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BULLETIN TYPE: Joint Flight Standards Handbook Bulletin for Air Transportation (HBAT), Airworthiness (HBAW), and General Aviation (HBGA)

BULLETIN NUMBER: HBAT 99-07, HBAW 99-07 and HBGA 99-10
(URGENT)

BULLETIN TITLE: Flight Standards Policy - Company Operating Manuals and Company Training Program Revisions For Compliance With Current Airplane or Rotorcraft Flight Manual Revisions

EFFECTIVE DATE: 05/28/99

TRACKING: NTSB Safety Recommendations A-98-89, A-98-95, A-98-102, and A-98-103

NOTE: THIS BULLETIN REQUIRES PTRS INPUT AND TIME SPECIFIC ACTIONS BY PRINCIPAL OPERATIONS INSPECTORS AND OPERATORS - SEE PARAGRAPH #5 AND #6.

NOTE: THIS BULLETIN IS LIMITED IN SCOPE TO OPERATIONS UNDER PARTS 121, 125, AND 135.

1. PURPOSE.

A. The purpose of this bulletin is to:

(1) Ensure that flightcrews are receiving "current" aircraft manufacturer operating information on the aircraft they operate by incorporating "current" approved aircraft manufacturer information necessary for safe operation into operator's company manuals and training programs; and,

(2) Address National Transportation Safety Board's (NTSB) safety recommendations A-98-89, A-98-95, A-98-102, and in part, A-98-103.

B. The purposes stated above will be accomplished by the following:

(1) Clarify the meaning of the term "current" as it relates to Airplane Flight Manual (AFM), Rotorcraft Flight Manual (RFM), Company Flight Manual (CFM), and Company Training Program;

(2) Establish policy for handling aircraft manufacturers operations bulletins;

(3) Establish safety policy for each operator to:

(a) Have in place a system for the timely receipt of AFM/RFM revisions;

(b) Develop and submit a written action plan to its Principal Operations Inspector (POI) as outlined in paragraph 5B(2) below;

(c) Make available in a timely manner a "current" copy of an AFM/RFM to its POI as outlined in paragraph 5B(3) below; and,

(4) Provide guidance for POI's to conduct surveillance of the operator's system for receipt of AFM/RFM revisions, and the incorporation of that information required by Title 14 of the Code of Federal Regulations, (14 CFR) part 91, section 91.9, and the safety policy prescribed in this bulletin into company manuals and training programs.

2. BACKGROUND.

A. On January 9, 1997, an aircraft accident near Monroe, Michigan resulted in 29 fatalities. During its investigation, the NTSB concluded that the aircraft manufacturer distributed an operations bulletin nine months before the accident. The operations bulletin dated April 12, 1996, titled "Operation in Icing Conditions" recommended minimum airspeeds while flying manually (autopilot off) and when using the autopilot in icing conditions. The operations bulletin also recommended turning de-ice boots on at the first sign of ice formation; whereas, the previous procedure for wing and tail de-ice boot activation was to wait until approximately $\frac{1}{4}$ to $\frac{1}{2}$ inch of ice accreted before activation. Approximately twelve days after the aircraft manufacturer's operations bulletin was published, an AFM "Normal Procedures" revision was released recommending that the wing and tail ice protection systems be turned on as advocated in the operations bulletin. Failure to implement the recommended minimum airspeeds and failure to implement the new procedure to activate the de-ice boots at the first sign of ice played a significant contributing role in the accident.

(1) The NTSB determined one of the probable causes of this accident was the Federal Aviation Administration's (FAA) failure to ensure that a CTA/FAA-approved procedure for the accident airplane's de-ice system operation was implemented by U.S.-based carriers. (CTA, Centro Tecnico Aeroespacial, is the Brazilian Certification Authority.)

(2) Contributing to the accident was:

(a) The operator's failure to establish, adequately communicate, and emphasize to flightcrews specific minimum airspeeds for flight in

icing conditions through its memos, bulletins, manuals, and training program; and,

(b) The flightcrew's acceptance of an ATC-assigned airspeed near the lower margin of the operating airspeed envelope while operating in icing conditions without extending flaps.

B. NTSB Safety Recommendations. Based on its investigation of the accident, the NTSB made 18 safety recommendations. NTSB safety recommendations addressed in this bulletin are numbered 1 through 4 below.

