

**Business Confidential Submissions**

An interested party requesting that information contained in a submission be treated as business confidential information must certify that such information is business confidential and would not customarily be released to the public by the submitter. Confidential business information must be clearly designated as such. The submission must be marked "BUSINESS CONFIDENTIAL" at the top and bottom of the cover page and each succeeding page, and the submission should indicate, via brackets, the specific information that is confidential. Additionally, "Business Confidential" must be included in the "Type Comment" field. For any submission containing business confidential information, a non-confidential version must be submitted separately (*i.e.*, not as part of the same submission with the confidential version), indicating where confidential information has been redacted. The non-confidential version will be placed in the docket and open to public inspection.

**Public Viewing of Review Submissions**

Submissions in response to this notice, except for information granted "business confidential" status under 15 CFR 2003.6, will be available for public viewing pursuant to 15 CFR 2007.6 at <http://www.regulations.gov> upon completion of processing, usually within two weeks of the relevant due date or date of the submission. Such submissions may be viewed by entering the country-specific docket number in the search field at: <http://www.regulations.gov>.

**William D. Jackson,**

*Deputy Assistant U.S. Trade Representative for the Generalized System of Preferences, Office of the U.S. Trade Representative.*

[FR Doc. 2015-30065 Filed 11-24-15; 8:45 am]

**BILLING CODE 3290-F6-P**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

[Summary Notice No. 2015-065]

**Petition for Exemption; Summary of Petition Received; Cape Productions, Inc.**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice.

**SUMMARY:** This notice contains a summary of a petition seeking relief from specified requirements of Title 14 of the Code of Federal Regulations. The

purpose of this notice is to improve the public's awareness of, and participation in, the FAA's exemption process. Neither publication of this notice nor the inclusion or omission of information in the summary is intended to affect the legal status of the petition or its final disposition.

**DATES:** Comments on this petition must identify the petition docket number and must be received on or before December 15, 2015.

**ADDRESSES:** Send comments identified by docket number FAA-2015-0223 using any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov> and follow the online instructions for sending your comments electronically.
- Mail: Send comments to Docket Operations, M-30; U.S. Department of Transportation (DOT), 1200 New Jersey Avenue SE., Room W12-140, West Building Ground Floor, Washington, DC 20590-0001.
- Hand Delivery or Courier: Take comments to Docket Operations in Room W12-140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.
- Fax: Fax comments to Docket Operations at 202-493-2251.

**Privacy:** In accordance with 5 U.S.C. 553(c), DOT solicits comments from the public to better inform its rulemaking process. DOT posts these comments, without edit, including any personal information the commenter provides, to <http://www.regulations.gov>, as described in the system of records notice (DOT/ALL-14 FDMS), which can be reviewed at <http://www.dot.gov/privacy>.

Docket: Background documents or comments received may be read at <http://www.regulations.gov> at any time. Follow the online instructions for accessing the docket or go to the Docket Operations in Room W12-140 of the West Building Ground Floor at 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

**FOR FURTHER INFORMATION CONTACT:** Dan Ngo, (202) 267-4264. 800 Independence Avenue SW., Washington, DC 20591.

This notice is published pursuant to 14 CFR 11.85.

Issued in Washington, DC, on November 19, 2015.

**Lirio Liu,**

*Director, Office of Rulemaking.*

**Petition for Exemption**

*Docket No.:* FAA-2015-0223.  
*Petitioner:* Cape Productions, Inc.

*Section(s) of 14 CFR Affected:* § 91.119.

*Description of Relief Sought:* The petitioner has requested to operate their UAS closer than 500 feet of athletes (who will receive briefings and consent to UAS risks). In Exemption No. 11433, the petitioner was approved to use a UAS for aerial data collection. Their exemption requires them to comply with § 91.119 Minimum safe altitudes and prohibits operation closer than 500 feet from people except for essential flight personnel. Their petition for amendment requests exemption from that prohibition so that they may operate within 500 feet of participating athletes who have consented.

[FR Doc. 2015-29950 Filed 11-24-15; 8:45 am]

**BILLING CODE 4910-13-P**

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**Aviation Rulemaking Advisory Committee; Meeting**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of Aviation Rulemaking Advisory Committee (ARAC) meeting.

**SUMMARY:** The FAA is issuing this notice to advise the public of a meeting of the ARAC.

**DATES:** The meeting will be held on December 17, 2015, starting at 1:00 p.m. Eastern Standard Time. Arrange oral presentations by December 10, 2015.

**ADDRESSES:** The meeting will take place at the Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591, 10th floor, MacCracken Conference Room.

**FOR FURTHER INFORMATION CONTACT:** Renee Pocius, Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591, telephone (202) 267- 5093; fax (202) 267-5075; email [Renee.Pocius@faa.gov](mailto:Renee.Pocius@faa.gov).

**SUPPLEMENTARY INFORMATION:** Pursuant to Section 10(a)(2) of the Federal Advisory Committee Act (5 U.S.C. App. 2), we are giving notice of a meeting of the ARAC taking place on December 17, 2015, at the Federal Aviation Administration, 800 Independence Avenue SW., Washington, DC 20591.

The Agenda includes:

1. Request for Clarification
  - a. Avionics Systems Harmonization Working Group—Phase 2 Low Airspeed Alerting
2. Materials Flammability Working Group Recommendation Report
3. Status Reports From Active Working Groups

- a. Airman Certification Systems Working Group
  - b. Aircraft Systems Information Security/Protection Working Group
  - c. Air Traffic Controller Training Working Group
  - d. Rotorcraft Occupant Protection Working Group
  - e. Airworthiness Assurance Working Group
  - f. Engine Harmonization Working Group- Engine Endurance Testing Requirements—Revision of Section 33.87
  - g. Flight Test Harmonization Working Group—Phase 2 Tasking
  - h. Transport Airplane Metallic and Composite Structures Working Group—Transport Airplane Damage-Tolerance and Fatigue Evaluation
  - i. Transport Airplane Crashworthiness and Ditching Evaluation Working Group
4. New Tasks
- a. Rotorcraft Bird Strike Working Group
  - b. Additional Tasking for the Airman Certification Systems Working Group
  - c. Load Master Certification Working Group

5. Status Report from the FAA

Attendance is open to the interested public but limited to the space available. Please confirm your attendance with the person listed in the **FOR FURTHER INFORMATION CONTACT** section no later than December 10, 2015. Please provide the following information: full legal name, country of citizenship, and name of your industry association, or applicable affiliation. If you are attending as a public citizen, please indicate so.

For persons participating by telephone, please contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section by email or phone for the teleconference call-in number and passcode. Callers outside the Washington metropolitan area are responsible for paying long-distance charges.

The public must arrange by December 10, 2015 to present oral statements at the meeting. The public may present written statements to the Aviation Rulemaking Advisory Committee by providing 25 copies to the Designated Federal Officer, or by bringing the copies to the meeting.

If you are in need of assistance or require a reasonable accommodation for this meeting, please contact the person listed under the heading **FOR FURTHER INFORMATION CONTACT**. Sign and oral interpretation, as well as a listening device, can be made available if

requested 10 calendar days before the meeting.

Issued in Washington, DC, on November 19, 2015.

**Lirio Liu,**

*Designated Federal Officer, Aviation Rulemaking Advisory Committee.*

[FR Doc. 2015-29949 Filed 11-24-15; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Highway Administration

#### Environmental Impact Statement: Alexander, Pulaski, and Union Counties, Illinois

**AGENCY:** Federal Highway Administration (FHWA), DOT.

**ACTION:** Notice of intent.

**SUMMARY:** The FHWA is issuing this notice to advise the public that an Environmental Impact Statement (EIS) will be prepared for the Shawnee Parkway Project in Alexander, Pulaski, and Union Counties, Illinois.

**FOR FURTHER INFORMATION CONTACT:**

Catherine A. Batey, Division Administrator, Federal Highway Administration, 3250 Executive Park Drive, Springfield, Illinois 62703. Phone: (217) 492-4600. Jeffrey L. Keirn, PE., Deputy Director of Highways, Region Five Engineer, Illinois Department of Transportation, State Transportation Building, 2801 W. Murphysboro, P.O. Box 100, Carbondale, Illinois 62903, (618) 549-2171.

**SUPPLEMENTARY INFORMATION:** The FHWA, in cooperation with Illinois Department of Transportation, will prepare an EIS for the Shawnee Parkway project. The anticipated termini are the intersection of Illinois Route 3 with Illinois Route 146 and Interstate 57. The project study area includes portions of the following counties: Alexander, Pulaski, and Union in Illinois. The study area covers approximately 350 square miles.

The EIS for the Shawnee Parkway is being conducted to evaluate the need for improved transportation between the anticipated termini within the study area. The EIS will complete an analysis of transportation alternative(s) in the study area and evaluate environmental impacts based on field investigations, transportation studies, economic impact studies, and cost analysis.

