

7/26/85

Bill O'Brien

8300.9

FOREWORD

This order represents a consolidation of Order 8600.1, General Aviation Airworthiness Inspector's Handbook, and Order 8320.12, Air Carrier Airworthiness Inspector's Handbook. It will provide field personnel with a single order that will guide and assist them in performing the duties pertaining to the certification and surveillance of aircraft, airmen, agencies, air carriers (including domestic, flag, commuters, and air taxi operators), commercial operators, and operators under FAR Part 125, and facilities and other actions which require the issuance of an approval, authorization, waiver, permit, or other official paper.



M. C. Beard
Director of Airworthiness

TABLE OF CONTENTS

| | <u>Page No.</u> |
|--|-----------------|
| CHAPTER 1. GENERAL. | |
| SECTION 1. INTRODUCTION. | |
| 1. Purpose. | 1 |
| 2. Distribution. | 1 |
| 3. Cancellation. | 1 |
| 4. Explanation of Changes. | 1 |
| 5. Authority to Change This Order. | 1 |
| 6. RESERVED. | |
| SECTION 2. DESCRIPTION. | |
| 7. Presentation. | 3 |
| 8. Basis for Procedures Contained in This Order. | 4 |
| 9. Definition of Operators as Used in This Order. | 4 |
| 10. Definition of the Term "Certification" as Used in This Order. | 5 |
| 11. Definition of the Term "Surveillance" as Used in This Order. | 5 |
| 12.-19. RESERVED. | |
| CHAPTER 2. GENERAL PRACTICES AND PROCEDURES. | |
| SECTION 1. UTILIZATION OF TECHNICAL PERSONNEL. | |
| 20. Purpose. | 19 |
| 21. General. | 19 |
| 22. Assignments. | 19 |
| 23. Trainee Inspectors. | 20 |
| 24. Scheduled Surveillance. | 20 |
| 25. Other Surveillance Activities. | 20 |
| 26. Weekend, Official Holiday, and Continuous Surveillance Activities. | 20 |
| 27. Requests for Certification and Surveillance Assistance. | 20 |
| 28. Shared Responsibilities for Surveillance of Facilities Performing Air Carrier Maintenance. | 21 |
| 29. Meetings/Workshops. | 23 |
| 30. Preparation and Issuance of Directives Requiring Action or Imposing Workloads on Airworthiness Inspectors. | 23 |
| 31. Aviation Safety Inspector's Credential, FAA Form 110A. | 23 |
| Figure 2-1. Delineation of Technical Responsibilities. | 29 |
| Figure 2-2. Sample FAA Form 110A (Front Side of Form). | 32 |
| Figure 2-3. FAA Form 110A (Reverse Side of Form). | 32 |
| Figure 2-4. Sample FAA Form 1600-14 (Front Side of Form). | 33 |
| Figure 2-5. FAA Form 1600-14 (Reverse Side of Form). | 33 |
| 32.-35. RESERVED. | |
| SECTION 2. PRECAUTION TO BE TAKEN BY TECHNICAL PERSONNEL IN PUBLIC DISCUSSION OF MAINTENANCE SERVICES AND AIRCRAFT PRODUCTS. | |
| 36. Purpose. | 37 |

| | <u>Page No.</u> |
|---|-----------------|
| 37. Opinions Concerning Maintenance Services and Aircraft Products. | 37 |
| 38. Requests for Information Concerning Sources of Services or Products. | 37 |
| 39. New or Unique Maintenance or Alteration Techniques, Practices, or Procedures. | 37 |
| 40. General. | 38 |
| 41.-55. RESERVED. | |
| SECTION 3. ORAL AUTHORIZATIONS. | |
| 56. General. | 49 |
| 57.-59. RESERVED. | |
| SECTION 4. CORRESPONDENCE WITH INDUSTRY. | |
| 60. Purpose. | 61 |
| 61. General. | 61 |
| 62. Formal Correspondence. | 61 |
| 63. Quality of Correspondence. | 61 |
| 64.-69. RESERVED. | |
| SECTION 5. PUBLICATION OF PRECAUTIONARY NOTICES, MAINTENANCE BULLETINS, AND MEMORANDA. | |
| 70. Purpose. | 71 |
| 71. General. | 71 |
| 72. Legal Aspects. | 71 |
| 73. Coordination With Washington Office. | 71 |
| 74.-79. RESERVED. | |
| SECTION 6. ACCESS TO PUBLIC AND PRIVATE AIRPORTS, LANDING STRIPS, AND OTHER AREAS USED FOR OPERATION OF AIRCRAFT. | |
| 80. Purpose. | 79 |
| 81. General. | 79 |
| 82. Definitions. | 79 |
| 83. Access to Private Airports, Landing Strips, and Other Areas. | 79 |
| 84. Access to Public Airports. | 79 |
| 85.-89. RESERVED. | |
| SECTION 7. RESPONDING TO WRITTEN NOTIFICATION OR COMPLAINTS. | |
| 90. Purpose. | 87 |
| 91. General. | 87 |
| 92. Action. | 87 |
| 93.-99. RESERVED. | |

SECTION 8. OBTAINING AND RETURNING AIRCRAFT MAINTENANCE/
ALTERATION RECORDS AND PARTS.

| | |
|---|-----|
| 100. Purpose. | 97 |
| 101. Authority. | 97 |
| 102. Obtaining Aircraft Maintenance and Alteration Records. | 97 |
| 103. Return of Maintenance and Alteration Records. | 97 |
| 104. Obtaining Aircraft/Parts for Analysis and Study. | 98 |
| 105. Routing of FAA Form 8020-2. | 98 |
| 106. Analysis and Handling of Parts. | 98 |
| 107. Test Results. | 99 |
| 108. FAA Obligation for the Disassembly and Reassembly of Component Parts. | 99 |
| 109. Forms. | 99 |
| Figure 2-6. Aircraft/Parts Identification and Release, FAA Form 8020-2. | 111 |
| 110.-119. RESERVED. | |

SECTION 9. GENERAL AVIATION SAFETY SEMINARS AND SPECIAL
MEETINGS.

| | |
|---|-----|
| 120. Purpose. | 117 |
| 121. General Policy. | 117 |
| 122. Special Meetings. | 117 |
| 123. Educational Clinics. | 117 |
| 124. Participation in Industry Sponsored Clinics. | 117 |
| 125. Coordinator's Report of Maintenance/Avionics Seminars and Clinics (RIS: FS 8300-6). | 120 |
| 126.-134. RESERVED. | |

SECTION 10. COORDINATION OF PROPOSED AIRWORTHINESS DIRECTIVES.

| | |
|---------------------|-----|
| 135. General. | 125 |
| 136. Coordination. | 125 |
| 137.-144. RESERVED. | |

SECTION 11. MANUFACTURER'S PRIVILEGES UNDER THE TERM REBUILD.

| | |
|---------------------|-----|
| 145. Purpose. | 129 |
| 146. Discussion. | 129 |
| 147. Guidance. | 129 |
| 148.-154. RESERVED. | |

SECTION 12. INTERPRETATION OF FEDERAL AVIATION REGULATIONS.

| | |
|---------------------|-----|
| 155. Purpose. | 141 |
| 156. Discussion. | 141 |
| 157. Action. | 141 |
| 158.-164. RESERVED. | |

Page No.

SECTION 13. INDUSTRY COMPLIANCE WITH FAR EFFECTIVE DATES.

| | |
|---------------------|-----|
| 165. Purpose. | 151 |
| 166. Discussion. | 151 |
| 167. Action. | 151 |
| 168.-174. RESERVED. | |

SECTION 14. RECORDKEEPING AND RELATED REPORTS.

| | |
|--|-----|
| 175. Purpose. | 163 |
| 176. General. | 163 |
| 177. Request for Mailing List Action. | 163 |
| 178. Instructions for Completion of AC Form 8300-10, RIS: AC 8300-1. | 164 |
| 179. Forms. | 166 |
| Figure 2-7. Certificate Authorization, or Designation Action Request, AC Form 8300-10 (Front). | 179 |
| Figure 2-8. Certificate, Authorization, or Designation Action Request, AC Form 8300-10 (Reverse). | 180 |
| 180.-184. RESERVED. | |

SECTION 15. INTERPRETATION OF THE TERM "AIRWORTHY."

| | |
|--------------------|-----|
| 185. Purpose. | 191 |
| 186. General. | 191 |
| 187. Discussion. | 191 |
| 188. Conclusion. | 191 |
| 189-194. RESERVED. | |

SECTION 16. MAINTENANCE BULLETINS.

| | |
|---------------------|-----|
| 195. Purpose. | 201 |
| 196. Preparation. | 201 |
| 197.-204. RESERVED. | |

SECTION 17. FUELING FACILITIES SURVEILLANCE - GENERAL AVIATION.

| | |
|-------------------------------|-----|
| 205. Purpose. | 211 |
| 206. General. | 211 |
| 207. Fueling Facilities. | 211 |
| 208. Surveillance Procedures. | 211 |
| 209. Reports. | 212 |
| 210. Discrepancies. | 212 |
| 211.-224. RESERVED. | |

SECTION 18. LISTING OF MAINTENANCE AGENCIES, DESIGNEES, AND INSPECTION AUTHORIZATIONS.

| | |
|---------------|-----|
| 225. Purpose. | 221 |
| 226. General. | 221 |

| | <u>Page No.</u> |
|---|-----------------|
| 227. Current Publications. | 221 |
| 228. Action. | 221 |
| 229. Statistical Data. | 222 |
| 230.-239. RESERVED. | |
| SECTION 19. COORDINATION OF VISITS TO MAINTENANCE AND MANUFACTURING FACILITIES. | |
| 240. General. | 233 |
| 241. Arrangements for Visits. | 233 |
| 242.-249. RESERVED. | |
| SECTION 20. COOPERATION WITH FOREIGN GOVERNMENTS IN ISSUANCE OF FOREIGN AIRWORTHINESS CERTIFICATE. | |
| 250. Purpose. | 245 |
| 251. Procedure. | 245 |
| 252.-255. RESERVED. | |
| SECTION 21. DEVIATIONS AND EXEMPTIONS. | |
| 256. Deviations. | 255 |
| 257. Exemptions. | 255 |
| 258.-449. RESERVED. | |
| CHAPTER 3. AIRCRAFT. | |
| SECTION 1. TYPE CERTIFICATION BOARDS. | |
| 450. Purpose. | 267 |
| 451. Membership on Type Certification Boards. | 267 |
| 452. Assignment. | 267 |
| 453. Duties. | 267 |
| 454. Procedures. | 268 |
| 455. Servicing and Maintenance Manuals. | 268 |
| 456. Maintenance Type Certification Activity Summary (RIS: FS 8300-2). | 269 |
| 457.-465. RESERVED. | |
| SECTION 2. SUPPLEMENTAL TYPE CERTIFICATES. | |
| 466. Authority. | 279 |
| 467. Purpose. | 279 |
| 468. Definition. | 279 |
| 469. Action. | 279 |
| 470. Compliance and Conformity. | 279 |
| 471.-475. RESERVED. | |

SECTION 3. MAJOR ALTERATIONS.

