

ORDER: 8300.10

APPENDIX: 3

BULLETIN TYPE: Flight Standards Handbook Bulletin
for Airworthiness (HBAW)

BULLETIN NUMBER: HBAW 96-05C (AMENDED)

BULLETIN TITLE: Air Carrier Operations Specifications
Authorization To Make Arrangements With
Other Organizations To Perform Substantial
Maintenance

EFFECTIVE DATE: 12-15-97

TRACKING NUMBER: NTSB A-97-74

1. SUBJECT. This bulletin introduces Air Carrier Operations Specifications, paragraph D91, Authorization To Make Arrangements With Other Organizations To Perform Substantial Maintenance (example attached). It also outlines policy and procedures related to that introduction. The authority for dissemination, as well as the content, of this operations specifications paragraph is 14 CFR part 119, sections 119.49 (a)(13), (b)(13), (c)(13), 119.51, 121.363, 121.365, 121.367, 121.369, 121.373, 121.375, and 121.379.

NOTE: HBAW 96-05 Amendment "A" incorporated a modified Table 1 in the attachment. HBAW 96-05 Amendment "B" contained grammatical as well as minor editorial changes intended to improve readability. Amendment "B" also introduced Attachment 2, Frequently Asked Questions (FAQ). Amendment "C" contains additional editorial changes intended to further improve readability, and an expanded FAQ and answer section is included. Amendment "C" also contains instructions and guidance that implement the National Transportation Safety Board Recommendation A-97-74 to require that 14 CFR part 121 air carrier's maintenance functions receive that same level of FAA surveillance, regardless of whether those functions are performed in house or by a contract maintenance facility.

2. BACKGROUND. On Tuesday, June 18, 1996 Administrator Hinson announced a six point program that outlined improvements to FAA Flight Standards inspection policies. The Administrator's

points, numbers 4 and 5, outlined improvements to Flight Standards' air carrier inspection policy regarding substantial maintenance performed by persons other than the air carrier. These particular part 121 air carrier inspection policy improvements are centered around the pre-qualification of new maintenance providers before they can be authorized for use; the evaluation of current maintenance providers being used by air carriers; and the listing, on Opspecs, of all maintenance providers who perform substantial maintenance. These inspection policy improvements are a result of a recent perceived trend among some air carriers to neglect their responsibility to effectively control and oversee maintenance performed by maintenance providers. In addition, the air carrier's responsibility for the airworthiness of its aircraft, along with the associated requirement to be responsible for the performance of all elements of its continuous airworthiness maintenance program, is restated and emphasized.

NOTE: This HBAW outlines the qualification, control and surveillance methodology and procedures that should be used by air carriers seeking to qualify maintenance providers who perform substantial maintenance. Air carriers should also consider the use of similar methodology and procedures, as described herein, except for the Opspecs listing, for the qualification, control, and surveillance of all other maintenance providers performing any maintenance for the air carrier, (sections 121.369 and 121.373).

3. CONTRACTORS. Any person with whom the air carrier has made an arrangement, (informal/oral or formal/written) for the performance of any maintenance, preventive maintenance, or alterations involving the air carrier's authorized aircraft and/or components thereof. This includes arrangements with persons or organizations who supply parts and/or components, other than new, on a lease, exchange, or sale basis.

4. SUBSTANTIAL MAINTENANCE. Within the intent of this handbook bulletin and Opspecs paragraph D91, substantial maintenance is defined as follows: Any activity involving a C-check or greater maintenance visit; any engine maintenance requiring case separation or tear down; and/or major alterations or major repairs performed on airframes, engines or propellers. The following provide examples:

A. Accomplishment of scheduled heavy maintenance inspections, e.g., "C" checks, "D" checks, or equivalent, which may

include accomplishment of Airworthiness Directives, Airworthiness Limitations Items, and Corrosion Prevention and Control Program tasks applicable to aircraft primary structure.

B. Accomplishment of off-aircraft maintenance or alteration of engines that involves: the separation of modules or propellers; Full Authority Digital Engine Controls; major engine repairs and; repairs to life-limited parts, such as compressors, turbine disks, engine cases, but excluding, for example blades, vanes, and burner cans.

