ÚDARÁS EITLÍOCHTA NA hÉIREANN
IRISH AVIATION AUTHORITY

SAR Oversight in Ireland: Lessons, Actions, and Future Direction

Presented by Capt. Tom O'Connor

20/11/2025

ICAO EUR SAR Task Force meeting and Joint ICAO EUR/NAT and ICAO SAR Workshop

What we are going to cover

1. Introduction
2. SAR oversight and regulation as a safety barrier
3. Evolution of SAR oversight
4. Actions post helicopter accident in 2017
5. Lessons learned from the accident report published November 2021
6. The regulatory oversight structure and system
7. Continuous improvement and the future of SAR / CG oversight

Section_01

Introduction

Introduction

Joined IAA as FOI (H) in March 2021

Introduction

23 years military experience
1983 - 2005

Section_02

SAR oversight and regulation as a safety barrier

SAR oversight and regulation as a safety barrier

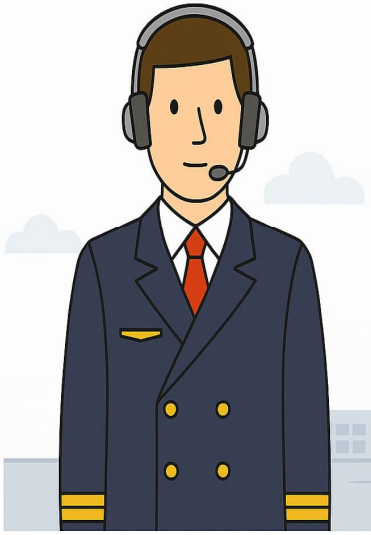
Initial Military SAR Role

Expansion to Civilian Involvement

Geopolitical Influence on SAR

SAR oversight and regulation as a safety barrier

Inspector Experience



- Training and operational knowledge are essential
- Experience helps identify challenges
- Enables meaningful oversight of SAR operations

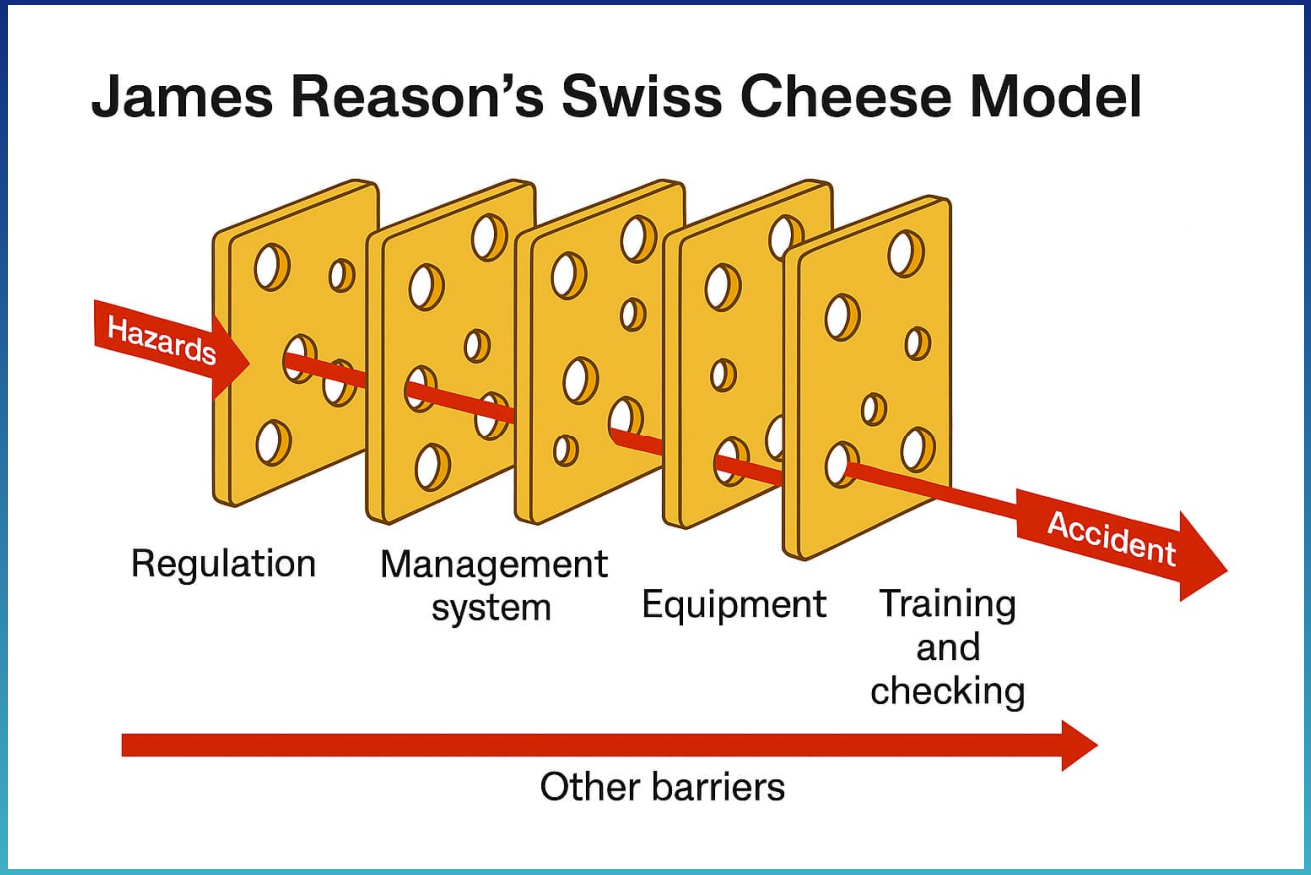
Appendix 1 to

Aeronautical Notice Operations (A.N.O.) 76

Search and Rescue Rules

('National SAR Rules')

