holidays. The Dockets Office (telephone 1–800–647–5527) is on the plaza level of the NASSIF Building at the Department of Transportation at the above address. Also, you may review public dockets on the Internet at *http://dms.dot.gov*.

FOR FURTHER INFORMATION CONTACT: Forest Rawls (202) 267–8033, Sandy Buchanan-Sumter (202) 267–7271, or Vanessa Wilkins (202) 267–8029, Office of Rulemaking (ARM–1) Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591.

This notice is published pursuant to 14 CFR 11.85 and 11.91.

Issued in Washington, DC, on March 21, 2002.

Gary A. Michel,

Acting Assistant Chief Counsel for Regulations.

Petitions for Exemption

Docket No.: FAA–2001–11169

Petitioner: Lockheed Martin

Section of 14 CFR Affected: 14 CFR SFAR–88

Description of Relief Sought:

To permit Lockheed Model L–188 airplanes to operate without meeting the requirements of SFAR–88.

Dispositions of Petitions

Docket No: 30122

Petitioner: Bombardier Aerospace Dallas/Fort Worth Customer Training Center

Section of 14 CFR Affected: 14 CFR from 91.105(a) and 135.338(f)

Description of Relief Sought/Disposition:

To permit persons assigned as required crewmembers on aircraft operated by Bombardier Aerospace to temporarily relinquish their crewmember stations to Bombardier Aerospace DFW–CTC instructors for the purpose of meeting the requirements of 14 CFR 142.53(b)(1) when those instructors do no hold valid medical certificates issued by the FAA. In addition, the proposed exemption would permit individuals who meet the requirements of § 142.53(b)(1) to be considered to meet the requirements of § 135.338(f)(1).

Denial, 02/28/2002, Exemption No. 7732

Docket No.: FAA–2001–11011

Petitioner: Executive Jet International

Section of 14 CFR Affected: 14 CFR 135.152(j)

Description of Relief Sought/Disposition:

To permit EJI to operate one Gulfstream Model GV (GV) airplane (Serial No. 687) without that airplane being equipped with the required flight data recorder after the August 19, 2002, compliance date. The FAA notes that EJI did not own the indicated aircraft at the time the petition was submitted; the airplane manufacturer (Gulfstream Aerospace Incorporated) petitioned for relief on behalf of EJI, citing EJI's ''willingness to accept'' this GV airplane if the requested relief were granted.

Denial, 02/25/2002, Exemption No. 77735

[FR Doc. 02–7509 Filed 3–27–02; 8:45 am]

BILLING CODE 4910–13–M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Aviation Rulemaking Advisory Committee Meeting on Air Carrier and General Aviation Maintenance Issues

AGENCY: Federal Aviation Administration (FAA) DOT.

ACTION: Notice of public meeting.

SUMMARY: The Federal Aviation Administration (FAA) is issuing this notice to advise the public of a meeting of the FAA Aviation Rulemaking Advisory Committee to discuss Air Carrier and General Aviation Maintenance Issues. Specifically, the committee will discuss tasks concerning quality assurance and ratings for aeronautical repair stations.

DATES: The meeting will be held April 17–18, 2002, from 10 a.m. to 5 p.m. Arrange for teleconference capability and presentations no later than 3 business days before the meeting.

ADDRESSES: The meeting will be held at the Helicopter Association International, 1635 Prince Street, Alexandria, VA 22134–2818.

FOR FURTHER INFORMATION CONTACT: Vanessa R. Wilkins, Federal Aviation Administration, Office of Rulemaking (ARM–207), 800 Independence Avenue, SW., Washington, DC 20591, telephone (202) 267–8029; fax (202) 267–5075.

SUPPLEMENTARY INFORMATION: Pursuant to § 10(a)(2) of the Federal Advisory Committee Act (Public Law 92–463; 5 U.S.C. App. II), notice is hereby given of a meeting of the Aviation Rulemaking Advisory Committee to discuss air carrier and general aviation maintenance issues. The meeting will be held April 17–18, 2002, from 10 a.m. to 5 p.m. at the Helicopter Association International, 1635 Prince Street, Alexandria, VA 22134–2818. The committee will discuss quality assurance and ratings for aeronautical repair stations.

Attendance is open to the public, but will be limited to the space available. The FAA will arrange teleconference capability for individuals wishing to participate by teleconference if we receive notification no later than 3 business days before the meeting. Arrangements to participate by teleconference can be made by contacting the person listed in the **FOR FURTHER INFORMATION CONTACT** section. Callers outside the Washington metropolitan area will be responsible for paying long distance charges.