(1) NTSB safety recommendation A-98-89 pertains to the requirement for each POI to discuss with their assigned operator(s) information contained in aircraft flight manual revisions and/or aircraft manufacturer operations bulletins and the sharing of that information with pilots who operate those aircraft.

(2) NTSB safety recommendation A-98-95 relates to the requirement for operators of all turbine-engine driven airplanes to incorporate the aircraft manufacturer's minimum maneuvering airspeeds, for various phases and conditions of flight, into operator's manuals and pilot training programs in a clear and concise manner, with emphasis on minimum safe airspeeds while operating in icing conditions.

(3) NTSB safety recommendation A-98-102 pertains to the requirement for air carriers to adopt the operating procedures contained in the manufacturer's aircraft flight manual, and subsequent approved revisions, or provide written justification that an equivalent safety level results from an alternative procedure.

(4) NTSB safety recommendation A-98-103 pertains to the dissemination of information contained in aircraft manufacturer operations bulletins and flight manual revisions, including the background and justification for the revision, to Flight Standards personnel at all levels, from Aircraft Evaluation Groups to Certificate Management Offices.

(5) This bulletin addresses in part safety recommendation A-98-89 and A-98-103 by establishing safety policy for operators to have readily available and furnish to the POI upon request, a "current" AFM/RFM.

(6) NTSB safety recommendation A-98-89 and A-98-103 will be further addressed by the establishment of an electronic database for use by inspectors. The database will provide a listing of current aircraft manufacturer operations bulletins and flight manual revisions. The electronic database has been developed and will be launched as soon as funding issues for maintaining the database are resolved. The launch

date and procedures for using the database will be announced by a separate handbook bulletin.

3. CLARIFICATION OF "CURRENT." The term "current" as it relates to the AFM and RFM has two meanings, depending on whether one is referring to aircraft certification or referring to ongoing operations conducted under parts 91, 121, 125, or 135. In an October 8, 1998, legal interpretation from the Assistant Chief Counsel, Regulations Division, AGC-200, the term "current" is defined as follows:

A. Certification Rules, part 21, Certification Procedures for Products and Parts. The definition of "*current*," as it pertains to aircraft certification and as it is used in the phrase "current approved Airplane or Rotorcraft Flight Manual" in section 21.5(a), means belonging to the present time. Once the "*current*" AFM or RFM is made available to the owner at the time of delivery of the aircraft, the obligation under section 21.5 is met, fulfilled and complete" (*emphasis added*);

B. Operating Rules, parts 91, 121, 125, and 135. The definition of "current" as it pertains to operations under these parts and as it is used in the phrase "current approved flight manual" in section 121.141(a) has been interpreted by AGC differently from the interpretation of "current" for aircraft certification purposes. In contrast to section 21.5(a), AGC has determined that the word "current" in section 121.141(a) is *ongoing* and those persons certified to operate under part 121 have an ongoing obligation to keep a "current" approved airplane flight manual. (*Emphasis added.*)

NOTE: See Appendix B for a detailed reading of AGC's interpretation of "current."

4. AIRCRAFT MANUFACTURER OPERATIONS BULLETINS. As evidenced by the NTSB's investigation, aircraft manufacturers sometimes convey significant recommended operating procedures information in their operations bulletins, information that may not necessarily be conveyed in an AFM revision. Operators are faced with a dilemma because this new information often conflicts with recommended manufacturer operating procedures in the "current" FAA-approved AFM/RFM.

NOTE: Manufacturers use various terminology for informational bulletins including *All Operator Letter, Communiqué, Operations Bulletin, Informational and/or Communications Directive, etc.*

5. POLICY/ACTION.

A. FAA Policy.

(1) AFM/RFM Revisions. FAA's policy is that information contained in approved sections of the AFM/RFM pertaining to operating limitations, operating procedures, performance information, loading information, and other information necessary for safe operations must be incorporated in the operator's CFM and in its training program(s).

(2) Aircraft Manufacturers Operations Bulletins. FAA's policy with respect to changes in manufacturers' recommended operating procedures contained in aircraft manufacturer operations bulletins are as follows:

(a) Recommended operating procedure changes are for information only; and,

(b) Operators shall not change existing approved aircraft manufacturer recommended operating procedures in their CFM based solely on information contained in the aircraft manufacturers operations bulletin unless the change is coordinated through its POI. Principal operations inspector's will coordinate approval of any proposed changes through the appropriate Aircraft Evaluation Group (AEG) and Aircraft Certification Office (ACO).

