SE 26

Loss of Control
Joint Safety Implementation Team

Implementation Plan
for
Policies and Procedures - Standard Operating Procedures (SOP's)

Statement of Work:

The purpose of this project is to ensure that all airline operators publish and enforce clear, concise, and accurate flight crew standard operating procedures (SOP). These procedures should include expected procedures during pre/post flight and all phases of flight i.e.: checklists, simulator training, PF/PNF duties, transfer of control, automation operation, rushed and/or unstabilized approaches, rejected landings and missed approaches, in-flight pilot icing reporting, and flightcrew coordination. Operator instructors and check airman should ensure these SOP's are trained and enforced in their aircrew proficiency and standardization programs.

Lead Organization for Overall Project Coordination (LOOPC):
ATA

Safety Enhancement:

The establishment, maintenance, and appropriate use of flight crew SOP's in accordance with AC 120-71 (Standard Operating Procedures for Flight Deck Crewmembers) will improve aviation safety.

Score: 2007-(1.8)   2020-(1.8)   100%-(2.2)

Resource Requirements:

- Outputs 1-3 – estimated at 3 man-years
- Output 4 – estimated at ¼ man-year per operator
- Total Cost - $550,000

Completion Date: 24 months

Note: FAA, in agreement with ATA, CAST, and AFS-200, will complete the measurement portion of this plan (Output 4) utilizing their POI's/ PMI's during normal work program functions.

Output 1/SE 26:

ATA Training Committee and AFS-200 should conduct a review of AC 120-71 and incorporate relative information from the LOC JSAT interventions and operator SOP's.

Resources: ATA (LOOC), RAA, manufacturers, operators, and labor unions. The cost of this output would be mostly the individual's time from each organization involved. Initial cost estimates would be one man-year and $250,000, which would be shared by the operators, manufacturers, and labor organizations.

Timeline: 6 months.

Actions:

ATA convene training committee to review all applicable information.

Output 2/SE 26:

Based on results of Output 1, AFS-200 should consider a revision/appendix to AC 120-71.

Resources: AFS-200 (LOOC), ATA, RAA, manufacturers, operators, and labor unions. The cost of this output would be mostly the individual's time from each organization involved. Initial cost estimates would be one man-year and $150,000, which would be shared by the operators, manufacturers, labor organizations, and government employees.

Timeline: 6 months from completion of review in output 1.

Actions:

 AFS-200 should revise AC 120-71 as needed to provide recommendations about development, implementation, and updating of operator SOP information.

Output 3/26:

Based on results of Output 2, AFS-200 should review and possibly revise guidance to FAA principal operations inspectors (POI's) for incorporation of the revised AC information into the operator's training programs and manuals.

Resources: AFS-200 (LOOC), ATA, RAA, manufacturers, operators, and labor organizations. The cost of this output would be mostly the individual's time from each organization involved. Initial cost estimates would be one man-year and $150,000, which would be shared by the operators, manufacturers, labor organizations, and government employees.

Timeline: 6 months from completion of review in output 1.

Actions:

AFS-200 should update the FSAT as needed to provide guidance to all POI's for their oversight of air carrier training programs and manuals.

Output 4/SE 26:

Air carriers should adopt the revised SOP information and revise their training programs and manuals to incorporate the proposed revisions.

> **Resources**: ATA (LOOC), FAA, RAA, manufacturers, operators, and labor unions. The cost of this output would be mostly the individual's time from each organization involved. Operator cost to implement the revision is estimated to be approximately ¼ man-year per operator. Revisions will be made within the carriers' normal revision process.

Timeline: 12 months from completion of AC 120-71 revision.

Actions:

Operators should revise their company training programs and manuals to incorporate as many SOP item revisions as appropriate.