Alternatives assessed will seek to avoid, minimize and mitigate impacts to resources in the project area. In accordance with IDOT policies, the project is being developed using Context

Sensitive Solutions (CSS) as a basis for a stakeholder outreach program. A scoping meeting will be held on December 3, 2015.

A range of alternatives will be developed and evaluated, including but not limited to: Taking no action, existing roadway improvements, and new roadways on new location. The Stakeholder Involvement Plan (SIP), which will satisfy the 23 U.S.C. Section 139 requirements for a coordination plan, will be developed to ensure that a full range of issues related to this proposed project are identified and addressed. The SIP provides meaningful opportunities for all stakeholders to participate in defining transportation issues and solutions for the study area.

Comments or questions concerning this proposed action and the EIS are invited from all interested parties and should be directed to the FHWA at the address provided above or the following Web site: [www.shawneeparkway.org](http://www.shawneeparkway.org).

A public hearing will be held after the Draft EIS is published and made available for public and agency review. Public notice will be given of the time and place of public meetings and hearings.

The EIS will conclude with a Record of Decision selecting either a no-build or a preferred alternative.

(Catalog of Federal Domestic Assistance Program Number 20.205, Highway Research, Planning and Construction. The regulations implementing Executive Order 12372 regarding intergovernmental consultation on Federal programs and activities apply to this program)

Issued on: November 19, 2015.

**Catherine A. Batey,**

*Division Administrator, Federal Highway Administration, Springfield, Illinois.*

[FR Doc. 2015-30003 Filed 11-24-15; 8:45 am]

**BILLING CODE 4910-22-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Motor Carrier Safety Administration

[Docket No. FMCSA-2015-0180]

#### Agency Information Collection Activities; New Information Collection Request: 391.41 CMV Driver Medication Form

**AGENCY:** Federal Motor Carrier Safety Administration (FMCSA), DOT.

**ACTION:** Notice and request for comments.

**SUMMARY:** In accordance with the Paperwork Reduction Act of 1995, FMCSA announces its plan to submit the Information Collection Request (ICR)

# AVIATION RULEMAKING ADVISORY COMMITTEE

## RECORD OF MEETING

**MEETING DATE:** December 17, 2015

**MEETING TIME:** 1 p.m.

**LOCATION:** Federal Aviation Administration  
800 Independence Avenue, SW.  
10th Floor  
MacCracken Conference Room  
Washington, DC 20591

**PUBLIC ANNOUNCEMENT:** The Federal Aviation Administration (FAA) told the public of this Aviation Rulemaking Advisory Committee (ARAC) meeting in a Federal Register notice published November 25, 2015 (80 FR 73870).

**ATTENDEES:** **Committee Members**

Todd Sigler	The Boeing Company (Boeing), <i>ARAC Chair</i>
Dr. Tim Brady	Embry-Riddle Aeronautical University (ERAU), <i>ARAC Vice Chair</i>
Michelle Betcher	Airline Dispatchers Federation (ADF)
Richard Baxley	FlyersRights.org
Ambrose Clay	National Organization to Insure a Sound Controlled Environment (NOISE)
Jim Crotty	Federal Aviation Administration (FAA) <i>Office of Rulemaking, ARM-200</i> <i>Designated Federal Officer (DFO)</i>
Mack Dickson*	Experimental Aircraft Association (EAA)
Marie-Anne Dromaguet*	Transport Canada Civil Aviation (TCCA)
Gail Dunham	National Air Disaster Foundation (NADF)

Jens Hennig	General Aviation Manufacturers Association (GAMA)
Robert Ireland	Airlines for America (A4A)
Peter Ivory	Federal Aviation Administration (FAA) <i>Office of Aviation Policy and Plans, APO-300</i>
Randy Kenagy	Air Line Pilots Association, International (ALPA)
Mark Larsen	National Business Aviation Association (NBAA)
George Novak	Aerospace Industries Association (AIA)
David Oord	Aircraft Owners and Pilots Association (AOPA)
Lorelei Peter	Federal Aviation Administration (FAA) <i>Office of the Chief Counsel, AGC-200</i>
George Paul	National Air Carrier Association (NACA)
Jennifer Sunderman*	Regional Airline Association (RAA)
David Supplee*	International Association of Machinists & Aerospace Workers (IAMAW)
Valentino Venier	AeroSpace and Defence Industries Association of Europe (ASD)
Chris Witkowski	Association of Flight Attendants (AFA)
David York	Helicopter Association International (HAI)

**Attendees**

Ryan Aggergaard	Modification and Replacement Parts Association (MARPA)
Ali Bahrami	Aerospace Industries Association (AIA) Transport Airplane and Engine (TAE) Subcommittee, Chair
DaleAnne Baker*	B/E Aerospace

Justin Barkowski	Aircraft Owners and Pilots Association (AOPA)
Leisha Bell	Federal Aviation Administration (FAA) <i>Air Transportation Division, AFS-270</i>
Kelsey Berkowitz	Greenberg Traurig, LLP
Elana Broitman	Greenberg Traurig, LLP
Jorge Castillo	Federal Aviation Administration (FAA) <i>Southwest Region—Rotorcraft Directorate, ASW</i>
Anthony Chu	Federal Aviation Administration (FAA) <i>Air Traffic Organization, AJI-231</i>
Diane Cook*	Federal Aviation Administration (FAA) <i>New England Region—Engine &amp; Propeller Directorate, ANE-111</i>
Damon Cox	Airline Dispatchers Federation (ADF)
Martin Crane	Federal Aviation Administration (FAA) <i>Southwest Region—Rotorcraft Directorate, ASW</i>
Jim Davis*	AccuFleet
Alison Duquette	Federal Aviation Administration (FAA) <i>Office of Communications (AOC)</i>
David Floyd*	The Boeing Company (Boeing)
Jeff Gardlin*	Federal Aviation Administration (FAA) <i>Northwest Mountain Region—Transport Airplane Directorate, ANM-115</i>
Stephen Grota	Federal Aviation Administration (FAA) <i>Aircraft Maintenance Division, AFS-330</i>
Ed Hall	Aviation Institute of Maintenance (AIM)
Katrina Holiday	Federal Aviation Administration (FAA) <i>Office of Rulemaking, ARM-202</i>

Joe Jacobsen*	Federal Aviation Administration (FAA) <i>Northwest Mountain Region—Transport Airplane Directorate, ANM-111</i>
Candace Kolander	Association of Flight Attendants (AFA)
Sandra Lamparello	PAI Consulting
Sandra Long	Federal Aviation Administration (FAA) <i>Office of Rulemaking, ARM-201</i>
Joan Lowy	Associated Press
Susan McCormick*	B/E Aerospace
Dorina Mihail*	Federal Aviation Administration (FAA) <i>New England Region—Engine &amp; Propeller Directorate, ANE-111</i>
Michael O’Donnell	Federal Aviation Administration (FAA) <i>Office of Airports Safety and Standards, AAS-1</i>
Steve Paasch*	Federal Aviation Administration (FAA) <i>Aircraft Engineering Division, AIR-130</i>
Susan Parson*	Federal Aviation Administration (FAA) <i>Flight Standards Service, AFS-2</i>
Phuc Phan	Federal Aviation Administration (FAA) <i>Office of Aviation Policy and Plans, APO-300</i>
Renee Pocius	Federal Aviation Administration (FAA) <i>Office of Rulemaking, ARM-024</i>
Tony Price	Federal Aviation Administration (FAA) <i>Air Traffic Organization, AJI-232</i>
Gary Roach	Federal Aviation Administration (FAA) <i>Southwest Region—Rotorcraft Directorate, ASW</i>
Brandon Roberts	Federal Aviation Administration (FAA) <i>Office of Rulemaking, ARM-100</i>
Lee Roskop	Federal Aviation Administration (FAA) <i>Southwest Region—Rotorcraft Directorate, ASW</i>

Kristen Sanders	Aurora Sciences
Mary Schooley*	Federal Aviation Administration (FAA) <i>Northwest Mountain Region—Transport Airplane Directorate, ANM-111</i>
Sandra Shelley	Federal Aviation Administration (FAA) <i>Southwest Region—Rotorcraft Directorate, ASW</i>
Walter Sippel	Federal Aviation Administration (FAA) <i>Northwest Mountain Region—Transport Airplane Directorate, ANM-111</i>
Harold Summers	Helicopter Association International (HAI)
Mona Tindall	Federal Aviation Administration (FAA) <i>Aircraft Maintenance Division, AFS-360</i>
Jim Ullmann	National Air Traffic Controllers Association (NATCA)
Nicole Vitale	National Air Traffic Controllers Association (NATCA)
Patricia Williams	Federal Aviation Administration (FAA) <i>Aircraft Maintenance Division, AFS-340</i>

\*Attended via teleconference.

## **WELCOME AND INTRODUCTION**

Mr. Todd Sigler, ARAC Chair, called the meeting to order at 1:03 p.m. and thanked the ARAC members and the public for attending. He invited the attendees to introduce themselves. Mr. Jim Crotty, DFO, read the required Federal Advisory Committee Act, Title 5, United States Code (5 U.S.C.) Appendix 2 (2007) statement.