| | |
|---|-----|
| 476. Authority. | 289 |
| 477. Purpose. | 289 |
| 478. General. | 289 |
| 479. Alteration - Definitions and Regulatory References. | 290 |
| 480. Review and Processing of Application and Data. | 290 |
| 481. Compatibility of Alterations. | 291 |
| 482. Minor Variations Form Previously Approved Data. | 291 |
| 483. Alterations Which are Classified as Major Alterations. | 291 |
| 484. Alteration Performance - Testing - Recordation. | 292 |
| 485. Assistance by Appropriately Rated Designated Engineering Representative (DER). | 293 |
| 486. Incomplete and/or Piecemeal Installation. | 293 |
| 487. Alterations Which Will Require Engineering Approval. | 293 |
| 488. Typical Alterations Which may Require Technical Assistance Due to the Nature of the Change Proposed by the Operator/Owner. | 295 |
| 489. FAA Inspectors Approval Entry on FAA Form 337. | 295 |
| 490. Document Disposition. | 296 |
| 491.-495. RESERVED. | |

SECTION 4. MAJOR REPAIRS.

| | |
|--|-----|
| 496. Authority. | 299 |
| 497. Requirement for Approved Data. | 299 |
| 498. Previously Approved Data. | 299 |
| 499. Major Repair Data Approval (Not Previously Approved). | 299 |
| 500. Mistaken Classification of Major Repairs as Alterations. | 301 |
| 501. Surveillance. | 301 |
| 502. Processing of the FAA Form 337. | 301 |
| 503. Disposition of Air Carrier Major Repairs and Major Alterations. | 301 |
| 504.-509. RESERVED. | |

SECTION 5. MAJOR REPAIR AND ALTERATION, FAA FORM 337.

| | |
|-----------------------------------|-----|
| 510. Purpose. | 313 |
| 511. Authority. | 313 |
| 512. General. | 313 |
| 513. Disposition of FAA Form 337. | 313 |
| 514. Discussion. | 314 |
| 515.-519. RESERVED. | |

SECTION 6. RECIPROCAL ACCEPTANCE OF MAINTENANCE AND ALTERATIONS PERFORMED BY CANADIAN MECHANICS AND U.S. REPAIR AGENCIES.

| | |
|-----------------|-----|
| 520. Authority. | 325 |
| 521. General. | 325 |

| | <u>Page No.</u> |
|--|-----------------|
| 522. United States Regulations. | 325 |
| 523. Mechanical Work Performed on U.S.-Registered Aircraft in Canada. | 325 |
| 524. Approval for Return-To-Service of Work Operations Performed on Canadian Aircraft by U.S. Repair Agencies. | 325 |
| 525. Canadian Engines Overhauled by U.S. Repair Agencies. | 326 |
| 526. Advisory Circular 43-10A. | 327 |
| 527.-534. RESERVED. | |
| SECTION 7. LEASING OF AIRCRAFT. | |
| 535. General. | 337 |
| 536. Types of Leases. | 337 |
| 537. Leases to Foreign Operators. | 337 |
| 538. Aircraft Removed From Air Carrier Operating Certificates. | 338 |
| 539. Leases to FAR Parts 91, 121, and 127 Operators. | 339 |
| 540. Surveillance of Leased Aircraft. | 339 |
| 541.-549. RESERVED. | |
| SECTION 8. USE OF AIRCRAFT PARTS/COMPONENTS OF UNKNOWN CONDITION OR ORIGIN. | |
| 550. General. | 349 |
| 551. Classification and Source Categories. | 349 |
| 552. Inspector's Responsibility and Action. | 350 |
| 553. Advisory Circular 20-62C, Eligibility, Quality, and Identification of Approved Aeronautical Replacement Parts. | 351 |
| 554.-559. RESERVED. | |
| SECTION 9. AIRCRAFT - AIRWORTHINESS DIRECTIVES (AD's). | |
| 560. Purpose. | 363 |
| 561. Adjustment of Repetitive Inspection Time. | 363 |
| 562. Alternate Means of Complying With the AD. | 364 |
| 563. Exemptions. | 364 |
| 564. Monitoring Air Carrier Fleet Operators Compliance With AD's. | 365 |
| 565. Recordation - Other Than Mechanic. | 365 |
| 566. Relationship of AD's Prior to FAA Approval of Technical Data for Major Repairs or Major Alterations. | 365 |
| 567.-574. RESERVED. | |
| SECTION 10. TESTING OF AIRCRAFT POWERPLANTS AFTER OVERHAUL. | |
| 575. Purpose. | 375 |
| 576. Reference. | 375 |
| 577. Discussion. | 375 |
| 578. Guidance. | 375 |
| 579. Action. | 376 |
| 580.-585. RESERVED. | |

Page No.

SECTION 11. SERVICING AND MAINTENANCE MANUALS.

| | |
|---------------------|-----|
| 586. Purpose. | 387 |
| 587. General. | 387 |
| 588. Discussion. | 387 |
| 589.-595. RESERVED. | |

SECTION 12. TESTING FABRIC COVERING OF AIRCRAFT.

| | |
|--|-----|
| 596. Purpose. | 399 |
| 597. General. | 399 |
| 598. Aircraft Owner/Maintenance Personnel Controversy. | 399 |
| 599. Field Testing of Fabric. | 399 |
| 600. Laboratory Testing of Fabric. | 399 |
| 601.-609. RESERVED. | |

SECTION 13. MAINTENANCE RECORDS.

| | |
|---------------------|-----|
| 610. Purpose. | 411 |
| 611. Action. | 411 |
| 612.-619. RESERVED. | |

SECTION 14. MAINTENANCE AND ADEQUACY OF AIRBORNE CARGO EQUIPMENT.

| | |
|------------------------------|-----|
| 620. Purpose. | 421 |
| 621. General. | 421 |
| 622. Key Surveillance Areas. | 421 |
| 623. Action. | 421 |
| 624.-629. RESERVED. | |

SECTION 15. POWERPLANT REPAIRS.

| | |
|---|-----|
| 630. Purpose. | 433 |
| 631. Background. | 433 |
| 632. Turbine Engine Parts. | 433 |
| 633. Turbine Engine Repairs. | 433 |
| 634. Reciprocating Engines. | 434 |
| 635. Definitions. | 434 |
| 636. Approved Data and Return-To-Service. | 434 |
| 637. Repair Stations. | 434 |
| 638.-649. RESERVED. | |

SECTION 16. ORIGINAL AIRWORTHINESS CERTIFICATION.

| | |
|-------------------------------|-----|
| 650. Purpose. | 447 |
| 651. Background. | 447 |
| 652. Action. | 447 |
| 653. Delegation of Authority. | 447 |
| 654. The Certification Task. | 447 |
| 655.-665. RESERVED. | |

Page No.

SECTION 17. IMPORT AND EXPORT AIRWORTHINESS APPROVALS.

| | |
|-------------------------------|-----|
| 666. Purpose. | 457 |
| 667. Authority. | 457 |
| 668. General. | 457 |
| 669. Delegation of Authority. | 458 |
| 670.-679. RESERVED. | |

SECTION 18. SPECIAL FLIGHT PERMITS.

| | |
|---------------------|-----|
| 680. Purpose. | 469 |
| 681. Authority. | 469 |
| 682. General. | 469 |
| 683.-689. RESERVED. | |

SECTION 19. COOPERATION WITH FOREIGN GOVERNMENTS IN ISSUANCE OF FOREIGN AIRWORTHINESS CERTIFICATES.

| | |
|---------------------|-----|
| 690. Purpose. | 479 |
| 691. Procedure. | 479 |
| 692.-849. RESERVED. | |

CHAPTER 4. AGENCIES.

SECTION 1. APPLICATION FOR REPAIR STATION CERTIFICATE.

| | |
|--|-----|
| 850. Authority. | 489 |
| 851. General. | 489 |
| 852. Name of Owner. | 489 |
| 853. Contracted Maintenance Functions. | 490 |
| 854. Assistance to Prospective Applicants. | 490 |
| 855. FAA Operated Repair Stations. | 490 |
| 856. Forms. | 490 |
| Figure 4-1. Application for Repair Station Certificate and/or Rating, FAA Form 8310-3. | 501 |
| Figure 4-2. Example of Limited Ratings Entered on the Reverse Side of FAA Form 8310-3, Application for Repair Station Certificate and/or Rating. | 502 |
| 857.-865. RESERVED. | |

SECTION 2. REPAIR STATION RATINGS.

| | |
|---|-----|
| 866. Authority. | 507 |
| 867. Purpose. | 507 |
| 868. General. | 507 |
| 869. Limited Specialized Service Ratings. | 507 |

| | <u>Page No.</u> |
|---|-----------------|
| 870. An Applicant for a Class Rating. | 507 |
| 871. Limited Ratings. | 507 |
| 872. Radio-Rated Repair Stations. | 507 |
| 873.-879. RESERVED. | |
| SECTION 3. ISSUANCE OF REPAIR STATION CERTIFICATE. | |
| 880. General. | 517 |
| 881. Satellite Repair Stations. | 519 |
| 882. Special Provisions for Repair Stations Performing Maintenance for U.S.-Certificated Air Carriers. | 520 |
| 883. Recordkeeping and Related Reports. | 523 |
| 884. Forms. | 523 |
| Figure 4-3. Air Agency Certificate FAA Form 8000-4. | 536 |
| Figure 4-4. Air Agency Certificate (Limited Rating), FAA Form 8000-4. | 537 |
| Figure 4-5. Air Agency Certificate (Foreign Repair Station), FAA Form 8000-4. | 538 |
| Figure 4-6. Repair Station Operations Specifications, FAA Form 8000-4-1. | 539 |
| Figure 4-7. Repair Station Operations Specifications, FAA Form 8000-4-1. | 540 |
| Figure 4-8. Repair Station Operations Specifications, FAA Form 8000-4-1, Showing Presently Certificated Repair Stations With Air Carrier Geographic Authorizations. | 541 |
| Figure 4-9. Repair Station Operations Specifications, FAA Form 8000-4-1, Showing Limited Ratings for Foreign Repair Stations Performing Contractual Maintenance for a U.S. Air Carrier. | 542 |
| Figure 4-10. Air Agency Certificate, FAA Form 8000-4, Showing A Foreign Repair Station With Limited Ratings for Performing Contractual Maintenance for a U.S. Air Carrier. | 543 |
| 885.-899. RESERVED. | |
| SECTION 4. CHANGE IN LOCATION OF A REPAIR STATION. | |
| 900. Authority. | 549 |
| 901. General. | 549 |
| 902.-909. RESERVED. | |

Page No.