B. Operators' Actions. FAA policy governing currency, receipt, notification, incorporation, and dissemination of AFM/RFM revisions is as follows:

(1) "Current" AFM/RFM, CFM, and Training Program(s). Each operator shall ensure that its AFM/RFM, CFM, and Training Program(s) are kept "current" on an ongoing basis.

(2) AFM/RFM Revisions. To ensure that pertinent information from AFM/RFM revisions is evaluated, pending rulemaking, each operator is strongly encouraged to:

(a) Have in place a reliable delivery system that ensures receipt by the operator of AFM/RFM revisions within 30 calendar days of FAA approval;

(b) Develop an action plan and notify its POI in writing within fifteen (15) calendar days of receipt when a new AFM/RFM revision has been received. That notification shall state:

(i) that the operator has evaluated the information contained in the AFM/RFM revision;

(ii) that either the information contained in the AFM/RFM revision is not applicable and why, or, the operator's intended course of action with respect to any changes that will be made in its operating procedure(s) and training program(s);

(iii) if changes are to be made, that the operator either intends to adopt the information contained in the AFM/RFM revision, including the aircraft manufacturers recommended operating procedures, into its company manual(s) and training program(s), or, that an equivalent level of safety results from an alternative course of action specified by the operator. The Administrator must approve any alternative course of action before implementation; and,

(c) Have in place in the company General Maintenance Manual (GMM) policy and procedures assuring that any aircraft alternation performed by the operator that constitutes a required change to the AFM/RFM is incorporated into the AFM/RFM.

NOTE: In some cases, AFM/RFM revisions contain only administrative information and will not require action by the operator other than posting the revision in the AFM and informing the POI of receipt.

(3) Within forty-five (45) days of receipt of this bulletin, each operator is strongly encouraged to ensure that a "current" copy of the AFM/RFM is readily available and furnished upon request to:

(a) the POI for the POI's use at the FAA Certificate Holding District Office (CHDO) during initial review and approval of the operator's CFM and/or training program(s), and during any subsequent review conducted by the POI; and,

(b) other representative(s) of the Administrator for review of the operator's CFM and/or training program(s) at the CHDO.

C. Principal Operations Inspector Actions. Principal Operations Inspectors, including POI's under the Air Transportation Oversight System (ATOS), shall ensure that:

(1) A copy of this bulletin, with cover letter from the POI, is provided to the operator at the earliest opportunity but not later than close of business **June 30, 1999**. A PTRS entry for distribution of this bulletin to the operator shall be listed as activity code 1381, and the "National Use" field entry shall be HBAT9907. The comments section of the PTRS shall be used to record interaction and response of the operator; and,

(2) Pending rulemaking, operators are strongly encouraged to follow the safety policy and actions outlined above.

6. SURVEILLANCE INSTRUCTIONS FOR POI's.

A. Initial surveillance. Principal Operations Inspector's shall conduct initial surveillance within forty five (45) calendar days after

the operator's receipt of this bulletin. The initial review of the operator's AFM/RFM revisions system is to ensure that the delivery system is in place and that revised information is being incorporated into the CFM and training program(s). Initial surveillance will be documented as follows:

(1) PTRS. Inspectors conducting surveillance shall use the PTRS to document the initial review. The activity code is 1621, Manual Procedures, with an entry in the "NATIONAL USE" field of HBAT9907. If surveillance reveals that the AFM/RFM revision system is not in place, the operator will be notified verbally and in writing. Principal Operations Inspector's shall request that operators take corrective action immediately. The comment section of the PTRS will be used to document interaction and response of the operator.

(2) ATOS. Principal operations inspectors under ATOS shall ensure that a Safety Attribute Inspection (SAI) and Element Performance Inspection (EPI), for the operator's AFM revision system, is included in the Comprehensive Surveillance Plan (CSP). If surveillance reveals that the AFM revision system is not in place, the operator will be notified verbally and in writing. Principal Operations Inspector's shall request that operators take corrective action immediately. Recording of ATOS surveillance will be accomplished using the guidance contained in FAA Order 8400.10, Appendix 6.

B. Follow-up Surveillance. After the initial surveillance, follow-up surveillance will be conducted as scheduled in the inspector's work program using National Program Guidelines (NPG) or under the ATOS CSP.

