

Airworthiness Directive

Federal Register Information

[Federal Register: November 08, 1995 (Volume 60, Number 216)]

[Page 56224]

Header Information

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [60 FR 56224 NO. 216 11/8/95]

Docket No. 95-ANE-32; Amendment 39-9420; AD **95-22-12**

Hamilton Standard 14RF, 247F, 14SF, and 6/5500/F Series Propellers
PDF Copy (If Available):

Preamble Information

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment supersedes an existing airworthiness directive (AD), applicable to Hamilton Standard 14RF, 247F, 14SF, and 6/5500/F (formerly Hamilton Standard/British Aerospace 6/5500/F) series propellers, that currently requires initial and repetitive inspections of the propeller control unit (PCU) servo ballscrew internal spline (BIS) teeth for wear, and replacement, if necessary, of PCU servo BIS assemblies. This amendment increases the repetitive PCU servo BIS teeth inspection interval from 1,500 to 2,500 hours time in service (TIS) for propellers that have a ballscrew quill damper installed. In addition, the FAA has reevaluated the optional installation of the Secondary Drive Quill (SDQ), and has added a new compliance end-date of June 30, 1998, for the installation of the SDQ. This AD will also require initial and repetitive torque check inspections of the primary ballscrew quill once the SDQ is installed. This amendment is prompted by field service and laboratory test data that indicate that the repetitive inspection interval can be safely increased, and by the development and availability of the SDQ. The actions specified by this AD are intended to prevent inability to control the propeller blade angle due to tooth wear in the PCU servo BIS assembly.

DATES: Effective May 6, 1996.

ADDRESSES:

Submit comments in triplicate to the Federal Aviation Administration (FAA),
New
England Region, Office of the Assistant Chief Counsel, Attention: Rules
Docket No. 95-ANE-32, 12 New England Executive Park, Burlington, MA
01803-5299.

The service information referenced in this AD may be obtained from
Hamilton Standard, One Hamilton Road, Windsor Locks, CT 06096-1010.
This information may be examined at the FAA, New England Region, Office
of the Assistant Chief Counsel, Burlington, MA; or at the Office of the
Federal Register, 800 North Capitol Street, NW., suite 700, Washington,
DC.

FOR FURTHER INFORMATION CONTACT: Frank Walsh, Aerospace
Engineer, Boston Aircraft Certification Office, FAA, Engine and Propeller
Directorate, 12 New England Executive Park, Burlington, MA 01803-5299;
telephone (617) 238-7158, fax (617) 238-7199.

SUPPLEMENTARY INFORMATION:

The FAA recently issued a proposal to amend part 39 of the Federal
Aviation Regulations (14 CFR part 39) by superseding airworthiness
directive (AD) 94-22- 12, Amendment 39-9062 (59 FR 55199, November 4,
1994), which is applicable to Hamilton Standard 14RF, 247F, 14SF, and
6/5500/F (formerly Hamilton Standard/British Aerospace 6/5500/F) series
propellers. This notice of proposed rulemaking (NPRM) was published in
the Federal Register on June 6, 1995 (60 FR 29797). That action proposed
to require increasing the repetitive propeller control unit (PCU) servo
ballscrew internal spline (BIS) teeth inspection interval from 1,500 to 2,500
hours time in service (TIS) for propellers that have a ballscrew quill damper
installed. In addition, that action proposed to add an optional terminating
action to the repetitive PCU servo BIS teeth inspections by installing a
Secondary Drive Quill (SDQ). With the SDQ installed, that action proposed
to require an initial torque check inspection of the primary ballscrew quill at
5,000 hours TIS since installation of the SDQ, and thereafter repetitive
torque check inspections at intervals not to exceed 5,000 hours TIS since
last inspection.

Since issuance of the NPRM, the FAA has been advised by the
manufacturer that the logistics (parts, special tools, personnel, shop
capability, and aircraft availability), required for the installation of the SDQ
for all operators can support installation by June 30, 1998. Based on this
factor, the FAA has re-evaluated the installation of the SDQ as an optional
requirement, and has changed the compliance section of the AD to provide

a requirement that the SDQ must be installed by June 30, 1998. The FAA determined that publication of this compliance end-date in this rule, rather than in a separate rulemaking, will benefit those operators who may wish to install the SDQ at an earlier, more convenient maintenance opportunity than otherwise might have been the case without the notice of the compliance end-date. The FAA recognizes, however, that the compliance end-date is a new requirement, and, therefore, has provided for a comment period and a separate effective date for the compliance end-date provision of this AD. Installation of an SDQ will constitute terminating action for the initial and repetitive inspections required by paragraph (a) of this AD.