To present oral statements at the meeting, members of the public must make arrangements no later than 3 business days before the meeting. The public may present written statements to the committee at any time by providing 25 copies to the Assistant Executive Director, or by bringing the copies to the meeting. In addition, sign and oral interpretation can be made available at the meeting, as well as assistive listening device, if requested no later than 10 calendar days before the meeting. Arrangements may be made by contacting the person listed under the heading **FOR FURTHER INFORMATION CONTACT**.

Issued in Washington, DC, on March 25, 2002.

Anthony F. Fazio,

Executive Director, Aviation Rulemaking Advisory Committee.

[FR Doc. 02–7482 Filed 3–27–02; 8:45 am]

BILLING CODE 4910–13–M

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Aviation Rulemaking Advisory Committee; Airport Certification Issues Meeting

AGENCY: Federal Aviation Administrative (FAA), DOT.

ACTION: Notice of public meeting.

SUMMARY: This notice announces a public meeeting of the Federal Aviation Administration's Aviation Rulemaking Advisory Committee to discuss Airport Certification issues.

DATES: The meeting will be held on April 8, 2002, from 1:00 p.m. to 4:00 p.m. Arrange presentations by April 1, 2002.

ADDRESSES: The meeting will be held at the Federal Aviation Administration, 800 Independence Ave. SW, Room 600 East, Washington, DC 20591.

FOR FURTHER INFORMATION CONTACT: Marisa Mullen, FAA, Office of Rulemaking (ARM–205), 800 Independence Avenue, SW,

AVIATION RULEMAKING ADVISORY COMMITTEE (ARAC)

Air Carrier and General Aviation Maintenance Issues

Meeting Minutes

Day 1:

DATE: April 17, 2002

TIME: 10:00 a.m. to 5:00 p.m.

PLACE: Helicopter Association International, Alexandria, VA

The Assistant Chair, Ms. Sarah MacLeod, called the meeting to order at 10:01 a.m.

Agendas were distributed (Attachment 1) and an attendance sheet was circulated (Attachment 2). Ms. Diana Frohn, Acting Assistant Executive Director, read instructions governing the conduct of the meeting. Ms. MacLeod welcomed everyone and asked those who called into the meeting to introduce themselves.

A handout related to economic information, prepared by Rose Scoones of The Boeing Company, was distributed (Attachment 3). Ms. MacLeod asked that all members send economic cost information to her and to Vanessa Wilkins, Federal Aviation Administration (FAA). Then, the committee proceeded to discuss the draft quality assurance technical report. The committee made minor revisions to the report, but did not make substantive changes.

The committee agreed to start the April 18, 2002, meeting at 9:00 a.m. instead of 10:00 a.m. and Ms. MacLeod adjourned the meeting at approximately 5:30 p.m.

Day 2:

DATE: April 18, 2002

TIME: 9:00 a.m. to 5:00 p.m.

PLACE: Helicopter Association International, Alexandria, VA

The Assistant Chair, Ms. Sarah MacLeod, called the meeting to order at 9:05 a.m.

Agendas were distributed (Attachment 4) and an attendance sheet was circulated (Attachment 5). Ms. Diana Frohn, Acting Assistant Executive Director, read instructions governing the conduct of the meeting. Ms. MacLeod distributed copies of the draft quality assurance technical report, which was revised the previous day (Attachment 6).

Ms. MacLeod welcomed everyone and asked those who called into the meeting to introduce themselves. Ms. MacLeod gave an overview of the meeting from the previous day. The committee members agreed to review the revisions to the draft quality assurance report and forward their comments to Ms. MacLeod and Ms. Wilkins within 30 days. Ms. MacLeod reminded committee members that their economic cost information should be submitted in the form of the survey.

The committee commenced to discuss ratings. The committee noted that the FAA's draft guidance material for the repair station manual describes the use of an optional capability list differently from what the committee envisioned. This difference between the FAA's interpretation and the committee's interpretation will have a significant impact on the committee's proposed system of ratings. The committee decided to move forward with its recommendation. Committee members should submit any comments about the guidance material through the formal comment procedures established by the FAA.

As the committee reviewed the draft technical report on ratings, several committee members expressed concern about classes. Ms. Wilkins read the draft minutes from the January 31, 2002, meeting, and the March 11 and 12, 2002, meeting to clarify what decisions, related to classes, the committee made at those meetings.

Ms. MacLeod agreed to send the revised draft report to the committee members for their review. She adjourned the meeting at 5:45 p.m.