### Ratification of Minutes

Mr. Sigler stated the first item on the agenda is ratification of the minutes from the September 17, 2015, meeting. He asked for any revisions or amendments to the draft minutes circulated before the meeting. Without any revisions or questions, the ARAC ratified the minutes.

### Bylaws (Attachment 1)

Mr. Crotty noted the Federal Aviation Administration (FAA) is requesting to revise the ARAC Bylaws to correct errors. He stated the current version of the Bylaws mistakenly designated Agência Nacional De Aviação Civil (ANAC), a foreign aviation authority, as a voting member organization of the TAE Subcommittee, when it should have been noted as a non-voting member. Mr. Crotty also stated Embraer had been inadvertently omitted from the list of TAE voting members, and had been added to the list.

Ms. Gail Dunham, National Air Disaster Alliance/Foundation (NADA/F), noted the boards of the National Air Disaster Alliance and the National Air Disaster Foundation had recently elected to proceed as a single organization, the National Air Disaster Foundation (NADF). She requested the draft Bylaws be revised accordingly.

## **REQUEST FOR CLARIFICATION**

### Avionics Systems Harmonization Working Group (ASHWG) (TAE) Phase 2 Low Airspeed Alerting

Mr. Joe Jacobsen, FAA, stated the ASHWG had previously researched and produced a Phase 1 and Phase 2 report on low airspeed alerting. He stated since the issuance of the Phase 2 report, an accident had occurred at San Francisco International Airport involving an Asiana Airlines Boeing 777. Mr. Jacobsen stated both low airspeed and low energy (that is, low airspeed at low altitude above ground level (AGL)) appear to have been factors in that accident. He stated the National Transportation Safety Board (NTSB), following its investigation of the accident, had recommended the ASHWG examine low energy alerting as well as low airspeed alerting. Mr. Jacobsen stated the FAA would like to request clarification on low airspeed alerting and low energy alerting and design issues related to low energy and low altitude. Mr. Jacobson stated he anticipates submitting a request for clarification to the ARAC ASHWG. In response to a question from Mr. Sigler, he stated the ASHWG would likely present such a request at the March 2016 ARAC meeting.

## **RECOMMENDATION REPORT**

### Materials Flammability Working Group (MFWG) (TAE) (Attachments 2 and 3)

Mr. Ali Bahrami stated the MFWG Chair would present the MFWG's recommendation report for approval, and briefly reviewed the MFWG's recent work. He stated the MFWG had separated the recommendations developed during Phase 1 into broad categories, such as those applicable to the in-flight regime, those applicable to a post-crash fire, and those applicable to future materials. Mr. Bahrami stated the MFWG had then performed a quantitative and/or qualitative assessment of the feasibility of the recommendations, including projected increases or decreases in costs resulting from implementation.

Mr. Bahrami stated determining appropriate testing methodologies often presents difficulties, and stated clear testing methodology expectations are necessary to avoid future confusion. He also stated it is imperative that the FAA publish guidance materials at the same time it publishes a rule, to facilitate a clear understanding of requirements. Additionally, Mr. Bahrami noted a need for clear expectations with respect to requirements applicable to derivative aircraft to avoid



possible misinterpretation of the product change requirements of § 21.101 of Title 14, Code of Federal Regulations (14 CFR).

Mr. Jim Davis, AccuFleet, MFWG Chair, noted the MFWG, to the extent possible, followed its tasking to develop quantitative assessments of the recommendations, but in some cases, test methods and/or anticipated regulations were not defined clearly enough to permit a quantitative assessment. He stated, in those cases, the MFWG developed qualitative assessments, e.g. estimating whether costs would be small or large. Mr. Davis stated these assessments should offer guidance to the FAA as to potential problem areas as it proceeds with rulemaking.

In response to a question from Mr. Jens Hennig, GAMA, Mr. Bahrami clarified the MFWG has not developed recommendations or an interpretation regarding applicability of § 21.101, but wishes to emphasize to the FAA the importance of clearly explaining such applicability in the preamble to the final rule and guidance materials. He stated the cover letter accompanying the MFWG's report would communicate these expectations.

Mr. Sigler noted the primary intent of reconvening the MFWG had been to develop cost information associated with the Phase 1 recommendations. He asked how, to the extent the MFWG was not able to develop quantitative cost assessments, the FAA will develop a cost/benefit analysis for a prospective rulemaking. Mr. Crotty stated the FAA Transport Airplane Directorate (TAD) has responsibility for reviewing the report and would work with the FAA Office of Aviation Policy and Plans (APO) to see if there is a sufficient data for a cost/benefit analysis. He added the MFWG's report would be of use in this effort, even in areas where the MFWG was unable to develop quantitative assessments, because it would provide previously unavailable information on where to obtain the needed information.

Mr. Peter Ivory, FAA, noted the FAA Office of Aviation Policy and Plans (APO) has been involved in the MFWG's efforts, and has some familiarity with its report. He stated to the extent testing criteria have not been established, they must be before a rule can be published. He indicated the MFWG's work will assist the FAA.

Mr. Davis noted a number of manufacturers have proprietary information relevant to testing criteria they did not wish to include in the MFWG's report, which will be made available to the public, but are willing to provide to the FAA directly.

Mr. Ambrose Clay, NOISE, asked if the MFWG is recommending the FAA eliminate smoke emissions tests because the report refers to the elimination of smoke emissions testing but is listed as a cost driver. Mr. Davis stated the FAA provided the MFWG with certain assumptions when it issued its tasking; because the value of smoke emissions testing had not been demonstrated, one assumption was the elimination of that testing. Mr. Clay confirmed the FAA, rather than the MFWG, assumed the smoke test would be eliminated. Mr. Sigler commented that almost two-thirds of the cost reduction figure determined by the MFWG in connection with elimination of smoke emissions testing relates to quality assurance testing not required by regulation and would expect FAA to consider that aspect appropriately during the rulemaking process.

The ARAC approved the MFWG's report, subject to the provision that the content of Mr. Bahrami's November 10, 2015, email to Ms. Renee Pocius, FAA, be included in the ARAC's transmission of the report to the FAA.

## **STATUS REPORTS FROM ACTIVE WORKING GROUPS**

### Airman Certification System Working Group (ACSWG) (Attachment 4)

Mr. David Oord, AOPA, provided the update for the ACSWG. He stated it is continuing to refine the Airman Certification System (ACS), which consists of airman certification standards, testing specifications, and guidance material. Mr. Oord noted most airman certification standards are complete, with the exception of the authorized instructor standard. He added this standard presents particular challenges because instructor applicants must be taught not only the elements of risk management, but also how to teach these elements to pilots in training. Mr. Oord stated the Authorized Instructor Standard Subgroup expects to have the standard near completion by the next ACSWG meeting in January 2016.

With respect to testing specifications, Mr. Oord stated the FAA Evaluation Group continues to make progress on its review of the private pilot and instrument rating question banks. He explained the group is assessing each question to confirm that it is appropriately referenced to the applicable standard and is relevant and meaningful. Mr. Oord noted the group is eliminating or revising questions failing to meet these standards. He added the FAA plans to review the air transport pilot and commercial pilot question banks in 2016.

Mr. Oord stated the FAA has issued a Request for Proposal for a test management services contract, which will include facilitation of coded questions and feedback for test takers.

Mr. Oord stated the Guidance Task Group has nearly completed revisions to chapter 4 of the Airplane Flying Handbook, dealing with loss of control. He noted the ACSWG will have an opportunity to review the chapter before publication. Mr. Oord added the task group is also reviewing the Aviation Instructor Handbook in conjunction with refinement of the Authorized Instructor Standard, and the task group will present recommendations regarding revisions at the January 2016 ACSWG meeting.

Mr. Oord stated the Test Supplement Working Group has reviewed the Figure Supplement Books (CT-8080) and is awaiting final artwork. He observed the books should be published in February 2016.

Mr. Oord stated after a limited initial prototype program involving ERAU students, the ACSWG has expanded the prototyping efforts to encompass students training under 14 CFR parts 61 and 141, including students pursuing an instrument rating. He reviewed statistics on the number of students who have enrolled (59), completed the knowledge test (23), and obtained their instrument rating (6). Mr. Oord noted surveys administered throughout the process have yielded positive feedback.

Mr. Oord stated the FAA has adopted change management principles to educate the community and garner support for adoption of the ACS. He noted John Duncan, Director, FAA Flight Standards Service, is the Executive Sponsor for the ACS change management initiative.

Mr. Oord described efforts to communicate changes associated with the ACS to the aviation community. He stated flight instructor refresher courses now include an ACS module, and organizations such as AOPA and the National Association of Flight Instructors have presented webinars on the topic. Mr. Oord noted the FAA Regulatory Support Division, Airman Testing Standards Branch (AFS-630) offers a variety of guidance and other materials on its Web site.