C. RESERVED.

D. Accomplishment of off-aircraft maintenance, or alteration, of required emergency equipment items such as slides and rafts, but excluding items such as medical kits, crash axes, life vests, and escape ropes.

5. QUALIFICATION TO PERFORM SUBSTANTIAL MAINTENANCE FOR AN AIR CARRIER. Before a maintenance provider, who performs substantial maintenance for an air carrier may be authorized and listed on Opspecs, its compliance with 14 CFR part 121, subpart L must be confirmed. The following items (5A through 5G) provide the standard for performance:

A. Prior to using a maintenance provider for the first time, unless the air carrier can successfully demonstrate to the PMI other means of accurately determining the capability and adequacy of the proposed maintenance provider, the air carrier must conduct an on site audit of the maintenance provider. The air carrier's on site audit or other means, must demonstrate to the Principal Maintenance Inspector (PMI) that the maintenance provider has the following:

- (1) capability;
- (2) organizational structure;
- (3) competent and trained personnel;

(4) relevant and current technical, and administrative material from the air carrier manual for the work;

(5) adequate facilities and equipment to do the work arranged for in accordance with the air carrier's program; and

(6) the ability to transfer and receive data and information necessary to support the continuing analysis and surveillance program, reliability program, or other programs required by the carrier's manual.

B. The air carrier and PMI may elect to review the results of the audit in a checklist or a summary analysis form. In either case the audit should show how the air carrier made its determination that all of the above listed items are addressed adequately.

C. When reviewing air carrier arrangements with maintenance providers to perform maintenance, the PMI should also consider the following items which may be contained within the air carrier's manual. The air carrier must also show how it intends to keep this material current:

(1) The source of major repair and major alteration data developed by or for the air carrier;

(2) Each air carrier shall maintain, or shall determine that each person with whom it arranges to perform its required inspections maintains a current listing of persons who have been trained, qualified, and authorized to conduct required inspections. The persons must be identified by name, occupational title, and the inspection that they are authorized to perform. The air carrier (or person with whom it arranges to perform its required inspections) shall give written information to each person, so authorized, describing the extent of his responsibilities, authorities, and inspection limitations. The list shall be made available for inspection by the FAA upon request; and

(3) Reports of failures, defects or malfunctions. 14 CFR sections 121.703 and 121.705 establish failure, defect, and malfunction reporting requirements.

D. The air carrier must have a system in place, that ensures on a continuing basis, that all substantial maintenance performed by the maintenance provider is performed in accordance

with the air carrier's manual and continuous airworthiness maintenance program.

E. The air carrier must have a system in place, that detects and identifies, as well as provides timely corrective action for, on a continuing basis, all deficiencies or deviations in those portions of the continuous airworthiness maintenance program accomplished by the substantial maintenance provider, including maintenance record keeping.

F. The air carrier must have a system in place, that tracks and evaluates, on a continuing basis, the standards of performance (quality) of the substantial maintenance work accomplished by the individual maintenance provider.

The system shall also include provisions for timely corrective action in the event the quality of work becomes unsatisfactory and deficiencies are noted.

G. An air carrier who elects to obtain the services of a substantial maintenance provider on an unscheduled, and/or short notice basis shall include specific procedures for doing so in its manual. However, the circumstance of unscheduled, short notice requirements for substantial maintenance does not abrogate the requirements of sections 121.365, 121.367, and 121.378 or any other applicable regulation.

NOTE: As part of its continuous analysis and surveillance program, the air carrier should establish a schedule for accomplishing continuing audits or inspections that are designed to determine the maintenance provider's level of compliance with 14 CFR part 121, subpart L. The frequency of these audits or inspections will be dictated by a number of inconstants, such as the air carrier's level of confidence in the maintenance provider, the complexity and quantity of the work, the quality of the work produced, and the quality of the records and certifications that are produced. Because of these variables air carriers will have audit schedules that differ from one another. Each air carrier should have an audit schedule based on its own unique set of circumstances and needs.