7. APPENDICES.

A. Appendix A renders additional background information regarding the FAA's review of its responsibilities and procedures for approving changes to various manuals developed by manufacturers and operators for use by flightcrews.

B. Appendix B provides a detailed rendering of AGC's interpretation of "current." It also renders Flight Standards' application of the term "current" as it relates to AFM/RFM, CFM, and training program(s) under the operating rules, specifically, parts 91, 121, 125, and 135.

C. Appendix C gives an overview of the language contained in 14 CFR parts 21, 23, 25, 27, 29, 91, 121, 125, and 135, as it pertains to manual requirements.

D. Appendix D presents an overview of current policy contained in FAA Order 8400.10, Air Transportation Operations Inspectors Handbook, as it relates to "content" and "currency" of operator manuals.

8. INQUIRIES. This bulletin was developed by AFS-200 with input from the Northwest Mountain Region Work Group. Valuable input and recommendations were also received from industry and FAA representatives at the FAA's In-flight Operations In Icing Conditions Conference, Work Group V, held in Washington, DC, February 2-4, 1999. Any inquiries from operators may be directed to the POI having oversight responsibilities at the Certificate Holding District Office (CHDO) or Certificate Management Office (CMO). Principal operations inspectors and Regional Office staff may direct any inquiries regarding this bulletin to either Will Swank at (202)493-4602 or Hop Potter at (202)267-3723.

9. LOCATION. This bulletin will expire when it is incorporated into FAA Order 8300.10, Airworthiness Inspector's Handbook, volume 2, chapter 1, section 1, paragraph 11, and volume 2, chapter 79, section 1, paragraph 5.D; FAA Order 8400.10, Air Transportation Operations Inspector's Handbook, volume 3, chapter 15; and, FAA Order 8700.1, volume 2, chapter 75. Until these handbooks are updated, inspectors shall make reference to this bulletin in the margin of the appropriate section of their handbooks.

/s/

L. Nicholas Lacey
Director, Flight Standards Service, AFS-1

APPENDIX A
HBAT 99-07, HBAW 99-07 and HBGA 99-10

ADDITIONAL BACKGROUND

1. After the accident, questions surfaced regarding the FAA's responsibilities and procedures for approving changes to various manuals that are developed by manufacturers and operators for use by flightcrews. The Transport Airplane Directorate Standards staff and the Seattle Aircraft Evaluation Group (AEG) compiled a detailed report showing pertinent regulatory requirements and current procedures. From this report it was learned that there was a diversity of opinions as to what is required by regulations, policy, and operations specifications (OpSpecs). Operators and FAA inspectors reflected this diversity in their activities.

2. To assess this complex issue, a team of Aircraft Certification and Flight Standards personnel reviewed current FAA requirements and procedures for handling various manuals and transmitting manual changes to the operator. The team determined several shortcomings that are presently being addressed. The team also determined that sufficient policy exists that requires POI's to review CFM's and CFM changes provided by the operator. On the other hand, the team determined that no established procedures are in place that mandate communication to the POI that a flight manual (AFM or RFM) revision has been issued and received by the certificate holder. Furthermore, no formal procedure exists to inform the POI what action the operator intends to take with respect to incorporating the information in the flight manual revision into its CFM and training program.

APPENDIX B
HBAT 99-07, HBAW 99-07 and HBGA 99-10

THE MEANING OF CURRENT

1. CLARIFICATION OF "CURRENT." The term "current" as it relates to the AFM and RFM has two definitions, depending on whether one is referring to aircraft certification or referring to ongoing operations conducted under parts 91, 121, 125, or 135. In an October 8, 1998, legal interpretation from the Assistant Chief Counsel, Regulations Division, AGC-200, the term current is defined in paragraph 2 for certification rules and in paragraph 3 for operating rules. Paragraphs 4 and 5 render Flight Standards application of the term "current" as it relates to the CFM and training program(s).