Mr. Oord reviewed the schedule of upcoming ACSWG meetings. He noted the ACSWG anticipates the FAA will implement private pilot and instrument rating certificates in June 2016.

Aircraft Systems Information Security/Protection (ASISP) Working Group (ASISPWG)  
(Attachment 5)

Mr. Hennig and Mr. David Floyd, Boeing, provided the update for the ASISPWG. Mr. Hennig reviewed the ASISPWG's tasking, noting the ASISPWG's focus has been on security of systems associated with the safety of aircraft in flight. He stated the FAA tasked the ASISPWG to determine whether rulemaking is appropriate, and, if so, to what parts of the industry it should apply. Mr. Hennig added the ASISPWG is examining policy, guidance, and best practices associated with aircraft certification. He noted the FAA can, if necessary, apply special conditions to specific aircraft types or systems.

Mr. Hennig stated the ASISPWG is developing regulatory language for future presentation to the ARAC. He stated the ASISPWG is reviewing existing security-related standards from a number of organizations to identify appropriate ASISP standards and best practices.

Mr. Hennig stated the ASISPWG has been asked to examine international harmonization of system security standards, and noted participants include representatives of authorities such as the European Aviation Safety Agency (EASA), Transport Canada, and ANAC.

Mr. Hennig reviewed the ASISPWG's history and future meeting schedule. He noted the ASISPWG's recommendation report is due no later than August 2016. Mr. Hennig reviewed the ASISPWG membership, noting airframe, avionics, and inflight systems manufacturers are participating. Mr. Hennig noted the ASISPWG continues to receive requests for membership because of the high visibility of the subject matter, but in the interest of fairness, the ASISPWG has not accepted any requests submitted after the March 5, 2015 deadline set forth in the Federal Register Notice seeking members.

Mr. Hennig stated the ASISPWG completed a work plan and submitted it to the ARAC Chair and FAA Office of Rulemaking.

Mr. Hennig reviewed the technical areas the ASISPWG is examining. He stated the ASISPWG's key focus is development of amendments to subpart F of 14 CFR part 25, with corresponding amendments to 14 CFR parts 23, 27, 29, and 33. Mr. Hennig stated the ASISPWG would also identify areas warranting guidance.

Mr. Hennig stated the ASISPWG would also review a March 2014 FAA policy statement setting forth under what circumstances the FAA might issue special conditions. He noted the FAA might issue special conditions to address ASISP needs pending rulemaking, which will likely take several years.

Mr. Hennig stated the ASISPWG would also examine technical topics including use of personal electronic devices, onboard use of commercial off-the-shelf software, field-loadable software, databases, and supply-chain management considerations. He noted FAA guidance or industry best practices exist with respect to many of these areas.

Mr. Hennig stated the ASISPWG would also examine continued operational safety and data sharing implications after equipment is fielded. He noted the FAA has issued Advisory Circular 119-1, addressing security of onboard networks. Mr. Hennig explained system security is a component of broader considerations of aircraft safety, and is relevant to the system security affects on the safety of the aircraft. He stated the ASISPWG will likely address how best to approach sharing of data on system security-related issues.

Mr. Hennig presented preliminary language drafted by the ASISPWG for inclusion in part 25. He stated the language incorporates two components, the first of which is a requirement for type certificate applicants to incorporate secure system designs and ensure security risks have been identified, assessed, and mitigated as necessary. Mr. Hennig noted the proposed regulation is performance based, and will require significant accompanying guidance. He stated the second component requires holders of type certificates to provide instruction to aircraft operators on how to maintain the security of the aircraft. Mr. Hennig stated the ASISPWG avoided requiring this instruction to be part of instructions for continued airworthiness (ICA) because some manufacturers may choose to issue guidance in documentation other than the ICA.

Mr. Hennig stated EASA is currently working with a commission to determine its authority to examine system security issues, and is launching a related rulemaking effort. He stated as a result of EASA's participation in the ASISPWG, EASA adjusted its rulemaking schedule to ensure the rulemaking is informed by the ASISPWG's work. Mr. Hennig stated this coordination will assist EASA and FAA to harmonize their regulations.

Mr. Hennig reviewed the ASISPWG's planned next steps. He noted the general impression among the ASISPWG participants from different aviation communities is that the performance-based approach developed for part 25 will be applicable to parts 23, 27, 29, and 33, subject to possible slight differences to accommodate differences between the parts. Mr. Hennig stated he anticipates the guidance developed for different communities will, however, differ significantly to address differences in safety philosophies and the different threats facing different types of aircraft. He stated the ASISPWG would also continue its development of regulatory guidance and examination of other technical areas.

In response to a question from Mr. Clay, Mr. Hennig stated the inclusion in the draft regulatory language of the phrase "*intentional* unauthorized electronic interaction" reflects lengthy consideration by standards groups, upon which the ASISPWG has relied. He explained there is a detailed definition of the term, and noted existing safety practices address consequences of unintentional conduct. Mr. Hennig added the use of the word "intentional" is to capture

malicious intent at any point, whether during product development, after installation, or otherwise.

Mr. Robert Ireland, A4A, noted past work on development of crew rest requirements had inadvertently relied upon obsolete standards, and asked whether the ASISPWG is in direct contact with standards organizations to ensure standards are not subject to review in the near future. Mr. Hennig stated RTCA, Inc. (RTCA) and the European Organization for Civil Aviation Equipment (EUROCAE) issued mature assessment standards in 2014. He stated EUROCAE has begun developing mitigation standards, and, once the ASISPWG has sufficiently developed policies, it will approach the EUROCAE Program Management Committee to request specific action. Mr. Hennig stated the ASISPWG is monitoring work being done by RTCA, EUROCAE, and other standards organizations to identify new standards for potential application, and to ensure the standards upon which it is relying are mature and not under review or subject to change in the near future.

#### Air Traffic Controller Basic Qualification Training Working Group (ATCWG)

Mr. Tony Price, FAA, provided the update for the ATCWG. He stated the tasking notice for the ATCWG was published in the Federal Register on September 18, 2015, and member nominations were closed October 19, 2015. Mr. Price stated 21 individuals volunteered to participate in the ATCWG, of which 13 were from academia, three were from associations, three were from industry, and two were from training providers. He expressed intent to limit membership to 12 individuals, including a chair, a vice-chair, himself, and nine others. Mr. Price explained the FAA has made an effort to engage subject matter experts (SME), including human resource management experts, representatives from the FAA Office of the Chief Counsel, Air Traffic Services, Mission Support, the FAA Academy, and NextGen Human Factors. He noted an FAA attorney and an FAA economist have been assigned to the ATCWG as well.

Mr. Price stated the Vice President of the FAA Air Traffic Organization (ATO), Safety and Technical Training (AJI) briefed the chief operating officer of ATO. Mr. Price described a plan to identify the ATCWG chair and vice-chair in early January 2016, and to finalize the ATCWG membership by the end of January 2016, with the first meeting of the ATCWG to take place in February 2016.

In response to a question from Mr. Sigler, Mr. Price stated once the ACTWG has convened, the ATCWG will likely request an extension to complete its tasking.

#### Rotorcraft Occupant Protection Working Group (ROPWG) (Attachment 6)

Mr. Martin Crane, FAA, provided the update for the ROPWG. He stated the tasking notice for the ROPWG published in the Federal Register on November 5, 2015, and member nominations were closed December 7, 2015. Mr. Crane stated 28 individuals volunteered to participate in the ROPWG. He noted the ROPWG chair has been selected, and he anticipates the FAA will finalize the ROPWG membership in the near future. Mr. Crane stated the FAA Rotorcraft Standards staff solicited participation in the ROPWG at the Ninth EASA Rotorcraft Symposium on December 2 and 3, 2015, and numerous individuals expressed interest in participating. Mr. Sigler asked if there were any industry groups not represented. Mr. Crane indicated seat suppliers

were the only industry area that did not express interest in participating. He explained other suppliers, manufacturers, organizations, and operators have expressed interest in participating, and one manufacturer is willing to supply information, but cannot participate in the ROPWG because of time constraints.

Mr. Crane stated the first task before the ROPWG, a cost/benefit analysis is due 6 months from publication of the tasking notice, on May 5, 2016, with the ROPWG's initial recommendation report due 12 months later. He stated the ROPWG's final report is due in November 2017.

Ms. Dunham stressed the importance of the ROPWG's work, given the recent occurrence of two fatal accidents involving helicopter emergency medical services within 1 week.

#### TAE Subcommittee (Attachment 7)

Mr. Bahrami provided the TAE update. He stated the TAE held its most recent meeting on November 4, 2015, and participation and representation were good. He then reviewed the status of the various TAE working groups.

#### Engine Harmonization Working Group (EHWG) (TAE)—Engine Endurance Testing Requirements—Revision of Section 33.87

Mr. Bahrami stated the EHWG is on schedule to complete its current tasking, 150 Hour Engine Endurance Testing, in the second quarter of 2017. He noted, however, uncertainties with respect to attendance and contribution by external organizations, which he explained he would address at the end of his briefing.

