



Loss of Control – Inflight (LOC-I) Safety Enhancement Team (SET)

Status Report

Presented to: PA-RAST

Date: March, 2016



SET Process

1. Review and analysis of accident risk
2. Review of applicable safety enhancements
3. Start preparing DIPs
4. Review DIPs with PA-RAST
5. Present DIPs to ESC for information

6. Coordinate DIP Implementation at PA-RAST

7. Monitor progress

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The LOC-I SET TEAM

Team members include:

- IATA*
- ALTA
- CAST/FAA
- IFALPA
- UK/CAA
- Brazil/ANAC

*Champion



LOC-I Design DIP Work Timeline



DIP 192 Low Airspeed Alerting



6 months

Output 1: IATA/ALTA will identify availability of manufacturer service bulletins by fleet

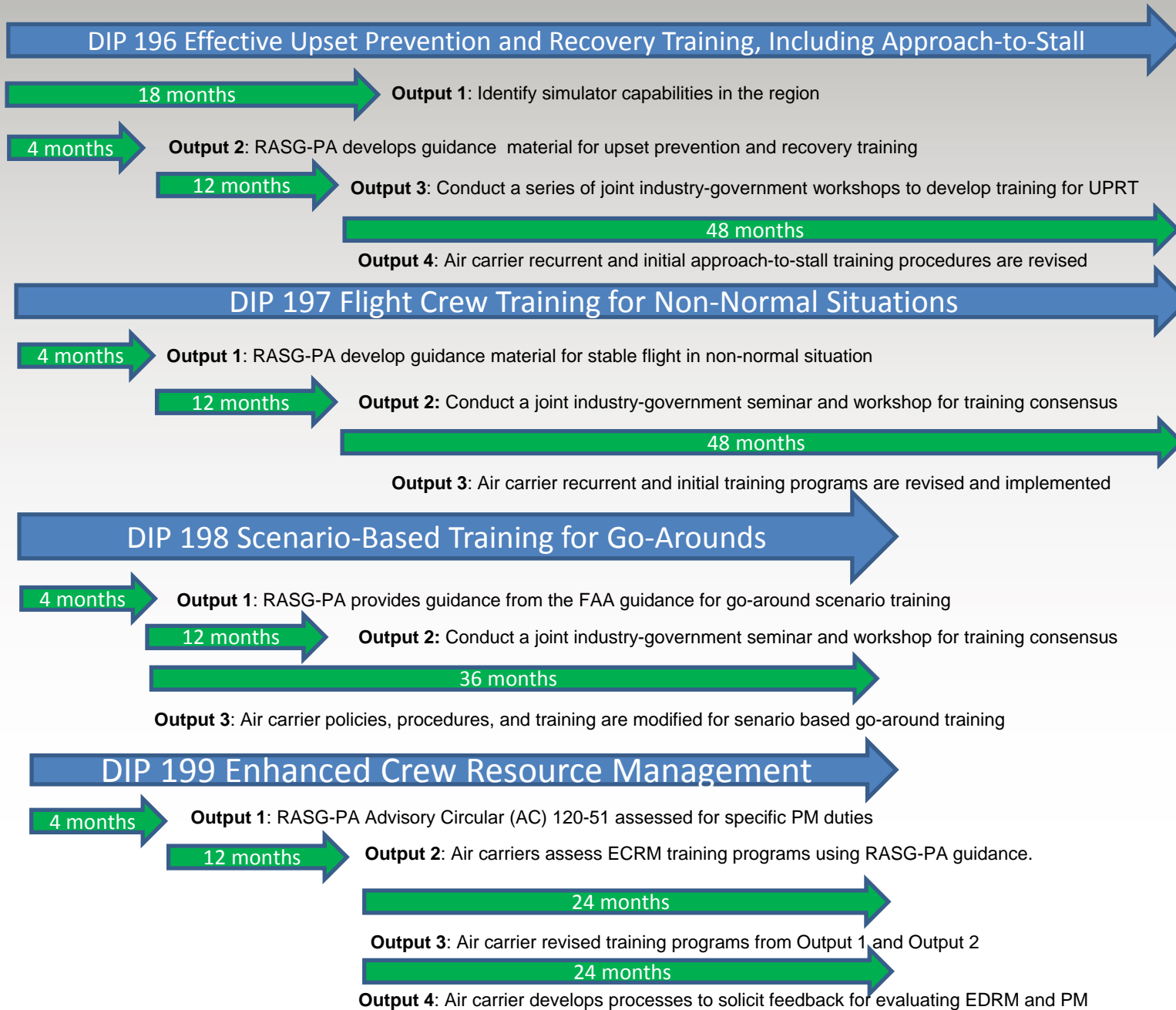


30 months

Output 2: Air carriers implement existing manufacturer service bulletins, installing low airspeed alerting functionality in their existing airplanes (as practical and feasible)



Combined Training DIP 196-199 Timeline





Safety Enhancement SE 196

Training - Effective Upset Prevention and Recovery Training, Including Approach-to-Stall

- Output 1: Identify simulator capabilities in the region
 - A survey has been drafted
 - certify flight simulation training devices
 - approve flight training programs
- Output 2: RASG-PA develops guidance material for upset prevention and recovery training
 - A guidance material working group has been formed
 - An [online repository](#) has been established
 - The working group is in the process of collecting and evaluating existing UPRT guidance material
 - Relevant material will be uploaded to the online repository
 - Ultimately, the existing guidance material will be cross-referenced with the training scenarios in the DIP



Thank You!
Gracias!
Obrigado!



