associated use of technology and related considerations to aeronautical operations that affect the future Air Traffic Management System.
 - a.** To achieve this, specific objectives include the following:
 - (1) Combine aviation system user and provider requirements in a manner that helps Government and industry meet their common objectives and responsibilities.

Distribution: Electronic

Initiated By: ANG-A15

(2) Analyze and recommend solutions to the challenges the aviation community faces as it continues to increase safety, security, system capacity, and efficiency.

(3) Develop consensus on relevant solutions to meet user and provider requirements, including the development of minimum operational performance standards and minimum operations performance standards for electronic systems and equipment that support aviation.

(4) Aid in developing the appropriate material on which to base U.S. positions for the International Civil Aviation Organization (ICAO) and other international organizations, when requested.

(5) Provide a venue where the FAA can solicit a single, consensus-based set of recommendations on issues that (1) are critical to the successful implementation of NextGen and Air Traffic Management System modernization and (2) require a commitment of resources and/or synchronized planning between Government and industry to achieve the intended outcome.

b. RTCA provides the following two categories of recommendations:

(1) Broad-gauged policy and investment priority recommendations used by the FAA when considering policy and program decisions.

(2) Minimum performance standards, reports, and guidance documents used by the FAA in regulatory decisions and rulemaking. Government regulatory and procurement practices reference or use the RTCA standards (with or without change). The RTCA recommendations are used in the private sector as the basis for development, investment, and other business decisions.

c. The advisory committee will not aid in the coordination or review of safety and certification issues that are inherently governmental.

d. RTCA also provides the following categories of recommendations:

(1) A Rolling Plan for NextGen Priorities through Fiscal Year 2019.

(2) A traffic flow management strategy to maintain capacity during Performance Based Navigation (PBN) operations consistent with the FAA's implementation of the PBN Navigation Strategy.

(3) FAA operational increments for NextGen planning consistent with the FAA's NextGen Vision.

8. Description of Duties. Components of the RTCA must serve as an advisory committee performing the following duties under the RTCA operating structure and methodology described below:

a. The FAA Air Traffic Organization Chief Operating Officer, the Assistant Administrator for NextGen, the Associate Administrator for Aviation Safety, and the Assistant Administrator of

Policy, International Affairs and Environment, serve as the FAA *ex officio*, nonvoting members of the RTCA Policy Board.

b. The FAA will keep participation in all levels of the RTCA committees to a minimum, serving in an *ex officio* capacity as nonvoting members. The Designated Federal Officer (DFO) for the various committees will determine appropriate FAA participation to ensure further understanding of the subject matter. The FAA officials will not serve as chair or co-chair of any committee. Exceptions for Special Committees will require approval of the FAA members of PMC.

c. The RTCA President and the FAA members of the RTCA Policy Board will review the NAC, the PMC and the TOC membership yearly to ensure a balanced and equitable representation of the points of view and roles performed by the committees and to the extent feasible of the aviation community. Recommended membership changes to the NAC, PMC, and TOC will be presented to the RTCA President and respective DFOs for review and approval.

9. Agency or Official to Whom the Committee Reports. The RTCA Advisory Committee must report to the Secretary of Transportation through the FAA Administrator.

10. Support. The FAA will provide support to the RTCA NAC, PMC, Special Committees, TOC, and any other Federal advisory committee established under this charter.

11. Annual Operating Cost: FAA annual funding commitment to support RTCA operating costs for the period covered by the charter shall not exceed \$1,100,000 for the first year and \$1,500,000 for the second year. The increase ceiling in the second year is to reflect the added requirements for NAC and to add the drone advisory committee (Appendix B).

12. Designated Federal Officer. The FAA Administrator, on behalf of the Secretary, designates full-time government employees as DFO and alternate for the NAC, PMC, and TOC.

a. The DFO or alternate must be present at all of the NAC, PMC, TOC and Special Committee meetings.

b. In accordance with the FACA, the DFO or alternate must be assigned to each committee to perform the following duties:

- (1) Call, attend, and adjourn committee meetings;
- (2) Approve agendas, maintain required records on costs and membership;
- (3) Ensure efficient operations;
- (4) Maintain records for availability to the public, provide copies of committee reports to the Committee Management Officer for forwarding to the Library of Congress; and
- (5) Close any advisory committee meeting, in coordination with the chairperson, when so doing would be in the public interest.

13. Estimated Number and Frequency of Meetings. The PMC will meet quarterly, as required, to carry out its responsibilities. The NAC and TOC will meet three times a year to ensure continuity and good preparation for public decision-making meetings. Special Committees meet as their workload requires. The NAC, PMC, TOC and Special Committee meetings must comply with all applicable provisions of the FACA, including the following:

a. The NAC, PMC, TOC and Special Committee, meetings must be open to the public and a notice must appear in the *Federal Register* at least 15 days before each meeting, except in emergencies. The notice must include the name of the advisory committee, the time, place, purpose of the meeting (including a summary of the agenda), and a statement that the meeting will be open to the public. The FAA may use other forms of notice, such as press releases.

b. Anyone interested can attend meetings and appear before the committee subject to reasonable limits of space and time. Additionally, anyone interested may file written statements with the committee.

(1) Meetings may be closed to the public only as authorized by section 10(d) of the FACA and applicable regulations.

(2) All RTCA advisory committees will follow the regular advisory committee process in making recommendations to the FAA, and will not make recommendations directly to FAA program offices.

(3) The FAA has determined that continued use of RTCA and its components as an advisory committee is in the public interest for responsibilities imposed on FAA by law.

14. Duration: Continuing.

15. Termination: There is not a termination date.

a. However, FAA may terminate the charter incorporated in this Order if the following conditions occur:

(1) RTCA disbands; the use of RTCA components by FAA ceases;

(2) RTCA operations as covered by the FACA do not comply with FACA or implementing regulations, and RTCA cannot, or will not, achieve compliance;

(3) RTCA refuses membership to a qualified applicant; or FAA determines that, as to important aspects of its operations, the role of RTCA as an advisory committee cannot be upheld.

b. The FAA will give as much advance notice as possible of such action to the RTCA and all participants. Such action by the FAA would not prevent another Government Agency from chartering RTCA under the Federal Advisory Committee Act.