Action Items

1. Walter Desrosier agreed to reformat the draft technical report on ratings and forward his revisions to Sarah MacLeod
2. Ms. MacLeod will send the draft technical reports to the committee members for their review and comment. She will incorporate their comments and suggestions and send out the final reports.
3. The committee members will review the technical reports and forward their responses to Ms. MacLeod by the date she specifies when she forwards the draft technical reports.
4. The committee members will send Ms. MacLeod their economic information with their final survey responses that will be attached to the technical reports.

Attendance

The April 17, 2002, meeting of the ARAC to address Air Carrier/General Aviation Maintenance issues was attended by 18 people, including committee members, alternates, government employees, and members of the general public.

The April 18, meeting of the ARAC to address Air Carrier/General Aviation Maintenance issues was attended by 18 people, including committee members, alternates, government employees, and members of the general public.

Public Notification

An announcement of the meeting was published in the Federal Register on March 28, 2002 (67 FR 15004).

Approval

I certify that the above minutes are accurate.

/s/Ms. Sarah MacLeod,

Assistant Chair for ARAC Air Carrier/General Aviation Maintenance Issues

Issued: June 1, 2002.

6 Attachments

AVIATION RULEMAKING ADVISORY COMMITTEE ON AIR CARRIER AND GENERAL AVIATION MAINTENANCE

HELICOPTER ASSOCIATION INTERNATIONAL
1635 PRINCE STREET
ALEXANDRIA, VA 22134-2818

MEETING AGENDA

DAY 1: APRIL 17, 2002

- Opening remarks and committee administration
- Discussion of quality assurance technical report
- Lunch
- Discussion of quality assurance technical report
- Adjourn

DAY 2: APRIL 18, 2002

- Opening remarks and committee administration
- Discussion of aeronautical repair station ratings and classes technical report
- Lunch
- Discussion of aeronautical repair station ratings and classes technical report
- Adjourn

Attachment 2

AVIATION RULEMAKING ADVISORY COMMITTEE ON AIR CARRIER AND GENERAL AVIATION MAINTENANCE

SIGN-IN SHEET

APRIL 17, 2002

MEMBER (M) NON-MEMBER (N)	NAME	AFFILIATION	TELEPHONE/ FAX NUMBER	E-MAIL ADDRESS
N	DIANA L. FROHN	FAA	202-267-7027 Fax: 267-5115	diana.frohn@faa.gov
N	Vanessa Wilkins	FAA	202-267-8009 202-267-5075	vanessa.wilkins@faa.gov
M	Ric Anderson	Air Transport Assn.	202-626-4134 -65776	randerson@airlines.org
M	C.H. "SKIP" JONES	AIA	202-371-8433 202-371-8471	jones@aia-aerospace.org
N	JOE SIRICO	P&W	860-565-6233 860 755-4538	siricojj@pwch.com
N	BRIAN WHITEHEAD	TCCA	613-941-8371 613-952-3298	whitehb@tc.gc.ca
M	Rosita Scoones	BOEING	425 237-4716 425-237-9866	ROSITA.M.SCOONES@BOEING.COM
M	Chad Bierman	Aviation Suppliers Assn	202. 478-5424 -5426 Fax	Chad.Bierman@washingtonaviation.com
M	RICHARD PERI	AIRCRAFT ELECTRONICS ASSN	202-589-1144 202-220-3104	ricp@AEA.NET
M	WALTER DESROSIER	GAMA	202 393 1500 202 842 4063	WDESROSIER@GENERALAVIATION.ORG
M	Janice Maniatis	National Air Disaster Alliance/Foundation	770.486.5630 no fax	jmaniati@ATT.NET

AVIATION RULEMAKING ADVISORY COMMITTEE ON AIR CARRIER AND GENERAL AVIATION MAINTENANCE

SIGN-IN SHEET

APRIL 17, 2002

MEMBER (M) NON-MEMBER (N)	NAME	AFFILIATION	TELEPHONE/ FAX NUMBER	E-MAIL ADDRESS
N	JOE BUTTNER	DALLAS ALTERNATIVE-MILLVILLE	856 825 6000 825 0078	JBUTTNER@ DALLASAIRMOTIVE.COM
N	DAVID SCHABER	INDEPENDANT CONSULTANT	410 775-1656	N14KY@AOL.COM
N	Steve Serdikoff	PAI	(202)898-1410	serdikoff@ compuserve.com
Y	GEORGE PAUL	NACA	202-833-8200	GPAUL@NACA.CC
Y (phone)	Marvin Curtis	AECMA		
Y (phone)	David Smith	AECMA		
	Sarah Macleod	ARSA		