SAR oversight and regulation as a safety barrier



Section_03

Evolution of SAR oversight

Evolution of SAR oversight

Media vs. Reality

Media often dramatizes SAR missions as high-risk, but truly life-threatening events are uncommon in SAR operations.

[Alpine helicopter rescue]

1982 – US PARKS POLICE

2016 – SPANISH COAST GUARD

2023 – DUTCH COAST GUARD

Evolution of SAR oversight

Rational Oversight Needed

Regulators should focus on risk-based procedures rather than emotional responses in order to ensure safety and efficiency.

SAR operations manuals in the past included:

‘Life at risk’ ✖

‘Life and death missions’ ✖

No specified minima or weather limits for SAR missions ✖

‘Commander’s discretion’ ✖

No FDP limit for SAR 24-hour shifts, particularly for missions carried out after midnight ✖

Evolution of SAR oversight

Regulatory Responsibilities and improvements

A SAR / CG regulatory framework should be established

SAR Safety Framework Enforcement
Regulators should ensure SAR / Coast Guard and CAT operations are carried out using standard, documented procedures removing emotional biases from crew decisions insofar as possible (Commander's discretion).

Harmonise EASA and national regulation as much as possible

Regulatory Approach
Regulators should adopt both a prescriptive and collaborative approach to oversight in order to foster fairness and strong relationships with operators.

TRUST

Section_04

Actions post helicopter accident in 2017

Actions post helicopter accident in 2017

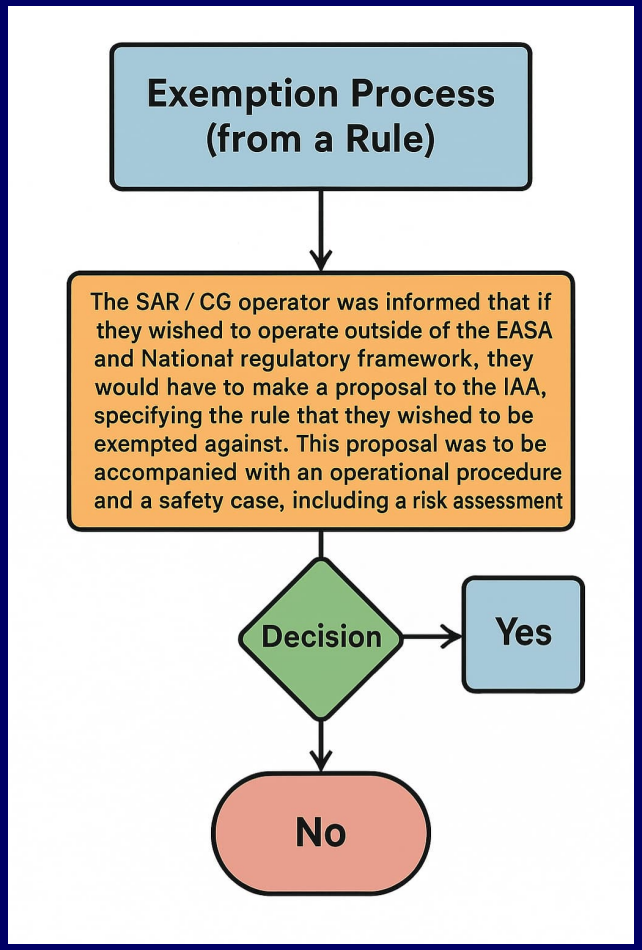
Extensive Search and Recovery
The accident involved an extended search for the aircraft and the recovery of crew, marking a tragic and difficult phase

Emotional Response and Support
Personnel experienced trauma and grief after the accident, highlighting the need for compassionate support and procedural review

Operational Challenges in SAR
The SAR / CG operator faced crew shortages and aircraft shortages, impacting service continuity

Psychological Impact on Crew
Crew members experienced psychological effects, leading some crew to seek counseling and take time off work