#### Airworthiness Assurance Working Group (AAWG) (TAE)

Mr. Bahrami stated the tasking for the AAWG focused on implementation of the widespread fatigue damage rule. He explained although that work is largely complete, the AAWG will remain in existence until 2017. Mr. Bahrami added the AAWG's expertise in damage tolerance could be applied to work before the Transport Airplane Metallic and Composite Structures Working Group (TAMCSWG), which has requested support. He noted the importance of documenting what has been communicated between the AAWG and TAMCSWG and to the TAD regarding such support.

#### Flight Test Harmonization Working Group (FTHWG) (TAE)—Phase 2 Tasking

Mr. Bahrami stated based on the complex nature of the FTHWG's tasking, delays in its completion are likely. He noted a need to review the FTHWG's tasking from the perspective of how it can best meet its obligations to the ARAC and the FAA. Mr. Bahrami explained the FTHWG's leadership will be prepared to present proposals to the ARAC on how to best move forward at its next meeting. Mr. Sigler asked Mr. Bahrami if he could elaborate on what the FTHWG would propose. Mr. Bahrami stated the FTHWG is considering requesting a modification to its tasking to incorporate a Phase 3, and shifting some of the activities under Phase 2 to Phase 3.

Transport Airplane Metallic and Composite Structures Working Group (TAE)—Transport Airplane Damage—Tolerance and Fatigue Evaluation

Mr. Bahrami stated the TAE accepted the TAMCSWG's work plan at its November 4, 2015, meeting, noting it is available for review if any ARAC members wish to examine it. He stated the TAMCSWG's report is due January 20, 2017.

Mr. Bahrami stated the TAMCSWG is tasked with developing recommendations regarding damage tolerance assessments and fatigue requirements. He stated Mr. Mike Gruber, Boeing, is the chair, and TAMCSWG members have been identified. Mr. Bahrami stated the TAE approved the TAMCSWG's work plan at its November 4, 2015, meeting.

Mr. Bahrami stated the TAMCSWG has requested support from the AAWG in the areas of large damage capability and rotorburst. He sought confirmation from the ARAC that it is appropriate for the AAWG to fulfill such a request. In response to a question from Mr. Sigler, Ms. Renee Pocius, FAA, explained, pending clarification based on a review of ARAC governance documentation, collaboration between working groups is permissible, subject to the working group chairs' approval. Mr. Sigler noted he saw no issues with respect to collaboration, provided the work fell within the working groups' taskings. Mr. Bahrami stated all interaction between the working groups would be documented.

Transport Airplane Crashworthiness and Ditching Evaluation Working Group (TACDWG) (TAE)

Mr. Bahrami stated the TACDWG's tasking is to develop recommendations regarding incorporation of airframe-level crashworthiness and ditching standards into part 25. He stated Mr. Kevin Davis, Boeing, is the TACDWG chair, and TACDWG members have been identified. Mr. Bahrami noted the TACDWG's work plan is due in March 2016, with a final report due June 2017.

Mr. Bahrami sought clarification from the FAA on whether observers who are not formally represented on the working group are permitted to attend working group meetings. Mr. Sigler stated once membership has been closed, new members generally cannot join a working group. Ms. Pocius clarified, pending clarification based on a review of ARAC governance documentation, attendance and participation by non-members is at the will of the working group chair.

Ms. Dunham noted TAE working groups are closed to the public. Mr. Sigler stated that TAE working group meetings are not open to any interested members of the public, but individuals may be granted access to attend a working group meeting as an observer after membership has been closed. Mr. George Novak, AIA, clarified that such observers would typically be SMEs supporting the needs of the working group, and not passive observers of working group proceedings. Mr. Sigler noted such observers would be required to adhere to governance relevant to the non-public nature of such meetings. Dr. Brady suggested revising the ARAC Bylaws to clarify under what circumstances non-members may attend working group meetings. Ms. Pocius noted the Committee Manual may address the subject in sufficient detail. Mr. Chris Witkowski, AFA, added that to the extent any such attendance is at the will of the working group chair, he

believed any elaboration to be unnecessary. Mr. Novak suggested the use of the term “observer” might be problematic, in that it connotes a role other than that described. He suggested using “subject matter expert” instead.

## TAE Issues/Concerns

### Level/Lack of Participation

Mr. Bahrami stated leadership of some TAE working groups had expressed concern regarding the level of participation and effort by some working group members, given the relatively demanding timelines associated with their taskings. He noted working group members, by agreeing to participate, take on obligations to provide value, and sought the ARAC’s views on best practices to encourage appropriate levels of effort and participation.

Mr. Crotty agreed that members are expected to participate as much as possible in working group activities, either in person, via teleconference, or, subject to working group chair approval, through an alternate. In response to a question from Mr. Crotty, Mr. Bahrami clarified that he was not seeking to remove non-participating members, but rather to communicate to working group members the importance of full participation.

Mr. Sigler stated there is not a standing list of best practices, but encouraged Mr. Bahrami to consult with the chairs of other working groups. He noted the concerns raised were valid and significant, and agreed with Mr. Bahrami that a commitment to participate in a working group should not be taken lightly. Mr. Sigler explained the ARAC should be made aware, on a case-by-case basis, when a lack of full participation affects the ability of working groups to complete taskings in a timely fashion or results in incomplete products due to the lack of necessary input.

Ms. Dorina Mihail, FAA, noted on a working group she is a member of, some members have complained they do not have the full support of their companies, or that their companies do not view providing the materials and resources needed to complete working group objectives as a priority. She suggested industry outreach to communicate the importance of prioritizing working group participation by employees. Mr. George Paul, NACA, noted individuals should obtain the backing of their employers before volunteering to participate in a working group.

### Inconsistency of Due Dates in Taskings

Mr. Bahrami noted there has been confusion in many working groups regarding when working group reports must be completed and submitted to the ARAC to meet tasking due dates. He stated taskings often include conflicting statements regarding submission of reports to ARAC and dates reports are due to the FAA. Mr. Bahrami added the respective timing of TAE Subcommittee and ARAC meetings is often not conducive to timely approval of reports by both bodies. Mr. Crotty promised that in the future the ARAC would pay close attention to the due dates stated in taskings to ensure they are not in conflict and are workable. Mr. Hennig observed the ARAC should set absolute due dates for working groups, and argued working groups should not be responsible for determining when their work must be complete to meet the ARAC’s obligations to the FAA.



### Sunsetting of Working Groups

Mr. Bahrami recommended working groups remain in existence for a sunset period after they submit their final reports to be available to respond to questions or requests for clarification from the FAA. He emphasized any such questions or requests should be within the scope of the working group's tasking.

### Delays Between Working Group Recommendations and Rulemaking

Mr. Bahrami stated some working group members have questioned the sense of urgency associated with working group activities, given that, as a result of departmental backlogs, rulemaking activities often do not occur for several years after working groups submit their recommendations. He noted this mentality is detrimental to the timely conduct of working group activities.

Mr. Crotty stated the concerns raised by Mr. Bahrami were valid, and the ARAC and FAA would consider what they could do to address them. Mr. Paul noted many of the same concerns are applicable to Aviation Rulemaking Committees. Mr. Sigler noted the opportunity to better synchronize activities of the ARAC and TAE Subcommittee. He explained the ARAC should consider when reports must be delivered to the FAA when presenting taskings to working groups.

## **NEW TASKS**

### Rotorcraft Bird Strike Working Group (RBSWG) (Attachment 8)

Mr. Gary Roach, FAA, briefed the ARAC on a proposed tasking to form the RBSWG. He stated the FAA Office of Airports and the U.S. Department of Agriculture have prepared a report on wildlife strikes, of which bird strikes account for 97 percent. Mr. Roach stated the data collected will permit the FAA to assess bird strike risks for various aircraft types and environments.

Mr. Roach stated part 27, which applies to rotorcraft with a maximum weight of 7,000 pounds or less, does not contain bird strike tolerance requirements. He noted aircraft certificated under part 27 account for 95 percent of helicopters flying in the United States, including all tour operators and the vast majority of air ambulance helicopters. Mr. Roach stated transport category rotorcraft certificated under part 29 must be able to withstand a strike from a 2.2 pound bird at the lesser of the never-exceed speed ( $V_{NE}$ ) or the maximum speed in level flight with maximum continuous power ( $V_H$ ) at altitudes up to 8,000 feet.

Mr. Roach stated the data available indicate there have not been a large number of bird strike-related fatalities involving rotorcraft in the past, but there is significant risk. He observed the lack of bird strike requirements under part 27 puts operators at risk daily, and noted the data indicates birds are increasing in size and number. Mr. Roach stated likely reasons for these increases include lack of migration.