SECTION 5. REPAIR STATION CERTIFICATION INSPECTIONS.

| | |
|---|-----|
| 910. Authority. | 563 |
| 911. Purpose. | 563 |
| 912. General. | 563 |
| 913. Repair Station Inspection Reports. | 563 |
| 914. Foreign Repair Station Inspection. | 563 |
| 915.-925. RESERVED. | |

SECTION 6. REPAIR STATION PERSONNEL.

| | |
|---------------------|-----|
| 926. Purpose. | 575 |
| 927. Reference. | 575 |
| 928. Requirements. | 575 |
| 929.-935. RESERVED. | |

SECTION 7. FOREIGN REPAIR STATIONS.

| | |
|---------------------|-----|
| 936. Authority. | 587 |
| 937. Purpose. | 587 |
| 938. Background. | 587 |
| 939. Action. | 587 |
| 940. Delegation. | 587 |
| 941.-949. RESERVED. | |

SECTION 8. REPAIR STATION INSPECTION SYSTEM.

| | |
|---------------------|-----|
| 950. Authority. | 597 |
| 951. General. | 597 |
| 952.-969. RESERVED. | |

SECTION 9. ASSIGNMENT OF AIR AGENCY CERTIFICATE NUMBERS.

| | |
|---------------------|-----|
| 970. Purpose. | 609 |
| 971. General. | 609 |
| 972.-979. RESERVED. | |

SECTION 10. FORMAL AND INFORMAL INSPECTION OF DOMESTIC AND FOREIGN REPAIR STATIONS.

| | |
|---|-----|
| 980. Inspection. | 619 |
| 981. Inspection and Surveillance Record, FAA Form 3112. | 619 |
| 982. Arrangements for Work by a Repair Station for an Air Carrier or Commerical Operator. | 619 |
| 983. Reports of Defects or Unairworthy Conditions. | 620 |
| 984. Actions Resulting From Inspections. | 620 |
| 985. Acceptance of Foreign Government Inspection Reports. | 621 |
| 986.-995. RESERVED. | |

SECTION 11. SURVEILLANCE OF MAINTENANCE FACILITIES AND
AIRCRAFT OPERATED BY THE FEDERAL AVIATION
ADMINISTRATION.

| | |
|--|-----|
| 996. Purpose. | 631 |
| 997. FAA Facilities Certificated as Repair Stations. | 631 |
| 998. Procedure for Reporting Inspection of FAA Facilities Certificated as Repair Stations. | 631 |
| 999. Noncertificated FAA Maintenance Facilities. | 631 |
| 1000. Procedures for Recording and Reporting Noncertificated FAA Maintenance Facility Inspection-General Aviation Inspection and Surveillance Record, FAA Form 3112. | 631 |
| 1001. Maintenance Spot Checks. | 631 |
| 1002. Procedures for Recording and Reporting Maintenance Spot Check. | 632 |
| 1003. FAA Facility or Aircraft Violation Actions. | 632 |
| 1004.-1015. RESERVED. | |

SECTION 12. PILOT SCHOOL - CERTIFICATION AND SURVEILLANCE

| | |
|--|-----|
| 1016. Authority. | 643 |
| 1017. Purpose. | 643 |
| 1018. Background. | 643 |
| 1019. Application for Certification. | 643 |
| 1020. Inspector Utilization. | 643 |
| 1021. Inspector's Responsibilities. | 643 |
| 1022. Maintenance Facilities. | 643 |
| 1023. Report of Inspection. | 644 |
| 1024. Application of Systems Analysis Processes. | 644 |
| 1025. Surveillance. | 644 |
| 1026. Inspection. | 645 |
| 1027. Guidelines. | 645 |
| 1028. Report of Aircraft Surveillance. | 645 |
| 1029. Malfunction or Defect Reports. | 645 |
| 1030.-1049. RESERVED. | |

SECTION 13. PARACHUTE LOFT - CERTIFICATION AND SURVEILLANCE.

| | |
|--|-----|
| 1050. Authority. | 657 |
| 1051. General. | 657 |
| 1052. Certificate. | 657 |
| 1053. An Applicant for a Parachute Loft Certificate. | 657 |

| | <u>Page No.</u> |
|--|-----------------|
| 1054. The Inspection System. | 657 |
| 1055. Required Records - FAR Section 149.15. | 657 |
| 1056. Technical Data. | 658 |
| 1057. Surveillance. | 658 |
| 1058. Recordkeeping and Related Reports. | 658 |
| 1059. Forms. | 658 |
| Figure 4-11. Air Agency Certificate, FAA Form 8000-4 (Typical for Parachute Loft). | 669 |
| 1060.-1069. RESERVED. | |
| SECTION 14. PARACHUTE EQUIPMENT AND INTENTIONAL PARACHUTE JUMPING. | |
| 1070. Authority. | 675 |
| 1071. Purpose. | 675 |
| 1072. General. | 675 |
| 1073. The Parachute. | 675 |
| 1074. Alteration of the Auxiliary Pack. | 676 |
| 1075. Alteration of the Harness. | 676 |
| 1076. Alteration of the Main Parachute. | 676 |
| 1077. Data Approval by Inspectors. | 677 |
| 1078. Procedures for Handling Parachute Alteration Data. | 677 |
| 1079. Assembly of Major Parachute Components. | 678 |
| 1080. Military Specification Excerpts; Mil Spec. Mil-R-25565D. | 678 |
| 1081.-1089. RESERVED. | |
| SECTION 15. AVIATION MAINTENANCE TECHNICIAN SCHOOL CERTIFICATION. | |
| 1090. Authority. | 689 |
| 1091. Purpose. | 689 |
| 1092. General. | 689 |
| 1093. Preapplication Assistance. | 689 |
| 1094. Certificate Application File. | 690 |
| 1095. Application Review and Final Certification Action. | 693 |
| 1096. Recordkeeping and Related Reports. | 693 |
| 1097. Form. | 694 |
| Figure 4-12. Aviation Maintenance Technician School Certificate and Ratings Application (Front), FAA Form 8310-6. | 705 |
| 1098.-1115. RESERVED. | |
| SECTION 16. AVIATION MAINTENANCE TECHNICIAN SCHOOL - REVIEW OF APPLICATION FILE, INSPECTION, AND ISSUANCE OF CERTIFICATE. | |
| 1116. Purpose. | 711 |
| 1117. Reference. | 711 |
| 1118. Application File Review. | 711 |
| 1119. Certification Inspection. | 711 |
| 1120. Operating Rules Compliance. | 712 |

| | <u>Page No.</u> |
|---|-----------------|
| 1121. Disapproval of Application. | 712 |
| 1122. Approval of Application. | 712 |
| 1123. Forms. | 713 |
| Figure 4-13. Typical Execution of Inspection Report - (Reverse), FAA Form 8310-6. | 723 |
| Figure 4-14. Typical Execution of FAA Form 8000-4, Air Agency Certificate - Aviation Maintenance Technician School. | 724 |
| 1124.-1139. RESERVED. | |
| SECTION 17. AVIATION MAINTENANCE TECHNICIAN SCHOOL CERTIFICATION - TEAM CERTIFICATION. | |
| 1140. Purpose. | 729 |
| 1141. Reference. | 729 |
| 1142. Team Certification Requirement. | 729 |
| 1143. Team Membership. | 729 |
| 1144. Team Member Roles. | 730 |
| 1145. Team Certification Procedures. | 731 |
| 1146. Team Action. | 732 |
| 1147.-1159. RESERVED. | |
| SECTION 18. AVIATION MAINTENANCE TECHNICIAN SCHOOL CERTIFICATION APPROVAL OF CHANGE OF LOCATION. | |
| 1160. Purpose. | 745 |
| 1161. Reference. | 745 |
| 1162. General. | 745 |
| 1163. Notification and Application for Approval. | 745 |
| 1164. Approval of Change of Location. | 745 |
| 1165. Change of Location Made Without Notification. | 746 |
| 1166. Changes of Location to Another FAA District. | 746 |
| 1167.-1175. RESERVED. | |
| SECTION 19. AVIATION MAINTENANCE TECHNICIAN SCHOOLS - SURVEILLANCE | |
| 1176. Purpose. | 757 |
| 1177. General. | 757 |
| 1178. Surveillance Inspections. | 757 |
| 1179. Special Surveillance Objectives. | 757 |
| 1180. Aviation Maintenance Technician School Norms Vs. National Passing Norms, RIS: AC 8080-08, and Associated Reports. | 762 |
| 1181. Use of the RIS: AC 8080-Series Report. | 763 |
| 1182. How to Read the RIS: AC 8080-8 Report. | 764 |
| 1183. Aviation Maintenance Technician School Inspection Report (RIS: FS 8310-4). | 765 |

| | <u>Page No.</u> |
|--|-----------------|
| 1184. Forms. | 766 |
| Figure 4-15. Aviation Maintenance Technician School Norms Vs. National Passing Norms: General Test - RIS: AC 8080-08. | 777 |
| Figure 4-16. Aviation Maintenance Technician School Norms Vs. National Passing Norms: Airframe Test - RIS: AC 8080-08. | 778 |
| Figure 4-17. Aviation Maintenance Technician School Norms Vs. National Passing Norms: Powerplant Test - RIS: AC 8080-08. | 779 |
| Figure 4-18. Aviation Maintenance Technician School Norms Vs. National Passing Norms: RIS: AC 8080-10. | 780 |
| Figure 4-19. Aviation Mechanic Test Applicant Listing: Interrogation Report - RIS: AC 8080-13. | 781 |
| 1185.-1299. RESERVED. | |

CHAPTER 5. AIRMEN.

SECTION 1. MECHANIC CERTIFICATION.

| | |
|--|-----|
| 1300. Authority. | 787 |
| 1301. Purpose. | 787 |
| 1302. General. | 787 |
| 1303. Mechanic Experience. | 787 |
| 1304. The Mechanic Written Tests Are of Three Parts. | 787 |
| 1305. Written Test Credit. | 788 |
| 1306. The Current Mechanic Oral and Practical Tests. | 788 |
| 1307. Establishing Eligibility for the Written Tests and/or Rating(s) Sought. | 788 |
| 1308. Application for Written Test. | 789 |
| 1309. Conducting Written Tests. | 789 |
| 1310. Written Test Grades. | 789 |
| 1311. Application for Oral/Practical Tests. | 789 |
| 1312. Taking Practical Before Written Tests. | 790 |
| 1313. Conducting Oral/Practical Tests. | 790 |
| 1314. Recording Oral/Practical Test Results. | 790 |
| 1315. Retest After Failure. | 791 |
| 1316. Testing for an Additional Rating. | 792 |
| 1317. Issuance of Temporary Certificates. | 792 |
| 1318. Applicants Under 18 Years of Age. | 792 |
| 1319. File and Routing. | 793 |
| 1320. Forms. | 794 |
| Figure 5-1. Typical FAA Form 8610-2, Showing Entries. for Application for Oral/Practical Tests. | 805 |
| Figure 5-2. Typical FAA Form 8610-2, Showing Entry for Taking the Oral/Practical Test Before the Written Test. | 806 |

| | <u>Page No.</u> |
|--|-----------------|
| Figure 5-3. Typical DME Report Showing All Subjects Passed - Reverse of FAA Form 8610-2. | 807 |
| Figure 5-4. DME Report Indicating Subjects Passed and Failed - Reverse of FAA Form 8610-2. | 808 |
| Figure 5-5. Privacy Act Information for Airman Applicants, FAA Form 8610-2. | 809 |
| Figure 5-6. Temporary Airman Certificate, FAA Form 8060-4. | 810 |
| 1321.-1335. RESERVED. | |
| SECTION 2. MAINTENANCE AIRMEN CERTIFICATION - ALIENS. | |
| 1336. Authority. | 817 |
| 1337. General. | 817 |
| 1338. Background. | 817 |
| 1339. Special Eligibility Requirements. | 817 |
| 1340.-1349. RESERVED. | |
| SECTION 3. INSPECTION AUTHORIZATION - ORIGINAL ISSUANCE. | |
| 1350. Authority. | 821 |
| 1351. Purpose. | 821 |
| 1352. General. | 821 |
| 1353. Persons Approved to Conduct the Test. | 821 |
| 1354. Qualification Requirements. | 821 |
| 1355. Procedure When Applicant Fails to Meet the Qualification Requirements. | 821 |
| 1356. The Test. | 821 |
| 1357. Procedure When Applicant Fails. | 823 |
| 1358. Issuance of Inspection Authorization, FAA Form 8310-5. | 823 |
| 1359. Recordkeeping and Related Reports. | 824 |
| 1360.-1365. RESERVED. | |
| SECTION 4. INSPECTION AUTHORIZATION - RENEWAL OR SURRENDER. | |
| 1366. Authority. | 835 |
| 1367. Purpose. | 835 |
| 1368. General. | 835 |
| 1369. Renewal of Inspection Authorization | 835 |
| 1370. Voluntary Surrender of an Inspection Authorization. | 836 |
| 1371. Failure to Renew. | 836 |
| 1372. Forms. | 836 |
| Figure 5-7. Mechanic's Application for Inspection Authorization, FAA Form 8610-1. | 847 |