The FAA did receive comments on the NPRM and addressees those comments in this rule.

The actions would be required to be accomplished in accordance with the following Hamilton Standard Alert Service Bulletins (ASB's), all dated May 5, 1995: No. 14SF-61-A59, Revision 6; No. 14RF-9-61-A53, Revision 7; No. 14RF-19-61-A25, Revision 6; No. 14RF-21-61-A38, Revision 6; No. 247F-61-A3, Revision 5; and No. 6/5500/F-61-A11, Revision 6. These ASB's enable affected propellers with a ballscrew quill damper installed in production or in accordance with the following Hamilton Standard Service Bulletins (SB's), all dated September 27, 1994, to extend the repetitive PCU servo BIS teeth inspection interval from 1,500 to 2,500 hours TIS since last inspection: No. 14SF-61-67, Revision 2; No. 14RF-9-61-61, Revision 1; No. 14RF-19-61-29, Revision 2; No. 14RF-21-61-48, Revision 2; No. 247F-61-6, Revision 2; and No. 6/5500/F-61-19, Revision 2.

In addition, the FAA has reviewed and approved the technical contents of the following Hamilton Standard SB's, all Revision 2, all dated June 22, 1995: No. 14SF-61-82; No. 14RF-9-61-76; No. 14RF-19-61-43; No. 14RF-21-61-62; No. 247F-61-13; and No. 6/5500/F-61-33. These SB's describe procedures for installing the SDQ.

Also, the FAA has reviewed and approved the technical contents of the following Hamilton Standard SB's, all Revision 1, dated May 17, 1995; No. 14SF-61-81; No. 14RF-9-61-75; No. 14RF-19-61-41; No. 14RF-21-61-60; No. 247F-61-12; and No. 6/5500/F-61-32. These SB's describe procedures for initial and repetitive torque check inspections of the primary ballscrew quill if the SDQ is installed.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received.

One commenter (the manufacturer) states that due to an arithmetic error, the total cost impact of the current AD per year on US operators should be

estimated to be \$138,000, and therefore the approximate yearly savings to US operators would be \$55,200 instead of \$51,570, a 6.7% increase in savings. The FAA concurs and has revised the economic analysis of this final rule accordingly.

The manufacturer states that the number of work hours required for installation of the SDQ should be three, as stated in the SB's. The FAA concurs and has revised the economic analysis of this final rule accordingly.

The manufacturer states that the number of work hours required for accomplishment of the torque check should be 0.25, assuming the spinner and transfer tube are removed, as stated in the SB's. The FAA concurs and has revised the economic analysis of this final rule accordingly.

The manufacturer states the approximate yearly inspection cost should be \$6 per propeller per year. The FAA concurs and has revised the economic analysis of this final rule accordingly.

The manufacturer states that the correct SB number referenced in the compliance section should be 6/5500/F-61-32. The FAA concurs and has revised this final rule accordingly.

One commenter presents comments similar to those previously submitted to the FAA concerning AD 92-22-12, which increased the BIS inspection interval from 500 to 1,500 hours TIS. The commenter states that the specific cause of wear has not been identified by the manufacturer and that the modifications proposed in the NPRM do not correct the inherent wear characteristics associated with BIS tooth wear. In addition, all causes for PCU wear should be positively identified before the inspection interval is increased.

The FAA does not concur. The FAA has reviewed data from numerous tests and investigations and has determined the cause of extreme wear when it occurs on a very small number of splines in service. These tests and investigations have revealed that spline joint wear factors include:

Magnitude and direction of vibratory environment.

How well the spline joint is lubricated.

Motion of elements within the joint due to stack up of clearances.

Thickness of chrome plating on spline teeth.

The FAA has therefore determined that there is no single factor for wear of this complex joint. However, the major contributors to these wear factors are

lack of lubrication and axial motion. Laboratory tests and controlled field service data have proven the damper reduces all of these wear factors by over 20 times the rate that was experienced before the damper installation.