Rating System Draft Rev c

Boeing Repair Station, R. Scoones

Rating (Listed on Cert.)	Privileges and Limitations	Operations Specifications Listing (Listed on Op Spec.)	Capability List (Requires a self-evaluation in accordance with FAR 145.215)
Aircraft: Aircraft means a device that is used, or intended to be used, for flight in the air. Airframe means the fuselage, booms, nacelles, cowlings, fairings, airfoil surfaces (including rotors but excluding propellers and rotating airfoils of engines), and landing gear of an aircraft and their accessories and controls.	**Privileges:** May perform maintenance, preventive maintenance and alterations of complete aircraft. May perform maintenance, preventive maintenance and alterations on any installed items not included in any other rating. May remove, replace, inspect and test those items included in a powerplant, propeller, or avionic rating. Perform 100-hour, annual or progressive inspections, and return the aircraft to service. **Limitations:** May not maintain or alter any article for which it is rated if it requires special technical data, equipment, or facilities that are not available to it.	List scope of maintenance if less than complete aircraft, i.e., Aircraft: Boeing 737-300, Alteration of Passenger Cabin Interiors	List makes and models for work performed on complete aircraft, i.e., Boeing 73 7-100 -200 Attachment 3
Powerplant: Aircraft engine means an engine that is used or intended to be used for propelling aircraft. It includes turbo superchargers, appurtenances, and accessories necessary for it's functioning, but does not include propellers.	**Privilege:** May perform maintenance, preventive maintenance, and alteration of complete; powerplants, auxiliary powerplants, and all interface components necessary for the powerplant to work properly. May remove, replace, propellers and components needed to perform powerplant maintenance. **Limitations:** May not maintain or alter any article for which it is rated if it requires special technical data, equipment, or facilities that are not available to it.	List scope of maintenance if less than complete powerplant, i.e., May perform alteration of Pratt and Whitney, 2000 Series, excluding disassembly of engine modules.	List makes and models for work performed on complete powerplant, i.e., Pratt and Whitney 2000 4000

Rating System Draft Rev c

Rating (Listed on Cert.)	Privileges and Limitations	Operations Specifications Listing (Listed on Op Spec.)	Capability List (Requires a self-evaluation in accordance with FAR 145.215)
Propeller: Propeller means a device for propelling an aircraft that has blades on an engine-driven shaft and that, when rotated, produces by its action on the air, a thrust approximately perpendicular to its plane of rotation. It includes control components normally supplied by its manufacturer, but does not include main and auxiliary rotors or rotating airfoils of engines.	**Privilege**: May perform maintenance, preventive maintenance, or alteration on parts of the Propeller. May remove/replace parts to gain access to the propeller. May remove/replace parts attached to the propeller. May remove/replace propeller. **Limitations:** May not maintain or alter main and auxiliary rotors or rotating airfoils of engines.	Repair and/or overhaul of propellers listed in Capability List. Repair and or overhaul of components listed in Capability List	Type of propeller, i.e., Fixed pitch Controllable pitch Type of Component i.e. Propeller Governor, Feathering Pumps, etc
Avionic: Electrically or electronically operated items and Instruments that aid in aircraft navigation, communication, and items that directly control auto-flight operation, radar units, and in-flight entertainment units. Instrument means a device using an internal mechanism to show visually or aurally the attitude, altitude, or operation of an aircraft or aircraft part or system. It includes electronic devices for automatically controlling or monitoring an aircraft in flight.	**Privilege:** May perform maintenance, preventive maintenance, or alteration of electrically or electronically operated items, including radar and in-flight entertainment units, and Instruments. May remove/replace parts to gain access to the avionics or instruments. However, may not remove structural members or flight control components. May remove, replace, or install avionic components on aircraft (does not include alteration of aircraft to facilitate installation). Note: Avionic "systems" maintenance/installation falls under the Aircraft rating. **Limitations:** May not install avionic components on aircraft unless it has adequate equipment, tools, training, personnel, and data to perform the work. May not maintain or alter any article for which it is rated if it requires special technical data, equipment, or facilities that are not available to it.	Maintain and/or alter Avionic-Electronic/Electric Items listed in Capability List Maintain and/or alter Avionic-Instrument Items listed in Capability List	List by type, i.e. Flight Data Computer Air Data Computers Communication Radios