| | <u>Page No.</u> |
|---|-----------------|
| Figure 5-8. Notice of Disapproval of Application, FAA Form 8060-5. | 848 |
| Figure 5-9. Inspection Authorization, FAA Form 8310-5 (Show no Entry for SSN). | 849 |
| Figure 5-10. Reverse Side of FAA Form 8310-5, Showing Entry for Renewal of an Inspection Authorization. | 849 |
| 1373.-1379. RESERVED. | |
| SECTION 5. REPAIRMAN CERTIFICATION. | |
| 1380. Authority. | 859 |
| 1381. Purpose. | 859 |
| 1382. General. | 859 |
| 1383. Application Procedures. | 859 |
| 1384. Application Review. | 860 |
| 1385. Certificate Issuance. | 860 |
| 1386. Complete the Temporary Airman Certificate. | 861 |
| 1387. Application Disapproval. | 861 |
| 1388. Reissuance or Change in Rating. | 861 |
| 1389. Surrendered Certificate Procedures. | 861 |
| 1390. File and Routing. | 861 |
| 1391. Forms. | 862 |
| Figure 5-11. Typical Repairman Applicant Entries on FAA Form 8610-2 (Front) | 873 |
| Figure 5-12. Typical Temporary Airman Certificate, FAA Form 8060-4. | 874 |
| Figure 5-13. Typical Temporary Airman Certificate, FAA Form 8060-4. | 875 |
| 1392.-1399. RESERVED. | |
| SECTION 6. REPAIRMAN, EXPERIMENTAL AIRCRAFT BUILDER CERTIFICATION. | |
| 1400. Authority. | 879 |
| 1401. Purpose. | 879 |
| 1402. General. | 879 |
| 1403. Eligibility Requirements. | 879 |
| 1404. Application. | 879 |
| 1405. Review Application. | 880 |
| 1406. Certificate Issuance. | 880 |
| 1407. Surrender Certificate Procedures. | 880 |
| 1408. File and Routing. | 881 |
| 1409. Forms. | 881 |
| Figure 5-14. Typical Airman Certificate and/or Rating Application, FAA Form 8610-2 (Front). | 885 |

| | <u>Page No.</u> |
|---|-----------------|
| Figure 5-15. Typical Airman Certificate and/or Rating Application, FAA Form 8610-2 (Reverse). | 886 |
| Figure 5-16. Typical Temporary Airman Certificate, FAA Form 8060-4. | 887 |
| 1410.-1419. RESERVED. | |
| SECTION 7. ORIGINAL ISSUANCE, RENEWAL AND SURVEILLANCE OF DESIGNATED MECHANIC EXAMINERS (DME) AND DESIGNATED PARACHUTE RIGGER EXAMINERS (DPRE). | |
| 1420. Purpose. | 891 |
| 1421. Issuance Authority. | 891 |
| 1422. General. | 891 |
| 1423. Designee Qualification Requirements. | 891 |
| 1424. Examiner Orientation and Standardization. | 892 |
| 1425. Fixed Base of Operations. | 893 |
| 1426. Examiner Privileges and Limitations. | 893 |
| 1427. Issuance of Designation. | 895 |
| 1428. Issuance of Designee Materials. | 895 |
| 1429. Recordkeeping and Related Reports. | 896 |
| 1430. Redesignation. | 896 |
| 1431. Annual Renewal. | 897 |
| 1432. Renewal Procedures. | 897 |
| 1433. Cancellation of Designation. | 897 |
| 1434. Voluntary Surrender of Certificate of Authority. | 898 |
| 1435. Records. | 898 |
| 1436. Surveillance Items and Procedures. | 899 |
| 1437. Forms. | 899 |
| Figure 5-17. Typical Execution of the Face of FAA Form 8110-14, Statement of Qualifications (DMIR - DER - DPRE - DME). | 905 |
| Figure 5-18. Reverse Side of FAA Form 8110-14, Showing Typical Entries. | 906 |
| Figure 5-19. Certificate of Authority, FAA Form 8430-9 (Typical Execution of the Face). | 907 |
| Figure 5-20. Reverse Side of FAA Form 8430-9. | 907 |
| Figure 5-21. Certificate of Designation, FAA Form 8000-5. | 908 |
| 1438.-1449. RESERVED. | |
| SECTION 8. PARACHUTE RIGGER CERTIFICATION PROCEDURES. | |
| 1450. Authority. | 917 |
| 1451. Purpose. | 917 |
| 1452. General. | 917 |
| 1453. Applicant's Experience and Eligibility. | 917 |
| 1454. Written Test. | 918 |
| 1455. Written Test Grades. | 918 |
| 1456. Application for Oral/Practical Test. | 918 |

Page No.

| | | |
|-------|---|-----|
| 1457. | Conducting Oral/Practical Test(s). | 919 |
| 1458. | Grading Procedures. | 919 |
| 1459. | Assignment of Seal Symbol. | 919 |
| 1460. | Issuance of Temporary Airman Certificate, FAA Form 8060-4. | 920 |
| 1461. | File and Routing. | 920 |
| 1462. | Forms. | 920 |
| | Figure 5-22. Typical Application Entries for Parachute Rigger Certificate on FAA Form 8610-2, Airman Certificate and/or Rating Application. | 925 |
| | Figure 5-23. DPRE Report for Parachute Rigger Practical Test (Reverse of FAA Form 8610-2). | 926 |
| | Figure 5-24. Typical Parachute Rigger Seal Symbol Assignment Card, FAA Form 3318. | 927 |
| | Figure 5-25. Temporary Airman Certificate, FAA Form 8060-4 for a Senior Parachute Rigger. | 927 |

1463.-1469. RESERVED.

SECTION 9. MAINTENANCE AIRMEN (MECHANICS AND REPAIRMEN)
SURVEILLANCE.

| | | |
|-------------|--|-----|
| 1470. | Purpose. | 931 |
| 1471. | General. | 931 |
| 1472. | Emphasis. | 931 |
| 1473. | Actions Resulting From Surveillance of Maintenance Airmen. | 932 |
| 1474. | Reports. | 932 |
| 1475.-1485. | RESERVED. | |

SECTION 10. ANNUAL AVIATION MECHANIC SAFETY AWARD/FLIGHT
INSTRUCTOR OF THE YEAR AWARD PROGRAMS.

| | | |
|-------------|----------------------|-----|
| 1486. | Purpose. | 937 |
| 1487. | General Information. | 937 |
| 1488.-1599. | RESERVED. | |

CHAPTER 6. AIR TRANSPORTATION.

SECTION 1. GENERAL.

| | | |
|-------------|--|-----|
| 1600. | Purpose. | 949 |
| 1601. | Applicability. | 949 |
| 1602. | Maintenance/Inspection Program Requirements. | 950 |
| 1603.-1609. | RESERVED. | |

SECTION 2. AIRCRAFT INSPECTIONS AND ADDITIONAL MAINTENANCE REQUIREMENTS (9-OR-LESS).

| | |
|--|-----|
| 1610. Purpose. | 961 |
| 1611. Description. | 961 |
| 1612. Approved Aircraft Inspection Program. | 961 |
| 1613. Additional Maintenance Requirements (FAR Section 135.421). | 962 |
| 1614. Program Approval. | 964 |
| Figure 6-1. Revision Control Record. | 977 |
| 1615.-1629. RESERVED. | |

SECTION 3. CONTINUOUS AIRWORTHINESS MAINTENANCE PROGRAM.

| | |
|----------------------------------|-----|
| 1630. Purpose. | 983 |
| 1631. General. | 983 |
| 1632. Inspection Program. | 983 |
| 1633. Inspection Organization. | 984 |
| 1634. Guidance. | 984 |
| 1635. Maintenance Privileges. | 985 |
| 1636. Operations Specifications. | 985 |
| 1637.-1649. RESERVED. | |

SECTION 4. MAINTENANCE MANUAL REQUIREMENTS.

| | |
|---|-----|
| 1650. Authority. | 995 |
| 1651. General. | 995 |
| 1652. Maintenance Manual Approval. | 995 |
| 1653. Maintenance Manual Content Pertaining to Approved Aircraft Inspection Programs. | 996 |
| 1654. Maintenance Manual Content Pertaining to Approved Additional Maintenance Programs. | 996 |
| 1655. Maintenance Manual Content Pertaining to Continuous Airworthiness Maintenance Programs. | 996 |
| 1656. Maintenance Manual Revisions. | 997 |
| 1657. Requirements for Manuals Aboard Aircraft - Charter Air Carriers and Operators Under FAR Part 135. | 997 |
| 1658. Maintenance Manual Distribution Within the FAA. | 997 |
| 1659. Maintenance Manual Requirements - Flight Test. | 997 |
| 1660.-1669. RESERVED. | |

SECTION 5. WEIGHT AND BALANCE CONTROL.

| | |
|--|------|
| 1670. Authority. | 1009 |
| 1671. Purpose. | 1009 |
| 1672. Responsibility. | 1009 |
| 1673. Program Basis. | 1009 |
| 1674. Additional Requirements For Aircraft Under FAR Part 135. | 1009 |
| 1675. Scales. | 1010 |
| 1676. Operations Specifications Part E, Weight and Balance. | 1011 |

Page No.

| | |
|---|------|
| 1677. Unapproved Weight and Balance Programs. | 1011 |
| 1678.-1685. RESERVED. | |

SECTION 6. CONTRACTUAL ARRANGEMENTS FOR MAINTENANCE/OVERHAUL.

| | |
|---|------|
| 1686. Authority. | 1021 |
| 1687. Background. | 1021 |
| 1688. General Provisions and Restrictions. | 1021 |
| 1689. Continuous Lease/Time-Sharing/Pool Arrangements. | 1022 |
| 1690. Arrangements Utilizing the Contractor's Maintenance Program. | 1022 |
| 1691. Contractual Categories and Related Provisions and Restrictions. | 1023 |
| 1692. Operations Specifications. | 1025 |
| 1693.-1709. RESERVED. | |

SECTION 7. OPERATIONS SPECIFICATIONS (FAA FORM 1014) GOVERNING THE MAINTENANCE OF AIRCRAFT.