Mr. Roach noted instances of severe aircraft damage and pilot incapacitation following bird strikes as a result of birds and aircraft parts breaching the windscreen. He stated 70 percent

of bird strike events occur at or below 500 feet AGL, where rotorcraft are the predominant aircraft type. Mr. Roach argued an increase in bird strike protection is appropriate, as the frequency of aircraft bird strike incidents is increasing, partly because of helicopters becoming faster and quieter. He observed there were 204 reported rotorcraft bird strike events in 2013, representing a 68 percent increase over the 121 events in 2009, and an over 700 percent increase since the early 2000s. Mr. Roach noted the increase is, in part, because of improved event reporting.

Mr. Roach noted many birds, such as ducks, greatly exceed the 2.2-pound figure used in the bird strike protection requirements of part 29.

Mr. Roach stated the objectives of the tasking include examining inclusion of bird strike protection in part 27 requirements, reviewing part 29 requirements to determine the continuing applicability of the 2.2-pound figure, and considering technological approaches to bird strike protection and prevention.

Dr. Brady discussed an anecdotal account of an accident in which a bird penetrated the wing of an ERAU training aircraft and damaged the wing spar. Mr. Roach stated an existing NTSB recommendation applicable to transport category airplanes contemplates leading edge damage from bird strikes.

In response to a question from Mr. Hennig regarding coordination between the FAA and Transport Canada and/or EASA, Mr. Roach stated the FAA fully harmonized the existing part 29 requirements with European regulations. He stated any changes to bird strike protection requirements would likewise be harmonized with foreign civil aviation authority regulations.

In response to a question from Mr. Hennig regarding the rate of compliance with the part 29 standards promulgated in 1996, Mr. Roach stated four helicopter models, representing approximately 17 percent of U.S.-registered rotorcraft certificated under part 29, satisfy the 1996 bird strike protection requirements. Mr. Lee Roskop, FAA, noted rotorcraft certificated under part 29 represent approximately 10 percent of all helicopters certificated in the United States.

Mr. Hennig noted the ARAC had previously discussed how the provisions of 14 CFR § 21.101 are used to enhance safety. He asked whether the proposed tasking would provide the RBSWG with any guidance concerning the interaction between § 21.101 and recommended changes to parts 27 and/or 29. Mr. Roach explained FAA personnel discussed the effect of § 21.101 when drafting the tasking, but stated he believed it would not ultimately be a significant factor. He stated it likely is not feasible to incorporate structural features to protect against a bird strike, but installing equipment posing an annoyance to birds in a rotorcraft's flight path would likely present an acceptable retrofit option. Mr. Hennig suggested the tasking incorporate language expressly seeking innovative, cost-effective retrofit solutions.

Mr. Novak asked whether a quantitative cost/benefit analysis justifies the tasking, and whether the proposed tasking could take advantage of other efforts with respect to bird strike study and mitigation development by any other groups, in the FAA or otherwise. Mr. Roach stated the

RBSWG may take advantage of whatever resources it sees fit, but a review of previous efforts did not reveal much work relevant to rotorcraft bird strike risk or prevention.

Ms. Dunham asked whether any other bird strike study groups have completed their activities. Mr. Roach stated bird strike study work is ongoing in a number of lines of business, but none is applicable to rotorcraft. Ms. Dunham noted the RBSWG might be able to leverage expertise from past working groups to support its efforts. Mr. Jorge Castillo, FAA, stated the Rotorcraft Directorate has shared its work with those involved in other bird strike research activities and with rulemaking teams within the FAA to identify any commonalities. He added most other ongoing work concerns fixed wing aircraft, and the RBSWG would need expertise with respect to rotorcraft operations.

Ms. Dunham recommended the RBSWG hold meetings in Washington, DC because that is where the industry expertise resides. Mr. Roach agreed to evaluate meeting locations based on the selected membership.

Mr. Castillo noted there have not been fatal accidents involving rotorcraft bird strike events, but the risk of such accidents is very real. He explained data was not available when the current requirements of parts 27 and 29 were promulgated and justifies the development of more rigorous requirements under part 27. He stated one option for the RBSWG to consider is including the part 29 bird strike protection requirements in part 27.

Mr. Novak expressed concern that efforts on bird strike research are becoming excessively compartmentalized, and suggested expanding existing efforts to incorporate rotorcraft bird strike research, rather than forming a new group. Mr. Castillo stated he believes expansion of other efforts would take up to 10 years, and the lack of any existing bird strike protection requirements under part 27, which accounts for 90 percent of the U.S. rotorcraft fleet, presents an urgency justifying faster action.

Mr. Sigler expressed concern regarding the time allotted for completion of the RBSWG's tasking and the industry segment's ability to supply sufficient resources to support it, given the recent formation of another working group involving normal category rotorcraft. Mr. Roach acknowledged the possibility that the relatively low cost technologies envisioned by the Rotorcraft Directorate will be determined to be unworkable or unfeasible. He stated in that case, the RBSWG would examine structural limitations. Mr. Roach added the RBSWG could potentially examine operating limitations, such as limiting airspeed below specified altitudes to mitigate bird strike risk. Mr. Sigler noted the draft tasking did not provide for the RBSWG to examine operational limitations. He suggested inclusion of such language in the tasking might encourage participation by organizations that would not otherwise participate, such as HAI.

Mr. David York, HAI, stated HAI would welcome any opportunity to study and address the issues raised by Mr. Roach. He explained the draft tasking is vague, but acknowledged the threat posed by rotorcraft bird strikes is serious and growing. Mr. York noted there do not appear to be any obvious solutions, and questioned whether setting a fixed timeline to complete the RBSWG's work is advisable. He agreed it is worthwhile for the RBSWG to examine the costs and benefits of applying part 29 standards to rotorcraft type certificated under part 27.

Mr. Harold Summers, HAI, noted the largest aeromedical operator represented by HAI experiences an average of approximately one bird strike per week. He observed past efforts to study and mitigate bird strike risk have focused on air carrier operations conducted under 14 CFR part 121, and noted rotorcraft regularly operate at lower altitudes, where encounters with birds are more likely. Mr. Summers stated as aeromedical rotorcraft operations have increased, the number of bird strike events has also increased dramatically.

Mr. Summers noted there have been fatalities in bird strike events involving rotorcraft certificated under part 29, and noted the risks associated with bird strikes are not limited to windscreen strikes and penetrations. He provided an anecdotal account of an event in which a buzzard struck a Bell 206, disabling lateral control tubes.

Mr. Hennig noted several ARAC members had suggested making the tasking more specific, and suggested the Rotorcraft Directorate withdraw the tasking for revision and resubmission. Mr. Sigler suggested circulating a revised tasking by email.

Ms. Pocius noted any substantial revisions to the draft tasking would have to be presented for discussion during a public meeting. Mr. Sigler and Mr. Novak stated the ARAC had already discussed some revisions during the meeting, and suggested revisions limited to those already discussed could be approved by the ARAC via email. Mr. Novak also requested the FAA provide the ARAC additional information on the likelihood of bird strike as a function of overall operations, to obtain a better understanding of the scope of the threat posed. Mr. Sigler stated the ARAC had discussed revisions relating to the effect of § 21.101 and fleet types, along with the inclusion of operational elements within the RBSWG's scope. He noted a revision to the scope of the tasking would be substantial, and suggested the ARAC provide specific direction on that subject. Ms. Dunham suggested the FAA resubmit the tasking at the ARAC's March 2016 meeting, and suggested, in the interim, the FAA consult with existing groups studying bird strike risk to obtain their input and expertise. Mr. Sigler stated the ARAC should provide specific direction regarding consideration of operational elements. After discussion, the ARAC recommended the FAA include consideration of operational limitations, such as speed and altitude limitations, within the scope of the RBSWG.

Mr. Randy Kenagy, ALPA, verified the RBSWG's tasking would address the entire aircraft, not only the windscreen. Mr. Roach confirmed part 29 covers the entire aircraft.

Mr. Hennig asked that the Rotorcraft Directorate advise the ARAC members of any findings, and submit a revised tasking in advance of the March 2016 ARAC meeting, for discussion and approval during the meeting.

#### Additional Tasking for the ACSWG (Attachment 9 and 10)

Ms. Susan Parson, FAA, briefed the ARAC on a scope expansion for the ACSWG. She stated the industry has expressed concerns regarding the quality of knowledge testing for applicants for Aircraft Mechanic Certificates with Airframe and/or Powerplant ratings, and, as a result, the FAA proposes to expand the existing ACSWG tasking to include such certificates among those for which the ACSWG is to provide advice and recommendations.

Ms. Parson stated the ACSWG's progress on its existing task is well underway and, given the importance of sound training for aircraft mechanics, the FAA wishes to address the concerns expressed as soon as possible. She added expanding the ACSWG's tasking provides opportunities for synergy and efficiency, because the ACSWG has a well-developed framework for creation of Airman Certification Systems (ACSEs) and for updating existing guidance and testing materials. Ms. Parson stated several members of the ACSWG have subject matter expertise in mechanics, but noted the proposed tasking provides for the addition of up to five members with experience in the 14 CFR parts 65 and 147 communities. She stated Mr. Oord and the other existing members of the ACSWG concur with the FAA's determination that it is well positioned to take on the additional tasking, and have confirmed it has the capacity to accept additional work.