The commenter also states that modifications to the PCU should be made so that wear-induced failure cannot cause catastrophic consequences. The FAA concurs and has determined that the addition of the primary quill damper reduces the probability of wear occurring. In addition, installation of the newly designed SDQ assembly hardware provides a redundant load path.

The commenter also states that the field data used to justify the increased inspection interval is being collected from only a small percentage of units in operation. The FAA does not concur. The field data includes a small controlled in-service usage program in addition to many thousands of reports submitted to the FAA for each BIS inspection, as required by AD 94-22-12.

This commenter also questions the criteria for determining the 2,500 hours TIS inspection interval for the BIS. In addition, the commenter finds the 5,000 hours TIS torque check interval to be arbitrary and unfounded, and believes that the torque check should be conducted during routine maintenance actions. The FAA does not concur. The FAA has phased in the inspection intervals for the BIS with the damper installed by intervals of 500, 1,500, and 2,500 hours TIS based on field service reports of a controlled population, continued fleet-wide reports of many thousands of inspections required by AD 94-22-12, and by certification test data that has revealed that installation of the ballscrew damper resulted in a spline life improvement factor of 20 times the original 500 hours TIS inspection interval, thereby justifying by test data at least a 10,000 hours TIS inspection interval for the BIS with the damper installed.

The FAA established torque check intervals for the SDQ based on test data on many test specimens for the equivalent of three times the proposed 5,000 hours TIS torque check interval. The interval of 5,000 hours TIS also coincides with a number of other propeller maintenance activities occurring at that time. The FAA is not mandating the SDQ interval at earlier, opportune times coinciding with routine maintenance, but believes that operators may be able to take advantage of propeller disassembly and conduct the SDQ inspection at that time.

The commenter also states that if the positive torque transmitting capability of the BIS fails and the SDQ becomes operational, the PCU has reverted to a single load path and the redundant feature is no longer available. The FAA concurs that reversion to a single load path would make use of the stated redundancy only after the primary path had failed. However, the

torque check is designed to detect failure of the primary path and therefore provides a positive indication that the PCU is utilizing the secondary path and that replacement of the PCU is necessary.

Several commenters state that the AD's required torque checks of the primary ballscrew after an SDQ is installed, in paragraph (d) of the AD, are repetitious of the same torque check requirements found in the Airworthiness Limitations Section of the Manufacturer's Maintenance Manual (MMM). The commenters suggest that the FAA should, therefore, delete paragraph (d) from the AD because it represents a check redundant to one already required. The FAA does not agree.

While the FAA views as mandatory the inspections contained in the Airworthiness Section of the MMM, these particular inspections were not part of the MMM at the time of type certification. In order to insure that all operators have constructive notice of the inspections contained in paragraph (d) of the AD, the FAA has determined that it is necessary to publish those requirements in this AD. While changes to the Airworthiness Limitations Section of an MMM normally follow an AD making those changes, the fact that the MMM already contains the inspections of paragraph (d) does not obviate the need to include those requirements in an AD. The MMM, then, merely reflects the inspections not present at the time of type certification and later made mandatory by this AD. Operators do not, of course, have to perform two inspections; one inspection would satisfy both requirements. Therefore, the presence of the same inspection in an AD and in the MMM does not increase the maintenance burden on any operator.

There are approximately 2,506 propellers of the affected design in the worldwide fleet. The FAA estimates that 1,150 propellers installed on aircraft of U.S. registry will be affected by this AD, that it will take approximately 1.5 work hours per propeller to accomplish the PCU servo BIS teeth inspections, and that the average labor rate is \$60 per work hour. Based on these figures, and on the average utilization rate of 2,000 hours TIS per year equating to 1.33 inspections per year, the total cost impact of the current AD per year on U.S. operators is estimated to be \$138,000. However, this superseding AD would require only 0.8 inspections per year, resulting in an approximate yearly inspection cost of \$82,800, which would provide an approximate yearly savings to U.S. operators of \$55,200.