16. Membership and Designation: The RTCA PMC has approximately 19 members. The PMC members, with the exception of the RTCA President, are volunteers appointed by the RTCA President and serve with concurrence of their parent organization. Selection of PMC members is managed to ensure an appropriate balance of Government and industry perspectives and coverage for all disciplines addressed by Special Committees. The criterion for selecting a PMC member includes the ability to provide the requisite executive management and support of Special Committee activities.

a. The PMC, using Special Committees, manages most of the Federal advisory committee-related business of the RTCA related to the development of minimum performance standards and guidance material. The PMC establishes Special Committees in response to needs identified by government and industry. The RTCA President, in consultation with the FAA DFO, recommends the chair or co-chair for each committee. The PMC approves the terms of reference for the Special Committee; approves the chairs; approves recommendations; monitors progress; reviews reports; and approves, modifies, returns for additional work, or disapproves these reports. The PMC meetings are open to the public and are announced in the *Federal Register*.

b. Special Committees along with policy committees, such as the NAC and TOC are a principal means for RTCA to carry out its mission for the FAA. The PMC invites the RTCA member organizations to recruit and name qualified persons to serve on Special Committees. The Special Committee urges any organization materially affected by work of Special Committees to participate to create a balanced membership. In addition, the chair of any Special Committee may invite non-members of the RTCA having expertise in the subject matter to participate. The duration of the Special Committee depends upon the assigned tasks. The RTCA will publish notices in the *Federal Register* when plenary meetings are open to the public.

c. The RTCA NAC has approximately 28 members. Committee membership includes representatives from the following stakeholders: Air Traffic Management Automation Providers, Aircraft Manufacturers, Airports, Avionics Manufacturers, Department of Defense (DoD), Environmental Interest, Finance, Labor, General Aviation, Air Carriers, Business Aviation, and the Transportation Security Administration. The FAA (NextGen Office, Air Traffic Operations, Aviation Safety, Airports, and Policy, International Affairs and Environment), MITRE, and RTCA are nonvoting members of the committee.

d. The RTCA TOC has approximately 17 members. Committee membership includes representatives from the following stakeholders: Airline Pilots, Airports, Business Aviation, Commercial Air Carriers, Controllers (NATCA), Dispatchers, DoD, General Aviation, and Regional Air Carriers. The FAA, MITRE, and RTCA are nonvoting members of the committee.

e. Representatives of non-Government RTCA member organizations serve on the committees without Government compensation. The employing organization bears all costs related to its participation on such RTCA committees. Appointed members of the RTCA Policy Board, Board of Directors, NAC, PMC, chairpersons of Special Committees and TOC serve as "representative" members. They must represent a particular interest of employment, education, experience, or affiliation with a specific aviation-related organization (reference Department of

Transportation (DOT) Order 1120.3B, Committee Management Policy and Procedures, Ch. II, 10.a.).

f. To identify clearly and provide proper disclosure of their specific affiliation or professional interest, appointed members will complete an Advisory Committee Candidate Biographical Information Request, Form DOT F 1120.1 (as described in the DOT Order 1120.3B, Committee Management Policy and Procedures, Ch. II, 11b(1)). Members must complete a new form DOT F 1120.1 when a change in affiliation occurs.

17. Subcommittees. The Department of Transportation has the authority to create subcommittees. All RTCA advisory subcommittees or work groups must report to the parent Federal advisory committee and must not provide advice or work products directly to the agency.

18. Recordkeeping. RTCA will publish the minutes of each NAC, PMC, Special Committee, and TOC meeting. The official minutes must include the following: time and place of the meeting; a list of all attendees, including members, staff, and public observers; a summary of matters discussed and conclusions reached; reference to reports issued or approved by the committee; and a description of public participation, including verbal or written statements. The committee chair must certify the accuracy of the minutes. Meeting summaries are available to the public and are posted on the RTCA web site at <http://www.rtca.org>.

a. Yearly, RTCA must provide information to FAA on its committees, including, but not limited to the following: the number of meetings of each committee; the total number of meetings; meeting attendance for FAA, other Government, and non-Government participants; the name and organizational affiliation of each RTCA committee member; report titles and dates; and dates of all meetings.

b. This order complies with the requirements in section 9(c) of the FACA for charters for PMC and Special Committees or other advisory committee task forces.

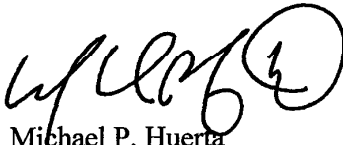
c. Appendix A provides a list of the current Special Committees. A new charter action is not required to assign a new tasking to an existing Special Committee so long as the new tasking is within its topical responsibility. These committees must comply with all requirements and implementing regulations covered in section 10 of the FACA.

d. The NAC, PMC, TOC and Special Committees formally and informally established subcommittees, or other subgroups of the committee, will handle their records in accordance with General Records Schedule 26, Item 2, or other approved Agency records disposition schedule.

e. Subject to the conditions of the Freedom of Information Act, 5 U.S.C. § 552(b), records, reports, transcripts, minutes or meeting summaries, and other documents are available for public inspection or purchase from RTCA. Copies of FAA documents are available to the public according to the fee schedule published in title 49, part 7, of the Code of Federal Regulations.

19. Filing Date. Renewal of the RTCA charter and its components, listed in Appendix A, is effective April 1, 2015, which is the filing date of the charter. Using RTCA components as advisory committees will continue for two (2) years, unless sooner terminated or renewed by proper authority.

20. Distribution. This order is available electronically as described in paragraph 3.



Michael P. Huerta
Administrator

08/31/16

1110.77V, CHG 1
Appendix A

Appendix A. RTCA Special Committees

Paragraph 18b contains information on the Special Committees. The following is a list of RTCA Special Committees as of January 2016. You can find the most current list of RTCA Special Committees at www.rtca.org.

SC-135	Environmental Testing
SC-147	Traffic Alert & Collision Avoidance System (TCAS)
SC-159	Global Positioning System (GPS)
SC-186	Automatic Dependent Surveillance-Broadcast (ADS-B)
SC-206	Aeronautical Information Services (AIS) Data Link
SC-209	ATCRBS & Mode S Transponder
SC-213	Enhanced Flight Vision Systems & Synthetic Vision Systems (EFVS/SVS)
SC-214	Standards for Air Traffic Data Communication Services
SC-216	Aeronautical Systems Security
SC-217	Aeronautical Databases
SC-222	AMS(R)S
SC-223	Aeronautical Mobile Airport Communication System
SC-224	Airport Security Access Control Systems
SC-225	Rechargeable Lithium Batteries & Battery Systems
SC-227	Standards of Navigation Performance
SC-228	Minimum Operational Performance Standards for Unmanned Aircraft Systems
SC-229	406 MHz Emergency Locator Transmitters (ELTs)
SC-230	Airborne Weather Detection Systems
SC-231	Terrain Awareness Warning Systems (TAWS)
SC-232	Airborne Selective Calling Equipment
SC-233	Addressing Human Factors/Pilot Interface Issues for Avionics
SC-234	Portable Electronic Devices
SC-235	Non-Rechargeable Lithium Batteries

08/31/16

1110.77V, Chg 1
Appendix B

Appendix B. Drone Advisory Committee

The following describes the addition of the designation of the Drone Advisory Committee (DAC).