Mr. Oord noted feedback to the ACSWG has indicated significant interest in development of ACSEs for Aircraft Mechanic Certificates, and stated the ACSWG welcomes the additional tasking.

In response to a question from Dr. Brady, Mr. Oord confirmed the FAA is in the process of revising 14 CFR part 147. Dr. Brady questioned whether development of an Aircraft Mechanic ACS is appropriate while regulatory requirements are in flux. Mr. Hennig noted part 147 addresses certification of aircraft mechanic schools, and does not include the requirements for certification of aircraft mechanics. Dr. Brady added testing developed as part of the ACS will assess learning at part 147 schools. He asked whether the FAA has consulted with the part 147 training community regarding the proposed tasking. Ms. Parson stated she did not know whether representatives of individual schools had been consulted, but support for the proposed tasking in the maintenance and maintenance training community was broad based, with no objections registered.

Mr. Sigler asked what implications a pending part 147 rulemaking would have with respect to development of an aircraft mechanic ACS. Dr. Brady expressed concern the FAA has not sufficiently reached out to the part 147 training community to determine if they support the tasking. Ms. Parson stated development of the ACS would begin with the existing Practical Test Standards for an Aircraft Mechanic Certificate with an Airframe and/or Powerplant rating. She stated the majority of the work involved in development of the ACS will relate to 14 CFR part 65 requirements, and as new part 147 requirements are developed, they could be brought into the process without significant disruption. Ms. Parson noted the most pressing concern of the aviation maintenance community is replacing outdated knowledge testing requirements and standards.

Mr. Hennig stated the ACSEs are not rulemakings intended to supplant regulatory certification standards, but are intended to provide a clear, up-to-date understanding of how to satisfy such regulatory requirements. He explained the certification requirements for an Aircraft Mechanic Certificate would remain unchanged, but the ACS would address how to appropriately test to those standards. Mr. Hennig stated there have been significant numbers of complaints from certificate applicants regarding existing knowledge testing.

Mr. Oord stated feedback from industry groups such as the Aviation Technician Education Council, the Aeronautical Repair Station Association, and the MARPA have been supportive of

better training for aircraft mechanics. He added a General Aviation Joint Steering Committee working group studying engine failures also expressed a need for improved knowledge, skills, and risk management abilities for aircraft mechanics. Mr. Oord explained the proposed tasking offers an opportunity to provide such improvements to aircraft mechanic certification under part 65, and stated the ACSWG's work would not affect part 147. He noted development of the pilot ACSes affected neither 14 CFR part 61 nor 14 CFR part 141. He stated any future changes to part 147 could be appropriately harmonized with the Aircraft Mechanic Certificate ACS. Mr. Oord added stakeholders with an interest in part 147 would participate in the ACSWG, and would advise if the ACSWG was proceeding in a direction that did not serve their interests.

Mr. Sigler noted the proposed tasking, as an expansion of an existing tasking, was unique, and sought comment on how to ensure participation by appropriate individuals. Ms. Parson stated the tasking calls for additional members to ensure individuals with knowledge or insight of value to the task have the opportunity to participate. She noted the existing ACSWG membership would provide an experience and knowledge base upon which new members could build. Mr. Sigler asked the ACSWG leadership would ensure the membership makeup was optimal.

Dr. Brady reiterated his concerns regarding changes to part 147, and stated parts 65 and 147 are integrated parts of a whole, and could not be considered independently of one another. He stated the tasking should more explicitly prescribe the types of participants sought, and suggested the addition of individuals with aviation maintenance expertise to the existing ACSWG would not necessarily be optimal. He asked the FAA for a list of groups it briefed on the proposed tasking. Mr. Ireland agreed there is interaction between parts 65 and 147, and suggested the ACSWG's work would inform the revision of part 147.

Mr. Hennig, Dr. Brady, and Mr. Oord discussed the extent to which compliance with part 147 would be affected by the proposed tasking. Dr. Brady noted part 147 includes curriculum requirements for schools, and stated changes to the underlying certification requirements would affect those curricula. He noted obtaining curriculum approval is a daunting prospect, and reiterated his concern that the FAA had not obtained appropriate input from schools certificated under part 147 before submitting the proposed tasking. Mr. Oord noted schools certificated under part 147 may have to modify their curricula based on revisions to part 147, and will almost certainly have to modify them based on development of an Aircraft Mechanic Certificate ACS. He stated if revisions to part 147 are harmonized with development of the ACS, the disruption and need for schools to modify their curricula could be minimized. Mr. Oord also noted the ACSWG could recommend streamlining of the curricula approval process under part 147.

Ms. Parson and Mr. Sigler further discussed the optimal composition of an expanded ACSWG. Ms. Parson noted while broad aviation maintenance and training expertise will be of value, the FAA expects to focus the ACSWG on certification itself, and not training leading to certification. Mr. Sigler noted ARAC governance includes recommendations on working group size, with 12 considered the norm. Ms. Parson stated the FAA, in drafting the proposed tasking, wished to enable representation by the appropriate communities and organizations, and thus recommends adding five individuals to the existing ACSWG.

Mr. Ed Hall, AIM, stated he was the Lead FAA Inspector on a part 147 ARAC tasking. He noted the committee examined training curriculums under part 147. Mr. Hall explained the committee

recommended removing the fixed curriculum requirements contained in the appendices to part 147 and including them in Operations Specifications, which may be modified without rulemaking activity, to provide flexibility to keep pace with industry developments. He added the curriculum content in the Operations Specifications would be governed by the Maintenance Training Review Board, which would revise curriculum requirements to align with testing criteria.

Mr. Hall stated he currently represents an organization operating 11 schools certificated under part 147. He explained the current Aircraft Mechanic Certificate Practical Test Standards and knowledge test requirements are not aligned, and expressed support for the proposed tasking expansion to the extent it would correct this misalignment.

In response to a question from Mr. Sigler, Ms. Parson stated the 30-month timeframe referenced in the proposed tasking would be from the modification of the tasking, and would not be retroactive to the initial tasking of the ACSWG. She noted the timeframe would apply to the new portion of the tasking, and would not expand the time for completion of the ACSWG's original tasking, which would continue to be due in 2016.

On motion, the ARAC accepted the proposed tasking. Mr. Sigler noted one vote in opposition. He recommended the FAA and the ACSWG take the ARAC's discussion of the tasking seriously, and give careful consideration to the membership of the expanded ACSWG and ensure the activities of the ACSWG are coordinated with rulemaking activities with respect to part 147. Ms. Parson and Mr. Oord stated they would remain cognizant of the concerns expressed and would ensure coordination of the ACSWG's work with interested parties.

#### Load Master Certification Working Group (LMCWG) (Attachment 11)

Mr. Steve Grotta, FAA, briefed the ARAC on a proposed tasking to form the LMCWG. He reviewed the details of an April 29, 2013, accident involving a B747 freighter taking off from Bagram Airfield in Afghanistan, noting the aircraft pitched up dramatically prior to crashing. Mr. Grotta stated the NTSB determined the cause of the accident to be improper restraint, improper supervision of the load, and an improper plan. He explained the aircraft was carrying five mine-resistant ambush-protected (MRAP) vehicles weighing 12 to 18 tons each. Mr. Grotta noted a load of this type differs significantly from cargo contained in unit load devices, which can be locked securely in place. He stated such loads are being termed "special cargo" in a newly revised Advisory Circular (AC) 120-85A, Air Cargo Operations.

Mr. Grotta stated load planning for special cargo can be problematic. He explained in the case of the accident, the aftmost MRAP rolled backward and breached the pressure bulkhead, severing both hydraulic lines controlling the elevator, resulting in loss of control. Mr. Grotta noted the ensuing crash killed seven people and destroyed the aircraft. He added poor load planning and improper supervision of loading has caused other accidents, citing an accident involving Fine Air in Miami in which the aircraft involved crashed in a populated area.

Mr. Grotta noted that following the accident in Bagram, the FAA established a tiger team to determine if the accident resulted from systemic issues or was an isolated incident. He stated the team determined the load plan was not in accordance with the operator's weight and balance

manual, but even if the load plan had been in conformance with the manual, an unsafe condition still would have existed because of inaccuracies in the manual. Mr. Grota explained the team determined using weight and balance materials supplied by Boeing that the accident aircraft could safely carry only one MRAP.

Mr. Grota stated a review of 10 other operators' weight and balance manuals and procedures determined they are insufficient. He presented anecdotal accounts of operator personnel using inapplicable formulas to determine the adequacy of tiedowns used to secure cargo to seat rails in cargo aircraft. Mr. Grota stated the loads imposed by such procedures may exceed the structural limits of the aircraft involved.

