

**Controlled Flight Into Terrain (CFIT)  
Joint Safety Implementation Team**

**Implementation Plan  
for  
“Standard Operating Procedures (SOP)”**

**Statement of Work: (SE-2)**

All operators should have standard operating procedures/training manual/chapter. This manual/chapter should address all projected normal situations crews/company personnel will encounter. This manual will address: use of checklists, what each person's responsibilities are, use of available equipment, and expected procedures to be used during preflight, taxi, take-off, climb, cruise, descent, approach, missed approach, landing, taxi and parking. Use of line crews to develop new procedures increase acceptance and understanding of these procedures. Standard operating procedures for any new equipment will be developed, published, and trained before any new equipment is used/installed. Operators will train proficiency in their SOP's and crews will use published company SOP's.

**Outcomes:**

To improve aviation safety by:

1. Ensuring that all operators establish flightcrew Standard Operating Procedures (SOP's) that fit that operator's particular operation.
2. Ensuring that all operators train their SOP's and encourage all SOP's be utilized in all normal operations.

**Outputs:**

In order to provide guidance to the operators in establishing SOP's for their particular airline, the following activities will need to occur:

1. ATA Training committee will facilitate, in conjunction with air carrier and association training groups, development of SOP templates for use by all FAR Part 121 operators in generating SOPs for each particular airline.  
Resources: ATA, RAA, Manufacturers, Operators, and member associations.  
Timeline: 3rd Quarter 1999  
Actions: Obtain a representative sample of air carrier SOP's and other appropriate material for review. Review for standardization and generate a proposed SOP template.

2. An Advisory Circular (AC) will need to be written to publish the template for use in establishing each operator's SOP's.  
Resources: FAA (AFS-200), ATA, Operators and member associations  
Timeline: 2<sup>nd</sup> Quarter 2000  
Actions: AFS-200 to write AC describing specific subject areas to be addressed by air carrier SOP's. The AC will not contain specific wording for the SOP's, but will only contain guidance to the air carriers.
3. A Handbook Bulletin for Air Transportation (HBAT) will need to be written to provide guidance to the FAA Principal Operations Inspectors (POI's) in incorporating the AC SOP template into the operators training and operations manuals.  
Resources: AFS-200, ATA, operators and member associations  
Timeline: 2<sup>nd</sup> Quarter 2000  
Actions: AFS-200 will write HBAT to provide guidance to all POI's as it relates to oversight of air carrier operations and training programs.
4. Air carriers will adopt SOP's and revise their training manuals and programs to incorporate the proposed SOP template items as appropriate for the technology of the equipment in the aircraft.  
Resources: ATA, RAA, Manufacturers, Operators and Member Associations  
Timeline: 3<sup>rd</sup> Quarter 2000  
Actions: Operators will revise their company training manuals and programs to incorporate as many SOP template items as appropriate for the technology of the equipment in the aircraft.

**Relationship to Current Aviation Community Initiatives:**

The following documents provided recommendations to the aviation industry for the establishment and usage of SOP's related to CFIT:

1. CFIT Training Aid (CD) sponsored by Boeing/FSF. Distributed internationally and posted on World Wide Web.
2. CFIT Training document published in 1997
3. Flight Safety Foundation (FSF) CFIT ALAR Report of November 1998
4. ICAO cover letter AN 11/37 of 3 December 1998

**Lead Organization for Overall Coordination**

**Lead:** Operators (ATA, RAA, etc.), Member Associations (ALPA, APA, etc.)

**Supporting:** FAA Flight Standards (AFS-200)

**Programmatic Approach:**

The SOP Project team will first review a representative sample of company manuals (SOP, training, etc.) From that review, a template will be generated to include a compilation of the most important and pertinent aspects of each operators manuals as they relate to SOP's. This template will then be provided to all operators via a newly written AC for their use in amending or establishing their own SOP's. In addition, an HBAT will be generated to provide guidance to all POI's to oversee their respective airline operation to ensure that company training programs and manual implementation are complied with in a standardized, uniform manner.

The goal of the SOP Project Team is to provide guidance to the operators through an SOP Template for the establishment of an airline's respective manuals. The project team will not write or revise company manuals nor recommend one procedure over another. The intent of the team and the SOP template is to identify areas that should be addressed.

**Key Products and Milestones:**

NOTE: All unknown dates will be revised to mirror dates found in associated SOP Gantt chart (in progress).

<b><u>Activity</u></b>	<b><u>#Days</u></b>	<b><u>Start Date</u></b>	<b><u>End Date</u></b>	<b><u>COG</u></b>
Develop Statement of Work	3	3/16/99	3/19/99	John
Identify Membership on Team	x	xx/xx/xx	xx/xx/xx	John
Identify Skills Needed	x	xx/xx/xx	xx/xx/xx	John
Determine Deliverables	x	xx/xx/xx	xx/xx/xx	John
Identify Resources Needed	x	xx/xx/xx	xx/xx/xx	John
Obtain Necessary Documentation	x	xx/xx/xx	xx/xx/xx	John
Identify Follow-On Actions	x	xx/xx/xx	xx/xx/xx	John
Identify Ongoing Programs	x	xx/xx/xx	xx/xx/xx	John
Review Operator Manuals	x	xx/xx/xx	xx/xx/xx	John
Assemble SOP Template	x	xx/xx/xx	xx/xx/xx	Impl Team
Review SOP Template	x	xx/xx/xx	xx/xx/xx	Impl Team
Write Advisory Circular (AC)	x	xx/xx/xx	xx/xx/xx	Impl Team
Review AC	x	xx/xx/xx	xx/xx/xx	Cog
Write HBAT	x	xx/xx/xx	xx/xx/xx	Impl Team
Review HBAT	x	xx/xx/xx	xx/xx/xx	Cog
Publish Final AC	x	xx/xx/xx	xx/xx/xx	Cog
Publish Final HBAT	x	xx/xx/xx	xx/xx/xx	Cog
Revise Company SOP's	x	xx/xx/xx	xx/xx/xx	Cog
Monitor Implementation	x	xx/xx/xx	xx/xx/xx	Cog
Produce Gantt Chart	x	xx/xx/xx	xx/xx/xx	Impl Team
Determine Impact on Non-121 & Int'l Apps	x	xx/xx/xx	xx/xx/xx	Impl Team

**Schedule and Resources Graphic:**

See Attached Gantt Chart (in progress)

**Plan & Execution Requirements:**

To implement the associated CFIT SOP tasks identified within this implementation plan requires resources from the following organizations:

- FAA Flight Standards (AFS-200)
- Airline / Operators
- Airline Member Associations

**Risk Description:**

Medium Risk. The development of the SOP template is a relatively low-risk activity. The only medium-risk items that can be identified at this point is the timeframe involved in coordinating, writing and implementing AC's and HBAT's and the willingness of the operators to review and revise their manuals based upon a new set of guidelines.

**Risk Mitigation Plan:**

The intent of the project is to include the operators as team-members of the template design process. This will provide them the opportunity to voice concerns at the early stages of template design to hopefully mitigate and risks later in the process. The use of SOP's has been encouraged through other 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 recommendations will improve the integrity of company manuals and training programs. Therefore, any International or Non FAR-121 operators will benefit from the SOP template, AC and HBAT guidance.