6. ACTION. Consistent with the preceding discussion, PMIs with certificate responsibilities for air carriers subject to part 121, subpart L, shall ensure that these air carriers qualify and list on Air Carrier Opspecs, paragraph D91, those

maintenance providers performing ONLY substantial maintenance, as defined herein, for the air carrier.

NOTE: Opspecs paragraph A4a or A4b, as appropriate must also be amended.

A. PMIs must notify all part 121 air carriers, that they are required to demonstrate the regulatory compliance of their contract maintenance programs. The air carrier is required to submit to the PMI a list of ONLY substantial maintenance contract providers as explained in the Administrator's and Director's letters. However, it should be noted that section 121.369(a) requirement to list all persons with whom the air carrier has made arrangements for the performance of any maintenance, preventive maintenance, and alterations in the air carrier manual is not nullified by this bulletin.

B. RESERVED.

C. Open the operator's Vital Information Subsystem (VIS) record and update the information on the VIS, page 4 of the air operator record in the field AIRWORTHINESS AGREEMENT. The PMI should determine whether or not revisions to Opspecs for contracted maintenance are required. The VIS record field(s) should reflect the most appropriate choice. The two pertinent option codes for maintenance are:

A: Contracts out most/all maintenance; or

P: Contracts out a substantial maintenance function.

D. Opspecs paragraph D91 must be updated whenever substantial maintenance providers are added or deleted. In addition, the contractor ancillary page in the Air Operator record must be updated whenever maintenance providers are added or deleted.

E. Effective September 1, 1996, all new maintenance providers must be authorized and listed on Opspecs prior to use. New substantial maintenance providers will not be authorized for use after September 1 without the accomplishment of an on site audit by the air carrier proposing to use the maintenance provider. A copy of the air carrier's audit report must be submitted to the FAA. The criteria for the on site audit, including other means, is paragraph 5 of this policy.

F. The principal inspector should perform the amount and type of surveillance and inspection necessary to validate that the air carrier's contracting system is performing satisfactorily.

The PMI should, while reviewing or monitoring these systems, described in paragraph 5, consider that the systems are consistent with, as well as responsive to, the differing quantities and complexities of the work accomplished by each individual maintenance provider.

For on site inspections and surveillance, in accordance with existing policy, the CHDO may employ it's own resources or, by means of a memorandum, through the appropriate Flight Standards Regional Division Manager, ask the applicable FSDO with geographic responsibility to perform the inspection and provide feedback. However, in accordance with existing travel restrictions, budgetary constraints, staffing shortages, etc., managers may find it necessary to limit the accomplishment of these inspections by only those inspectors with geographic responsibilities for the maintenance provider. The 1997 National Flight Standards Work Program Guidelines, paragraphs 4(g) and 4(h) provide details for inspection of suppliers. It should also be clearly noted that the accomplishment of these types of inspections is intended to determine compliance with part 121, subpart L, particularly section 121.367.

In addition, the inspections described herein should not be designed to determine compliance with any provisions of 14 CFR part 145.

It should also be clearly noted that all 14 CFR part 121 air carrier's maintenance functions must receive the same level of FAA surveillance, regardless of whether those maintenance functions are performed by the air carrier or by a contract maintenance facility.

7. AMENDING OPERATIONS SPECIFICATIONS. Part 119, section 119.51 outlines the authority and procedure for amendments to Opspecs.

8. INQUIRIES/COMMENTS. This HBAW was developed by the Air Carrier Maintenance Branch, AFS-330. Queries or comments regarding this handbook bulletin should be directed to AFS-330 at (202) 267-3440.

9. LOCATION IN HANDBOOK. The material covered in this HBAW will be incorporated in FAA Order 8300.10, Airworthiness Inspector's Handbook. However, until the new material is incorporated, written reference to this HBAW should be made in the margins of volume 2, chapter 69.

10. RESOURCES. Program requirements are to be accomplished within available resources.

/s/ John Tutora for
Ava L. Mims, Manager,
Aircraft Maintenance Division

Attachments

OPERATIONS SPECIFICATIONS

D91. AUTHORIZATION TO MAKE ARRANGEMENTS WITH OTHER ORGANIZATIONS TO PERFORM SUBSTANTIAL MAINTENANCE.