Relationship to Current Aviation Community Initiatives:
The following documents provided recommendations to the aviation industry for the establishment, usage, and revision of SOP's related to LOC:
- Loss Of Control JSAT Report
- AC 120-71 dated 8/10/00, titled "Standard Operating Procedures for Flight Deck Crewmembers"
- Draft AC, 120-xx, titled " Part 121, 125, and 135, Flight Crew Procedures during Taxi Operations"
- Approach and Landing JSAT report
- Flight Safety Foundation ALAR report
- JSAT CFIT report
- FSAT 00-08 dated 8/23/00
- Human Performance Considerations in the Use and Design of Aircraft Checklists (FAA) report dated January 1995

Performance Goals and Indicators for Safety Enhancements/Outputs:
- **Safety Enhancement Goal:** To improve aviation safety through SOP's, each operator should establish, maintain, and use flightcrew SOP's in accordance with AC 120-71.
- **Indicator**: A reduction of LOC incidents and accidents related to SOP's.

Output 1
- Goal: Review Part 121 operators' SOP's relative to Loss of Control JSAT intervention information and make recommendations for improvement.
- Indicator: Recommendations provided to AFS-200

Output 2
- Goal: Revise AC 120-71 per recommendations from Output 1.
- Indicator: AC 120-71 revised and published.

Output 3
- Goal: Revise FSAT 00-08 to supplement revisions in Output 2.
- Indicator: FSAT 00-08 revised and published.

Output 4
- Goal: Operators adopt the revised LOC related SOP information.
- Indicator: Operator's training programs and manuals are revised to include this information.

Programmatic Approach:

Organizational Strategy

The LOC JSIT has identified ATA as the LOOPC organization. The LOOC's 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. The LOOPC will provide the project lead for the SOP project. The project lead will work with the manufacturers, labor unions, FAA Flight Standard's personnel, and others to complete the four outputs. The project lead will coordinate the activities outlined in the implementation plan, and will provide progress reports, when requested, to the CAST. Implementation of this product is a shared responsibility between the operators, the FAA, the manufacturers, and labor organizations.

Implementation Activities

The ATA Training committee should review the current operator SOP's related to LOC and LOC JSAT interventions. AFS-200 should use the results of this review to revise the AC as appropriate. Operators should then be encouraged to use this information to amend their own SOP's. In addition, HBAT 00-08 should be reviewed and revised as necessary to provide guidance to all POI's. The POI's should assist the operators in revising the operator's training program and manuals per the new guidance.

Key Products and Milestones:

The following milestones are based on the date of CAST "G" approval:

Products	LOOC	Milestones
Review operator SOP's and JSAT interventions	ATA	G + 6 months
Revise AC 120-71	AFS-200	G + 12 months
Revise FSAT 00-18	AFS-200	G + 12 months
Revise operator training programs and manuals	ATA	G + 24 months

Plan & Execution Requirements:
To implement the associated LOC SOP revision tasks identified within this implementation plan requires resources and support from the following organizations:
- Airline operators
- Airline labor organizations
- Airline member associations
- FAA Flight Standards

Risk Description:
Low-Medium Risk. The revision of the SOP information is a relatively low-risk activity because the operators participated in the initial ATA SOP review and AC 120-71 design. The operators should be willing to address the LOC intervention information and make appropriate revisions. The only medium-risk items that can be identified at this point are:
- The timeframe involved in the review and recommendations to the operator SOP's and AC.
- The timeframe to write and implement the revised AC and FSAT.
- The willingness of the operators to review and revise their manuals based upon a new set of guidelines and their staff time in competition with other projects.

Risk Mitigation Plan:
The project will include the operators as team-members of the SOP information review/revision process. This will provide them the opportunity to voice concerns at the early stages of information re-design to hopefully mitigate the risks later in the process. The success of this project may depend on operators' willingness to revise long-standing procedures. The use of SOP's has been encouraged through many other recent industry activities such as the CFIT Training Aid, CFIT Training Document, Flight Safety Foundation CFIT ALAR report, and the ICAO cover letter accompanying the CFIT Training Document.

Impact on Non-FAR Part 121 or International Applications:
Any SOP revision/recommendations that address LOC issues should improve the integrity of company manuals and training programs. Therefore, any International or Non FAR-121 operators should also benefit from the revised SOP information, AC and FSAT guidance material.