Rating System Draft Rev c

Rating (Listed on Cert.)	**Privileges and Limitations**	**Operations Specifications Listing** (Listed on Op Spec.)	**Capability List** (Requires a self-evaluation in accordance with FAR 145.215)
Specialized Service: Specific individual processes associated with the maintenance, preventive maintenance, or alterations of an aviation item. Does not apply to processes used in usual "aircraft" rated maintenance activities.	**Privilege:** May perform a special maintenance processes requiring equipment and/or skills not ordinarily found in a regular repair station. **Limitation:** The repair station's operations specifications must contain the specification, either civil or military used by industry and approved by the Administrator or one developed by the repair station and approved by the Administrator, used in performing the specialized service.	Perform Special Processes listed in Capability List in accordance with (list data or specification)	List by process i.e., Heat treat Plating Welding

AVIATION RULEMAKING ADVISORY COMMITTEE ON AIR CARRIER AND GENERAL AVIATION MAINTENANCE

Attachment 5

SIGN-IN SHEET

APRIL 18, 2002

MEMBER (M) NON-MEMBER (N)	NAME	AFFILIATION	TELEPHONE/ FAX NUMBER	E-MAIL ADDRESS
M	Janice Maniatis	National Air Disaster Alliance/Foundation	770.486.5630 no fax	jmaniati@att.net
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M	BRIAN WHITEHEAD	TCCA	613-941-8371 613-952-3298	whitehb@tc.gc.ca
N	JOE SIRICO	P&W	860-565-6233 860-755-4538	siricojj@pwa.com
M	ROSE SCOONES	BOEING	425-237-4716 425-237-9866	Rosita.M.Scoones@Boeing.com
M	BOB HALL	AIR LINE PILOTS ASSN.	703-689-4205 703-464-2104	hallb@alpa.org
	SARAH MACLEOD	Asst. Chair | ARSA	703.739.9543 9468	sarahsmp@arsa.org
N	JOE BUTTNER	DALLAS AIRMOTIVE-MILLVILLE	856 825-6000 825-0078	JOEBUTTNER@DALLASAIRMOTIVE.COM
N	Steve Serdikoff	PAI	(202)898-1410	serdikoff@compuserve.com

AVIATION RULEMAKING ADVISORY COMMITTEE ON AIR CARRIER AND GENERAL AVIATION MAINTENANCE

SIGN-IN SHEET

APRIL 18, 2002

MEMBER (M) NON-MEMBER (N)	NAME	AFFILIATION	TELEPHONE/ FAX NUMBER	E-MAIL ADDRESS
M	RICHARD PERI	AIRCRAFT ELECTRONICS ASSN	202-589-1144 / 202-220-3104	RICP @ AEA.NET
M	GEORGE PAUL	NACA	202-833-8200	G-PAUL@NACA.CC
M	WALTER DESROSIER	GAMA	202 393 1500 842 4063	WDESROSIER@ GENERALAVIATION.ORG
N	Vanessa Wilkins	FAA	202-267-8029 202-267-5075	vanessa.wilkins@faa.gov
M	David Smith			
M	Marvin Curtis	AECMA		
M	TOM WILLES	NBAA / NATA	419-865-2311 F 419-866-2555	TOMWILLES@NATIONALFLIGHT.COM

AVIATION RULEMAKING ADVISORY COMMITTEE

Repair Station Quality Assurance Technical Report

A report on the advantages and disadvantages of requiring a quality assurance system in part 145 of Title 14, Code of Federal Regulations

March 2002

Attachment 6

INTRODUCTION

The Federal Aviation Administration (FAA) issued notice No. 99–09, Part 145 Review: Repair Stations; Notice of Proposed Rulemaking (64 FR 33142, June 21, 1999), proposing to update and revise part 145 of Title 14, Code of Federal Regulations. The FAA proposed that each repair station establish a quality assurance system acceptable to the Administrator. The FAA stated that guidance on establishing an effective quality assurance system would be included in advisory material published concurrently with the final rule if adopted. The FAA noted that an acceptable quality assurance system would be based on the repair station's size and type of operations. However, commenters generally opposed adding a quality assurance requirement to part 145, citing various concerns addressed later in this report. In amendment No. 145–27, Repair Stations; Final Rule With Request for Comments and Direct Final Rule With Request for Comments (66 FR 41088, August 6, 2001), the FAA removed its proposal for a quality assurance requirement and stated that it intends to address this issue in a subsequent rulemaking. The FAA assigned the Aviation Rulemaking Advisory Committee, Air Carrier and General Aviation Maintenance Issues area (the committee) with the task of producing a technical report that reviews current regulatory requirements for a quality assurance system and recommends a preferred quality assurance system (66 FR 53281, October 19, 2001).