1. Purpose: Establish the DAC as a component of the RTCA Federal advisory committee.

2. Description: The RTCA DAC will comply with the provisions of the RTCA Charter and the DAC specific provisions below:

a. Objective and Scope of Activities. The Objective of the DAC is to provide an open venue for FAA and UAS stakeholders to work in partnership to identify and recommend a single, consensus-based set of resolutions for near-term issues regarding the efficiency and safety of integrating UAS into the NAS and to develop recommendations to address those issues and challenges. The DAC will also provide the FAA with recommendations which may be used for tactical and strategic planning purposes. The DAC is comprised of executive leaders from key unmanned aircraft stakeholders as well as key stakeholders in the manned aviation community. The DAC will track and report progress and activities of FAA-approved subcommittees, provide suggested guidance for their work, and will coordinate final products for submittal to the FAA Administrator. Each FAA-approved Task Group will have a specific, limited charter that is developed by the DAC and is approved by the FAA Administrator. Unless otherwise stated, Task Groups will be sunset upon completion of deliverables as documented in their respective charter(s). Task Groups may be cancelled prior to completion of specified deliverables in accordance with the terms in their respective charter(s).

b. Estimated Number and Frequency of Meetings. The DAC will hold at least three meetings per year, as required, to carry out its responsibilities. The DAC will meet as often as necessary to ensure continuity and good preparation for public decision making meetings.

c. Membership. The DAC has approximately 30 members. Committee membership includes representatives from the following stakeholder communities: UAS Manufacturers (all sizes), UAS Operators (all sizes), Drone Hardware Component Manufacturers, Drone Software Application Manufacturers, Traditional Manned Aviation Operators, Airports and Airport Communities, Labor (controllers, pilots), Research and Development, Academia, Local Government, and Navigation, Communication and Surveillance and Air Traffic Management Capabilities Providers. The FAA (UAS Integration Office, Air Traffic Organization, and other Federal Representatives) are non-voting members of the committee.

d. A Terms of Reference (TOR) will be developed separately that details the specific conduct of the DAC. Provisions of the TOR will comply with all requirements and implementing regulations covered in section 10 of the FACA.



**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

ORDER

1110.77W

Effective Date:

Charter for RTCA, Inc.

04/01/17

SUBJ: RTCA, Inc. (Utilized as an advisory committee)

- 1. Committee's Official Designation.** RTCA, Inc. (Utilized as an advisory committee).
- 2. Authority.** This order renews the charter for using the RTCA, Inc. (referred to as RTCA throughout) as an advisory committee in accordance with the provisions of the Federal Advisory Committee Act (FACA), as amended, Pub. L. 92-463, 5 U.S.C. App. 2. The RTCA benefits the public interest and supports the Federal Aviation Administration (FAA) in performing its duties and responsibilities under Subtitle VII, 49 U.S.C. § 40101.
- 3. Objective and Scope of Activities.** The objective of the RTCA advisory committee is to seek resolution of issues and challenges involving air transportation concepts, requirements, operational capabilities, and the associated use of technology and related considerations to aeronautical operations that affect the future Air Traffic Management System. The FAA may decide to form additional subcommittees, as it deems necessary during the term of this charter. RTCA will function under section 3(2)(C) of the FACA.
 - a.** To achieve this, specific objectives include the following:
 - (1) Combine aviation system user and provider requirements in a manner that helps Government and industry meet their common objectives and responsibilities.
 - (2) Analyze and recommend solutions to the challenges the aviation community faces as it continues to increase safety, security, system capacity, and efficiency.
 - (3) Develop consensus on relevant solutions to meet user and provider requirements, including the development of minimum operational performance standards, including minimum operations performance standards for electronic systems and equipment that support aviation.
 - (4) Aid in developing the appropriate material on which to base U.S. positions for the International Civil Aviation Organization (ICAO) and other international organizations, when requested.
 - (5) Provide a venue where the FAA can solicit a single, consensus-based set of recommendations on issues that (1) are critical to the successful implementation of NextGen and Air Traffic Management System modernization and (2) require a commitment of resources and/or synchronized planning between Government and industry to achieve the intended outcome.

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Initiated By: ANG-1

04/01/17

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b. RTCA provides the following two categories of recommendations:

(1) Broad-gauged policy and investment priority recommendations used by the FAA when considering policy and program decisions.

(2) Minimum performance standards, reports, and guidance documents used by the FAA in regulatory decisions and rulemaking. Government regulatory and procurement practices reference or use the RTCA standards (with or without change). The RTCA recommendations are used in the private sector as the basis for development, investment, and other business decisions.

c. The advisory committee will not aid in the coordination or review of safety and certification issues that are inherently governmental.

d. RTCA also provides the following categories of recommendations:

(1) A Rolling Plan for NextGen Priorities through Fiscal Year 2019.

(2) A traffic flow management strategy to maintain capacity during Performance Based Navigation (PBN) operations consistent with the FAA's implementation of the PBN Navigation Strategy.

(3) FAA operational increments for NextGen planning consistent with the FAA's NextGen Vision.

4. Description of Duties. RTCA and its subcommittees are solely advisory and will perform the following duties under the RTCA operating structure and methodology described below:

a. The FAA Air Traffic Organization Chief Operating Officer, the Assistant Administrator for NextGen, the Associate Administrator for Aviation Safety, and the Assistant Administrator of Policy, International Affairs and Environment, make up the FAA's representation to the RTCA. They provide FAA oversight to RTCA.

b. The FAA will keep participation in all levels of the RTCA and its subcommittees to a minimum, serving in an *ex officio* capacity as nonvoting members. The Designated Federal Officer (DFO) for the RTCA will determine appropriate FAA participation to ensure further understanding of the subject matter. The FAA official will not serve as chair or co-chair of any committee. Exceptions for Special Subcommittees will require approval of the FAA members.

c. The RTCA President and the FAA members review subcommittee membership yearly to ensure a balanced and equitable representation of the points of view and roles performed by the subcommittees and to the extent feasible of the aviation community. Recommended membership changes to the subcommittees will be presented to the RTCA President and respective DFO for review and approval.

5. Agency or Official to Whom the Committee Reports. The RTCA Advisory Committee must report to the Secretary of Transportation through the FAA Administrator.

