INDIVIDUAL FLIGHT TIME SPECIFICATION SCHEME ('IFTSS') – Ops Standardisation perspective

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- Overview of the typical findings addressed during standardisation OPS inspections
- NAA and Operator Training
- Managing Fatigue as an hazard…or not?!

What has been found during our visit

1. STANDARDISATION FOUND COMPLIANCE ISSUES IN 70% OF INSPECTED STATES
2. SCHEMES NOT TAILORED TO THE ACTUAL OPERATIONS
3. AOC MANAGERS LACKED COMPETENCE TO FULFILL THEIR RESPONSIBILITIES

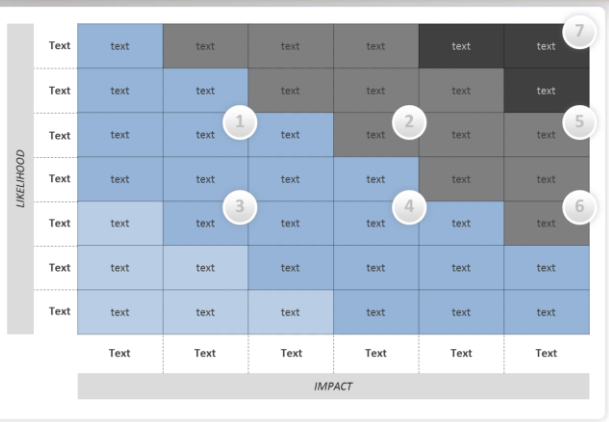
Typical finding in the IFTSS approval process

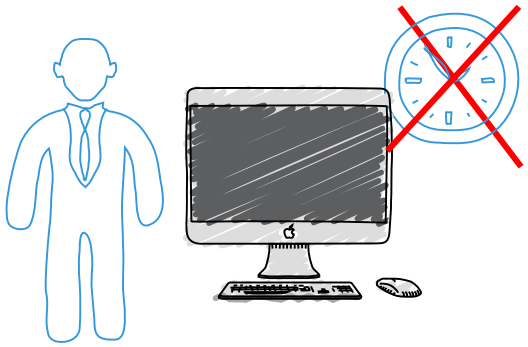
OM A Chapter 7 is a ‘cut and paste’ of the requirements and do not define:

- Performance indicators on operational robustness of rosters
- Reporting times
- Delayed reporting procedures
- Home base
- the crew member’s nutrition during FDP is ensured. (ORO.FTL.240).
- Standby procedures designed to ensure that the combination of standby and FDP do not lead to more than 18 hours awake time (CS FTL .1.225)

IFTSS not customised to actual operations e.g. schemes *(or supporting documentation)* not defined

ORO.FTL/FRM (IFTSS) typical findings





- Fatigue not being managed in the operators' management systems;
- Operators not monitoring performance indicators for operational robustness of rosters;
- Operators not maintaining individual records for each crew member which included the rest periods and assigned home base;
- Times spent on office duties for management pilots and other duties such as ground training and positioning not recorded;
- Fatigue management training not provided to crew members, personnel responsible for preparation and maintenance of crew rosters and management personnel concerned.

Operator Training

ORO.FTL.250 Fatigue management training

(a) The operator shall provide initial and recurrent fatigue management training to crew members, personnel responsible for preparation and maintenance of crew rosters and management personnel concerned.

(b) This training shall follow a training programme established by the operator and described in the operations manual. The training syllabus shall cover the possible causes and effects of fatigue and fatigue countermeasure.

AMC1 ORO.FTL.250 Fatigue management training

TRAINING SYLLABUS FATIGUE MANAGEMENT TRAINING

The training syllabus should contain the following:

(a) applicable regulatory requirements for flight, duty and rest;

(b) the basics of fatigue including sleep fundamentals and the effects of disturbing the circadian rhythms;

(c) the causes of fatigue, including medical conditions that may lead to fatigue;

(d) the effect of fatigue on performance;

(e) fatigue countermeasures;

(f) the influence of lifestyle, including nutrition, exercise, and family life, on fatigue;

(g) familiarity with sleep disorders and their possible treatments;

(h) where applicable, the effects of long range operations and heavy short range schedules on individuals;

(i) the effect of operating through and within multiple time zones; and

(j) the crew member responsibility for ensuring adequate rest and fitness for flight duty.