In this technical report, "quality assurance system" refers to a program that monitors the controls used to ensure quality in manufacturing a product or offering a service. Quality control comprises the actual mechanisms an organization uses to ensure quality, such as training procedures, inspections, and procedures manuals. A quality assurance system monitors these quality control mechanisms to verify they are being used and are effective. At present, part 145 incorporates quality control under §145.211 but contains no requirements for quality assurance. Numerous industry commenters and members of the committee note that most repair stations already have quality assurance programs.

CURRENT QUALITY ASSURANCE PROGRAM

[Should describe that there is not one. To be added.]

CONCERNS WITH REGULATING QUALITY ASSURANCE

The committee members agree that a quality assurance program is nearly a necessity for a repair station in the current aviation marketplace. Many committee members also acknowledge the value of having some regulatory controls in place to encourage repair stations to engage in quality control. Some committee members suggest that the FAA implement a voluntary quality assurance program. However, the committee is decidedly split on whether a quality assurance system should be required under part 145.

The committee members differ on the effect of mandating quality assurance under part 145. While half of the committee members regard requiring quality assurance as beneficial to repair stations that lack such programs, the remaining half believe that such a requirement would not achieve greater industry safety or quality for three reasons. First, many committee members believe that mandatory quality assurance would place a heavy burden on small repair stations and have a severe economic impact on this segment of the marketplace. Second, many committee members question whether the FAA has shown sufficient need for a mandatory quality assurance system. Many other industry representatives also express this view in comments. Third, most committee members have strong concerns about the effect disclosure of audit results might have on future FAA enforcement actions.

The committee members agree that quality assurance is important and that any repair station truly committed to quality and safety should have a quality assurance program. However, many on the committee believe that making quality assurance a regulatory control on repair stations fundamentally alters the nature of any quality assurance program. In most respects, quality assurance is self-imposed, driven by an inherent industrial motivation to produce quality results and compete effectively in the marketplace. By making quality assurance mandatory, some committee members believe that the line between regulatory control and business practice will become blurred. Without disputing the necessity of FAA safety regulations, members of the committee argue that quality assurance exists outside the limits of what can be regulated effectively.

REGULATORY BURDEN ON SMALL REPAIR STATIONS

Many committee members believe that the burden a mandatory system could place on small repair stations counsels against regulating quality assurance. Other industry representatives in comments to the FAA echo this concern. They fear that requiring a small repair station to conduct a formal internal audit would force that repair station to incur high costs. For example, a repair station with only one employee would have to require that employee to perform every aspect of the quality assurance program. Because most industry quality assurance programs require separating those who conduct the audit from those subject to the audit, most small repair stations would be forced to hire a third party to conduct audits. Several committee members express concern about the expense

of hiring an independent auditor. Further, the committee questions whether third party audits even should count toward meeting an FAA-mandated internal audit requirement.

Committee members did not argue that quality assurance itself poses a heavy financial burden on small repair stations. According to several committee members, most small repair stations engage in quality assurance, even if it only consists of a manager informally observing the performance of his employees as they go about their jobs. Committee members are concerned about the additional regulatory requirements the FAA is likely to impose on small repair stations under a mandatory quality assurance program. It bears repeating that all committee members regard quality assurance as valuable for repair stations. The concern lies with the possible requirements that the FAA might impose under a mandatory system.

In addition to concerns about the financial burden a mandatory quality assurance program might place on a small repair station, several committee members express concern about the time burden that would be placed on a small repair station. For example, a repair station with only one employee might not be able to commit to an audit that lasts for an extended period. Reserving even a few days for an audit would effectively eliminate a small repair station's ability to take in work during that same time, having serious consequences on that repair station's income.

Several committee members and the FAA suggest that repair station size be a factor in the FAA's requirements for a quality assurance program. Many committee members believe that having different requirements for large and small repair stations would help alleviate some of the concerns about overburdening small repair stations. However, some committee members note that placing more-extensive requirements on large repair stations might afford small repair stations a competitive advantage. Some on the committee believe that addressing these two concerns would result in a quality assurance system so limited in scope as to be worthless.

NEED FOR MANDATORY QUALITY ASSURANCE

Many committee members question whether the FAA has demonstrated sufficient need for a mandatory quality assurance system. A few committee members note that the United States has the best aviation safety record in the world. More important, the safety record surpasses those of European nations that have mandatory quality assurance programs under the Joint Aviation Requirements 145.65. The committee members argue, therefore, that the United States' safety record demonstrates that the U.S. aviation industry adequately addresses quality issues without the FAA's regulatory involvement.

