



BRACING FOR PART SPO IMPLEMENTATION

PART ORO – SMALL ORGANISATIONS



SMS IMPLEMENTATION WITHIN SMALL ORGANISATIONS

A few words about myself:

Name: Lucy Hayward

University degree: Master in International and European Law

Experience:

Entered the aviation business and more specifically the helicopter business 10 years ago

- Started as an assistant to the Continuing Airworthiness Manager with a company based in the South of France (CAT operations, ATO and Aerial work)
- 2 years after I became Quality Manager (CMM) and Safety Manager
- After 7 years I left to work for an offshore helicopter company in Aberdeen (Scotland) as Safety Manager
- Came back to France and worked as CMM for a company in the French Alps (HEMS, Mountain Rescue, CAT operations and SPO)
- Now working and partner with LET'S FLY in the South of France (ATO, CAMO and consultancy)

SMS IMPLEMENTATION WITHIN SMALL ORGANISATIONS

PRACTICAL IMPLEMENTATION

SMALL OPERATORS

CHIEF OF FLIGHTS

SMS IMPLEMENTATION WITHIN SMALL ORGANISATIONS

SMALL OPERATOR

What can be considered as a « Small Operator »

- Non complex operator employing less than 20 FTE's.
- A complex operator employing less than 20 FTE's due to the nature and complexity of its activities.

The smallest organisation can be a one-man organisation where all of the nominated posts are filled by the accountable manager and audits are conducted by an independent person.

ORO.GEN.200 (b) provides that the management system shall correspond to the size of the operator and the nature and complexity of its activities.

QUESTION: Is the concept of “complex operator” adapted to small operator's with only 5 or 10 employees?

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MANAGEMENT SYSTEM IMPLEMENTATION

What does the regulation N°965/2012 ask for?

PART ORO

- Safety risk management, hazard identification and risk assessment
- Manage safety risks related to change
- Identify a person who fulfils the role of Safety Manager
- Safety policy
- Emergency Response Plan (ERP)
- Compliance monitoring

PART SPO - SPO.OP.230

- Conduct a risk assessment, assessing the complexity of the activity
- Based on risk assessment, the operator shall establish Standard Operating Procedures (SOP)



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SAFETY RISK MANAGEMENT

For non complex operators, AMC1 ORO.GEN.200(a)(1);(2);(3);(5) provides that the safety risk management may be performed using hazard checklists or similar risk management tools or processes.

Many small operators develop their own safety management tools or use those provided by the EHEST. Word or Excel tools are the most used.



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SAFETY RISK MANAGEMENT

Example of risk assessment tools:

EHEST TOOLS:

- Hazardous Event Identification & Risk Assessment for Helicopter External Sling Load Operations (HESLO)
 - Define the HAZARDOUS EVENTS related to the operation
 - Define possible CONSEQUENCES
 - Define BARRIERS (Proactive or Recovery) in order to reduce the RISK
 - RATE the LIKELIHOOD of the Hazardous Events and the RISK of the consequences, and
 - Apply the barriers to the SOP

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SAFETY RISK MANAGEMENT

Example of risk assessment

tools:

EHEST MARIA (My Assessment of Risks for Incidents and Accidents)

Available:

<https://essi.easa.europa.eu/ehest>



MARIA (My Assessment of Risks for Incidents and Accidents)

EHEST RISK ASSESSMENT TOOL

A - SELECT THE CASE STUDY
B - SELECT THE TOP EVENT
C - SELECT THE HAZARD OR THE CONSEQUENCE
D - SELECT THE BARRIER
E - SELECT THE RISK

REPORTS

Report
Op-Proc. Bar.
Report
Op-Rou. Bar.
Cause
Proactive Barrier
Recovery Barrier
Consequence

No.	Cause
CA-001	CA-001, Tree, bushes, vegetation
CA-002	CA-002, Wind, power lines
CA-003	CA-003, Low Clouds
CA-004	CA-004, Low visibility, fog
CA-005	CA-005, Confined area operations, landings, take offs
CA-006	CA-006, Use of sling load
CA-007	CA-007, Operation planning
CA-008	CA-008, Mountainous area

No.	Operation
OP-001	OP-001, Slung load operations

No.	Hazardous Event	Likelihood
HE-001	HE-001 - Reduced separation with obstacles	2
HE-002	HE-002 - Reduced separation of the load from	3
HE-003	HE-003 - Degraded aircraft performance	1
HE-004	HE-004 - Degraded aircraft performance during	1
HE-005	HE-005 - Aircraft unintentionally deviates from	2
HE-006	HE-006 - Safety measures not respected by pilot	1
HE-007	HE-007 - Load is not properly prepared (dmg)	1
HE-008	HE-008 - Unexpected technical problem relates	3
HE-009	HE-009 - Unexpected technical problem on air	3
HE-010	HE-010 - Loose objects moved by the rotor down	3
HE-011	HE-011 - Not accurate re-mapping mission plan	2

