The International Civil Aviation Organization Eastern and Southern African Office in Conjunction with the Kenya Civil Aviation Authority

Loss of Control-in Flight (LOC-I) Symposium, Nairobi, Kenya, 22-24 June 2015

THE WAY FORWARD

1.   UPSET PREVENTION AND RECOVERY TRAINING (UPRT)

UPRT Outcome No.	Text	Proposed Deadline*	Deliverable(s)	Responsibility
1.	Transpose in specific operating regulations new SARPs on UPRT.	31 December 2015	Amendments to PEL and OPS regulations	CAAs
2.	Establish UPRT training programmes including training tasks.	1 July 2016	UPRT training programmes including training tasks.	ATOs, AOs, IATA
3.	Training of UPRT instructors and CAAs inspectors should be enhanced.	31December 2016	Training of UPRT instructors and CAAs inspectors	ATOs, AOs, CAAs
4.	Provide on-airplane UPRT for a selected core group of instructors.	31December 2016	On-airplane UPRT for a selected core group of instructors	ATOs, AOs, CAAs, RSOOs

UPRT Outcome No.	Text	Proposed Deadline*	Deliverable(s)	Responsibility
5.	Standardize training and avoid negative training.	31 October 2016	Standardized training	ATOs, AOs, CAAs, AATO, CASSOA
6.	Train for proficiency and avoid checking for UPRT.	31 December 2015 31December 2016	-Amendments to PEL and OPS regulations(for CAAs) -Training of UPRT instructors and CAAs inspectors	ATOs, AOs, CAAs
7.	Consider that startle can only be rendered on on-airplane training.	31 July 2017	Inclusion of startle factor by providing minimum on-airplane training	ATOs, AOs, CAAs
8.	Upgrade current FSTDs to incorporate proper modelling of full flight envelope and instructor tools to provide feedback for pilot performance.	Refer to UPRT Outcome N° 24	Refer to UPRT Outcome N° 24	ATOs, AOs
9.	Take into account smaller turboprop (non-swept wing) airplanes in UPRT.	31December 2016	To apply best practices (while waiting for ICAO to develop additional guidance material)	ATOs, AOs, CAAs, ICAO
10.	Establish adequate operational control for relevant training organizations.	31 December 2015	-Operational control organization, means, processes and procedures for	ATOs, CAAs

UPRT Outcome No.	Text	Proposed Deadline*	Deliverable(s)	Responsibility
			ATOs - Inspectors procedures for CAAs	
11.	Address all type of stalls including tail stall.	1 July 2016	UPRT training programmes including training tasks.	ATOs, AOs
12.	Training for high speed stall as a priority.	1 July 2016	UPRT training programmes including training tasks	ATOs, AOs
13.	Strike a balance between use of automation and stick and rudder.	1 July 2016	UPRT training programmes including training tasks	ATOs, AOs
14.	Improve pilots aptitude testing and hiring processes and procedures.	31January 2016	Enhancement of pilots aptitude testing and hiring processes and procedures.	AOs
15.	Properly address UPRT in CRM training.	31January 2016	Inclusion of UPRT in CRM training	AOs
16.	Harness assistance from airlines which have implemented UPRT, like Kenya Airways and South African Airways.	28 February 2016	Best practices MoUs, MoCs	ICAO, ATOs, AOs, CAAs, RSOOs
17.	Foster cooperation through regional organizations and	31 July 2016	-Regional	Champion

UPRT Outcome No.	Text	Proposed Deadline*	Deliverable(s)	Responsibility
	regional economic communities.		arrangements -MoUs	
18.	Gain support from the industry and other stakeholders including insurance underwriters.	31October 2015	-Letters to Industry and other stakeholders for support - letters to Insurance underwriters for support	AFRAA, IATA, AOs
19.	Promote champions for industry best practices.	31 January 2016	Designation of Champions	Champion, AOs, CAAs
20.	Share information on LOC-I and UPRT.	31 January 2016	Processes and procedures for sharing of information established	Champion, All stakeholders
21.	Build African capacity and expertise.	Refer to UPRT Outcomes N° 3 and 4	Refer to UPRT Outcomes N° 3 and 4	ATOs, AOs, CAAs, AFRAA, Champion
22.	Establish a Regional UPRT training organization fitted, in particular, with adequate FSTDs.	1 January 2016 1 March 2017	-Letters to stakeholders -Inception	ATOs, AOs, CAAs, AFRAA, IATA, AATO
23.	Establish a five years implementation plan for regulatory oversight of UPRT is essential.	30 November 2015	five years implementation	ICAO, CAAs