- ❑ TRAINING NOT DESCRIBED IN OPERATION MANUAL
- ❑ TRAINING NOT DELIVERED TO ALL THE RELEVANT PERSONNEL

NAA training

AMC5 ARO.GEN.200(a)(2) Management system

FATIGUE RISK MANAGEMENT INSPECTOR TRAINING

An inspector involved in the approval process of operator's flight time specification schemes and fatigue risk management (FRM) should receive the following training:

(a) Initial training

(1) Theory and effects of fatigue

(2) Human factors related to fatigue

(3) Typical hazards and risks related to fatigue, their possible mitigation measures maturity of hazard identification models (reactive, proactive and predictive)

(4) FRM training and promotion methodologies and how to support ongoing developmen FRM

(5) Data collection and analysis methods related to FRM

(6) Integration of FRM into the Management System

(7) Fatigue management documentation, implementation and assurance methodologies

(8) Regulatory framework and current best practices

(9) Auditing and assessment of the effectiveness of an operator's FRM

(b) Recurrent training (at least every 3 years)

Applicable 30th March 2017

Fatigue *not* managed as a hazard…

- "I have not received a fatigue report, therefore fatigue is not an issue in my operation"
- Fatigue not an integral part of the risk assessment process
- Fatigue SPI values "changing" without justification
- Mitigating measures not verified for implementation or reviewed for effectiveness
- Crews not understanding the impact of fatigue as a hazard

Examples…

Hazard no.	Revised on	Description	Likelihood	Severity	Result	Defences	Likelihood	Severity	Result	In place Y/N	Docu-mented	REF Documentation	Additional measures or comments
		Pilot Fatigue due to improper rest This can be caused by the following threats: Resting facilities inadequate - Personal issues - Physical conditions (for example sickness) - Personal behaviour (going late to bed, smoking, drinking) - Inadequate rest periods - Extended duty operations - Travel to start duty (transfers to reach the airport, taxi, etc.) -	Remote	Major	Tolerable	Reporting system, fatigue training	Improbable	Major	Acceptable	Y	Y	Operations Manual	Flight time is determined and must not be exceeded. Rest period should be respected. No fatigue report received