No.	Consequence	Risk
CO-001	CO-001 - Aircraft crash	2 E
CO-002	CO-002 - Property damage on ground	1 C
CO-003	CO-003 - Injury to flight crew or crew member	3 C
CO-004	CO-004 - Injury to passengers	2 C
CO-005	CO-005 - Aircraft not available	3 B
CO-006	CO-006 - Pilot/personnel not available	1 B
CO-007	CO-007 - Rules infringement	4 B
CO-008	CO-008 - Main rotor blades strike a ground object	3 C
CO-009	CO-009 - Tail rotor blades strike a ground object	3 C
CO-010	CO-010 - Impact with wires or cables	2 E

No.	Proactive Barrier
PB-001	PB-001, Pilot experience
PB-002	PB-002, Pilot vacancy
PB-003	PB-003, Basic contact with personnel on ground
PB-004	PB-004, Initial Recce of the operating area
PB-005	PB-005, Previous ground reconnaissance
PB-006	PB-006, Pilot maximum mountain experience
PB-007	PB-007, Personnel on ground experience
PB-008	PB-008, Personnel on ground vacancy
PB-009	PB-009, Mission planning
PB-010	PB-010, Pre-flight Risk Assessment
PB-011	PB-011, In-flight decision making training

No.	Recovery Barrier
RB-001	RB-001, Emergency Response Plan (ERP)
RB-002	RB-002, Pilot and personnel data
RB-003	RB-003, Spare helicopter availability
RB-004	RB-004, Personnel proper clothing
RB-005	RB-005, Survival kit
RB-006	RB-006, Portable communication radio on board
RB-007	RB-007, Emergency Locator Beacon (ELB)
RB-008	RB-008, Insurance
RB-009	RB-009, First Aid Kit
RB-010	RB-010, Wire strike protection system



Example of risk assessment tools:

[illegible]

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SAFETY RISKS RELATED TO CHANGE

ORO.SPO.115 – Changes

Applicable to small operators who have an authorisation of High Risk Commercial Specialised Operations, for many small operator's, this may never have to be applied due to little change in their activities.

Nevertheless, where applicable, a small operator may not have the reflex to perform safety risk and compliance assessment when changes occur due to commercial implication and possible business development that is associated with the change.

- The management of change is complex due to it's formalism and not always well understood within small operators.

➔ However, any deficiency in this process may lead to a situation where the authority refuses to issue a HR authorisation.

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SAFETY MANAGER

A Safety Manager can be:

- The Accountable Manager
- A person with an operational role
- Outsourced person

Part ORO offers different possibilities for appointing a Safety Manager.



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SAFETY POLICY

GM1 ORO.GEN.200(a)(2)

For either complex or non complex operator, the safety policy shall state that the operator intends to maintain and where practicable, improve safety levels in all its activities.

A small operator needs to develop a safety culture throughout the organisation, even if its very small. It's important for the employees to adhere to the Safety policy, helping improve the safety culture.

The small size of an operator can be an advantage for the dissemination of safety information and safety discussions in order to maintain a safety culture.

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EMERGENCY RESPONSE PLAN (ERP)

AMC1 ORO.GEN.200(a)(1);(2);(3);(5) / AMC1 ORO.GEN.200(a)(3)

The ERP should reflect the size, nature and complexity of the activities performed by the operator.

A small operator needs to establish an ERP that is simple to use and that can be activated by people inside or outside the company.

For example, in the case of a one-man organisation, the ERP should be held by the compliance manager as well as someone outside the operator (family, friends, ...).

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COMPLIANCE MONITORING

For non complex operators, the regulation allows a “simplified” Compliance Monitoring Checklist. Associated to this checklist, all findings shall be recorded in a “Non-compliance Report”.
An example of this Compliance Monitoring Checklist is provided by GM3 ORO.GEN.200(a)(6)

COMPLIANCE MONITORING CHECKLIST			
Year:			
Subject	Date checked	Checked by	Comments/Non-compliance Report No.
Flight Operations			
Aircraft checklists checked for accuracy and validity			
Minimum five flight plans checked and verified for proper and correct information			

SMS IMPLEMENTATION WITHIN SMALL ORGANISATIONS

DIFFICULTIES OF IMPLEMENTING A MANAGEMENT SYSTEM

SMALL OPERATORS

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DIFFICULTIES OF IMPLEMENTING A MANAGEMENT SYSTEM

- Knowledge
- Resources / Staff
- Volume of activity
- Non CAT, non complex operators
- CAT non complex operators becoming complex operator due to HR authorisation

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DIFFICULTIES OF IMPLEMENTING A MANAGEMENT SYSTEM

- Knowledge and experience in risk management
 - A small operator may find the management system difficult to apprehend.
 - A one-man operator or with few employees may not have the knowledge and experience to implement a management system.
- ➔ Help from outside is often needed (outsourcing safety and compliance manager) and can be costly for this type of operator.