Further, many committee members believe that the United States' safety record indicates that repair stations already are engaging in quality assurance without a regulatory mandate. They argue that the competitive nature of the aviation industry has made quality assurance essentially a necessity for most repair stations. For example, a repair station that wishes to compete seriously against a repair station that has a quality

assurance program must implement its own program to give potential customers a sense of comfort and also to ensure that its work is of comparable quality.

Therefore, committee members argue that the marketplace already is regulating the industry. One committee member states the issue very simply: A quality repair station probably already engages in effective quality assurance and therefore does not need to be regulated. Conversely, a repair station that is producing poor-quality work likely would implement its quality assurance program ineffectively. Therefore, requiring such a repair station to implement a quality assurance system would do little to improve the repair station's level of quality. Moreover, placing heavy regulatory burdens and the threat of enforcement actions on repair stations that already have quality assurance programs actually might serve as a deterrent to continue with a commitment to quality. Therefore, regulatory quality assurance might have no effect on poorly performing repair stations and a negative effect on those stations with rigorous quality assurance systems.

Committee members also express concern that allowing the FAA to regulate quality assurance would set aviation regulation down a "slippery slope," unnecessarily increasing regulatory control over the industry. For example, one committee member offers that an FAA mandate for a quality assurance system might lead to regulation of the specific procedures a repair station uses to ensure quality. Some committee members argue that quality assurance is part of a repair station's corporate culture. Allowing the FAA to mandate a quality assurance system might bring the Administration dangerously close to a repair station's business practices.

The committee adds that it is unclear how effective a mandatory quality assurance system would be. One committee member notes that merely having a quality assurance program does not ensure quality. The committee member argues that documentation, while offering a level of comfort to the FAA, often does not reflect the actual procedures of a repair station. A mandatory quality assurance system might serve only to mollify the FAA's safety concerns without really affecting quality or safety.

DISCLOSURE AND ENFORCEMENT ISSUES

Most committee members express strong concerns about requiring a repair station to reveal the results of internal audits to the FAA. The committee contends that when an audit reveals deficiencies, the FAA would use this information to take enforcement actions against the repair station. Therefore, repair stations may be reticent to reveal such deficiencies to the FAA.

All committee members and industry commenters agree that the purpose of a quality assurance system is to encourage a repair station to examine its policies and procedures periodically to make them better and safer. Many committee members and industry commenters express concern that mandating quality assurance would defeat this purpose and possibly cause a repair station to be less rigorous in its audit for fear of inadequacies that could result in enforcement action. Therefore, the committee believes that without

some measures to prevent the FAA from taking immediate enforcement action when it finds a deficiency, a mandatory quality assurance program would be wholly ineffective.

Committee members believe the FAA could address this concern by mandating a quality assurance program in which the repair station is not required to reveal details that might result in enforcement action. For example, a repair station could note general deficiencies that confirm it follows its quality assurance program.

Another solution the committee offers is that the FAA classify deficiencies uncovered during a quality assurance audit as major or minor. A repair station would have to reveal major deficiencies uncovered during an audit and would be required to engage in immediate corrective action or be subject to enforcement action. A major deficiency would pose an immediate safety threat, requiring a repair station to take immediate action to prevent the problem from presenting a safety hazard. Regardless of how the FAA addresses the issue, the committee believes that a quality assurance system repeatedly resulting in enforcement action would not improve quality in the industry and even might serve as a disincentive to uncover problems with a repair station's policies and procedures.

OPTIONS FOR A MANDATORY QUALITY ASSURANCE PROGRAM

The committee believes the FAA must address the issues identified in this report before any effective quality assurance program can be required of repair stations under part 145. All committee members agree that a mandatory quality assurance system will not achieve the results the FAA intends unless repair stations understand precisely what kind of quality assurance is required of them. The FAA could address this issue by providing clear guidance to repair stations.

Most committee members oppose a regulatory quality assurance system regardless of how the FAA implements it and regardless of how effective the guidance materials are. Therefore, the committee will only define what it believes are the basic elements of a quality assurance system.

BASIC ELEMENTS OF A MANDATORY QUALITY ASSURANCE PROGRAM

In reviewing industry quality assurance programs used, the committee members agree that there are four basic elements in any quality assurance system: auditing, root-cause analysis, corrective action and followup, and management review.

AUDITING

[The committee should provide a clear definition of "audit."]

The committee finds that a fundamental requirement of any quality assurance system is auditing. Under a possible mandatory quality assurance system, a repair station would conduct audits of its operations to ensure that its manual complies with FAA regulations and that its operations conform to the requirements of its manual. The repair station's audit system methodology would require complete documentation of the audit. The committee agrees that a system of internal audits would include at least the following requirements.