Provided the following conditions are met, on a continuing basis, the certificate holder is authorized to make arrangements with the organizations listed in Table 1 to perform substantial maintenance in accordance with the certificate holder's continuous airworthiness maintenance program:

a. The certificate holder shall ensure that all substantial maintenance performed by the organizations listed in Table 1, is performed, without deviation, in accordance with the certificate holder's continuous airworthiness maintenance program.

b. The certificate holder shall ensure that the organizations listed in Table 1 have an adequate organizational structure, and provide competent, appropriately trained, qualified personnel, as well as appropriate and adequate facilities and equipment for the proper performance of substantial maintenance in accordance with the certificate holder's continuous airworthiness maintenance program.

c. The certificate holder shall ensure that each person employed by the organizations, listed in table 1 who prepares an airworthiness release in accordance with 14 CFR section 121.709 is properly trained, qualified, and authorized to make such an airworthiness release.

d. The certificate holder shall have a system that detects and identifies, as well as provides timely corrective action for, all deficiencies in those portions of its continuous airworthiness maintenance program, including recordkeeping systems that are carried out by the organizations listed in Table 1.

e. The certificate holder shall ensure that each person employed by the organizations, listed in Table 1, who determines the adequacy of work performed in accordance with the certificate holder's continuous airworthiness maintenance program is fully informed, as well as appropriately trained about procedures, techniques, and the use of existing, as well as new equipment, and is competent to perform their duties.

f. The certificate holder shall have a system that tracks and evaluates, on a continuing basis, the quality of the substantial

maintenance work accomplished by the individual maintenance provider. The system shall also include provisions for timely corrective action in the event the quality of work becomes unsatisfactory.

g. The certificate holder shall ensure that all arrangements, particularly those arrangements with foreign organizations, that are made with the organizations listed in Table 1 are not contrary to these Opspecs, the certificate holder's continuous airworthiness maintenance program, or the Title 14 Code of Federal Regulations (14 CFR).

Table 1.

Authorized Organization	Authorized Equipment	Work Authorized	Date of Authorization

FREQUENTLY ASKED QUESTIONS AND ANSWERS

1. Must air carriers perform audits of organizations that certificated repair facilities contract with?

A. Not normally, however the air carrier's system must identify and document the means used by the certificated repair facility to ensure the organizations it contracts with have the organizational structure, competent and trained personnel, and adequate facilities and equipment to perform the intended function(s). The repair station should have an audit and surveillance system that will determine that work done is accomplished properly.

2. Can maintenance providers be compiled into a listing and the listing referenced on Opspecs?

A. No. Maintenance providers performing substantial maintenance must be listed on the new D91 Opspecs. The Administrator made it clear in his press release that this was one of the primary initiatives involved in the strengthening the FAA's safety oversight of the contracting segment of an air carrier's maintenance program. Listing maintenance providers on Opspecs provides the PMI with the ability to immediately react to negative conditions or situations with regard to an air carrier's maintenance provider.

3. Define the D91, Table 1, headings:

Authorized Organization: Name of Maintenance provider, and repair

station certificate number, if applicable.

Authorized Equipment: DC-8, JT-8D, hyd pump, transponder, etc.

Work Authorized: "C" Checks, repair, x-ray, test, etc.

Date of Authorization: Principal Inspector's authorization date.

4. Is an air carrier or an original equipment manufacturer (OEM) performing maintenance for another air carrier considered to be a maintenance provider.

A. Yes. A determination must still be made that the air carrier or the OEM is qualified and properly equipped, moreover, the maintenance still has to be performed according to the air carrier's program and manual [121.379 (a)].

5. Must an air carrier, who is using another air carrier's continuous airworthiness maintenance program and has been issued Opspecs paragraph D77, also require the issuance of para D91?

A. Yes, if the contractual agreement involves the accomplishment of substantial maintenance. Paragraph D91 formalizes and emphasizes the air carrier's responsibility to ensure, on a continuing basis, that performance and effectiveness of the program is adequate and suitable for its aircraft and its operation. (14 CFR section 121.373)

6. What Opspecs are issued if an air carrier does not contract any substantial maintenance?

A. In accordance with paragraph 6 "Action" of this HBAW, Opspecs A4b is issued.

7. Is an air carrier required to accomplish audits on a maintenance provider who supplies parts and/or components on a lease or exchange basis?