| | |
|--|------|
| 1710. Authority. | 1037 |
| 1711. Purpose. | 1037 |
| 1712. Introduction. | 1037 |
| 1713. Operations Specifications. | 1037 |
| 1714. Maintenance Operations Specifications - Part "D." | 1038 |
| 1715. Description of Operations Specifications - Aircraft Maintenance Pages. | 1040 |
| 1716. Description of Operations Specifications - Preface Pages. | 1040 |
| 1717. Inspector's Action Prior to Receipt of Formal Application. | 1044 |
| 1718. Preparation of Operations Specifications (OMB 04-R0075), FAA Form 1014. | 1045 |
| 1719. Review and Approval. | 1045 |
| 1720. Numbering Operations Specifications Pages. | 1046 |
| 1721. Minimum Distribution of Operations Specifications, FAA Form 1014 (OMB 04-R0075). | 1047 |
| 1722. Cancellation of Operations Specifications. | 1047 |
| 1723. Effective Date of Amended Operations Specifications - Aircraft Maintenance. | 1048 |
| 1724. Amendments Not Acceptable to the Operator. | 1048 |
| Figure 6-2. Example Operations Specifications - Aircraft Maintenance. | 1059 |
| Figure 6-3. Example Operations Specifications - Aircraft Maintenance. | 1060 |
| Figure 6-4. Example Operations Specifications - Aircraft Maintenance. | 1061 |

| | <u>Page No.</u> |
|---|-----------------|
| Figure 6-5. Example Operations Specifications - Preface Page - General. | 1062 |
| Figure 6-6. Example Operations Specifications - Preface Page - Checks, Inspections, and Overhaul Time Limits. | 1063 |
| Figure 6-7. Example Operations Specifications - Preface Page - Checks, Inspections, and Overhaul Time Limits. | 1064 |
| Figure 6-8. Example Operations Specifications - Preface Page - Reliability Program Authorization. | 1065 |
| Figure 6-9. Example Operations Specifications - Preface Page - Reliability Program Authorization. | 1066 |
| Figure 6-10. Example Operations Specifications - Aircraft Maintenance - Reliability Program Identification. | 1067 |
| Figure 6-11. Example Operations Specifications - Preface Page - Short-Term Escalation Authorization. | 1068 |
| Figure 6-12. Example Operations Specifications - Preface Page - Maintenance Contractual Arrangement Authorization. | 1069 |
| Figure 6-13. Example Operations Specifications - Preface Page - Maintenance Contractual Arrangement Authorization. | 1070 |
| Figure 6-14. Example Operations Specifications - Preface Page - Maintenance Contractual Arrangement Authorization. | 1071 |
| Figure 6-15. Example Operations Specifications - Preface Page - Leased Aircraft Maintenance Program Authorization. | 1072 |
| Figure 6-16. Example Operations Specifications - Preface Page - Parts Pool Agreement Authorization. | 1073 |
| Figure 6-17. Example Operations Specifications - Preface Page - Prorated Time Authorization. | 1074 |
| Figure 6-18. Example Operations Specifications - Preface Page - Parts Borrowing Authorization. | 1075 |
| Figure 6-19. Example Operations Specifications - Preface Page - Special Flight Permit With Continuing Authorization to Conduct Ferry Flights. | 1076 |
| Figure 6-20. Example Operations Specifications - Preface Page - Aircraft Identification. | 1077 |
| Figure 6-21. Example Operations Specifications - Aircraft Maintenance Pages - Typical Form 1014 Reverse Entries. | 1078 |
| Figure 6-22. Operations Specifications - Preface Page - Approved Aircraft Inspection Program. | 1079 |

| | <u>Page No.</u> |
|---|-----------------|
| Figure 6-23. Example Operations Specifications - Preface Page - Additional Maintenance Requirements Programs. | 1080 |
| Figures 6-24.-6-29. RESERVED. | 1080 |
| Figure 6-30. Example Operations Specifications - Aircraft Weight and Balance. | 1081 |
| 1725.-1749. RESERVED. | |
| SECTION 8. MAINTENANCE REVIEW BOARD (MRB) PROCEDURES. | |
| 1750. Purpose. | 1087 |
| 1751. General. | 1087 |
| 1752. Maintenance Review Board Proceedings. | 1087 |
| 1753. Maintenance Review Board Management. | 1087 |
| 1754. Maintenance Review Board Running Concurrently. | 1087 |
| 1755. Maintenance Review Board Considerations. | 1087 |
| 1756. Maintenance Review Board Duties and Responsibilities. | 1089 |
| 1757. Maintenance Review Board Policy Board. | 1090 |
| 1758. Maintenance/Inspection Requirement Approvals. | 1091 |
| 1759. Maintenance/Inspection Requirement Publications. | 1091 |
| 1760. Initial Maintenance/Inspection Revision. | 1091 |
| 1761. Implementation of Initial Maintenance/Inspection Requirements. | 1091 |
| 1762.-1775. RESERVED. | |
| SECTION 9. AIRCRAFT RELIABILITY PROGRAMS. | |
| 1776. Authority. | 2003 |
| 1777. Background. | 2003 |
| 1778. Primary Maintenance Processes. | 2004 |
| 1779. Reliability Programs. | 2004 |
| 1780. Continuous Surveillance and Analysis. | 2005 |
| 1781. Application of "Three-Process Concept" to New Aircraft. | 2005 |
| 1782. Application of the Condition-Monitoring Process to Existing Fleets. | 2005 |
| 1783. Group Programs. | 2006 |
| 1784. Maintenance Programs Approval. | 2007 |
| 1785. Operations Specifications - Aircraft Maintenance, Part D. Figure 6-31. Component Analysis. | 2010 2021 |
| 1786-1799. RESERVED. | |
| SECTION 10. SHORT-TERM ESCALATION. | |
| 1800. Authority. | 2023 |
| 1801. Background. | 2023 |
| 1802. Policy. | 2023 |
| 1803. Essential Elements of a Short-Term Escalation Program. | 2023 |
| 1804. Extended Short-Term Escalations. | 2024 |

Page No.

| | |
|-----------------------|------|
| 1805. Approval. | 2025 |
| 1806.-1815. RESERVED. | |

SECTION 11. ADOPTED MAINTENANCE PROGRAMS FOR AIRCRAFT
ON SHORT-TERM LEASE.

| | |
|-----------------------|------|
| 1816. Authority. | 2037 |
| 1817. Purpose. | 2037 |
| 1818. General. | 2037 |
| 1819. Procedure. | 2037 |
| 1820. Approval. | 2038 |
| 1821.-1829. RESERVED. | |

SECTION 12. AIR CARRIER SPECIAL FLIGHT PERMITS WITH CONTINUING
AUTHORIZATION TO CONDUCT FERRY FLIGHTS.

| | |
|--|------|
| 1830. Authority. | 2049 |
| 1831. Purpose. | 2049 |
| 1832. General. | 2049 |
| 1833. Special Conditions and Limitations. | 2049 |
| 1834. Application. | 2050 |
| 1835. Applications Involving Foreign Air Transportation. | 2050 |
| 1836. Display of Permit. | 2050 |
| 1837. Guidance. | 2051 |
| 1838.-1845. RESERVED. | |

SECTION 13. PARTS POOL AGREEMENTS.

| | |
|---|------|
| 1846. Purpose. | 2063 |
| 1847. Background. | 2063 |
| 1848. Guidance. | 2063 |
| 1849. Foreign-Manufactured Replacement Parts. | 2064 |
| 1850.-1855. RESERVED. | |

SECTION 14. MANAGEMENT PERSONNEL.

| | |
|--------------------------------|------|
| 1856. Purpose. | 2077 |
| 1857. Background. | 2077 |
| 1858. Discussion | 2077 |
| 1859. FAR Part 135 Deviations. | 2078 |
| 1860.-1865. RESERVED. | |

SECTION 15. MINIMUM EQUIPMENT LISTS - DEVELOPMENT AND UTILIZATION.

| | |
|--|------|
| 1866. Purpose. | 2089 |
| 1867. Flight Operations Evaluation Board (FOEB). | 2089 |
| 1868. Inclusion of Minimum Equipment List in the Operator's Maintenance Manual. | 2089 |

| | <u>Page No.</u> |
|---|-----------------|
| 1869. The Effect of the Minimum Equipment List on the Airworthiness Release as Required by FAR Sections 121.709, 127.319, or 135.433. | 2089 |
| 1870. The Effect of the Minimum Equipment List on Approval for Return to Service Required for Aircraft Under FAR Section 135.411(a)(1). | 2090 |
| 1871.-1889. RESERVED. | |
| SECTION 16. LIST OF AIR CARRIER AIRCRAFT. | |
| 1890. Purpose. | 3001 |
| 1891. General. | 3001 |
| 1892. Reporting Procedures. | 3001 |
| 1893. Information to Included on "List of Air Carrier Aircraft (RIS: FS 8320-7)." | 3001 |
| 1894.-1899. RESERVED. | |
| SECTION 17. MONTHLY AIR CARRIER AIRCRAFT/ENGINE UTILIZATION REPORT (RIS: AC 8320-1). | |
| 1900. Authority. | 3013 |
| 1901. Purpose. | 3013 |
| 1902. General. | 3013 |
| 1903. Procedures. | 3013 |
| 1904.-1909. RESERVED. | |
| SECTION 18. INSPECTION PROCEDURES TO BE FOLLOWED DURING STRIKES OR LABOR DISPUTES. | |
| 1910. Purpose. | 3027 |
| 1911. General. | 3027 |
| 1912. Caution. | 3027 |
| 1913. Inspector's Responsibility. | 3027 |
| 1914. Reports. | 3027 |
| 1915.-1919. RESERVED. | |
| SECTION 19. OPERATIONAL CHECKS (FLIGHT TEST). | |
| 1920. Purpose. | 3039 |
| 1921. General. | 3039 |
| 1922.-1925. RESERVED. | |
| SECTION 20. AIR CARRIER MAINTENANCE AND INSPECTION PERSONNEL DUTY TIME LIMITATIONS. | |
| 1926. Purpose. | 3049 |
| 1927. General. | 3049 |
| 1928. Guidance. | 3049 |
| 1929.-1933. RESERVED. | |

Page No.

SECTION 21. PREFLIGHT INSPECTIONS.

| | |
|-----------------------|------|
| 1934. Purpose. | 3061 |
| 1935. General. | 3061 |
| 1936.-1939. RESERVED. | |

SECTION 22. MAINTENANCE OF PRESSURE CYLINDERS IN USE
AS AIRCRAFT EQUIPMENT.

| | |
|--|--------------|
| 1940. Purpose. | 3073 |
| 1941. Background. | 3073 |
| 1942. Procedures. | 3074 |
| 1943. Guidance and Use in Preparation of Operations Specifications. | 3074 |
| 1944. Application of CFR 49, Section 173.301(c). Figure 6-32 - Operations Specifications - Aircraft Maintenance. | 3075 3085 |
| 1945.-1949. RESERVED. | |

SECTION 23. SERVICEABILITY OF USED ENGINES, PROPELLERS, AND
COMPONENTS.

| | |
|-----------------------------|------|
| 1950. Purpose. | 3089 |
| 1951. General. | 3089 |
| 1952. Approval for Service. | 3089 |
| 1953.-1959. RESERVED. | |

SECTION 24. PROVING FLIGHTS AND PLACING NEW AIRCRAFT INTO SERVICE.

| | |
|--|------|
| 1960. Purpose. | 4001 |
| 1961. Authority. | 4001 |
| 1962. General. | 4001 |
| 1963. Proving Flight Requirements. | 4001 |
| 1964. Aircraft Proving Tests. | 4002 |
| 1965. En Route Phase. | 4002 |
| 1966. Items to be Observed on Proving Flights. | 4003 |
| 1967. Unsatisfactory Items Observed During Proving Flights. | 4003 |
| 1968. Reports, Aircraft Proving Tests and Route Proving Flights (RIS: FS 8430-9). | 4004 |
| 1969. Distribution. | 4004 |
| 1970-1979. RESERVED. | |

SECTION 25. MAINTENANCE AND INSPECTION PERSONNEL TRAINING.

| | |
|------------------------------------|------|
| 1980. General. | 4015 |
| 1981. Training Program Evaluation. | 4015 |
| 1982.-1989. RESERVED. | |

SECTION 26. SPOT AND RAMP INSPECTIONS.

| | |
|--|------|
| 1990. Purpose. | 4027 |
| 1991. General. | 4027 |
| 1992. Maintenance Spot Inspections. | 4027 |
| 1993. Ramp Inspections. | 4028 |
| 1994. Reporting Spot and Ramp Inspections. | 4030 |
| 1995.-1999. RESERVED. | |

SECTION 27. EN ROUTE INSPECTIONS.