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6. Support. The FAA will provide support to the RTCA advisory committee and subcommittees.

7. Estimated Annual Operating Costs and Staff Years: FAA annual funding commitment to support RTCA operating costs for the period covered by the charter will not exceed \$750,000.

8. Designated Federal Officer. The FAA Administrator, on behalf of the Secretary, designates full-time government employees as DFO and alternate for the RTCA advisory committee and subcommittees.

- a. The DFO or alternate must be present at all of the subcommittee meetings.
- b. In accordance with the FACA, the DFO or alternate must be assigned to the RTCA and its subcommittees to perform the following duties:
 - (1) Call, attend, and adjourn subcommittee meetings;
 - (2) Approve agendas, maintain required records on costs and membership;
 - (3) Ensure efficient operations;
 - (4) Maintain records for availability to the public, provide copies of committee reports to the Committee Management Officer for forwarding to the Library of Congress; and
 - (5) Adjourn any meeting, in coordination with the chairperson, when so doing would be in the public interest.
 - (6) Chair meetings when directed to do so by the Secretary of Transportation.

9. Estimated Number and Frequency of Meetings. RTCA will oversee all meetings. The PMC will meet quarterly, as required, to carry out its responsibilities. The NextGen Subcommittee (NAC) and Tactical Operations Subcommittee (TOC) will meet three times a year to ensure continuity and good preparation for public decision-making meetings. Special Subcommittees meet as their workload requires. The subcommittee meetings will comply with FACA as follows:

- a. The subcommittee meetings must be open to the public and a notice must appear in the *Federal Register* at least 15 days before each meeting, except in emergencies. The notice must include the name of the subcommittee, the time, place, purpose of the meeting (including a summary of the agenda), and a statement that the meeting will be open to the public. If the meeting is closed, state the reasons why, citing the specific exemptions of the Government in the Sunshine Act, 5 U.S.C. 552b(c), as the basis for closure. The FAA may use other forms of notice, such as press releases.
- b. Anyone interested can attend meetings and appear before the committee subject to reasonable limits of space and time. Additionally, anyone interested may file written statements with the RTCA.

04/01/17

1110.77W

(1) Meetings may be closed to the public only as authorized by section 10(d) of the FACA and applicable regulations.

(2) RTCA and its subcommittees will follow the regular advisory committee process in making recommendations to the FAA.

(3) The FAA has determined that continued use of RTCA as an advisory committee is in the public interest for responsibilities imposed on FAA by law.

10. Duration: Continuing.

11. Termination: This charter shall terminate 6 months after its effective unless renewed in accordance with FACA and other applicable regulations.

a. However, FAA may terminate the charter incorporated in this Order if the following conditions occur:

(1) RTCA disbands; the use of RTCA subcommittees by FAA ceases;

(2) RTCA operations as covered by the FACA do not comply with FACA or implementing regulations, and RTCA cannot, or will not, achieve compliance;

(3) RTCA refuses membership to a qualified applicant; or

(4) FAA determines that, as to important aspects of its operations, the role of RTCA as an advisory committee cannot be upheld.

The FAA will give as much advance notice as possible of such action to the RTCA and all participants. Such action by the FAA would not prevent another Government Agency from chartering RTCA under the FACA.

12. Membership and Designation: The RTCA coordinates membership, expertise, and groups represented to achieve a balance in the RTCA and its subcommittees. The membership varies to address the complexity of the subcommittee topic. Membership includes FAA regular or special government employees.

a. The PMC has approximately 19 members. Selection of PMC members is managed to ensure an appropriate balance of Government and industry perspectives and coverage for all disciplines addressed by Special Subcommittees. The criterion for selecting a PMC member includes the ability to provide the requisite executive management and support of Special Subcommittee activities.

b. Special Subcommittees along with policy subcommittees, such as the NAC and TOC, are a principal means for RTCA to carry out its mission for the FAA. The PMC invites the RTCA member organizations to recruit and name qualified persons to serve on Special Subcommittees. The Special Subcommittee urges any organization materially affected by work of Special Subcommittees to participate to create a balanced membership. In addition, the chair of any Special Subcommittee may invite non-members of the RTCA having expertise in the

04/01/17

1110.77W

subject matter to participate. The duration of the Special Subcommittee depends upon the assigned tasks. The RTCA will publish notices in the *Federal Register* when meetings are open to the public.

c. The RTCA NAC has approximately 28 members. Subcommittee membership includes representatives from the following stakeholders: Air Traffic Management Automation Providers, Aircraft Manufacturers, Airports, Avionics Manufacturers, Department of Defense (DoD), Environmental Interest, Finance, Labor, General Aviation, Air Carriers, Business Aviation, and the Transportation Security Administration. The FAA (NextGen Office, Air Traffic Operations, Aviation Safety, Airports, and Policy, International Affairs and Environment), MITRE, and RTCA are nonvoting members of the subcommittee.

d. The RTCA TOC has approximately 17 members. Subcommittee membership includes representatives from the following stakeholders: Airline Pilots, Airports, Business Aviation, Commercial Air Carriers, Controllers (NATCA), Dispatchers, DoD, General Aviation, and Regional Air Carriers. The FAA, MITRE, and RTCA are nonvoting members of the subcommittee.

e. The RTCA Drone Subcommittee (DAC) has 35 members. Subcommittee membership includes representatives from the following stakeholder communities: UAS Manufacturers (all sizes), UAS Operators (all sizes), Drone Hardware Component Manufacturers, Drone Software Application Manufacturers, Traditional Manned Aviation Operators, Airports and Airport Communities, Labor (controllers, pilots), Research and Development, Academia, Local Government, and Navigation, Communication and Surveillance and Air Traffic Management Capabilities Providers. The FAA (UAS Integration Office, Air Traffic Organization, and other Federal Representatives) and RTCA are non-voting members of the subcommittee.

f. Representatives of non-Government RTCA member organizations serve on the subcommittees without Government compensation. The employing organization bears all costs related to its participation on such RTCA subcommittees. They must represent a particular interest of employment, education, experience, or affiliation with a specific aviation-related organization (reference Department of Transportation (DOT) Order 1120.3B, Committee Management Policy and Procedures, Ch. II, 10.a.).

g. To identify clearly and provide proper disclosure of their specific affiliation or professional interest, appointed members will complete an Advisory Committee Candidate Biographical Information Request, Form DOT F 1120.1, OMB No.04-R5722 (as described in the DOT Order 1120.3B, Committee Management Policy and Procedures, Ch. II, 11b(1)). Members must complete a new form DOT F 1120.1 when a change in affiliation occurs.