Mr. Grota recited the language of § 121.665, which makes certificate holders responsible for the preparation and accuracy of a load manifest, which must be signed by a person authorized by the certificate holder to supervise the loading of the aircraft. He stated there are no standards for training or qualifications of personnel so authorized.

In response to a question from Mr. Novak, Mr. Grota confirmed that the pilot in command is ultimately responsible for the proper loading of the aircraft. Mr. Novak questioned why it would be necessary to certificate an individual to perform a function for which regulations already exist, and for which the pilot in command is already responsible. Mr. Grota explained in practice, pilots do not supervise aircraft loading or visually confirm conformance to the loading plan, nor do they understand the structural limitations associated with loading procedures. He stated pilots generally accept the assurances of the loadmaster or other person responsible for supervising loading. Mr. Grota noted such individuals have significant duties, but there are no controls in place to ensure they have appropriate training and knowledge.

In response to a question from Mr. Novak, Mr. Grota stated personnel responsible for fueling aircraft are not certificated. Mr. Novak asked if the International Civil Aviation Organization (ICAO) has offered any opinion or guidance with respect to certification of loadmasters or similar personnel. Mr. Grota added ICAO is considering creating such a requirement in its Standards and Recommended Practices. He noted the proposed tasking follows on an NTSB recommendation after the previously mentioned Fine Air accident.

Ms. Dunham expressed interest in the topic, noting fatalities on the ground in the Fine Air accident could have been significantly worse had automobiles been in an intersection through which the aircraft traveled. She also noted an accident in Halifax, Nova Scotia, Canada, involved aircraft loading. Ms. Dunham also referred to an accident in Alaska in which one of the passengers killed in the accident had earlier captured in a mobile phone video of improper aircraft loading. She noted the importance of the subject, and expressed hope oversight of proper loading procedures would, ultimately, not be limited to cargo operations.

Mr. Grota acknowledged there have been a number of accidents related to aircraft loading in operations under 14 CFR part 135. He stated the immediate proposal relates to cargo operations under part 121. Mr. Grota added the majority of cargo operations, involving shipping of parcels and similar cargo, are not subject to the risks being discussed because the spatial limitations of the aircraft are often reached well before the cargo approaches weight limitations. He stated the



concern driving the proposed tasking is air freight operations involving air transport of, for example, large equipment, often in international operations.

Mr. Sigler suggested efforts to ensure the proposed LMCWG include representatives from the armed services, as well as those from the civil aviation cargo community, to take advantage of the knowledge and experience gained in military air freight operations. Mr. Paul stated following the Bagram accident, NACA convened a Special Cargo Working Group (SCWG) involving representatives from the FAA, the military, the NTSB, aircraft manufacturers, and load engineers from numerous air carriers, including foreign air carriers. He stated the SCWG examined many of the issues described by Mr. Grotta, including improper tying down of freight to seat tracks, and the industry had made significant changes within the past 2 years. Mr. Paul noted, because of the SCWG's work, the FAA revised AC 120-85A and issued a Safety Alert for Operators.

Mr. Paul stated the focus of the NTSB's recommendation, and of the SCWG, had been on special cargo operations only. He noted the SCWG did not recommend requiring certification of loadmasters for all operations, regardless of the type of cargo. Mr. Paul stated the SCWG recommended instead that all personnel involved with loading of special cargo, including engineers, loadmasters, and loaders, be certified by the FAA office responsible for oversight of the air carrier's training program. He noted such certifications would not be portable from one air carrier to another, and personnel changing employment would need to become recertified. Mr. Paul stated significant differences between procedures at different air carriers operating different aircraft justified such an approach. He also noted such an approach provides the FAA a continuing opportunity to review air carriers' cargo loading procedures to ensure they are adequate. Mr. Novak expressed support for limiting the proposed tasking to examining certification of personnel involved with loading of special cargo only.

Mr. Paul provided further details on the Bagram accident, noting each of the MRAPs were tied down laterally, but a single set of straps tied down all five MRAPs longitudinally. He added the load had shifted during the aircraft's landing in Bagram, requiring tightening of the straps, and that one of the longitudinal straps had torn during that landing. He stated the air carrier weight and balance manual was not available to the loadmaster at Bagram.

Mr. Novak asked whether it would be possible for the ARAC to group the tasks under the proposed tasking, and grant conditional approval so the LMCWG would be permitted to proceed with a group of tasks only if the ARAC was satisfied with its earlier findings. Mr. Paul stated the LMCWG would likely include many of the same personnel as the SCWG, and he did not expect its findings and recommendations would differ significantly from those of the SCWG. He offered to provide the ARAC and the FAA with the SCWG's report and recommendations. Mr. Paul explained the air carrier industry is not normally inclined to recommend new personnel certifications, but had recognized the need for certification of personnel involved in special cargo operations. He stated, at the same time, industry is aware that the procedures used in such operations are air carrier-specific, and had recommended air carrier-specific certification at a local level, rather than a higher level general certification.

Mr. Sigler, Mr. Paul, Mr. Novak, and Ms. Dunham discussed whether the proposed tasking would be duplicative of the efforts of the SCWG, which had already developed recommendations for a narrow certification limited to special cargo. In response to a question

from Mr. Kenagy Mr. Paul stated the SCWG had recommended some common elements of training for such personnel that would not differ between air carriers. He also noted the SCWG had recommended air carriers discontinue carriage of intermodal containers, because it determined they could not be safely secured within the aircraft.

Mr. Sigler stated there appeared to be a gap in communication regarding the SCWG's activities, and there did not seem to be significant benefit in accepting the proposed tasking. Mr. Hennig asked if Mr. Paul could present the SCWG's recommendations at the March 2016 meeting of the ARAC. He noted if the FAA Cargo Focus Team (CFT) determines the SCWG's report does not fully address the concerns driving its proposed tasking, it could present an amended tasking at that meeting. Mr. Paul agreed to present the SCWG's recommendations at the March 2016 ARAC meeting and indicated he would share the recommendations with the ARAC in advance of the meeting.

Mr. Oord noted the Committee F46 on Aerospace Personnel, an industry consensus body, has been examining the possible adoption of standards and guidance developed by ASTM International, an international standards body, relating to education, qualification, testing, certification requirements, and continued education for aerospace personnel. He suggested considering certification under those standards, rather than by the FAA. Mr. Paul stated because procedures are aircraft specific, and would likely require significant input from experienced individuals, he believed FAA certification would be more feasible.

Mr. Grota noted no procedure exists for local FAA certification of personnel, and stated the portion of the proposed tasking dealing with development or modification of an existing certification process might continue to be of value. Mr. Paul suggested the procedure used for certification of flight attendants might be applicable.

Mr. Grota and Mr. Paul discussed the practicalities of implementing the SCWG's recommendations at local FAA offices. Mr. Paul noted there is a relative lack of knowledge of loading procedures among FAA field inspectors. In response to a question from Ms. Dunham, Mr. Grota stated the CFT is developing new training for FAA personnel to familiarize them with special cargo procedures. Mr. Paul stated NACA can provide assistance with development of a training curriculum.

Mr. Novak moved to defer the ARAC's consideration of the proposed tasking pending presentation of the SCWG's recommendations at the March 2016 meeting. Mr. Sigler noted the SCWG's efforts can be leveraged, but cautioned against the ARAC simply passing off responsibility for the concerns raised. Mr. Kenagy agreed, noting the ARAC is waiting for additional information, but is not avoiding the topic. The ARAC agreed to defer consideration of the proposed tasking.

## **FAA UPDATE**

Mr. Crotty noted the FAA is internally coordinating the ARAC Charter renewal, which must be completed by September 17, 2016. He stated there have been no significant changes to the current version of the Charter.

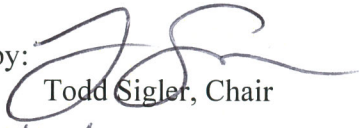
Mr. Crotty expressed thanks to the Maintenance Reliability Working Group for its recommendations reflecting the interest of industry safety. He stated AFS-30 is currently reviewing the recommendations and draft AC, determining policy implementations, and drafting revised guidance.

**ADJOURNMENT**

Mr. Sigler adjourned the meeting at 4:09 p.m.

**ACTION ITEMS**

Action Item	Responsible Party
Review the ARAC Committee Manual to determine/clarify under what circumstances non-members may attend working group meetings.	FAA
Review the ARAC Committee Manual to determine/clarify whether working groups may work together.	FAA
Revise the Rotorcraft Bird Strike Working Group tasking based on the ARAC's discussion and present it at the March 2016 meeting for acceptance.	FAA
Provide Special Cargo Working Group reports and recommendations to the ARAC members and FAA Cargo Focus Team for review. Present the SCWG's work at the March 2016 ARAC meeting.	George Paul
Revise the Load Master Certification Working Group tasking based on the SCWG's prior work and present it at the March 2016 meeting for acceptance.	FAA

Approved by:   
 Todd Sigler, Chair

Dated: 3/5/16

Ratified on: \_\_\_\_\_