

**Approach and Landing Accident Reduction
Joint Safety Implementation Team**

**Implementation Plan
For
Maintenance Procedures**

Statement of Work: (1 SE-17, 2 SE-18, 3 SE-19, 4 SE-20)

The purpose of this project is a reduction in Approach and Landing accidents by re-emphasizing current Maintenance rules, policies, and procedures developed by the commercial airline operators and the FAA. The re-emphasis should specifically direct:

- That approved maintenance programs related to the servicing of components incorporate all of the OEM safety related components and procedures
- That oversight of sub-contract activity is increased by both the operators and regulators, and
- That MEL policy and procedures are strictly adhered to. The re-emphasis could be acted upon almost immediately.

Lead Organization for Overall Project Coordination (LOOPC):

AVR-1

Outcome:

Substantially reduce or eliminate the Approach and Landing (ALAR) accident rate by strict adherence to established maintenance rules, policies, and procedures relating to the proper servicing of aircraft components, oversight of maintenance contract activities, and compliance with the approved Minimum Equipment List (MEL).

Output 1:

- AFS-300 will issue guidance, to their field inspectors, outlining FAA national policy to ensure that aircraft nose landing gear struts are serviced in accordance with the original manufacturers recommended methods for cold weather operations.

Resources: AFS-300 (LOOC) and PMI's

Timeline: Completed

Actions: Flight Standards Information Bulletin FSAW 97-10 dated March 3, 1997 was issued specifically as a result of this particular approach and landing accident. The

bulletin describes FAA national policy regarding adequate procedures to ensure that aircraft nose landing gear struts are serviced in accordance with the manufactures recommended methods for cold weather operations. The bulletin closed NTSB Safety Recommendation A-96-166 and remains as current FAA national policy.

Output 2:

- AFS-300 will issue guidance, to their field inspectors, outlining FAA national policy for the evaluation and surveillance of sub-contractor maintenance providers.

Resources: AFS-300 (LOOC) and PMI's

Timeline: Completed

Actions: Flight Standards Handbook Bulletins HBAW-96-05C and HBAW-98-01 dated December 15, 1997 and February 3, 1998 respectively, were issued specifically addressing FAA surveillance oversight activity of air carriers sub contractor activities and evaluation of contractual relationships between air carriers and maintenance providers. HBAW-96-05C closed NTSB Safety Recommendation A-97-74. Both bulletins remain as current FAA national policy.

Output 3:

- AFS-300 will issue guidance, to their field inspectors, revising FAA national policy regarding the use of Minimum Equipment List (MEL) conditions and limitations by air carriers.

Resources: AFS-300 (LOOC) and PMI's

Timeline: Completed

Actions: Flight Standards Joint Handbook Bulletin HBAW-98-18 and HBAW-98-09 dated April 28, 1998 were issued to provide guidance to aviation safety inspectors regarding the requirement for air carriers to include instructions concerning the MEL conditions and limitations. The bulletin closed NTSB Safety Recommendation A-97-57 and remains as current FAA national Policy.

Output 4:

- Directors of Safety will determine 1) that the maintenance deficiencies described in the attached bulletins and policy letters have been remedied and 2) that Quality Control Procedures have been implemented to ensure that those deficiencies are continually addressed.

Resources: ATA (LOOC), RAA, NACA, Directors of Safety

Timeline: 180 days

Actions: Directors of Safety will ensure an internal audit is conducted to determine that rules relating to the maintenance deficiencies described in the specified bulletins are being met through adequate maintenance procedures. Further, the DOS will establish system safety procedures to ensure continuing conformance with the bulletins. The DOS will report the outcome of the audit to his/her respective CAST member.

Relationship to Current Aviation Community Initiatives:

- Flight Standards Information Bulletin Airworthiness (FSAW) 97-10 dated 03/397
- Handbook Bulletin Airworthiness (HBAW) 96-05C dated 12/15/97
- Handbook Bulletin Airworthiness (HBAW) 98-01 dated 02/03/98
- Handbook Bulletin Air Transportation (HBAT) 98-18 dated 04/28/98
- Handbook Bulletin Airworthiness (HBAW) 98-09 dated 04/28/98
- Minimum Equipment List (MEL) Policy Letter 87-2 dated 09/23/98
- Minimum Equipment List (MEL) Policy Letter 87-3 dated 11/20/98
- NTSB Safety Recommendation A-96-166
- NTSB Safety Recommendation A-97-74
- NTSB Safety Recommendation A-97-57