2. CERTIFICATION RULES, PART 21, CERTIFICATION PROCEDURES FOR PRODUCTS AND PARTS. AGC defines the term "current," as it pertains to aircraft certification and as it is used in the phrase "current approved Airplane or Rotorcraft Flight Manual" in section 21.5(a), as follows:

"According to Webster's II Dictionary the adjective "current" means belonging to the *present time*. The use of the word "current" in section 21.5 is limited by the phrase "at the time of delivery of the aircraft." Thus, those persons who are governed by section 21.5 are required to make available to the aircraft owner a "current" approved AFM or RFM *at the time of delivery of the aircraft*. Once the "current" AFM or RFM is made available to the owner at the time of delivery of the aircraft, the obligation under section 21.5 is met, fulfilled and complete."
(*Emphasis added.*)

3. OPERATING RULES, PARTS 91, 121, 125, AND 135. AGC defines the term "current" as it pertains to operations under these parts and as it is used in the phrase "current approved flight manual" in section 121.141(a) differently from the definition of "current" for aircraft certification purposes. In contrast to section 21.5(a), AGC has determined that:

"The word "current" in section 121.141(a) is not similarly limited by other words in section 121.141(a). Thus, the nature of the obligation in section 121.141(a) is *ongoing*. Those persons certified to operate under part 121 have an *ongoing obligation* to keep a "current" approved airplane flight manual for each type of airplane that it operates except for nontransport category airplanes certificated before January 1, 1965." (*Emphasis added.*)

A. In its summation of section 21.5(a) and section 121.141(a), AGC made the following comment:

"The type certificate holder or its licensee satisfies its section 21.5 obligation when it makes available a "current" AFM or RFM at the time of delivery of the aircraft to the owner. On the other hand, the person certificated to operate under part 121 has an *ongoing obligation* to keep a "current" AFM. So, for example, a 737 manufactured in 1993 and sold in 1993 would have a "current" (as of the time of delivery of the aircraft) AFM made available to the owner. If that owner happened to be an air carrier that operates the aircraft under part 121, that air carrier would have an *ongoing obligation*, under section 121.141(a), to keep a "current" AFM for that airplane. Thus, if amendments were made to the AFM in 1995 and 1998, and if the air carrier operates that aircraft in 1998, the air carrier would be *required* to have the 1995 amendments and the 1998 amendments."
(*Emphasis added.*)

B. Although AGC was not asked specifically to address the word "current" in sections 91.9(b), 125.75(a) and 135.81, it is clearly evident that the interpretation of "current" as interpreted in part 121 operating rules would apply equally in parts 91, 125 and 135 operating rules.

4. "CURRENT" AS IT RELATES TO COMPANY FLIGHT MANUALS. For use in operations under parts 91, 121, 135, and 125, operators must either develop CFM's for use in their operations or use the approved AFM/RFM. Flight Standards application of present regulations containing the term "current", as it relates to CFM's, is that the term has the same meaning as the legal definition of "current" in 14 CFR part 121, section 121.141(a) under the operating rules, not the definition under aircraft certification rules. Thus, operators are required to keep "current" CFM's on an ongoing basis by updating them to coincide with pertinent revisions to the AFM/RFM.

5. "CURRENT" AS IT RELATES TO COMPANY TRAINING PROGRAMS. Certificate holders conducting operations under parts 121 and 135 are required to provide and keep "current" on an ongoing basis appropriate training program curriculums for the training of crewmembers. Current training is essential to keep the crewmember *adequately trained and currently proficient and qualified in new procedures.* (*Emphasis added -- see section 121.415(g) and section 135.329(e).*) Flight Standards application of present regulations containing the term "current", as it relates to operator training program(s), is that the term has the same meaning as the AGC definition of "current" under section 121.141(a) of the operating rules. Thus, certificate holders are required to keep "current" company training program(s) on an ongoing basis by updating them to coincide with pertinent revisions to the AFM/RFM.