| | |
|--|------|
| 2000. Purpose. | 4041 |
| 2001. Authority. | 4041 |
| 2002. En Route Inspections. | 4041 |
| 2003. Personnel Authorized to Conduct En Route Inspections. | 4041 |
| 2004. Qualifications. | 4041 |
| 2005. Access to Aircraft. | 4041 |
| 2006. Performance of En Route Inspections. | 4043 |
| 2007. General. | 4044 |
| 2008. Reporting En Route Inspections. | 4045 |
| 2009. Distribution of FAA Form 3112 (RIS: FS 8320-8). | 4047 |
| 2010. Followup Action on Reported Discrepancies. | 4047 |
| Figure 6-33. Sample Standard Form 160, Request for Access to Aircraft or Free Transportation. | 4057 |
| Figure 6-34. Sample FAA Form 8430-13, Request for Access to Aircraft. | 4058 |
| Figure 6-35. FAA Form 3112, Inspection and Surveillance Record. | 4059 |
| Figure 6-36. FAA Form 3112, Inspection and Surveillance Record. | 4060 |
| 2011.-2019. RESERVED. | |

SECTION 28. INFORMAL SURVEILLANCE OF MAINTENANCE ACTIVITIES.

| | |
|----------------------------------|------|
| 2020. Purpose. | 4065 |
| 2021. General. | 4065 |
| 2022. Informal Visits. | 4065 |
| 2023. Recording Informal Visits. | 4065 |
| 2024.-2029. RESERVED. | |

SECTION 29. AIR CARRIER MAINTENANCE FACILITY INSPECTIONS.

| | |
|--|------|
| 2030. Authority. | 4071 |
| 2031. General. | 4071 |
| 2032. Performance of Maintenance Facility Inspections. | 4071 |
| 2033. Maintenance Facility Inspection Reports. | 4071 |
| 2034.-2039. RESERVED. | |

SECTION 30. STORAGE AND HANDLING OF FUEL, OIL, DEICER FLUID,
ADI, ETC.

| | |
|------------------|------|
| 2040. Authority. | 4077 |
|------------------|------|

| | <u>Page No.</u> |
|--|-----------------|
| 2041. Responsibility. | 4077 |
| 2042.-2045. RESERVED. | |
| SECTION 31. TEMPORARY GROUNDING OF AIR CARRIER AIRCRAFT. | |
| 2046. Purpose. | 4083 |
| 2047. Persons Authorized to Cause Temporary Grounding of Air Carrier Aircraft. | 4083 |
| 2048. Conditions Under Which a Temporary Grounding Notice May be Issued. | 4083 |
| 2049. Form and Manner of Notifying an Air Carrier of Temporary Grounding of Aircraft. | 4083 |
| 2050. Coordination Before Temporary Grounding Action is Initiated. | 4084 |
| 2051. Coordination After Temporary Grounding Action. | 4084 |
| 2052. Action by Regional Office After Being Notified of Temporary Grounding Action. | 4085 |
| 2053. Additional Action With Regard to Air Carrier Aircraft Which Have Been Temporarily Grounded. | 4085 |
| 2054. Violation Action. | 4085 |
| 2055. Probability of Need to Use the Temporary Grounding Provisions of Section 605(b) of the Federal Aviation Act. | 4086 |
| 2056.-2059. RESERVED. | |
| SECTION 32. AIR CARRIER MAINTENANCE DESIGNATOR SYMBOLS. | |
| 2060. Purpose. | 4091 |
| 2061. Caution. | 4091 |
| 2062. Changes, Additions, or Deletions to the List of Maintenance Designator Symbols (RIS: FS 8300-1). | 4091 |
| 2063. Maintenance Designator Symbols. | 4092 |
| 2064.-2069. RESERVED. | |
| SECTION 33. AIR CARRIER INSPECTION PROCEDURE. | |
| 2070. Purpose. | 4097 |
| 2071. General. | 4097 |
| 2072. Interregional Coordination of Inspections | 4097 |
| 2073. Periodic Meetings of Inspectors. | 4098 |
| 2074. Air Carrier Meeting Report/Attendees (RIS: FS 8320-21). | 4098 |
| 2075. Training Operations. | 4098 |
| 2076.-2087. RESERVED. | |
| SECTION 34. SPECIAL FIELD REPORTING REQUIREMENTS. | |
| 2088. Field Reporting Requirements. | 5003 |
| Figure 6-37. Service Difficulty Information to be Reported - Special Report of Significant DC-10/B-747,757,767/L-1011/A-300 Failures, Malfunctions, or Defects (RIS: WS 8320-22). | 5006 |

| | <u>Page No.</u> |
|---|-----------------|
| 2089. Distribution. | 5006 |
| 2090. Safety Is Dependent on Good Effective Communication. | 5006 |
| 2091.-2099. RESERVED. | |
| SECTION 35. OPERATION OF FOREIGN-REGISTERED AIRCRAFT BY U.S. AIR CARRIERS. | |
| 2100. Authority. | 5015 |
| 2101. Purpose. | 5015 |
| 2102. Instructions. | 5015 |
| 2103. Certificate Holder Responsibility. | 5015 |
| 2104. Exemptions or Concessions. | 5016 |
| 2105. FAA Responsibility. | 5016 |
| 2106.-2150. RESERVED. | |
| SECTION 36. AIR CARRIER RELIABILITY PROGRAMS DEVELOPED FOR CUSTOMER USE. | |
| 2151. Purpose. | 5025 |
| 2152. Definitions. | 5025 |
| 2153. Background. | 5025 |
| 2154. Discussion. | 5026 |
| 2155. Procedures. | 5027 |
| 2156.-2165. RESERVED. | |
| SECTION 37. CONTINUING ANALYSIS AND SURVEILLANCE SYSTEMS. | |
| 2166. Purpose. | 5033 |
| 2167. Discussion. | 5033 |
| 2168. Application. | 5034 |
| 2169.-2175. RESERVED. | |
| SECTION 38. INSPECTION PROGRAMS AND ORGANIZATION. | |
| 2176. Purpose. | 5037 |
| 2177. General. | 5037 |
| 2178. Inspection Programs. | 5037 |
| 2179. Inspection Organization. | 5038 |
| 2180. Guidance. | 5038 |
| 2181.-2187. RESERVED. | |
| SECTION 39. AIRCRAFT EVALUATION GROUPS (AEG). | |
| 2188. General. | 5045 |
| 2189. Duties of Maintenance/Avionics Specialists. | 5045 |
| 2190.-2199. RESERVED. | |

CHAPTER 7. GENERAL AVIATION/COMMERCIAL.

SECTION 1. OPERATORS OF LARGE AND TURBINE-POWERED MULTIENGINE AIRPLANES - INSPECTION PROGRAMS.

| | |
|--|------|
| 2200. Purpose. | 5051 |
| 2201. Selection of Inspection Program. | 5051 |
| 2202. Programs Currently in Use. | 5051 |
| 2203. Manufacturer's Recommended Inspection Program. | 5051 |
| 2204. Program Approval. | 5051 |
| 2205. FAA Initiated Changes to an Approved FAR Section 91.169(f)(5) Program. | 5052 |
| 2206. Changes Requested by the Program Holder. | 5052 |
| 2207. Inspector's Approval. | 5052 |
| 2208. Change of Ownership. | 5052 |
| 2209. Additional Guidelines. | 5052 |
| 2210.-2220. RESERVED. | |

SECTION 2. CERTIFICATION AND SURVEILLANCE OF FAR PART 125 OPERATORS.

| | |
|--|------|
| 2221. Authority. | 5063 |
| 2222. Purpose. | 5063 |
| 2223. Standardization of Procedures. | 5063 |
| 2224. General. | 5063 |
| 2225. Foreign Operators. | 5064 |
| 2226. Aviation Safety Inspector Credentials. | 5064 |
| 2227. List of Certificated Operators. | 5064 |
| 2228.-2233. RESERVED. | 5065 |
| 2234. Precertification Actions. | 5065 |
| 2235. Eligibility. | 5065 |
| 2236. Application for Certification. | 5066 |
| 2237. Processing the Application. | 5067 |
| 2238. Proration. | 5071 |
| 2239. Preparation and Issuance of Certificate. | 5072 |
| 2240. Amendment of a Certificate. | 5073 |
| 2241. Voluntary Cancellation of Certificates. | 5073 |
| 2242. Replacement of Lost or Destroyed Certificates. | 5073 |
| 2243. Operations Specifications - General. | 5073 |
| 2244. Contents of Operations Specifications (OPS SPECS.) | 5074 |
| Figure 7-1. Operations Specifications Part D - Maintenance Preface Page. | 5085 |
| Figure 7-2. Operations Specifications Part D - Maintenance. | 5086 |
| Figure 7-3. Operations Specifications Part D - (Continued). | 5087 |
| Figure 7-4. Operations Specifications Part D - (Continued). | 5088 |
| Figure 7-5. Operations Specifications Part E - Weight and Balance Program. | 5089 |

| | <u>Page No.</u> |
|---|-----------------|
| Figure 7-6. Operations Specifications Part E - (Continued). | 5090 |
| Figures 7-7.-7-10. RESERVED. | |
| 2245.-2285. RESERVED. | |
| SECTION 3. SURVEILLANCE OF GENERAL AVIATION AIRCRAFT. | |
| 2286. Objective. | 5097 |
| 2287. Surveillance Coverage. | 5097 |
| 2288. General Procedures. | 5097 |
| 2289. Scope of Aircraft Surveillance. | 5097 |
| 2290. Reports of Aircraft Surveillance, FAA Form 8620-1, Aircraft Condition Notice. | 5098 |
| 2291. Disposition of Reports - Aircraft Condition Notice, FAA Form 8620-1. | 5098 |
| 2292. Malfunction or Defect Report, (OMB 04-R0003) (RIS: FS 8330-11), FAA Form 8010-4. | 5099 |
| 2293. Followup Action. | 5099 |
| 2294. Surveillance of Large, Pressurized, and Turbine-Powered Aircraft. | 5099 |
| 2295. Surveillance of U.S.-Registered Aircraft in Foreign Countries. | 6000 |
| Figure 7-11. Aircraft Condition Notice, FAA Form 8620-1 (Front). | 6011 |
| Figure 7-12. Aircraft Condition Notice, FAA Form 8620-1 (Reverse). | 6012 |
| 2296.-2306. RESERVED. | |
| SECTION 4. THE ANNUAL AND 100-HOUR INSPECTION. | |
| 2307. General. | 6017 |
| 2308. Annual Inspection Intervals. | 6017 |
| 2309. Scope of Inspection. | 6017 |
| 2310. Performance of Annual and 100-Hour Inspection. | 6017 |
| 2311. Compliance With FAA Aircraft Specifications, Airworthiness Directives, and Other Approved Data, FAR Section 43.15. | 6017 |
| 2312. Recording of the Annual Inspection. | 6017 |
| 2313. Followup of Unairworthy Aircraft. | 6018 |
| 2314.-2320. RESERVED. | |
| SECTION 5. PROGRESSIVE INSPECTION. | |
| 2321. General. | 6029 |
| 2322. The Responsibility of the Inspector in the Initiation of a Progressive Inspection System. | 6029 |
| 2323. Complete Inspection at Start of Progressive Inspection. | 6029 |
| 2324. Discontinuation of Progressive Inspection System. | 6029 |
| 2325. Field Office Records. | 6029 |
| 2326. Surveillance by the Inspector. | 6029 |
| 2327.-2999. RESERVED. | |

Page No.