13. Subcommittees. The Department of Transportation has the authority to create other subcommittees. All RTCA subcommittees must report to the parent Federal advisory committee and must not provide advice or work products directly to the agency.

14. Recordkeeping. RTCA will publish the minutes and recommendations of each of its subcommittees. The official minutes must include the following: time and place of the meeting; a list of all attendees, including members, staff, and public observers; a summary of matters

04/01/17

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discussed and conclusions reached; reference to reports issued or approved by the subcommittee; and a description of public participation, including verbal or written statements. The subcommittee chair must certify the accuracy of the minutes. Meeting summaries are available to the public and are posted on the RTCA web site at <http://www.rtca.org>.

a. Yearly, RTCA must provide information to FAA on its subcommittees, including, but not limited to the following: the number of meetings of each subcommittee; the total number of meetings; meeting attendance for FAA, other Government, and non-Government participants; the name and organizational affiliation of each RTCA committee/subcommittee member; report titles and dates; and dates of all meetings.

b. Appendix A provides a list of the current Special Subcommittees. These subcommittees must comply with all requirements and implementing regulations covered in section 10 of the FACA.

c. The NAC, PMC, TOC, DAC and Special Subcommittees formally and informally established subgroups of the committee, will handle their records in accordance with General Records Schedule 6.2, or other approved Agency records disposition schedule.

d. Subject to the conditions of the Freedom of Information Act, 5 U.S.C. § 552(b), records, reports, transcripts, minutes or meeting summaries, and other documents are available for public inspection or purchase from RTCA. Copies of FAA documents are available to the public according to the fee schedule published in title 49, part 7, of the Code of Federal Regulations.

15. Filing Date. Renewal of the RTCA charter is effective from April 1, 2017.



Victoria Wassmer
Deputy Administrator (Acting)

04/01/17

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Appendix A - Special Subcommittees

The following is a list of Special Subcommittees as of December 2016. To view the most current list of Special Subcommittees online, please visit:

<http://www.rtca.org/content.asp?pl=33&sl=108&contentid=108>.

SC-135	Environmental Testing
SC-147	Traffic Alert & Collision Avoidance System (TCAS)
SC-159	Global Positioning System (GPS)
SC-186	Automatic Dependent Surveillance-Broadcast (ADS-B)
SC-206	Aeronautical Information Services (AIS) Data Link
SC-209	Air Traffic Control Radar Beacon System (ATCRBS & Mode S Transponder)
SC-213	Enhanced Flight Vision Systems & Synthetic Vision Systems (EFVS/SVS)
SC-214	Standards for Air Traffic Data Communication Services
SC-216	Aeronautical Systems Security
SC-217	Aeronautical Databases
SC-222	Aeronautical Mobile-Satellite (R) Radiocommunication Service (AMS(R)S)
SC-223	Aeronautical Mobile Airport Communication System
SC-224	Airport Security Access Control Systems
SC-225	Rechargeable Lithium Batteries & Battery Systems
SC-227	Standards of Navigation Performance
SC-228	Minimum Operational Performance Standards for Unmanned Aircraft Systems
SC-229	406 MHz Emergency Locator Transmitters (ELTs)
SC-230	Airborne Weather Detection Systems
SC-231	Terrain Awareness Warning Systems (TAWS)
SC-233	Addressing Human Factors/Pilot Interface Issues for Avionics
SC-234	Portable Electronic Devices
SC-235	Non-Rechargeable Lithium Batteries
SC-236	Standards for Wireless Avionics Intra-Communication System (WAIC) within 4200-4400 MHz



**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

**ORDER
1110.77X**

Effective Date:

09/29/17

SUBJ: RTCA Charter

- 1. Committee's Official Designation.** RTCA Advisory Committee.
- 2. Authority.** The Federal Aviation Administration (FAA) finds that it is in the public interest to utilize the RTCA advisory committee in connection with the duties of the FAA under law, and in accordance with the provisions of the Federal Advisory Committee Act (FACA), as amended, Pub. L. 92-463, 5 U.S.C. App 2.
- 3. Objectives and Scope of Activities.** RTCA, Inc. is a private, not-for-profit association that is utilized as a federal advisory committee by the FAA. The RTCA Advisory Committee, composed of RTCA members appointed by the Secretary, works in response to requests from the FAA, providing recommendations from the aviation community on issues/challenges involving: air transportation concepts, requirements, operational capabilities, the associated use of technology, and related considerations to operations that affect the future of the Air Traffic Management System and the integration of new technologies by providing recommendations in these areas. As requested by the FAA, the RTCA Advisory Committee provides advice on topics including but not limited to: Next Generation Air Transportation System (NextGen), Tactical Operations, new entrants such as Unmanned Aircraft Systems (UAS) and other technical requirements for the FAA. The RTCA Advisory Committee does not exercise program management responsibilities and makes no decisions directly affecting the programs on which it provides advice.
- 4. Audience.** This order applies to the FAA and all members of the RTCA Advisory Committee that participate in advisory activities for the FAA.
- 5. Where to Find This Order.** You can find this order on the FAA.GOV website under the "Regulations & Policies" tab and select "Orders & Notices" or on the My FAA Employee website. Use "Tools & Resources" tab and select "Orders & Notices."
- 6. This Order Cancels.** FAA Order 1110.77W, RTCA, Inc. (Utilized as an advisory committee), Effective Date: April 01, 2017.
- 7. Description of Duties.** The objective of the RTCA Advisory Committee is to assist the FAA with seeking resolution and/or investigating options for resolution. At the request of the FAA, this committee will perform the following advisory duties:

Distribution: Electronic

Initiated By: ANG-A1

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- a. Develop recommendations to meet government and industry common objectives and responsibilities, taking into account aviation system user and provider requirements.
- b. Analyze and recommend solutions to the challenges the aviation community faces as it continues to increase safety, security, system capacity, and efficiency.
- c. Develop consensus recommendations on solutions to meet user and provider requirements, including developing recommendations of minimum operational performance standards for electronic systems and equipment that support aviation.
- d. Facilitate planning between government and industry to achieve a consensus-based set of recommendations on issues that include, without limitation, those that are critical to setting international standards, ensuring successful implementation of NextGen, Air Traffic Management System modernization, and new entrants into the National Airspace System (NAS).
- e. Support FAA by providing recommendations for: (1) investment priorities and (2) minimum performance standards, reports, and guidance documents.

8. Agency or Official to Whom the Committee Reports. The RTCA Advisory Committee reports to the Secretary of the Department of Transportation (DOT) through the FAA Administrator.