First, a repair station would conduct scheduled audits on a periodic basis to ensure currency. The committee has not concluded how often a repair station should conduct audits; but the committee members agree that the repair station could divide its operations into sections, provided the repair station audits its entire operation within the applicable interval. For example, if the quality assurance system requires that a repair station audit its operations once every year, the repair station could audit different divisions of its operations separately, provided it audits its entire operations within the 1-year timeframe.

Second, a repair station would designate in its manual who can conduct audits. The committee believes that it might be necessary for some repair stations, especially smaller repair stations, to use third parties to complete audits. The committee has yet to reach a consensus on what third party audits would meet the requirements of a quality assurance system. The committee agrees that when an audit is performed internally, as most often

will be the case, the selected auditor should not audit the task for which he or she is responsible.

Third, a repair station should prepare for an audit prior to reviewing the repair station's operations. During this preparation, the repair station should review its manual alongside FAA regulations to ensure that the manual is in compliance. After reviewing all of the requirements of the repair station manual, an auditor would prepare a checklist of items to examine during the audit. During the audit, the individual designated by the repair station's manual would gather data, inspect the repair station's procedures and materials, and interview employees to determine whether the repair station's actual operations deviate from its manual requirements.

Fourth, the repair station would prepare a record of the audit. This record would document the audit process, note what aspects of the repair station's operations were audited, and indicate how the operations were audited. This documentation also would note the manner in which the auditor gathered the information, whether by examining the repair station's documents, by observing repair station employees' performance, or by interviewing repair station employees. If the auditor finds any deviations from the repair station manual, the auditor would document these findings and include objective evidence of the deviations in the audit record.

After the audit is completed and documented, a repair station would be required to complete the last three basic elements of the quality assurance system. The quality assurance system being discussed, however, also would require a repair station to complete the elements that follow whenever noncompliance with the repair station manual is found, whether during an audit or not, in accordance with §145.211. For example, if a repair station manager conducting a routine employee inspection notes that a mechanic is not following the procedures set forth in the repair station manual, this noncompliance would trigger the remaining basic elements of the quality assurance system even though the deviation was not observed during a formal audit.

ROOT CAUSE ANALYSIS

After a repair station completes an audit or discovers a deviation from repair station procedure, the repair station conducts a root-cause analysis. In this technical report, the committee defines root-cause analysis as a finding of a fundamental breakdown or failure within a system that, when resolved, prevents a recurrence of the problem. This analysis would include a requirement that the repair station then determine whether other products or systems in the repair station are impacted by the deviation. The committee agrees that the most important aspect of a quality assurance system would be timely analysis of the underlying cause of a deviation.

CORRECTIVE ACTION AND FOLLOW-UP

After a repair station discovers and documents a deviation and identifies its root cause, the repair station prepares a plan to remove the root cause. The repair station establishes immediate, short-term, and long-term actions to document implementation dates and identify responsible personnel. After the repair station implements a corrective action

plan, the repair station must validate that it took the necessary corrective action and has removed the root cause of the deviation. The committee agrees that it is important for a repair station to establish a feedback loop, that is, a system for ongoing evaluation of its policies and procedures. In addition, a repair station must take corrective action in a timely fashion. For deviations with possibly severe safety consequences, the FAA would require the repair station to take corrective action immediately or face enforcement action.

MANAGEMENT REVIEW

The committee agrees that a quality assurance system would hold the accountable manager responsible for overseeing the audit process and require him or her to review audit documentation to ensure the repair station personnel comply with regulatory requirements. The committee also agrees that the repair station manager may be required to conduct a trend analysis of past audit results to identify systemic problems with the repair station's procedures. The committee also believes the repair station manager must confirm that the repair station took corrective action that has removed the root cause of any deviations.

The committee notes this stage in the quality assurance process is also essential in ensuring that the repair station maintains a feedback loop. Especially at large repair stations, a manager might not have the chance to directly inspect or observe the performance of the employees. By maintaining an effective system of feedback and review, the manager has the resources to stay informed about the repair station's performance and to keep apprised of any trends that may emerge and demand a reassessment of that repair station's policies and procedures.

COST-BENEFIT ANALYSIS OF A MANDATORY QUALITY ASSURANCE PROGRAM

[This section to be included in final report]

VOLUNTARY QUALITY ASSURANCE PROGRAM

Several committee members recommend the FAA implement a voluntary quality assurance program. Under such a program, repair stations would comply voluntarily with FAA requirements for a quality assurance system. A repair station that complies with these standards would enjoy reduced inspection requirements, provided the repair station can demonstrate compliance.**[The committee should clarify and expand this idea.]**