CHAPTER 8. AVIONICS

SECTION 1. JOB FUNCTIONS/UTILIZATION.

| | |
|--|------|
| 3000. Purpose. | 6041 |
| 3001. General. | 6041 |
| 3002. Job Function Descriptions for Avionics Inspectors With Scheduled, Supplemental, and Commercial Operators Responsibilities. | 6041 |
| 3003. Job Function Descriptions for Avionics Inspectors With General Aviation Responsibilities. | 6045 |
| 3004.-3024. <u>RESERVED.</u> | |

SECTION 2. AIRBORNE INSTRUMENT INSPECTOR.

| | |
|------------------------------|------|
| 3025. Purpose. | 6059 |
| 3026. Inspector Location. | 6059 |
| 3027. Responsibilities. | 6059 |
| 3028. Duties. | 6059 |
| 3029. Scheduling. | 6060 |
| 3030. Utilization. | 6060 |
| 3031.-3040. <u>RESERVED.</u> | |

SECTION 3. PERSONNEL UTILIZATION/EFFECTIVENESS AND CONDUCT.

| | |
|--|--------------|
| 3041. Purpose. | 6071 |
| 3042. Personnel Utilization/Effectiveness and Conduct. Figure 8-1. Delineation of Technical Responsibilities. | 6071 6081 |
| 3043.-3050. <u>RESERVED.</u> | |

SECTION 4. AVIONICS EQUIPMENT APPROVAL.

| | |
|---|------|
| 3051. Authority. | 6085 |
| 3052. Purpose. | 6085 |
| 3053. Background. | 6085 |
| 3054. Avionics Inspector's Responsibilities and Action. | 6085 |
| 3055. Maintenance Certification Procedures. | 6085 |
| 3056. Alternate Initial Action. | 6085 |
| 3057.-3070. <u>RESERVED.</u> | |

SECTION 5. TEST EQUIPMENT APPROVAL.

| | |
|--|------|
| 3071. Purpose. | 6095 |
| 3072. General. | 6095 |
| 3073. Test Equipment Equivalency. | 6095 |
| 3074. Test Equipment Updating. | 6095 |
| 3075. Acceptability. | 6095 |
| 3076. Radiated VOR Maintenance Test Signals. | 6095 |
| 3077.-3097. <u>RESERVED.</u> | |

SECTION 6. AUTOMATIC TEST EQUIPMENT (ATE). BUILT-IN TEST EQUIPMENT (BITE).

| | |
|---------------------------------------|------|
| 3098. Purpose. | 7007 |
| 3099. Authority. | 7007 |
| 3100. Automatic Test Equipment (ATE). | 7007 |
| 3101. Built-In Test Equipment (BITE). | 7007 |
| 3102. Inspector's Responsibility. | 7008 |
| 3103. General Practices - ATE. | 7009 |
| 3104. General Practices - BITE. | 7009 |
| Figure 8-2. Flow Chart. | 7021 |
| 3105.-3120. <u>RESERVED.</u> | |

SECTION 7. APPROVAL OF AREA NAVIGATION SYSTEMS.

| | |
|--|------|
| 3121. Purpose. | 7027 |
| 3122. Background. | 7027 |
| 3123. FAA Approval. | 7027 |
| 3124. VFR Approval. | 7028 |
| 3125. IFR Approval. | 7028 |
| 3126. Original VFR Approval Changed to IFR Approval. | 7029 |
| 3127. Major Repair and Alteration, FAA Form 337. | 7030 |
| 3128. Engineering Assistance. | 7030 |
| 3129. Air Carrier Maintenance Training Program. | 7030 |
| 3130.-3150. <u>RESERVED.</u> | |

SECTION 8. APPROVAL OF MICROWAVE LANDING SYSTEM.

| | |
|---|------|
| 3151. Purpose. | 7041 |
| 3152. Background. | 7041 |
| 3153. System Description. | 7041 |
| 3154. Approval. | 7041 |
| 3155. General. | 7041 |
| 3156. Maintenance Program Requirements. | 7042 |
| 3157. Contractual Maintenance. | 7043 |
| 3158. Reliability Program. | 7043 |
| 3159. Training. | 7043 |
| 3160. Operations Specifications, FAA Form 1014. | 7044 |
| Figure 8-3. Operations Specifications (Front) Doro Aviation Service MLS Ground Transmitter Maintenance (1). | 7055 |
| Figure 8-4. Operations Specifications (Reverse) Doro Aviation Service MLS Ground Transmitter Maintenance (1). | 7056 |
| Figure 8-5. Operations Specifications (Front) Doro Aviation Service Aircraft Maintenance, MLS (1) De Havilland DHC-6. | 7057 |
| Figure 8-6. Operations Specifications (Reverse) Doro Aviation Service Aircraft Maintenance, MLS (1) De Havilland DHC-6. | 7058 |
| 3161.-3181. <u>RESERVED.</u> | |

SECTION 9. APPROVAL OF CAT I, II, AND IIIa LANDING MINIMUMS.

| | |
|---|------|
| 3182. Purpose. | 7063 |
| 3183. Authority. | 7063 |
| 3184. Background. | 7063 |
| 3185. CAT I and CAT II Program Development. | 7063 |
| 3186. Evaluation Programs. | 7064 |
| 3187. Additional Equipment Installation. | 7064 |
| 3188. Alterations. | 7064 |
| 3189. Maintenance Training Programs. | 7065 |
| 3190. General Aviation Category II Equipment Approval (FAR Part 91). | 7065 |
| 3191. Maintenance Program - General Aviation. | 7066 |
| 3192. Test Equipment and Standards. | 7066 |
| 3193. Approvals and Authorizations - General Aviation. | 7067 |
| 3194. Reports and Records - General Aviation. | 7067 |
| 3195. Maintenance Period Extensions - General Aviation. | 7067 |
| 3196. FAR Part 121 - Category I, II, IIIa Equipment Approval. | 7068 |
| 3197. Aircraft Status Limitations. | 7069 |
| 3198. Test Equipment and Standards. | 7069 |
| 3199. Approval Authorization. | 7069 |
| 3200.-3220. <u>RESERVED.</u> | |

SECTION 10. MERCURY BAROMETER CORRECTION.

| | |
|--|------|
| 3221. Purpose. | 7079 |
| 3222. Authority. | 7079 |
| 3223. Background. | 7079 |
| 3224. Avionics Inspector's Responsibilities. | 7079 |
| 3225.-3230. <u>RESERVED.</u> | |

SECTION 11. MONITORING COCKPIT VOICE RECORDERS.

| | |
|--|------|
| 3231. Purpose. | 7089 |
| 3232. Background. | 7089 |
| 3233. Avionics Inspector's Responsibilities. | 7089 |
| 3234.-3254. <u>RESERVED.</u> | |

SECTION 12. EN ROUTE INSPECTIONS.

| | |
|--|------|
| 3255. Purpose. | 7099 |
| 3256. General. | 7099 |
| 3257. Air Carrier En Route Inspection Report - Avionics. Figure 8-7. Air Carrier En Route Inspection Report (FAA Form 3112). | 8011 |
| 3258.-3268. <u>RESERVED.</u> | |

SECTION 13. INSPECTION OF COMMUNICATION STATIONS.

| | |
|--------------------------------|------|
| 3269. Purpose. | 8017 |
| 3270. General. | 8017 |
| 3271. Frequency of Inspection. | 8017 |

| | <u>Page No.</u> |
|---|-----------------|
| 3272. Air Carrier Communication Facility Ground Inspection. | 8017 |
| 3273. Distribution of Report. | 8017 |
| 3274.-3284. <u>RESERVED.</u> | |
| SECTION 14. INSPECTION OF FOREIGN LOCATED GROUND NAVIGATIONAL AIDS. | |
| 3285. Purpose. | 8027 |
| 3286. General. | 8027 |
| 3287. Nondirectional Beacons. | 8028 |
| 3288. Omiranges. | 8028 |
| 3289. Localizer and Glide Slope. | 8029 |
| 3290. Seventy-Five Megahertz Markers. | 8029 |
| 3291. Four-Course Ranges. | 8029 |
| 3292. Ground-Controller Approach. | 8029 |
| 3293. Frequency of Inspection. | 8029 |
| 3294. Exceptions. | 8029 |
| 3295. Discrepancies. | 8030 |
| 3296.-3306. <u>RESERVED.</u> | |
| SECTION 15. REGULATIONS HAVING SPECIFIC COMPLIANCE DATES. | |
| 3307. Purpose. | 8041 |
| 3308. Background. | 8041 |
| 3309. Avionics Inspector's Responsibilities and Action. | 8041 |
| 3310.-3320. <u>RESERVED.</u> | |
| SECTION 16. FLIGHT DATA RECORDER MODIFICATION. | |
| 3321. Authority. | 8051 |
| 3322. Purpose. | 8051 |
| 3323. Background. | 8051 |
| 3324. Discussion. | 8051 |
| 3325.-3334. <u>RESERVED.</u> | |
| SECTION 17. DIGITAL FLIGHT DATA RECORDERS. | |
| 3335. Purpose. | 8063 |
| 3336. Background. | 8063 |
| 3337. Action. | 8063 |
| 3338.-3348. <u>RESERVED.</u> | |
| SECTION 18. MANUFACTURERS' AVIONICS RENTAL/EXCHANGE PROGRAMS FOR COMMUTER AIRLINES. | |
| 3349. Purpose. | 8073 |
| 3350. Authority. | 8073 |
| 3351. Background. | 8073 |
| 3352. Avionics Inspector's Responsibilities. | 8073 |
| 3353.-3400. <u>RESERVED.</u> | |

Page No.

SECTION 19. IMPLEMENTATION OF APPROVED AVIONICS SOFTWARE CHANGES.

| | |
|---|------|
| 3401. Purpose. | 8083 |
| 3402. Authority. | 8083 |
| 3403. Background. | 8083 |
| 3404. Discussion. | 8083 |
| 3405. Avionics Inspector's Responsibilities and Actions. | 8084 |
| 3406. Software Changes Requiring Technical Assistance. | 8085 |
| 3407.-3444. RESERVED. | |
| APPENDIX 1. FORMS AND REPORTS. (5 Pages) | 1 |
| APPENDIX 2. GUIDE FOR AIRCRAFT MAINTAINABILITY EVALUATION SUMMARY. (9 Pages) | 1 |
| APPENDIX 3. INDEX FOR PARACHUTE AUTOMATIC RELEASE DEVICES MILITARY SPECIFICATION EXCERPTS; MIL SPEC. MIL-R-25565D. (5 Pages) | 1 |
| APPENDIX 4. AIRWORTHINESS REVIEW CASES. (11 Pages) | 1 |
| <u>Review Case No. 1.</u> Applicant's Request for Information Regarding Qualifications for an Inspection Authorization (2 Pages) | 2 |
| <u>Review Case No. 2.</u> Request for Approval of Service Bulletins on U.S. Certificated Aircraft of Foreign Manufacture (1 Page) | 4 |
| <u>Review Case No. 3.</u> Use of Maintenance Release (1 Page) | 5 |
| <u>Review Case No. 4.</u> Operator's Request for a Certificated Mechanic to Accomplish Propeller Governor Drive Gear Replacement (1 Page) | 6 |
| <u>Review Case No. 5.</u> Interpretation of FAR Section 65.95, Inspection Authorization-Privileges and Limitations (1 Page) | 7 |
| <u>Review Case No. 6.</u> Clarification of Maintenance Rules when Aircraft That are Certificated in Standard Airworthiness Status are Operated as Public Aircraft (2 Pages) | 8 |

| | <u>Page No.</u> |
|---|-----------------|
| <u>Review Case No. 7.</u> Interpretation of "Return to Service" as Opposed to "Approval for Return to Service" (1 Page) | 10 |
| <u>Review Case No. 8.</u> Persons Authorized to Repack and Perform Maintenance on Drag Chutes Used on FAA Certificated Aircraft (1 Page) | 11 |
| APPENDIX 5. RELIABILITY PROGRAM REQUIREMENT AND PROGRAM APPROVAL CHECKLIST. (9 Pages) | 1 |
| APPENDIX 6. AIRLINE/MANUFACTURE MAINTENANCE PROGRAM PLANNING DOCUMENT - MSG-2. (25 Pages) | 1 |
| APPENDIX 7. MILITARY OCCUPATIONAL SPECIALITY (MOS) CODES. (7 Pages) | 1 |

CHAPTER 1. GENERAL

SECTION 1. INTRODUCTION

1. PURPOSE. This order provides field personnel with information which will guide and assist them in performing the duties associated with the airworthiness certification and surveillance of U.S.-registered civil aircraft and foreign-registered aircraft used by U.S.-certificated air carriers. It also provides guidance for the airworthiness certification and surveillance of general aviation aircraft, airmen, agencies, facilities, and other actions which require the issuance of an approval, authorization, waiver, permit, or other official paper.