APPENDIX C
HBAT 99-07, HBAW 99-07 and HBGA 99-10

RULES RELATING TO MANUALS

1. CLARIFICATION OF REGULATIONS. The following paragraphs summarize the language contained in parts 21, 23, 25, 27, 29, 91, 121, 125, and 135 as that language relates to manual requirements.
 2. PART 21, CERTIFICATION PROCEDURES FOR PRODUCTS AND PARTS. Section 21.5(a) requires that "the holder of a Type Certificate (including a Supplemental Type Certificate) or the licensee of a Type Certificate shall make available to the owner, at the time of delivery of the aircraft, a "current" approved Airplane or Rotorcraft Flight Manual."
 3. PARTS 23, 25, 27, AND 29, AIRWORTHINESS STANDARDS. These parts specify airworthiness standards that must be met for aircraft certification and specify flight manual (AFM or RFM) content requirements. The airworthiness standards parts are part 23, Normal, Utility, Acrobatic, and Commuter Category Airplanes; part 25, Transport Category Airplanes; part 27, Normal Category Rotorcraft; and, part 29, Transport Category Rotorcraft. Specifically, sections 1581 through 1587 of each of those parts require that the AFM/RFM contain Operating Limitations, Operating Procedures, and Performance Information, and require certain information to be contained within these sections. Parts 23, 27, and 29 include an additional section 1589 that requires "Loading Information" to be in the AFM/RFM. The AFM requirement for weight and loading distribution information for part 25 airplanes is contained within section 1583 of that part.
 4. PART 91, SECTION 91.9, CIVIL AIRCRAFT FLIGHT MANUAL, MARKING, AND PLACARD REQUIREMENTS. Section 91.9(a) states, "Except as provided in subparagraph (d) of this section, no person may operate a civil aircraft without complying with the operating limitations specified in the approved Airplane or Rotorcraft Flight Manual, markings, and placards, or as otherwise prescribed by the certificating authority of the country of registry."
- A. Some operators and FAA inspectors have believed for years if an aircraft manufacturer revises its AFM/RFM, and if the revision was in the "Operating Limitations" section of the AFM/RFM, that only then was the operator required to implement the revision into its company manuals and training program(s). Conversely, if an AFM/RFM revision applied to the "Operating Procedures" or "Performance Information" section of the AFM/RFM, they have believed that the revision was not mandatory and that the operator was not necessarily required to comply.

B. Research of FAA legal interpretations, policy directives, and other records revealed that this belief is not substantiated in any FAA written document. Therefore, FAA legal counsel was asked to render an interpretation of section 91.9. In an October 8, 1998, legal interpretation the Assistant Chief Counsel, Regulations Division, AGC-200, affirmed the long held belief and wrote as follows:

"Section 91.9(a) provides that no person may operate a civil aircraft without complying with the operating limitations specified in the approved Airplane or Rotorcraft Flight Manual," and further, "it is clear that those parts of the AFM/RFM that are not "operating Limitations" are not imposed on the operator as a section 91.9(a) operating requirement."

C. It is important to note that the language contained in Title 49 of the United States Code (U.S.C.), and Title 14 of the Code of Federal Regulations (14 CFR), contains the principle that air carriers holding out air commerce services to the public must be held to higher standards than the general aviation community. Therefore, the FAA expects every air carrier certificate holder to operate to a higher standard to provide the flying public with the highest degree of safety practicable.

D. Flight Standards is proposing changes to existing FAA regulations to require the safety policy contained in this bulletin be mandatory. (see page 4, paragraph 5, POLICY/ACTION).

5. 14 CFR PART 121. For Air Carrier Operations under part 121, rules pertaining to manual requirements are contained in sections 121.131 through 121.141. Training program requirements are contained in sections 121.400 through 121.427.

A. Company Manual. Section 121.133 requires that each certificate holder prepare and keep "current" a manual for the *use and guidance* of flight, ground operations, and management personnel in conducting its operations. (*Emphasis added.*)

B. Manual Contents. Section 121.135(a) mandates that each manual required by section 121.133 include instructions and information necessary to allow the personnel concerned to perform their duties and responsibilities with a *high degree of safety*, be easy to revise and have the date of the last *revision*, and not be contrary to applicable regulations. Section 121.135(b) lists the required contents of the company manual(s). (*Emphasis added.*)

C. Requirement To Keep Current & Carry AFM or CFM. Except for certain non-transport category airplanes, section 121.141(a) requires the certificate holder to keep a "current" approved AFM for each type of airplane that it operates. Section 121.141(b) requires that either the

approved AFM or the manual required by section 121.133 (CFM) be carried in the aircraft.

NOTE: FAA Order 8400.10 clearly states that the information required by part 25, sections 1583 through 1587, of the approved AFM must be contained in the CFM. If the certificate holder elects to revise the "operating procedures" section or modify the presentation of the "performance information" section of the AFM in its CFM, the revisions must be *approved* by the Administrator (POI).

D. Training Program Currency. Section 121.403 requires that the certificate holder must prepare and keep "current" a written training program curriculum, and the curriculum must contain the ground and flight training required by subpart N of part 121.

6. 14 CFR PART 125. For operations under part 125, rules pertaining to manual requirements are contained in sections 125.71 through 125.75.