The terminating action will require 3 work hours to install the SDQ, and required parts will cost approximately \$5,500 per propeller. With the SDQ installed, the AD will require initial and repetitive torque check inspections of the primary ballscrew quill. The torque check inspection will take 0.25 work hours to perform the required actions, and with an average utilization rate of 2,000 hours TIS per year equating to 0.4 inspections per year, resulting in

an approximate yearly inspection cost of \$6 per propeller.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety, the requirement to install a Secondary Drive Quill (SDQ) was not preceded by notice and an opportunity for public comment, therefore, comments are specifically invited on the installation requirement described in compliance paragraph (b) of this AD. Interested persons are invited to comment on this requirement of this rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified under the caption "ADDRESSEES." All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 95-ANE-34." The postcard will be date stamped and returned to the commenter.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 USC 106(g), 40101, 40113, 44701. §39.13 - [AMENDED]

2. Section 39.13 is amended by removing Amendment 39-9062 (59 FR 55199, November 4, 1994), and by adding a new airworthiness directive, Amendment 39-9420, to read as follows:

Regulatory Information

95-22-12 Hamilton Standard: Amendment 39-9420. Docket 95-ANE-32. Supersedes AD 94-22-12, Amendment 39-9062.

Applicability: Hamilton Standard Models 14RF-9, 14RF-19, 14RF-21, and 14RF-23; 247F-1; 14SF-5, 14SF-7, 14SF-11, 14SFL11, 14SF-15, 14SF-17, 14SF-19, 14SF-23; and 6/5500/F propellers installed on but not limited to Embraer EMB-120 and EMB-120RT; SAAB-SCANIA SF340B; Aerospatiale ATR42-100, ATR42-300, ATR42-320, ATR72, ATR72-210; DeHavilland DHC-8-100 series, DHC-8-300; Construcciones Aeronauticas SA (CASA) CN-235 and CN-235-100; Canadair CL215T and CL415; and British Aerospace ATP airplanes. NOTE: This airworthiness directive (AD) applies to each propeller identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For propellers that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must use the authority provided in paragraph (e) to request approval from the Federal Aviation Administration (FAA). This approval may address either no action, if the current configuration eliminates the unsafe condition, or different actions necessary to address the unsafe condition described in this AD. Such a request should include an assessment of the effect of the changed configuration on the unsafe condition addressed by this AD. In no case does the presence of any modification, alteration, or repair remove any propeller from the applicability of this AD.

Compliance: Required as indicated, unless accomplished previously.

To prevent the inability to control the propeller blade angle due to tooth wear in the propeller control unit (PCU) servo ballscrew internal spline (BIS) assembly, accomplish the following:

(a) Inspect the PCU servo BIS assembly for tooth wear in accordance with the Accomplishment Instructions of the following Hamilton Standard Alert

Service Bulletins (ASB), all dated May 5, 1995, as applicable: No. 14RF-9-61-A53, Revision 7; No. 14RF-19-61-A25, Revision 6; No. 14RF-21-61-A38, Revision 6; No. 247F-61-A3, Revision 5; No. 14SF-61-A59, Revision 6; and No. 6/5500/F-61-A11, Revision 6; as follows:

(1) For a PCU with unknown time in service (TIS), and unknown TIS since the last inspection, on the effective date of this AD, and that does not have a ballscrew quill damper installed, inspect within 200 hours TIS after the effective date of this AD.

(2) For a PCU with 1,800 or more hours TIS or unknown TIS on the effective date of this AD, and either has not been inspected, or has been inspected more than 500 hours prior to the effective date of this AD, in accordance with the applicable Hamilton Standard ASB listed in paragraph (a) of this AD; and that does not have a ballscrew quill damper installed; inspect within 200 hours TIS after the effective date of this AD.

(3) For a PCU with 1,800 or more hours TIS or unknown TIS on the effective date of this AD, and that has been inspected within the previous 500 hours TIS in accordance with the applicable Hamilton Standard ASB listed in paragraph (a) of this AD, and that does not have a ballscrew quill damper installed, inspect within 500 hours TIS since the last inspection in accordance with the applicable Hamilton Standard ASB listed in paragraph (a) of this AD.

(4) For a PCU with less than 1,800 hours TIS on the effective date of this AD, and that does not have a ballscrew quill damper installed, inspect prior to accumulating 1,800 hours TIS, or within 300 hours TIS after the effective date of this AD, whichever occurs later.