Backup Information



Safety Enhancement SE 192 Design – Low Airspeed Alerting Implementation Status

- Output 1: IATA/ALTA will identify availability of manufacturer service bulletins by fleet
 - IATA has administered a world-wide survey to determine which member airlines have implemented the Alert Service Bulletin (insert bulletin #)
 - Currently analyzing the results of the survey responses
 - World-wide response rate of 30%
 - RASG-PA region response rate higher than the world-wide response rate
 - One operator in the PA Region has not implemented the Alert SB
- Suggested next-step: ICAO offices will send a State Letter with a RASG-PA Safety Advisory (RSA) recommending to conduct a risk analysis for the implementation of the Alert SB



Safety Enhancement SE 196

Training - Effective Upset Prevention and Recovery Training, Including Approach-to-Stall (cont'd)

- Output 3: Conduct a series of joint industry-government workshops to develop training for UPRT
 - Drafting a survey for air carriers in the region
 - Baseline UPRT, including approach-to-stall, training scenarios
 - Web-enabled
 - Developing an introduction to the survey
 - Intended audience (training departments – not safety departments)
 - Qualifications of the respondents



Safety Enhancement SE 197

Training - Policy and Training for Non-normal Situations

- Output 1: RASG-PA develop guidance material for stable flight in non-normal situation
 - A guidance material working group has been formed
 - An [online repository](#) has been established
 - The working group is in the process of collecting and evaluating existing policy and training guidance material for non-normal situations.
 - Relevant material will be uploaded to the online repository
 - Ultimately, the existing guidance material will be cross-referenced with the training scenarios in the DIP
- Output 2: Conduct a joint industry-government seminar and workshop for training consensus
 - Drafting a survey for air carriers in the region
 - Baseline non-normal situation training scenarios
 - Web-enabled
 - Developing an introduction to the survey
 - Intended audience (training departments – not safety departments)
 - Qualifications of the respondents



Safety Enhancement SE 198

Training – Scenario-Based Training for Go-Around Maneuvers

- Output 1: RASG-PA develop guidance material for go-around training scenarios
 - A guidance material working group has been formed
 - An [online repository](#) has been established
 - The working group is in the process of collecting and evaluating existing policy and training guidance material for go-around training.
 - Relevant material will be uploaded to the online repository
 - Ultimately, the existing guidance material will be cross-referenced with the training scenarios in the DIP
- Output 2: Conduct a joint industry-government seminar and workshop for training consensus
 - Drafting a survey for air carriers in the region
 - Baseline go-around training scenarios
 - Web-enabled
 - Developing an introduction to the survey
 - Intended audience (training departments – not safety departments)
 - Qualifications of the respondents



Safety Enhancement SE 199

Training - Enhanced Crew Resource Management Training

- Output 1: FAA Advisory Circular (AC) 120-51 assessed for specific PM duties
 - A group will be formed to assess FAA AC 120-51 (and other relevant material) to place specific emphasis on the duties and responsibilities of the pilot monitoring
 - The group will include pilot monitoring concepts into the air carrier survey (ref SE 197 & 198; Output 2)
 - The group will draft and disseminate guidance ECRM guidance material
- Output 2: Air carriers assess ECRM training programs using RASG-PA guidance.
 - IATA and ALTA have agreed to disseminate RASG-PA ECRM guidance once developed and approved by RASG-PA ESC.



Draft Airline Survey Questionnaire

Screen Shot

Area	question	no/yes/question is unclear	Comments
	i. approach-to-stall with the autopilot engaged (including autothrottles disengaged, inoperative or not installed), with emphasis on the effect of autopilot trim/auto-trim and combinations of autoflight modes that can lead to low energy state (e.g., use of vertical speed modes in climb near the airplane's performance ceiling)		
	ii. a demonstration of recognition and recovery from initial improper response to approach-to-stall		
	iii. high-altitude approach-to-stall (service ceiling for the weight) to include recognition of low and high speed buffet, performance capabilities of the engines and flight control sensitivity		
	iv. low-altitude approach-to-stall (terrain critical) and recovery with ground proximity warning system (GWPS) alerts		
a. Approach-to-stall (i.e., up to warning activation) scenarios:	v. Indication failures (i.e., speed, altitude failures/malfunctions)		
	i. The key concept that reduction of angle of attack is the most important response when confronted with a stall event. The training should emphasize treating an approach to stall the same as a full stall, executing the stall recovery at the first indication of the stall and emphasizing that reduction of angle of attack is the most important response.		
	ii. Evaluation criteria for a recovery from a stall or approach-to-stall that does not mandate a predetermined value for altitude loss and should consider the multitude of external and internal variables which affect the recovery altitude.		



State Survey Topics

- Two topics for the State Survey
 - Certification of Flight Simulator Training Devices
 - Aerodynamics Evaluation
 - Instructor Operating System Evaluation
 - Statement of Compliance (SOC) requirements
 - Acceptance of foreign certificates
 - Approval of Operator Flight Training Programs
 - Process for evaluating and approving training program (regulations)
 - Criteria/standards used to evaluate proposed training programs
 - Process for reviewing and approving changes to existing training programs
 - Evidence required to support requested changes to training programs.
- Are the training devices appropriate/capable for the proper execution the approved training programs?



LOC-I SET MS Project Screen Shot