Performance Goals & Indicators for Outcomes/outputs:

- Goal: Approach and Landing accident reduction in these specific maintenance areas.
 - Indicator: A reduction in Approach and Landing accidents in these maintenance areas.
- Goal: All air carriers have FSAW's, HBAW's, HBAT's, and MEL Policy Letters
 - Indicator: Audit confirms air carriers have guidance material.
- Goal: All air carriers in conformance with guidance material.
 - Indicator: Audit confirms air carriers in conformance with guidance material
- Goal: All air carries have safety system procedures in place to maintain continued conformance with guidance material.
 - Indicator: Audit confirms air carriers have safety systems in-place for continued regulatory compliance.

Programmatic Approach:

Organizational Strategy

The CFIT/ ALAR JSIT identified Jerry Tegen, ACE-203 (816-329-3204) as the JSIT project lead for Maintenance Procedures. The project lead will assist with the implementation of the activities outlined in this Implementation Plan and will, when requested, provide progress reports to the CFIT/ALAR JSIT. Implementation of this

project is viewed as a shared responsibility and tasks will be divided between the FAA and organizations/persons in industry. The Lead Organization for Overall project Coordination (LOOPC) is AVR-1. The Lead Organizations for Output Coordination (LOOC) are identified in each Output of this Implementation Plan. The roles and responsibilities of the LOOPC and LOOC are described in the CAST approved JSIT Process Document.

Implementation Activities

The FAA, in addressing several NTSB Safety Recommendations and the interventions later identified by the CFIT/ALAR JSAT concerning this particular accident, issued guidance in the form of Handbook Bulletins for FAA field inspectors and air carriers. CAST, believing the guidance that was issued to be adequate had concerns as to the conformance with the guidance by all air carriers. Thus, the internal audit directed by the air carriers Directors of Safety (DOS) called for in this Implementation Plan and a final report submitted to CAST outlining the results of the of each air carriers internal audit.

Key Products and Milestones:

- Identification of each Part 121 air carrier and their required DOS
- Specific FSAW's, HBAW's, and HBAT's, and MEL Policy Letters in the possession of each air carrier.
- Internal audit directed by each air carriers DOS to confirm conformance with bulletins and MEL Policy Letters
- Internal audit to confirm safety system procedures are in place by each air carrier to show continued conformance with bulletins and MEL Policy Letters.
- Report to CAST outlining the results of each air carriers internal audit.

Plan and Execution Requirements:

FAA Regulations, policies, and procedures developed by the commercial airline operators and the FAA are believed to be adequate and in place. The internal audit called for in this Implementation Plan will merely confirm that the well thought through regulations, policy and procedures are in fact being adhered to by all air carriers. The involvement of the air carriers DOS is considered a needed self-check of the industry and not an inspection conducted by the FAA.

Risk Description:

- Additional workload imposed on the air carriers to perform the audit.
- Additional workload imposed on the DOS to perform the audit.
- Fear of action taken by FAA if audit proves non-conformance with bulletins and MEL Policy Letters.
- Carriers not aligned with CAST might not perform the audit.
- Method of reporting audit results to CAST

Risk Mitigation Plan:

- As a matter of good practice air carriers routinely perform internal audits to assure self-compliance with FAA Regulations, this audit would benefit individual programs.
- This plan does not require the DOS to complete the audit personally, the air carrier will use what ever method they have established for conducting internal audits. The DOS will merely report the results to CAST through their CAST representative.
- The FAA is not conducting the audit, the air carrier is and reporting the results directly to CAST not to the FAA. Since the bulletins are linked directly to a FAA regulation, compliance is assured.
- AFS-1 and ATA to develop a communication link with non-aligned carriers.
- CAST is a very diverse group of individuals representing a majority of the commercial air carrier industry. The DOS can report to CAST through its member organization represented on CAST or not being a member of an organization through the DOS on the CAST.

Impact on Non - Part 121 or International Applications:

FAR Part 125 and 135 operators are impacted as the HBAT's, HBAW's, FSAW's, and MEL Policy Letters are directly related to FAR's.

Impacts and risks identified by the CFIT/ALAR JSIT are conveyed to other organizations as appropriate, such as the general aviation teams convened under the JSC. Those teams generally return in kind.

Coordination with international organizations such as ICAO and JAA is continuous. While those organizations have their own safety agendas addressing ALAR, they stay in touch with the CFIT/ALAR JSIT and routinely exchange safety agenda information with the CFIT/ALAR JSIT.