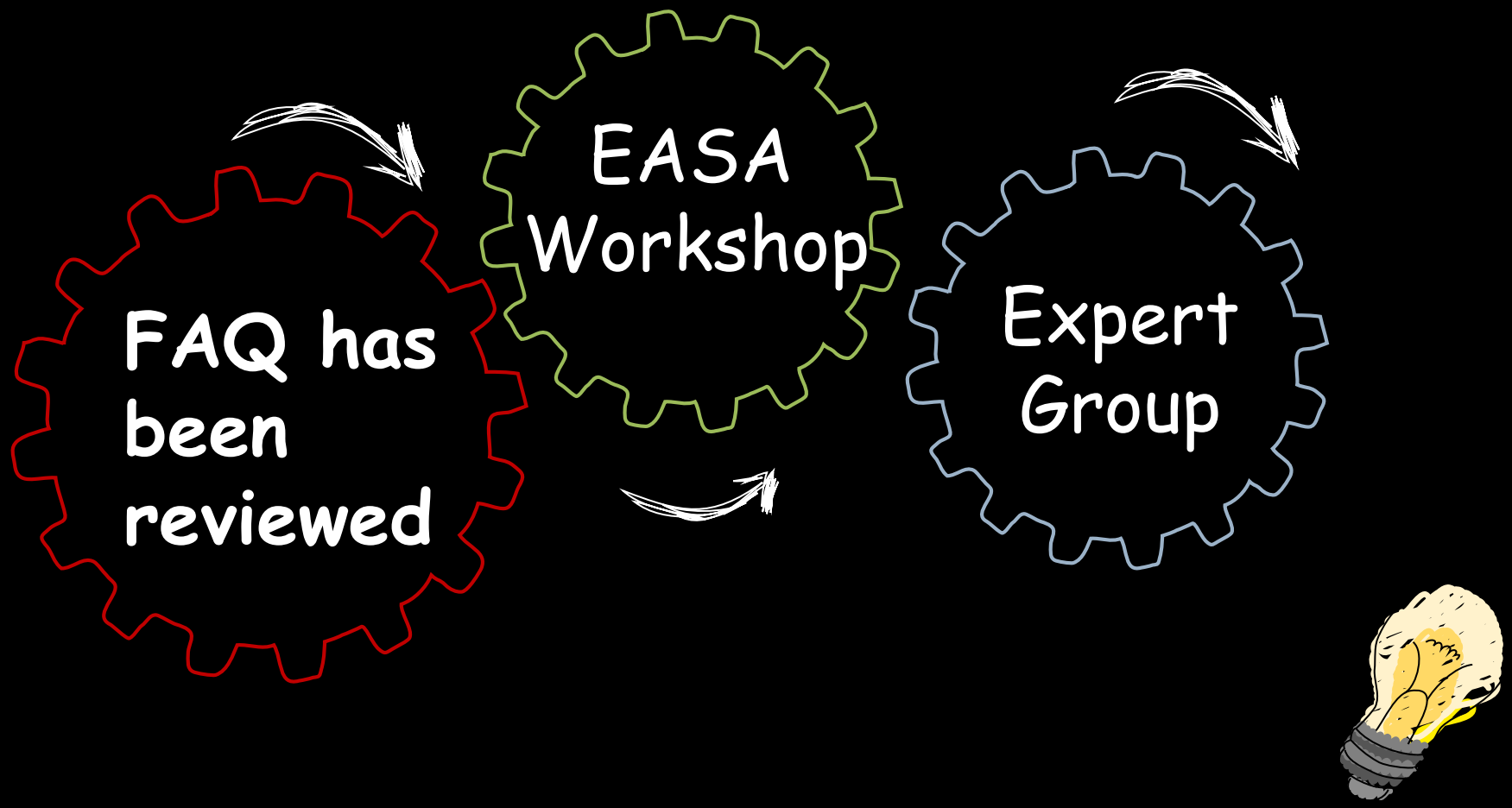
"I have not received a fatigue report, therefore fatigue is not an issue in my operation"

ASSESSMENT AFTER ACTION		
Assessment	**Monitor**	The risk is acceptable, but it is advisable to monitor the situation
Comments	SPI identified: - Nr. of reports received related to fatigue	

Examples…

Type of operation	Description of hazard	Safety barriers in place	Undesirable event(s)	Current risk category			Future mitigation and measures	Future risk category			In place Y/N?	Documents to be revised	Responsible by when	Additional measures or comments	Restricted to XYZ use Y/N?
				Likelihood	Severity	Result		Likelihood	Severity	Result					
	Fatigue - slower reactions reduced ability to process information memory lapses absent-mindedness decreased awareness lack of attention underestimation of risk reduced coordination	Experienced company staff	Delays/ Incidents - failure to communicate, failure to understand ATC Clearances, etc	3	3	9	Fatigue management training for flight crews	3	2	6	Yes	SMM, ed 2, rev 3		Additional measures or comments	No
	Fatigue - Pilot - night flights	Initial and recurrent fatigue management training to crew members, personnel responsible for preparation and maintenance of crew rosters and management personnel concerned. Excel file updated each month with WOCL Hours encroachment	Procedural errors ATC Clearances misunderstood Runway incursion Lack of communication in the cockpit	4	3	12	Encourage fligh crews to proactively report fatigue/ Carrefully monitor WOCL encroachments	3	3	9	Yes	SMM, ed 2, rev 3	On going		No

How to make the gears turn



EASA
European Aviation Safety Agency

Thanks for your attention

Your safety is our mission.

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