(5) For a PCU that has a ballscrew quill damper installed in production or in accordance with the following applicable Hamilton Standard Service Bulletins (SB), all dated September 27, 1994, or previous revisions: No. 14SF-61-67, Revision 2; No. 14RF-9-61-61, Revision 1; No. 14RF-19-61-29, Revision 2; No. 14RF-21-61-48, Revision 2; No. 247F-61-6, Revision 2; and No. 6/5500/F-61-19, Revision 2; inspect within 2,500 hours TIS since installation of the ballscrew quill damper.

(6) Thereafter, inspect at intervals described as follows:

(i) For propellers that have a ballscrew quill damper installed in production or in accordance with the applicable Hamilton Standard SB listed in paragraph (a)(5) of this AD, or previous revisions, inspect at intervals not to exceed 2,500 hours TIS since the last inspection required by this AD.

(ii) For propellers that do not have a ballscrew quill damper installed in

production or in accordance with the applicable Hamilton Standard SB listed in paragraph (a)(5) of this AD, inspect at intervals not to exceed 500 hours TIS since the last inspection required by this AD.

(7) If PCU servo BIS teeth are worn beyond the limits specified in the Accomplishment Instructions of the applicable ASB's listed in paragraph (a) of this AD, prior to further flight, replace the PCU with a serviceable assembly in accordance with the Accomplishment Instructions of the applicable ASB's listed in paragraph (a) of this AD, and thereafter inspect in accordance with paragraphs (a)(5) and (a)(6) of this AD.

(b) Prior to June 30, 1998, install a Secondary Drive Quill (SDQ) in accordance with the Accomplishment Instructions of the following applicable Hamilton Standard SB's, all Revision 1, all dated May 17, 1995: No. 14SF-61-82; No. 14RF-9-61-76; No. 14RF-19-61-43; No. 14RF-21-61-62; No. 247F-61-13; and No. 6/5500/F-61-33.

(c) Installation of an SDQ in accordance with applicable SB's listed in paragraph (b) of this AD constitutes terminating action to the repetitive inspections required by paragraph (a) of this AD.

(d) With an SDQ installed, perform an initial torque check inspection of the primary ballscrew quill at 5,000 hours TIS since installation of the SDQ, and thereafter at intervals not to exceed 5,000 hours TIS since last inspection, and remove from service and replace with a serviceable part, if necessary, in accordance with the following applicable Hamilton Standard SB's, all Revision 2, dated June 22, 1995: No. 14SF-61-81; No. 14RF-9-61-75; No. 14RF-19-61-41; No. 14RF-21-61-60; No. 247F-61-12; and No. 6/5500/F-61-32.

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Boston Aircraft Certification Office. The request should be forwarded through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Boston Aircraft Certification Office. NOTE: Information concerning the existence of approved alternative method of compliance with this AD, if any, may be obtained from the Boston Aircraft Certification Office.

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the aircraft to a location where the requirements of this AD can be accomplished.

(g) The actions required by this AD shall be done in accordance with the following Hamilton Standard service documents:

Document No.	Pages	Revision	Date
ASB No. 14SF-61-A59	1	6	May 5, 1995
	2	5	December 30, 1994
	3-6	6	May 5, 1995
	7	3	March 1, 1994
	8	2	July 28, 1993
	9-10	4	April 7, 1994
	11-20	3	March 1, 1994
	21	4	April 7, 1994
Total pages: 21.			
ASB No. 14RF-9-61-A53	1-6	7	May 5, 1995
	7	6	December 30, 1994
	8	3	July 28, 1993
	9-10	6	December 30, 1994
	11-12	4	March 1, 1994
	13	5	April 7, 1994
	14-20	4	March 1, 1994
	21	5	April 7, 1994
Total pages: 21.			
ASB No. 14RF-19-61-A25	1-6	6	May 5, 1995
	7	5	December 30, 1994
	8	2	July 28, 1993
	9	4	April 7, 1994
	10	3	March 1, 1994
	11	4	April 7, 1994
	12-20	3	March 1, 1994
	21	4	April 7, 1994
Total pages: 21.			
ASB No. 14RF-21-61-A38	1	6	May 5, 1995
	2	5	December 30, 1994
	3-6	6	May 5, 1995
	7	5	December 30, 1994
	8	2	July 28, 1993
	9-10	4	April 7, 1994
	11-20	3	March 1, 1994