A. Yes. All parts and/or components used by an air carrier on its authorized aircraft are required to be maintained under the air carrier's continuous airworthiness maintenance program. Lease or exchange, or other arrangements that do not allow the air carrier to be in control of the maintenance of the lease/exchanged part/component while it is in a maintenance status are contrary to the regulations. These arrangements clearly abrogate the air carrier's responsibility under 14 CFR section 121.363. In addition, they severely compromise the air carrier's ability to comply with 14 CFR sections 121.367, 121.373, and 121.379.

8. How is parts pooling or parts borrowing, when it involves substantial maintenance, handled?

A. Parts pooling is authorized on Opspecs which require the parts involved to be compliant with the regulations and the pertinent procedures in the air carrier's manual. The air carrier's manual should have a procedure that, at least, complies with the intent of Opspecs paragraph D91. Parts

borrowing is, essentially, a short term authorization to use a part that does not conform to the air carrier's program, i.e., having a higher time-in-service limit than the air carrier's currently approved limit.

9. Does contract maintenance mean only those devices provided through formal signed contracts; or does it encompass those services obtained through purchase order or work order?

A. Included is ANY person with whom the air carrier has made an arrangement, (either formal or informal, or verbal or written) for the performance of any maintenance, preventive maintenance, or alterations involving the air carrier's authorized aircraft or components thereof. (HBAW 96-05C, paragraph 3)

10. Can a current CASE audit report be substituted for the required on site audit by the air carrier?

A. Yes it can, however, all elements of paragraph 5 of this bulletin must be addressed. The air carrier must perform an on-site audit of those elements of paragraph 5 which were not accomplished by the auditing organization.

11. Is all contracted maintenance training required to be listed in the Opspecs? If so, will this include manufacturers such as Boeing and Pratt and Whitney?

A. Contract MAINTENANCE TRAINING facilities are not required to be listed on Opspecs.

12. Upon receiving the airline's audit report and adding the maintenance provider to the Opspecs, is any further approval needed from the FAA, or is the addition of the maintenance provider to the Opspecs sufficient?

A. Addition to the Opspecs constitutes FAA approval.

13. An air carrier's operations are conducted with a company mechanic on board each flight. The company mechanic supervises all maintenance work performed on the aircraft by certificated/noncertificated sources and performs the Airworthiness Release required by the rule. Are the maintenance sources used in this case required to be listed on Opspecs? How is the requirement to list "substantial maintenance" maintenance providers altered, if at all, by the fact that a "company representative" is "directly" in charge of all maintenance performed?

A. Before a maintenance provider, who performs substantial maintenance for an air carrier may be authorized to perform that maintenance, compliance with 14 CFR part 121, subpart L must always be determined. Does the maintenance provider have an organization, competent personnel, and facilities and equipment that is adequate to do the work arranged for? In addition, one of the primary purposes of this bulletin is to emphasize the air carrier's responsibility to be in charge of all maintenance performed on its aircraft whether it was accomplished by air carrier personnel or by persons outside the air carrier's organization. An air carrier is always responsible for the performance of all maintenance on its aircraft, the presence of a "company representative" does not abrogate the air carriers responsibility to comply with 14 CFR part 121, subpart L, as well as sections 121.105 or 121.123.

14. What FAA information concerning a proposed contract facility may be provided if requested by an air carrier?

A. Please refer to the Freedom of Information Act process.

15. Does the FAA consider fire extinguishers and oxygen bottles to be included in the requirements of paragraph 4D of this bulletin?

A. No, they are not intended to be included.

16. An air carrier leases an aircraft on which a "C" check has just been completed. The maintenance provider that performed the "C" check is not listed on the air carrier's Opspecs. Is the operator required to accomplish an audit on the maintenance provider that performed the "C" check and list the facility on its Opspecs before the aircraft can be added to its aircraft listing.

A. No, the aircraft was not subject to the air carrier's program since the aircraft was not listed on the aircraft listing.