UPRT Outcome No.	Text	Proposed Deadline*	Deliverable(s)	Responsibility
			plan for regulatory oversight of UPRT	
24.	Establish a five years implementation plan for the establishment of training means and provision of training in UPRT is essential.	31January 2016	five years implementation plan for the establishment of training means and provision of training in UPRT	ATOs, AOs, IATA, CAAs
25.	Evaluate the training gaps given the current curriculum for pilots and define priorities and sequencing for the training.	31 May 2016	Training gaps and training priorities	ATOs, AOs, CAAs, IATA
26.	Improve CAAs' approval systems for training organizations including simulators' approvals, training and procedures manual, quality systems and safety management systems.	31 January 2016	Approval processes and procedures	CAAs
27.	Improve approval of air operator training programmes including ensuring consistency of the applied one with air operator flight safety documents system.	31 January 2016	Approval processes and procedures	CAAs
28.	Evaluate the impact of training on special operations related to the AOC and make necessary enhancements to take into account UPRT.	31 May 2016	Approval processes and procedures	CAAs
29.	Assess aircraft capabilities and limitations for on-airplane training.	31 December 2016	Procedures	ATOs, AOs, CAAs
30.	Avoid using multi-engine airplane for on-airplane training.	31 December 2016	Procedures	ATOs, AOs, CAAs

UPRT Outcome No.	Text	Proposed Deadline*	Deliverable(s)	Responsibility
31.	Take into account safety risks derived from flight data analysis and safety management systems for recurrent training.	1July 2016	UPRT training programmes including training tasks.	AOs, CAAs, IATA

2.   OTHER MITIGATION MEASURES FOR LOC-I

Mitigation Outcome No.	Text	Proposed Deadline*	Deliverable(s)	Responsibility
1.	Promotion of countermeasures for other safety issues and contributory factors to LOC-I accidents.	28 February 2016	-Correspondences -Information on best practices	Champion, ATOs, AOs, CAAs
2.	Define beside the Abuja high level safety target of reducing LOC-I related accidents, subsidiary parameters in order to assess progress made in LOC-I implementation plan.	30 November 2015	subsidiary target parameters for LOC-I	ICAO ESAF
3.	Oversee proper implementation of flight crew duty	31 March 2016	-Procedures for	AOs, CAAs

Mitigation Outcome No.	Text	Proposed Deadline*	Deliverable(s)	Responsibility
	limitation and fatigue risk management systems.		CAAs inspectors -Processes and procedures of the AOs	
4.	Sensitize flight crew on effects of medications.	31 March 2016	-Procedures for CAAs inspectors -Processes and procedures of the AOs	AOs, CAAs
5.	Analyze in-flight incapacitation events and medical findings during medical assessments to identify areas of increased medical risk	31 March 2016	-Procedures for designated medical examiners -Procedures for CAAs medical assessors -Processes and procedures of the AOs	AOs, CAAs
6.	Establish adequate operational control and flight planning for the air operators.	31 March 2016	-Procedures for air operators certification and surveillance by CAAs -Adequate air operators	AOs, CAAs

Mitigation Outcome No.	Text	Proposed Deadline*	Deliverable(s)	Responsibility
			organization for operational control and flight planning	
7.	Properly train flight operational officers/flight dispatchers.	30 June 2016	-Training programmes for FOOs -Procedures for approval of training programmes for FOOs, instructors and examiners	AOs, CAAs
8.	Establish and implement procedures for the carriage of dangerous goods.	30 June 2016	-Procedures for dangerous goods	AOs, CAAs
9.	Address LOC-I issues in managing cases of unlawful interference.	31 July 2016	-Coordination -Procedures	AOs, CAAs, ICAO
10.	Address LOC-I issues in regard to air traffic management.	31 July 2016	-Coordination -Procedures	AOs, CAAs, ICAO
11.	Properly address and in a timely manner airworthiness/maintenance issues relating to critical parts/components/systems of the airplanes.	30 June 2016	-Identification of critical parts/components/systems of the airplanes -Inclusion in the SMS	ATOs, AOs, CAAs
12.	Establish and implement routine and non-routine weather	31 March 2016	-Procedures for the	AOs, CAAs

Mitigation Outcome No.	Text	Proposed Deadline*	Deliverable(s)	Responsibility
	reporting procedures.		approval of the operations manual	
13.	Improve ground-based communications for weather reporting by meteorological stations.	31 July 2016	Improvement of ground-based communications for weather reporting by meteorological stations	CAAs, ANSPs
14.	Systematically report serious incidents and accidents.	31 March 2016	Reporting processes and procedures	AOs, CAAs, AAIAs
15.	Establish and implement a data collection system in the framework of an SMS.	31 July 2016	Data collection system in the framework of an SMS.	AOs, CAAs

Note: * The proposed dateline is tentative deadline to be coordinated with relevant stakeholders.

CAAS: Civil Aviation Authorities

AAIAs: Aviation Accident Investigation Authorities

AATO: Association of Aviation Training Organizations

ATOs: Aviation Training Organizations

AOs: Air Operators

ANSPs: **Air Navigation Service Providers**

FSTDs: Flight Simulation training Devices

FOOs: Flight Operations Officers

CRM: Crew Resources Management

MoU: Memorandum of Understanding

MoC: Memorandum of Cooperation

AOC: Air Operator Certificate

SMS: Safety Management System