	21	4	April 7, 1994
Total pages: 21.			
ASB No. 247F-61-A3	1	5	May 5, 1995
	2	4	December 30, 1994
	3-6	5	May 5, 1995
	7	4	March 1, 1994
	8	1	July 28, 1993
	9-10	3	April 7, 1994
	11-19	2	March 1, 1994
	20	3	April 7, 1994
Total pages: 20.			
ASB No. 6/5500/F-61-A11	1	6	May 5, 1995
	2	5	December 30, 1994
	3-6	6	May 5, 1995
	7	5	December 30, 1994
	8	3	March 1, 1994
	9	5	December 30, 1994
	10-11	4	April 7, 1994
	12	2	July 28, 1993
	13	3	March 1, 1994
	14	2	July 28, 1993
	15-20	3	March 1, 1994
	21	4	April 7, 1994
Total pages: 21.			
SB No. 14SF-61-67	1	2	September 27, 1994
	2	1	May 6, 1994
	3-9	Original	December 9, 1993
	10	1	May 6, 1994
	11	Original	December 9, 1993
	12	2	September 27, 1994
	13-15	Original	December 9, 1993
	16	1	May 6, 1994
Total pages: 16.			
SB No. 14RF-9-61-61	1-2	1	September 27, 1994
	3-10	Original	December 9, 1993

	11	1	September 27, 1994
	12-14	Original	December 9, 1993
Total pages: 14.			
SB No. 14RF-19-61-29	1	2	September 27, 1994
	2	1	May 6, 1994
	3-10	Original	December 9, 1993
	11	2	September 27, 1994
	12-13	Original	December 9, 1993
	14	1	May 6, 1994
Total pages: 14.			
SB No. 14RF-21-61-48	1-4	2	September 27, 1994
	5-10	Original	December 9, 1993
	11	2	September 27, 1994
	12-13	Original	December 9, 1993
	14	1	May 6, 1994
Total pages: 14.			
SB No. 247F-61-6	1-4	2	September 27, 1994
	5-10	Original	December 9, 1993
	11	2	September 27, 1994
	12-13	Original	December 9, 1993
	14	1	May 6, 1994
Total pages: 14.			
SB No. 6/5500/F-61-19	1	2	September 27, 1994
	2	1	May 6, 1994
	3-10	Original	December 6, 1993
	11	2	September 27, 1994
	12	Original	December 6, 1993
	13-14	1	May 6, 1994
Total pages: 14.			
SB No. 14SF-61-82	1-36	1	May 17, 1995
Total pages: 36.			
SB No. 14RF-9-61-76	1-33	1	May 17, 1995
Total pages: 33.			
SB No. 14RF-19-61-43	1-34	1	May 17, 1995
Total pages: 34.			

SB No. 14RF-21-61-62	1-33	1	May 17, 1995
Total pages: 33.			
SB No. 247F-61-13	1-34	1	May 17, 1995
Total pages: 34.			
SB No. 6/5500/F-61-33	1-33	1	May 17, 1995
Total pages: 33.			
SB No. 14SF-61-81	1-12	2	June 22, 1995
Total pages: 12.			
SB No. 14RF-9-61-75	1-10	2	June 22, 1995
Total pages: 10.			
SB No. 14RF-19-61-41	1-10	2	June 22, 1995
Total pages: 10.			
SB No. 14RF-21-61-60	1-10	2	June 22, 1995
Total pages: 10.			
SB No. 247F-61-12	1-10	2	June 22, 1995
Total pages: 10.			
SB No. 6/5500/F-61-32	1-11	2	June 22, 1995
Total pages: 11.			

This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Hamilton Standard, One Hamilton Road, Windsor Locks, CT 06096-1010. Copies may be inspected at the FAA, New England Region, Office of the Assistant Chief Counsel, 12 New England Executive Park, Burlington, MA; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(h) This amendment becomes effective on November 24, 1995 as to all compliance paragraphs except paragraph (b) of this AD.

(i) This amendment becomes effective on May 6, 1996 as to compliance paragraph (b) of this AD.

Footer Information

Comments