9. Support. FAA will provide support for the RTCA Advisory Committee and its subcommittees. The FAA will participate and provide requirements, review and consider guidance. In addition, the Designated Federal Officer (DFO) (see paragraph 11) for the RTCA Advisory Committee and subcommittees will determine appropriate FAA participation to ensure proper understanding of the subject matter.

10. Estimated Annual Operating Costs and Staff Years. The FAA's annual operating costs to support RTCA Advisory Committee and its subcommittees for the period and scope specified by the charter shall not exceed \$750,000 and 9.5 full time equivalent (FTE).

11. Designated Federal Officer. The FAA Administrator, on behalf of the Secretary, designates full-time or part-time employees, appointed in accordance with agency procedures, as the DFO (or alternate DFO) for the RTCA Advisory Committee and subcommittees.

- a. The DFO or alternate will ensure compliance with FACA, and any other applicable laws and regulations
- b. The DFO or alternate must be present at all the RTCA Advisory Committee and subcommittee meetings
- c. In accordance with the FACA, the DFO or alternate must perform the following duties:
 - 1) Call, attend, and adjourn all the committee/subcommittees meetings
 - 2) Approve all committee/subcommittee agendas

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- 3) Maintain membership records
- 4) Ensure efficient operations
- 5) Maintain required records for availability to the public
- 6) Provide copies of RTCA Advisory Committee reports to the Committee Management Officer (CMO) for forwarding to the Library of Congress
- 7) Adjourn any meeting in coordination with the committee chair when doing so would be in the public interest; and
- 8) Chair meetings when directed to do so by the FAA Administrator

12. Estimated Number and Frequency of Meetings. Committee and subcommittee meetings will comply with the following applicable provisions of FACA:

a. The RTCA Advisory Committee will meet at least annually, as required, to carry out its responsibilities. The Program Management Subcommittee will meet quarterly, as required, to carry out its responsibilities. The NextGen, Tactical Operations and Drone Advisory Subcommittees will meet three times a year to ensure continuity and good preparation for public decision-making meetings. Special subcommittees meet as their workload requires.

b. RTCA Advisory Committee and subcommittee meetings will be open to the public, except as provided by section 10(d) of the FACA and applicable regulations. Meetings will be announced in the Federal Register at least 15 days before each meeting, except in emergencies. Additionally, the FAA may use other forms of notice, such as press releases and web site notifications for committee and subcommittee meetings.

c. Anyone interested may attend meetings and appear before the RTCA Advisory Committee or subcommittees within reasonable limits of space and time. Additionally, anyone interested may file written statements with the committee/subcommittees. RTCA Advisory Committee will provide public web access to committee/subcommittee meeting agendas, summaries and other appropriate materials. This includes documents that are in the Final Review and Comment (FRAC) period.

13. Duration. The period of performance for this charter is October 1, 2017 through March 31, 2018. All subcommittees will be on a continuing period of performance for the duration of the charter, unless its tasks are completed prior to the six months.

14. Termination. The charter shall terminate 6 months after its filing date unless renewed in accordance with FACA and other applicable regulations.

If RTCA Advisory Committee is terminated the FAA will give as much advance notice as possible of such action to all participants.

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15. Membership and Designation. The Secretary will appoint members based on the recommendations of the FAA. The membership varies to address the complexity of the topic. Membership includes FAA regular government employees, special government employees, and various representative members from the aviation sector, including manufacturers of aircraft and aircraft systems; airports and air traffic management; dispatchers, pilots and operators; state/local government; and others in the aviation industry.

Members also may be drawn from FAA's Office of NextGen, Security and Hazardous Materials Safety, Air Traffic Operations, Aviation Safety, Airports Division, Policy, International Affairs and Environment Office, as well as MITRE Inc.

In addition, the chair of any subcommittee may request that the RTCA Advisory Committee invite experts in a non-represented subject matter, if it is determined essential to the successful completion of its function.

a. The RTCA Advisory Committee has approximately 24 members, NextGen Advisory Subcommittee has approximately 43 members, Drone Advisory Subcommittee has approximately 79 members, Tactical Operations Subcommittee has approximately 18 members, and Program Management Subcommittee has approximately 21 members. Membership is determined by the topic.

b. Non-government representatives will serve without government compensation. The employing organization bears all costs related to its participation. They must represent a particular interest of employment, education, experience, or affiliation with a specific aviation-related organization (reference Department of Transportation (DOT) Order 1120.3B, Committee Management Policy and Procedures, Ch. II, 10.a).

16. Subcommittees. The FAA has the authority to create and dissolve subcommittees, as needed. All subcommittees, must report to the RTCA Advisory Committee and must not provide advice or work products directly to the agency unless operating under the authority and requirements contained in FACA, §102-3.145.

17. Recordkeeping. The records of the committee, formally and informally established subcommittees, or other work or task subgroup of the subcommittee, shall be handled in accordance with the General Records Schedule 6.2, or other approved agency records disposition schedule.

The committee/subcommittee chair must certify the accuracy of the minutes. Meeting summaries are available to the public and are posted on the RTCA web site at <http://www.rtca.org>.

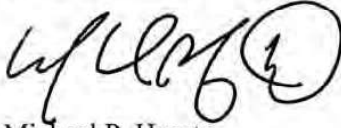
a. Subject to the Freedom of Information Act, 5 U.S.C. § 552, records, reports, transcripts, minutes or meeting summaries, and other materials presented to or prepared for the RTCA Advisory Committee are available for public inspection.

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18. Filing Date. This charter is effective September 29 2017, the date on which it was filed with Congress.

19. Distribution. This order is distributed as referenced in Paragraph 5 of this Order.

A handwritten signature in black ink, appearing to read 'Michael P. Huerta', with a circled '1' at the end.

