



ICAO NAIROBI UNITING AVIATION

NO COUNTRY
LEFT BEHIND



Workshop on LOC-I and UPRT

LOC-I and UPRT regional planning

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LOC-I and UPRT regional planning



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

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THE WAY FORWARD

1. UPSET PREVENTION AND RECOVERY TRAINING (UPRT)

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



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UPRT Outcome No.	Text	Deliverable(s)	Responsibility
5.	Standardize training and avoid negative training.	Standardized training	ATOs, AOs, CAAs, AATO, CASSOA
6.	Train for proficiency and avoid checking for UPRT.	-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.	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	ATOs, AOs
9.	Take into account smaller turboprop (non-swept wing) airplanes in UPRT.	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.	-Operational control organization, means, processes and procedures for	ATOs, CAAs



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



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UPRT Outcome No.	Text	Deliverable(s)	Responsibility
	regional economic communities.	arrangements -MoUs	
18.	Gain support from the industry and other stakeholders including insurance underwriters.	-Letters to Industry and other stakeholders for support - letters to Insurance underwriters for support	AFRAA, IATA, AOs
19.	Promote champions for industry best practices.	Designation of Champions	Champion, AOs, CAAs
20.	Share information on LOC-I and UPRT.	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	ATOs, AOs, CAAs, AFRAA, Champion
22.	Establish a Regional UPRT training organization fitted, in particular, with adequate FSTDs.	-Letters to stakeholders -Inception	ATOs, AOs, CAAs, AFRAA, IATA, AATO
23.	Establish a five years implementation plan for regulatory oversight of UPRT is essential.	five years implementation	ICAO, CAAs



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UPRT Outcome No.	Text	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.	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.	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.	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.	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.	Approval processes and procedures	CAAs
29.	Assess aircraft capabilities and limitations for on-airplane training.	Procedures	ATOs, AOs, CAAs
30.	Avoid using multi-engine airplane for on-airplane training.	Procedures	ATOs, AOs, CAAs



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



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2. OTHER MITIGATION MEASURES FOR LOC-I

Mitigation Outcome No.	Text	Deliverable(s)	Responsibility
1.	Promotion of countermeasures for other safety issues and contributory factors to LOC-I accidents.	-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.	subsidiary target parameters for LOC-I	ICAO ESAF
3.	Oversee proper implementation of flight crew duty	-Procedures for	AOs, CAAs



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Mitigation Outcome No.	Text	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.	-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	-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.	-Procedures for air operators certification and surveillance by CAAs -Adequate air operators	AOs, CAAs



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Mitigation Outcome No.	Text	Deliverable(s)	Responsibility
		organization for operational control and flight planning	
7.	Properly train flight operational officers/flight dispatchers.	-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.	-Procedures for dangerous goods	AOs, CAAs
9.	Address LOC-I issues in managing cases of unlawful interference.	-Coordination -Procedures	AOs, CAAs, ICAO
10.	Address LOC-I issues in regard to air traffic management.	-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.	-Identification of critical parts/components/s systems of the airplanes -Inclusion in the SMS	ATOs, AOs, CAAs
12.	Establish and implement routine and non-routine weather	-Procedures for the	AOs, CAAs



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



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- **Nairobi LOC-I Symposium** 22-24 JUNE 2015
(Documents available at <http://www2010.icao.int/ESAF/Pages/loci-symp-2015.aspx>)
- **Set of recommendations from the Symposium**
- **A RASG-AFI endorsed 5-Year implementation Plan**