2. DISTRIBUTION. This order is distributed to all organizational elements on ZVS-832; to branch level in the Offices of Airworthiness and Flight Operations, and in the Aviation Standards National Field Office; to the branch level in the regional Flight Standards and Aircraft Certification Divisions; to all Aircraft Certification Offices, Aircraft Certification Field Offices, Manufacturing Inspection District Offices, and Manufacturing Inspection Satellite Offices, to all Air Carrier, General Aviation, and Flight Standards District Offices; to all International, Aeronautical Quality Assurance, and International Aviation Field Offices; and to all Aircraft Evaluation Groups.

3. CANCELLATION. The following orders are cancelled:

a. Order 8320.12, Air Carrier Airworthiness Inspector's Handbook, dated November 7, 1977.

b. Order 8600.1, General Aviation Airworthiness Inspector's Handbook, dated October 16, 1978.

4. EXPLANATION OF CHANGES. The General Aviation and Air Carrier Airworthiness Inspectors' Handbooks are consolidated into a single Airworthiness Inspector's Handbook in keeping with the Washington Headquarters' reorganization consolidating the General Aviation and Commercial, Air Transportation, and Avionics Branches into the Aircraft Maintenance Division. It also provides field personnel with a single order that will guide and assist them in performing their duties.

5. AUTHORITY TO CHANGE THIS ORDER. The Manager of the Aircraft Maintenance Division, AWS-300, may issue changes to this order necessary to implement and manage the regulation of aircraft maintenance. The Director of Airworthiness, AWS-1, reserves the authority to approve changes to Chapter 1.

6. RESERVED.

SECTION 2. DESCRIPTION

7. PRESENTATION. This order is divided into chapters which pertain to the basic areas in which surveillance and certification are performed. These chapters are:

- a. CHAPTER 1 - General.
- b. CHAPTER 2 - General Practices and Procedures.
Pertains to administration of the FAA aircraft maintenance regulatory program.
- c. CHAPTER 3 - Aircraft.
Pertains to maintenance matters common to all civil aircraft.
- d. CHAPTER 4 - Agencies.
Pertains to repair stations, Federal Aviation Administration (FAA) maintenance facilities, pilot schools, parachute lofts, and aviation maintenance technician schools.
- e. CHAPTER 5 - Airmen.
Pertains to mechanics, repairmen, holders of inspection authorizations, parachute riggers, designated mechanic examiners, and designated parachute rigger examiners.
- f. CHAPTER 6 - Air Transportation.
Pertains to air carriers (including commuter/air taxi and commercial operators).
- g. CHAPTER 7 - General Aviation/Commercial.
Pertains to private and commercial aircraft other than in air transportation.
- h. CHAPTER 8 - Avionics.
Pertains to exclusive avionics matters. (Avionics activities associated with other maintenance activities are included in appropriate chapters).
- i. APPENDIX 1 - Forms and Reports.
- j. APPENDIX 2 - Guide for Aircraft Maintainability Evaluation Summary.
- k. APPENDIX 3 - Index for Parachute Automatic Release Devices and Military Specification Excerpts; MIL SPEC. MIL-R-25565D.
- l. APPENDIX 4 - Airworthiness Review Cases.
- m. APPENDIX 5 - Reliability Program Requirement and Program Approval Checklist.
- n. APPENDIX 6 - Airline/Manufacturer Maintenance Program Planning Document - MSG-2.
- o. APPENDIX 7 - Military Occupational Speciality (MOS) Codes.

8. BASIS FOR PROCEDURES CONTAINED IN THIS ORDER. Every action by the Federal Aviation Administration must be based on the legislative authority of the Federal Aviation Act of 1958. This authority is further defined in regulations, rules, orders, or other official media. Inspectors are urged to review this authority (particularly the FA Act and pertinent Federal Aviation Regulations) as often as needed to be firmly aware of the scope and authority. A directive merely provides instructions or guidance for performing the duties associated with that authority and does not, in itself, constitute authority to act. However, it does provide a uniform basis for performing such duties and is binding where it specifies procedures which must be followed in performing the inspector's duties.

9. DEFINITION OF OPERATORS AS USED IN THIS ORDER.

a. Air Carrier. An air carrier certificate holder authorized by operations specifications as designated by SFAR-38 to conduct operations under one or all of the following:

(1) Part 121, DOMESTIC AND FLAG Rules.

(2) Part 121, SUPPLEMENTAL (Charter) Rules includes commuters/air taxi operators, and 418 all-cargo operators using aircraft with more than 30 passenger seats or allowable payload greater than 7500 pounds.

(3) Part 127 for Scheduled Helicopter Operations.

(4) Part 135, Commuters/Air Taxi Operators and 418 all-cargo operators using aircraft of 30 passenger seats or less and maximum payload capacity of 7500 pounds.

b. Commercial Operator. An operating certificate holder authorized by operations specifications as designated by SFAR-38 under one or both of the following:

(1) Part 121, SUPPLEMENTAL (Charter) and COMMERCIAL OPERATOR Rules.*

(2) Part 135, reference 135.1(a)(3).*

*Except for intrastate operations under Part 121, operations of U.S.-registered civil airplanes which have a seating capacity of 30-or-more passenger seats or a maximum payload capacity of 6000 pounds by operating certificate holders are governed by Part 125.

c. Operating Certificate Holders Under Part 125. An operating certificate holder authorized by operations specifications to conduct operations under Part 125 as designated in that Part.

10. DEFINITION OF THE TERM "CERTIFICATION" AS USED IN THIS ORDER. For purposes of identification and definition, "certification," as used herein, refers to those duties which involve a determination of competence, qualification, or quality by the FAA after which a certification, rating, or other official paper is issued to an applicant which confirms such determination and grants certain privileges and may prescribe certain limitations in accordance with the Federal Aviation Act and the Federal Aviation Regulations.

11. DEFINITION OF THE TERM "SURVEILLANCE" AS USED IN THIS ORDER. The purpose of surveillance is to ascertain if a pertinent activity has been, or is being, accomplished in an acceptable manner. Surveillance may take the form of observing the actions of an individual or conformance with standards. In other cases, the inspection of a finished job may suffice. Surveillance may be applied to aircraft and components, to the use of tools and equipment, aircraft records, etc.

12.-19. RESERVED.

CHAPTER 2. GENERAL PRACTICES AND PROCEDURES

SECTION 1. UTILIZATION OF TECHNICAL PERSONNEL

20. PURPOSE. The complexity and sophistication of today's aircraft demand effective utilization of technical personnel. This section provides guidance for identifying the responsible skills with aircraft systems for effective maintenance/avionics coordination.

21. GENERAL. Each employee and each level of agency management are responsible for assuring that manpower resources are effectively and efficiently used. The following guidance is directed toward optimum utilization of technical personnel.

22. ASSIGNMENTS.

a. Present technical classifications which separate the technical specialists and inspectors must receive primary consideration in the assignment of work functions. Inspectors or specialists should normally perform those functions that logically fall within their respective area of technical specialization. The foremost consideration must be that all technical work functions are assigned to and accomplished by the technical personnel who are appropriately qualified and competent to carry out the work functions. The primary responsibility for the aircraft systems or functions is identified by specialty on the chart in Figure 2-1.

b. Although the chart delineates the assignment of technical responsibilities, this does not imply isolation in any manner when performing regular duties or carrying out special assignments. The chart identifies the recognized specialty that has the primary responsibility "P" for the aircraft system as shown by the ATA specification 100 system codes. In the interest of realizing optimum use of technical manpower, work assignments which cross lines of technical classification should be used when circumstances dictate the practicality of such assignments.

c. Certain subsystems that are more closely associated with the avionics technology are identified on the chart by the letter "S" indicating secondary responsibility. Primary system responsibility "P" remains with specialty shown; however, secondary responsibility "S" requires complete coordination between the inspectors/specialists so that the overall maintenance objectives are accomplished.

d. In the certification and monitoring of repair stations and other maintenance facilities, the primary responsibility for the type of work performed must be related to the systems and subsystems shown on the chart. To illustrate the distinction between specialties, in the areas of powerplant and airframes, the maintenance inspector has the primary responsibility; whereas, in the field of instruments and electronics, the primary responsibility is assigned to the avionics inspector. We must recognize that no system within an aircraft is an entity. The proper and safe operation of the aircraft is dependent on the combined performance of all systems, and it follows that this same combination in the form of teamwork and coordination must be reflected within the field offices.

23. TRAINEE INSPECTORS. Trainee inspectors shall be assigned duties and the corresponding responsibilities only when it is known that they are technically and administratively competent.

24. SCHEDULED SURVEILLANCE is that anticipated and planned for in the annual work program and which is accomplished during the normal scheduled work period.

25. OTHER SURVEILLANCE ACTIVITIES. General aviation activities, such as airshows, hot air balloon races, and parachute meets are examples of where extra surveillance may be required. Emphasis should be placed on surveillance of those operators and activities which have the greatest potential effect on public safety.

26. WEEKEND, OFFICIAL HOLIDAY, AND CONTINUOUS SURVEILLANCE ACTIVITIES.

a. Accident Standby. Airworthiness inspectors are expected to take a fair share of accident standby duty. The scheduling of such duty is a prerogative of the office manager with respect to "who" and "when." However, as a matter of good management, the assignments should be made on an equitable basis so that no one person is "saddled" with the standby job for long, consecutive periods.

b. Surveillance of Air Carriers. Because substantial experience shows regularly scheduled weekend and holiday maintenance surveillance to be generally ineffective and wasteful of inspector manpower resources, it should not be utilized except under specific circumstances, such as strikes and similar exceptional or emergency conditions. This is not intended to imply that weekend or holiday surveillance should not be conducted. On the contrary, such surveillance has exceptional merit when conducted on an "as needed," unscheduled basis to include not only weekends and holidays, but off-hours and night surveillance. For example, an occasional Saturday night or Sunday surveillance trip through a maintenance facility can produce good results.

c. Scheduled, weekend, and holiday (or night) surveillance, when performed, should have a definite result-producing purpose, rather than merely wandering around maintenance shops and airport ramp areas. Air carrier strike surveillance is an example of a good purpose. Surveillance of operators of large and turbine-powered aircraft, who are not established certificated operators excluding legitimate corporate airplane operators, shall be emphasized. Suspected illegal or unsafe maintenance activities are other situations that may warrant scheduling of maintenance surveillance during irregular working hours on a short term basis. However, in each instance, the purpose and expected result should be carefully weighed to assure that man-hours are not wasted.

27. REQUESTS FOR CERTIFICATION AND SURVEILLANCE ASSISTANCE.

a. General. When an airworthiness inspector finds a need for certification or surveillance assistance from another region or district, he should first discuss the matter with the unit supervisor or principal inspector of the office with area responsibility regarding what is presently being done