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DIFFICULTIES OF IMPLEMENTING A MANAGEMENT SYSTEM

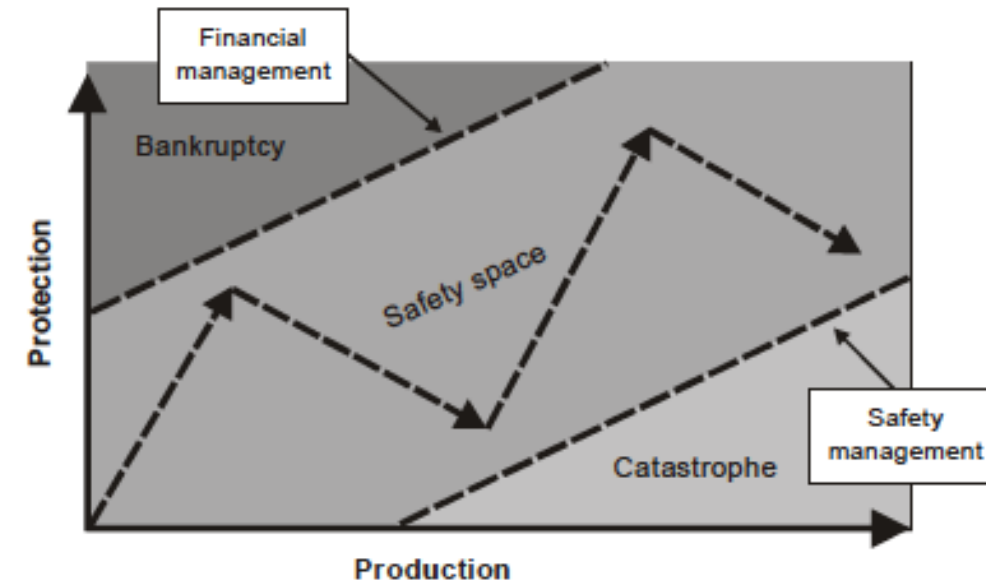
- Resource and staff

Safety Manager:

- The Accountable Manager or a person with an operational role can hold the role of Safety Manager.
- In depth training is necessary for holding this role
- Enough time needs to be allocated to this role
- Maintain balance between protection and production (especially if Accountable Manager is Safety Manager)

Compliance Manager:

- Small operators have difficulties in finding a compliance manager (as Accountable Manager often already holds several posts)



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DIFFICULTIES OF IMPLEMENTING A MANAGEMENT SYSTEM

- Volume of activity
 - Small operators have less volume of activity.
 - The management system needs to be fed by safety database
 - Accident and mandatory reports
 - Voluntary reporting data
 - Safety risk assessment data
 - Data from audits findings/reports
 - Data from safety studies/reviews
 - Low activity can induce low reporting level:
 - Most problems are dealt orally. Everyone knows each other and people talk to one another. In this case, writing a safety report can be seen as an unnecessary constraint.
 - Anonymous safety reports are close to impossible

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DIFFICULTIES OF IMPLEMENTING A MANAGEMENT SYSTEM

- Non CAT, non complex operators
 - Major change from national regulations (Aerial work) to implementing AIROPS regulation (Part ORO and Part SPO)
 - This means development of:
 - Minimum Equipment List (MEL)
 - Operations Manuel
 - Implementing a management system
- ➔ Several national regulations, including ours, did not include a management system.

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DIFFICULTIES OF IMPLEMENTING A MANAGEMENT SYSTEM

- CAT, non complex operators becoming complex operators
 - Due to High Risk commercial operations, a non complex operator could become complex
 - NAA's have different appreciations regarding what are high risk commercial operations
 - This could have an impact on fair competition between operators in different countries
 - Will need to “upgrade” its management system
 - Set up regular Safety Review Boards, possible Safety Action Groups,
 - May have to find extra resource
 - ➔ Extra costs
 - ➔ Impact on company's financial health
 - ➔ Positive point: Becoming complex may be a positive development for an operator who seeks to enlarge his business
 - ➔ One must keep in mind that some sporadic HR commercial flights taking place over a long period of time may not necessarily lead to the operator being classified as complex, especially if FTE is far below 20

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QUESTION: Is the concept of “complex operator” adapted to small operator’s with only 5 or 10 employees?

- Probably not
- A “non complex” safety management system if well implemented could be enough where everybody can get their “hands on it”
- The most important is a strong safety culture that flows through the company from top to bottom, where all employees are aware of safety and reporting a safety issue
- A simple and efficient system rather than a complex and inefficient system



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THANK YOU FOR YOUR ATTENTION...