A. Company Manual & Contents. Section 125.71 requires that each certificate holder prepare and keep "current" a company manual setting forth the certificate holder's procedures and policies, and further requires the company manual to be *used* by the certificate holder's flight, ground, or maintenance personnel. (*Emphasis added.*)

B. Manual Contents. Section 125.73 lists the contents required in company manuals, and requires that the company manual have a *revision* process. (*Emphasis added.*)

C. Requirement To Keep Current & Carry AFM or CFM. Section 125.75(a) requires the certificate holder to keep a "current" approved AFM, or approved equivalent, for each type of airplane that it operates. Section 125.75(b) requires either the approved AFM, or the approved equivalent (CFM), to be carried aboard each airplane it operates.

7. 14 CFR PART 135. For operations under part 135, rules pertaining to manual requirements are contained in sections 135.21, 135.25, 135.81, and 91.9.

A. Company Manual & Contents. Section 135.21 requires the certificate holder, other than one who uses only one pilot, to prepare and keep "current" a manual setting forth the certificate holder's procedures. Section 135.23 lists the contents required in the company manual.

B. Manual Availability. Section 135.81 requires the certificate holder to make available, in "current" form to each pilot in the certificate holder's employ, an Aircraft Equipment Manual and AFM or equivalent.

C. Requirement To Carry AFM/RFM/CFM. Unlike parts 121 and 125, part 135 does not require a flight manual to be carried aboard the aircraft. However, the requirement to carry a flight manual for part 135 certificate holders may be found in part 91.

(1) Section 91.9(b)(1) requires that "no person may operate a U.S. registered civil aircraft for which an Airplane or Rotorcraft Flight Manual *is* required by section 21.5, unless there is available in the aircraft a "current" approved Airplane or Rotorcraft Flight Manual." (*Emphasis added.*)

(2) Section 91.9(b)(2) requires that "no person may operate a U.S. registered civil aircraft for which an Airplane or Rotorcraft Flight Manual *is not* required by section 21.5 unless there is available in the aircraft a "current" approved Airplane or Rotorcraft Flight Manual (CFM), approved manual material, markings, and placards, or a combination thereof." (*Emphasis added.*)

D. Training Program Currency. Section 135.327 requires that the certificate holder must prepare and keep "current" a written training program curriculum and the curriculum must contain the ground and flight training required by subpart H of part 135.

APPENDIX D
HBAT 99-07, HBA7 99-07 and HBGA 99-10

MANUALS: FAA POLICY OVERVIEW

1. FAA POLICY FOR COMPANY MANUALS. The following is an overview of current FAA policy for the preparation of company manuals, procedures and checklists. Detailed company manual policy for part 121 and part 135 operations may be found in FAA Order 8400.10, volume 3, chapter 15, sections 1 through 6.
2. PART 125 OPERATIONS. Company manuals policy for part 125 operations is contained in FAA Order 8700.1, General Aviation Inspector's Handbook, volume 2, chapter 75; however, there is no policy for the preparation of a CFM. Until policy is developed in FAA Order 8700.1, inspectors assigned to part 125 operators should be guided by the policy contained in FAA Order 8400.10.
3. FLIGHT MANUAL REQUIREMENTS. The requirement for operators to prepare and keep a "current" flight manual for the direction of flight personnel is contained in applicable regulations.
 - A. Flight Manual. A flight manual, as defined in FAA Order 8400.10, is any manual approved by the FAA that the operator uses to comply with the requirements of sections 91.9, 121.141, 125.75, and 135.81. A flight manual may be an approved AFM, an approved RFM, or an approved CFM.
 - B. Airplane Flight Manual (AFM) and Rotorcraft Flight Manual (RFM). An approved AFM/RFM is prepared by the aircraft manufacturer and approved by the applicable FAA Aircraft Certification Office (ACO) under the provisions of section 21.5.
 - C. Approved Sections of the AFM and RFM. Sections 1581 through 1589 of the applicable certification rules specify flight manual content requirements.
 - (1) An AFM of a part 25 transport category airplane contains three sections that are reviewed by the Flight Manual Review Board (FMRB) and approved by the ACO. These sections are Operating Limitations (section 1583), Operating Procedures (section 1585), and Performance Information (section 1587). Weight and loading distribution for transport category airplanes is contained in the operating limitations section of the AFM.
 - (2) An AFM of a part 23 airplane or an RFM of a part 27 or part 29 helicopter contains four sections approved by the ACO. These sections are; Operating Limitations (section 1583), Operating Procedures

(section 1585), Performance Information (section 1587), and Loading Information (section 1589).