EXAMPLES OF BEST PRACTICES: ADDRESSING LOC-I AT THE LEVEL OF THE AIR OPERATOR

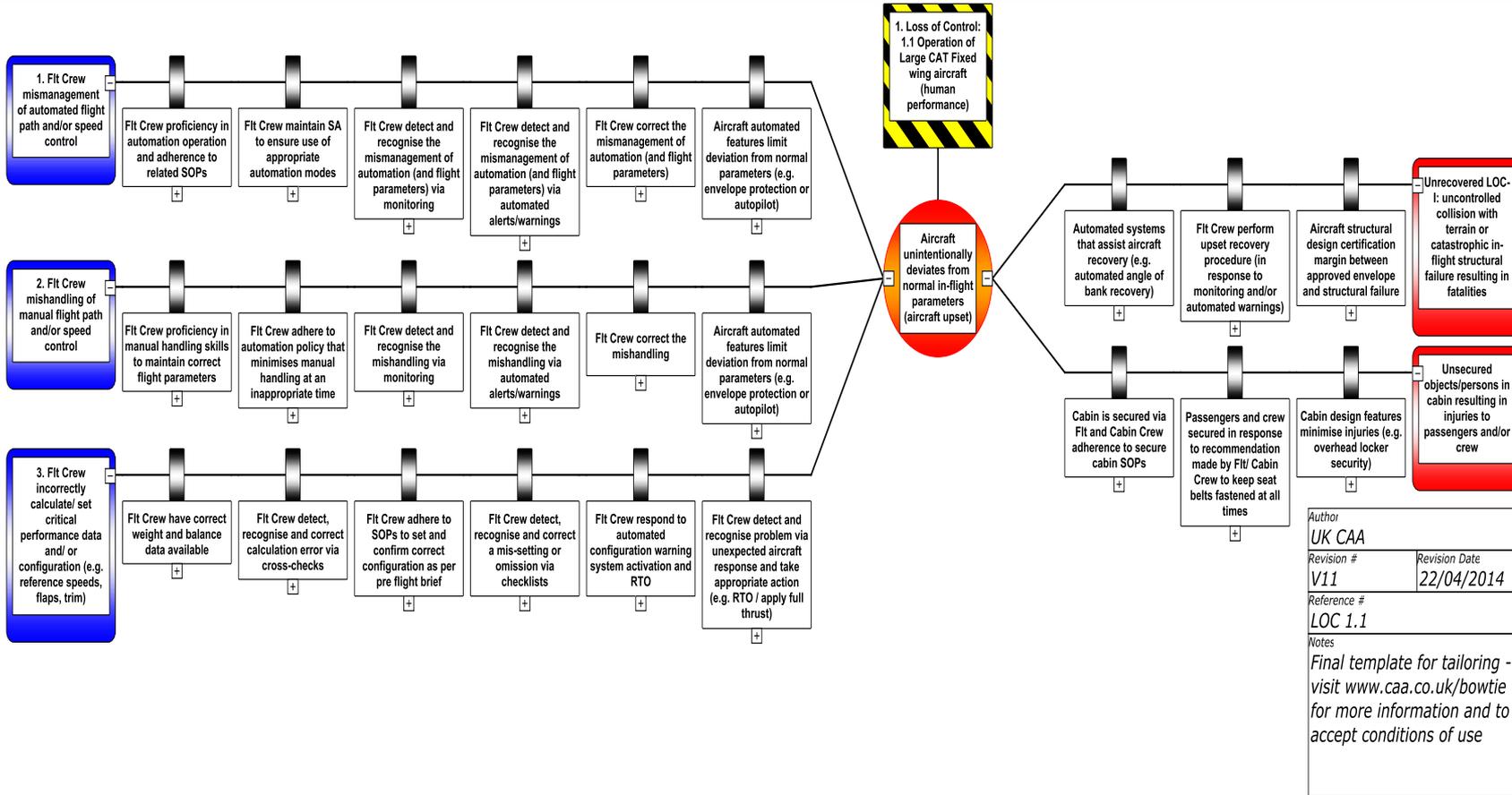
- SMS as an effective way to mitigate LOC-I risks: Safety Risk Management
- SMS for practitioners (Ref. ICAO Course)
- Bow-tie methodology(Ref. UK CAA)
- Safety Indicators for reporting and assessing progress made at regional level



EXAMPLES OF BEST PRACTICES: ADDRESSING LOC-I AT THE LEVEL OF THE AIR OPERATOR

BOW-TIE: Hazard identification and Risk Assessment and Mitigation

- Hazards(Human, Technical, Environmental)
- Threats
- Unsafe state
- Safety events
- Consequences
- Level of risk and tolerability of risk
- Safety barriers
- Escalation factors
- Escalation factors controls
- Mitigations measures





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THANK YOU