Michael P. Huerta
Administrator



**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION**

**ORDER
1110.77Y**

Effective Date:

3/29/2018

SUBJ: RTCA Charter

- 1. Committee's Official Designation.** RTCA Advisory Committee.
- 2. Authority.** The Federal Aviation Administration (FAA) finds that it is in the public interest to utilize the RTCA advisory committee in connection with the duties of the FAA under law, and in accordance with the provisions of the Federal Advisory Committee Act (FACA), as amended, Pub. L. 92-463, 5 U.S.C. App 2.
- 3. Objectives and Scope of Activities.** RTCA, Inc. is a private, not-for-profit association that is utilized as a federal advisory committee by the FAA. The RTCA Advisory Committee, composed of RTCA members appointed by the Secretary, works in response to requests from the FAA, providing recommendations from the aviation community on issues/challenges involving: air transportation concepts, requirements, operational capabilities, the associated use of technology, and related considerations to operations that affect the future of the Air Traffic Management System and the integration of new technologies by providing recommendations in these areas. As requested by the FAA, the RTCA Advisory Committee provides advice on topics including but not limited to: Next Generation Air Transportation System (NextGen), Tactical Operations, new entrants such as Unmanned Aircraft Systems (UAS) and other technical requirements for the FAA. The RTCA Advisory Committee does not exercise program management responsibilities and makes no decisions directly affecting the programs on which it provides advice.
- 4. Audience.** This order applies to the FAA and all members of the RTCA Advisory Committee that participate in advisory activities for the FAA.
- 5. Where to Find This Order.** You can find this order on the FAA.GOV website under the "Regulations & Policies" tab and select "[Orders & Notices](#)" or on the My FAA Employee website. Use "Tools & Resources" tab and select "[Orders & Notices](#)."
- 6. This Order Cancels.** FAA Order 1110.77X, RTCA, Inc. (Utilized as an advisory committee), Effective Date: September 29, 2017.
- 7. Description of Duties.** The objective of the RTCA Advisory Committee is to assist the FAA with seeking resolution and/or investigating options for resolution. At the request of the FAA, this committee will perform the following advisory duties:

Distribution: Electronic

Initiated By: ANG-A1

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- a. Develop recommendations to meet government and industry common objectives and responsibilities, taking into account aviation system user and provider requirements.
- b. Analyze and recommend solutions to the challenges the aviation community faces as it continues to increase safety, security, system capacity, and efficiency.
- c. Develop consensus recommendations on solutions to meet user and provider requirements, including developing recommendations of minimum operational performance standards for electronic systems and equipment that support aviation.
- d. Facilitate planning between government and industry to achieve a consensus-based set of recommendations on issues that include, without limitation, those that are critical to setting international standards, ensuring successful implementation of NextGen, Air Traffic Management System modernization, and new entrants into the National Airspace System (NAS).
- e. Support FAA by providing recommendations for: (1) investment priorities and (2) minimum performance standards, reports, and guidance documents.

8. Agency or Official to Whom the Committee Reports. The RTCA Advisory Committee reports to the Secretary of the Department of Transportation (DOT) through the FAA Administrator.

9. Support. FAA will provide support for the RTCA Advisory Committee and its subcommittees. The FAA will participate and provide requirements, review and consider guidance. In addition, the Designated Federal Officer (DFO) (see paragraph 11) for the RTCA Advisory Committee and subcommittees will determine appropriate FAA participation to ensure proper understanding of the subject matter.

10. Estimated Annual Operating Costs and Staff Years. The FAA's operating costs to support RTCA Advisory Committee and its subcommittees for the period and scope specified by the charter shall not exceed \$250,000 and 9.5 full time equivalent (FTE).

11. Designated Federal Officer. The FAA Administrator, on behalf of the Secretary, designates full-time or part-time employees, appointed in accordance with agency procedures, as the DFO (or alternate DFO) for the RTCA Advisory Committee and subcommittees.

a. The DFO or alternate will ensure compliance with FACA, and any other applicable laws and regulations

b. The DFO or alternate must be present at all the RTCA Advisory Committee and subcommittee meetings

c. In accordance with the FACA, the DFO or alternate must perform the following duties:

- 1) Call, attend, and adjourn all the committee/subcommittees meetings
- 2) Approve all committee/subcommittee agendas

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- 3) Maintain membership records
- 4) Ensure efficient operations
- 5) Maintain required records for availability to the public
- 6) Provide copies of RTCA Advisory Committee reports to the Committee Management Officer (CMO) for forwarding to the Library of Congress
- 7) Adjourn any meeting in coordination with the committee chair when doing so would be in the public interest; and
- 8) Chair meetings when directed to do so by the FAA Administrator

12. Estimated Number and Frequency of Meetings. Committee and subcommittee meetings will comply with the following applicable provisions of FACA:

a. The RTCA Advisory Committee will meet at least annually, as required, to carry out its responsibilities. The Program Management Subcommittee will meet quarterly, as required, to carry out its responsibilities. The NextGen, Tactical Operations and Drone Advisory Subcommittees will meet three times a year to ensure continuity and good preparation for public decision-making meetings. Special subcommittees meet as their workload requires.

b. RTCA Advisory Committee and subcommittee meetings will be open to the public, except as provided by section 10(d) of the FACA and applicable regulations. Meetings will be announced in the Federal Register at least 15 days before each meeting, except in emergencies. Additionally, the FAA may use other forms of notice, such as press releases and web site notifications for committee and subcommittee meetings.

c. Anyone interested may attend meetings and appear before the RTCA Advisory Committee or subcommittees within reasonable limits of space and time. Additionally, anyone interested may file written statements with the committee/subcommittees. RTCA Advisory Committee will provide public web access to committee/subcommittee meeting agendas, summaries and other appropriate materials. This includes documents that are in the Final Review and Comment (FRAC) period.

13. Duration. The period of performance for this charter is March 29, 2018 through May 29, 2018. All subcommittees will be on a continuing period of performance for the duration of the charter, unless its tasks are completed prior to the two months.

14. Termination. The charter shall terminate 2 months after its filing date unless renewed in accordance with FACA and other applicable regulations.

If RTCA Advisory Committee is terminated the FAA will give as much advance notice as possible of such action to all participants.

15. Membership and Designation. The Secretary will appoint members based on the recommendations of the FAA. The membership varies to address the complexity of the topic.

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Membership includes FAA regular government employees, special government employees, and various representative members from the aviation sector, including manufacturers of aircraft and aircraft systems; airports and air traffic management; dispatchers, pilots and operators; state/local government; and others in the aviation industry.

Members also may be drawn from FAA's Office of NextGen, Security and Hazardous Materials Safety, Air Traffic Operations, Aviation Safety, Airports Division, Policy, International Affairs and Environment Office, as well as MITRE Inc.

In addition, the chair of any subcommittee may request that the RTCA Advisory Committee invite experts in a non-represented subject matter, if it is determined essential to the successful completion of its function.

a. The RTCA Advisory Committee has approximately 24 members, NextGen Advisory Subcommittee has approximately 43 members, Drone Advisory Subcommittee has approximately 79 members, Tactical Operations Subcommittee has approximately 18 members, and Program Management Subcommittee has approximately 21 members. Membership is determined by the topic.

b. Non-government representatives will serve without government compensation. The employing organization bears all costs related to its participation. They must represent a particular interest of employment, education, experience, or affiliation with a specific aviation-related organization (reference Department of Transportation (DOT) Order 1120.3B, Committee Management Policy and Procedures, Ch. II, 10.a).