D. CFM (Company Flight Manual). A CFM is a flight manual that is developed by, or for, a specific operator regarding a specific aircraft type. A CFM is clearly marked as an approved flight manual for a specific operator and is approved by the operator's POI. A CFM containing the *required* information and approved by the POI under the provisions of FAA Order 8400.10 is an approved flight manual for the purposes of sections 91.9(b), 121.141(b), 125.75(b), or 135.81(c) as applicable. (*Emphasis added.*)

(1) Approved Sections of the CFM. When approving a CFM, a POI must ensure that sections requiring approval are clearly identified as approved (see FAA Order 8400.10, volume 3, chapter 15, section 2, paragraph 2109 for specific policy on identifying approved information). A POI must also ensure that approved sections of the CFM contain all of the information that is required by the flightcrew to operate the aircraft. (*Emphasis added.*)

(a) Operating Limitations Section. The operating limitations section of a CFM must be clearly identified as approved and must contain each limitation that is contained in the approved AFM/RFM. See FAA Order 8400.10, volume 3, chapter 15, section 4, paragraph 2185 for further detail. (*Emphasis added.*)

(b) Operating Procedures Section. The operating procedures section of a CFM must be clearly identified as approved and must contain all procedures required by the AFM/RFM regarding each operation the operator conducts. As a minimum, the operator must include sufficient detail to allow a trained crew to safely and effectively operate the aircraft. The procedures section of the manual may be divided into subsections such as normal, non-normal (abnormal), and emergency procedures. See FAA Order 8400.10, volume 3, chapter 15, section 4, paragraphs 2169 through 2183 for further detail. (*Emphasis added.*)

(c) Performance Information Section. The operator's performance information in a CFM must be clearly identified as approved and must contain the information from the AFM/RFM. The CFM must also contain instructions on how to use that information. An operator may assign the responsibility for performing takeoff and landing performance computations to flightcrew or ground personnel. The flightcrew must have access to adequate performance information on the flight deck (including information for the specific airport and runway to be used), to perform the computations for which they are responsible. When takeoff and landing performance information is presented in tabular format for specific runways, it is often referred to as an airport analysis. Performance information data may be published under separate cover, and may be given titles such as performance manual or airport

analysis. When performance information data is published under separate cover, it must be identified as an approved portion of the CFM. Takeoff and landing performance data may be stored in an on board or ground based computer. See FAA Order 8400.10, volume 4, chapter 3 for policy on the approval of aircraft performance information and airport data acquisition systems. (*Emphasis added.*)

(d) Loading Information Section. For aircraft certified under part 25, loading information is contained within section 25.1583. However, loading information requirements for aircraft certified under parts 23, 27, and 29 is contained within section 1589 of the applicable part. The operator's loading information section in a CFM must be clearly identified as approved and must contain the information from the AFM/RFM. (*Emphasis added.*)

(2) Accepted Sections of the CFM. Accepted sections of the CFM are distinct from approved sections in that they contain supplementary information beyond that information required by regulation. Accepted sections of a CFM may contain supplementary information such as aircraft and systems descriptions, an expanded explanation of procedures, special policies and procedures, and other selected topics pertinent to operation of the aircraft type. The accepted sections of a CFM must conform to FAA regulations and safe operating practices but do not need to conform to corresponding sections of the AFM/RFM, either in format or content. One of a POI's functions is to ensure that the CFM developed by, or for the operator, contains sufficient explanation and guidance for flightcrew use in the safe operation of the particular aircraft type.

E. Review of CFM's. Company flight manuals must be reviewed by POI's and other qualified inspectors to ensure the contents are adequate and in compliance with applicable regulations, safe operating practices, and the operator's OpSpecs. While POI's are encouraged to provide guidance and advice to operators in the preparation of their CFM's, the development and production of a CFM acceptable for FAA approval is solely the responsibility of the operator.

F. Distribution and Availability of Flight Manuals (AFM, RFM or CFM). The distribution, the availability, and, significantly, the use of flight manuals is mandated by regulation and policy. Refer to FAA Order 8400.10, volume III, chapter 15, paragraphs 2077, 2081, and 2161 for applicable guidance.