16. Subcommittees. The FAA has the authority to create and dissolve subcommittees, as needed. All subcommittees, must report to the RTCA Advisory Committee and must not provide advice or work products directly to the agency unless operating under the authority and requirements contained in FACA, §102-3.145.

17. Recordkeeping. The records of the committee, formally and informally established subcommittees, or other work or task subgroup of the subcommittee, shall be handled in accordance with the General Records Schedule 6.2, or other approved agency records disposition schedule.

The committee/subcommittee chair must certify the accuracy of the minutes. Meeting summaries are available to the public and are posted on the RTCA web site at <http://www.rtca.org>.

a. Subject to the Freedom of Information Act, 5 U.S.C. § 552, records, reports, transcripts, minutes or meeting summaries, and other materials presented to or prepared for the RTCA Advisory Committee are available for public inspection.

18. Filing Date. This charter is effective March 29, 2018, the date on which it was filed with Congress.

3/29/2018

1110.77Y

19. Distribution. This order is distributed as referenced in Paragraph 5 of this Order.

A handwritten signature in black ink, appearing to read "D. Elwell", is written over a faint, circular official seal.

Dan Elwell
Acting Administrator



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

ORDER
1110.157

Effective Date:
 06/15/18

SUBJ: Charter of the Drone Advisory Committee

1. Enter overview of the Order here. This will help provide a uniform look for all FAA directives. **Committee's Official Designation.** The Committee's official designation is the Drone Advisory Committee (DAC).
2. **Authority.** The Committee is established under the authority of the U.S. Department of Transportation (DOT), in accordance with the provisions of the Federal Advisory Committee Act (FACA), as amended, Pub. L. 92-463, 5 U.S.C. App. The Secretary of Transportation has determined that the establishment of the Committee is in the public interest.
3. **Objectives and Scope of Activities.** The objective of the DAC is to provide independent advice and recommendations to the Federal Aviation Administration (FAA) and to respond to specific taskings received directly from the FAA. The advice, recommendations, and taskings relate to improving the efficiency and safety of integrating Unmanned Aircraft Systems (UAS) into the National Airspace System. In response to FAA requests, the DAC may provide the FAA with information that may be used for tactical and strategic planning purposes.
4. **Description of Duties.** The DAC will act solely in an advisory capacity and will not exercise program management responsibilities. Decisions directly affecting implementation of transportation policy will remain with the FAA Administrator and the Secretary of Transportation. The DAC will:
 - a. Undertake only tasks assigned by the FAA.
 - b. Deliberate on and approve recommendations for assigned tasks in meetings that are open to the public.
 - c. Respond to ad-hoc informational requests from the FAA and or provide input to the FAA on the overall DAC structure (including the structure of subcommittees and or task groups).
5. **Agency or Official to Whom the Committee Reports.** The DAC reports to the Secretary of the Department of Transportation (DOT) through the FAA Administrator.
6. **Support.** The FAA will provide support as consistent with the act, including funding for the Committee. For the period of this charter, the FAA plans to utilize contractual support to provide for logistics and administrative support.

06/15/18

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7. Estimated Annual Operating Costs and Staff Years. The FAA's annual operating costs to support the DAC for the period and scope specified by the charter is approximately \$704,000, which includes 1.0 full-time equivalent salary and benefits at \$204,000, plus \$500,000 in contractor costs.

8. Designated Federal Officer. The FAA Administrator, on behalf of the Secretary of Transportation will appoint a full-time Federal employee to serve as the DAC Designated Federal Officer (DFO). The DAC DFO will ensure that administrative support is provided for all activities. The Designated Federal Officer will:

- a. Ensure compliance with FACA and any other applicable laws and regulations.
- b. Call and attend all the committee and subcommittee meetings.
- c. Formulate and approve, in consultation with the Chair, all committee and subcommittee agendas.
- d. Notify all Committee members of the time, place, and agenda for any meeting.
- e. Maintain membership records.
- f. Ensure efficient operations, including maintaining itemized contractor invoices.
- g. Maintain all DAC records and files.
- h. Adjourn any meeting when doing so would be in the public interest.
- i. Chair meetings when directed to do so by the FAA Administrator.

9. Estimated Number and Frequency of Meetings. Committees will meet as follows:

- a. It is estimated that the DAC will meet three times a year to carry out its responsibilities.
- b. Meetings of the DAC will be announced in the *Federal Register* at least 15 days before each meeting, unless exceptional circumstances require shorter notice. Such circumstances will be explained in the notice. DAC meetings will be open to the public, except as provided by section 10(d) of the FACA and applicable regulations. The DAC will publish an annual report summarizing activities held in closed or partially closed meetings, consistent with the policies of the Freedom of Information Act.
- c. Anyone interested may attend committee meetings and appear before the DAC within reasonable limits of space and time. Additionally, anyone interested may file written statements with the committee.

10. Duration. Subject to renewal every 2 years.

06/15/18

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11. Termination. The charter will terminate 2 years after its effective date, unless renewed in accordance with FACA and other applicable regulations. If the DAC is terminated, the FAA will give as much advance notice as possible of such action to all participants.

12. Membership and Designation. The FAA will submit recommendations for membership to the Secretary of Transportation, who will appoint members to the DAC. All DAC members serve at the pleasure of the Secretary of Transportation.

a. The DAC will have no more than 35 members.

b. Members will serve without charge, and without government compensation. The employing organization bears all costs related to its participation. Members must represent a particular interest of employment, education, experience, or affiliation with a specific aviation-related organization.

13. Subcommittees. The DAC DFO has the authority to create and dissolve subcommittees as needed. Subcommittees must not work independently of the DAC. They must provide recommendations and advice to the DAC, not the FAA, for deliberation, discussion, and approval.

14. Recordkeeping.

a. The records of the committee and subcommittee will be handled in accordance with the General Records Schedule 6.2, or other approved agency records disposition schedules.

b. Meeting minutes must be kept in accordance with GSA standards as published in 41 CFR Part 102-3 Subpart D - § 102-3.165.

c. These records will be available for public inspection and copying, subject to the Freedom of Information Act, 5 U.S.C. 552. The records, reports, transcripts, minutes, and other documents that are made available to or provided for or by the DAC are available for public inspection at www.faa.gov/regulations_policies.

15. Filing Date. This charter is effective June 15, 2018, the date on which it was filed with Congress. This Committee will remain in existence for 2 years after this date unless sooner terminated or renewed.



Daniel K. Elwell
Acting Administrator