Actions post helicopter accident in 2017



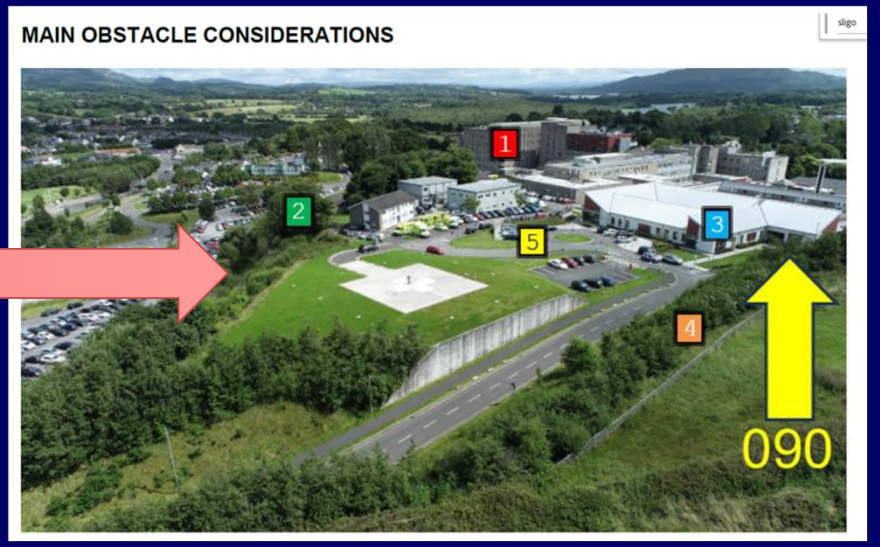
	Exempted Rule	Specific Rule Exemption Granted	Reason for Exemption
	SERA 3105 Minimum heights	3. SERA 3105	To operate over congested areas of cities, towns or settlements or over an open-air assembly of persons where in the event of an emergency arising, a landing without hazard to persons or property on the surface may not be possible.

	Exempted Rule	Specific Rule Exemption Granted	Reason for Exemption
	SERA 2005 Compliance with the rules of the air (a) and (b)	1. SERA 2005 a (Excluding applicable local provisions)	To operate VFR and special VFR to a minima of XXXm flight visibility, clear of cloud and in sight of the surface when engaged in over land hover search or hoisting operations.
		2. SERA 2005 b (Excluding applicable local provisions)	To operate below MSA IMC offshore.
	SERA 3105 Minimum heights	3. SERA 3105	To operate over congested areas of cities, towns or settlements or over an open-air assembly of persons where in the event of an emergency arising, a landing without hazard to persons or property on the surface may not be possible.
	SERA 5001 VMC Visibility and distance from cloud minima are contained in Table S5-1	4. SERA 5001	To operate VFR by day in conditions of visibility equal to or greater than XXXm and clear of cloud and in sight of the surface in class C and G airspace if engaged in over land hover search or hoisting operations.
	SERA 5005 Visual Flight Rules	5. SERA 5005a	To operate VFR by day in conditions of visibility equal to or greater than XXXm and clear of cloud and in sight of the surface in class C and G airspace if engaged in over land hover search or hoisting operations.
		6. SERA 5005b	To take off or land at an aerodrome within a control zone or enter the aerodrome traffic zone or aerodrome traffic circuit, in conditions of ground visibility equal to or greater than 800m, clear of cloud and in sight of the surface. Visibility may be reduced to XXXm if engaged in over land hover search or hoisting operations within the zones or traffic circuits.
		7. SERA 5005c3	To operate at night VFR with a ceiling of not less than 600ft' and flight visibility not less than 2500m'. 5nm offshore this may reduce to a flight visibility not less than 1500m remaining clear of cloud and in sight of the surface.
	SERA 5005 Visual Flight Rules	8. SERA 5005c5 (i & ii)	To operate VFR flights at night below the minimum specified in 5005 c5 (i & ii) as detailed within OM suite of manuals.
		9. SERA 5005f	To operate over congested areas of cities, towns or settlements or over an open-air assembly of persons below the minima as detailed in 5005f (1 & 2) as detailed within OM suite of manuals.

Actions post helicopter accident in 2017

Hospital Site Compliance Review

All hospital landing sites were reviewed to ensure compliance with EASA performance requirements. IAA mandated all flights, including Part CAT and SAR / CG to adhere strictly to Part CAT performance standards



Actions post helicopter accident in 2017

Charting Working Group

IAA ANS decided to set up a Aero charting Workshop with members drown from the General Aviation community and the State Services.

The aim of the Group was to improve the quality of the Irish ICAO aero charts

Over the next number of years the following actions resulted:

- Improved the frequency of publication of updated aero charts (annually currently)
- Improved the quality of the Area 1 Obstacle list, depicted on the aero charts
- Introduced a Safety Significant Obstacle list, which is also depicted on the aero charts
- Introduced a chart error reporting system with a chart amendment system
  On the IAA website we have introoduced 'Electronic Air Navigation Obstacle Data Set'

1:250K x 4

1:500K x 1

Section_05

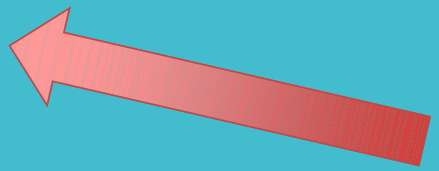
Lessons learnt from the accident report published in November 2021

Lessons learnt from the accident report published in November 2021

1999 – RESCUE 111 - SAR military Dauphin helicopter – SAR mission at night

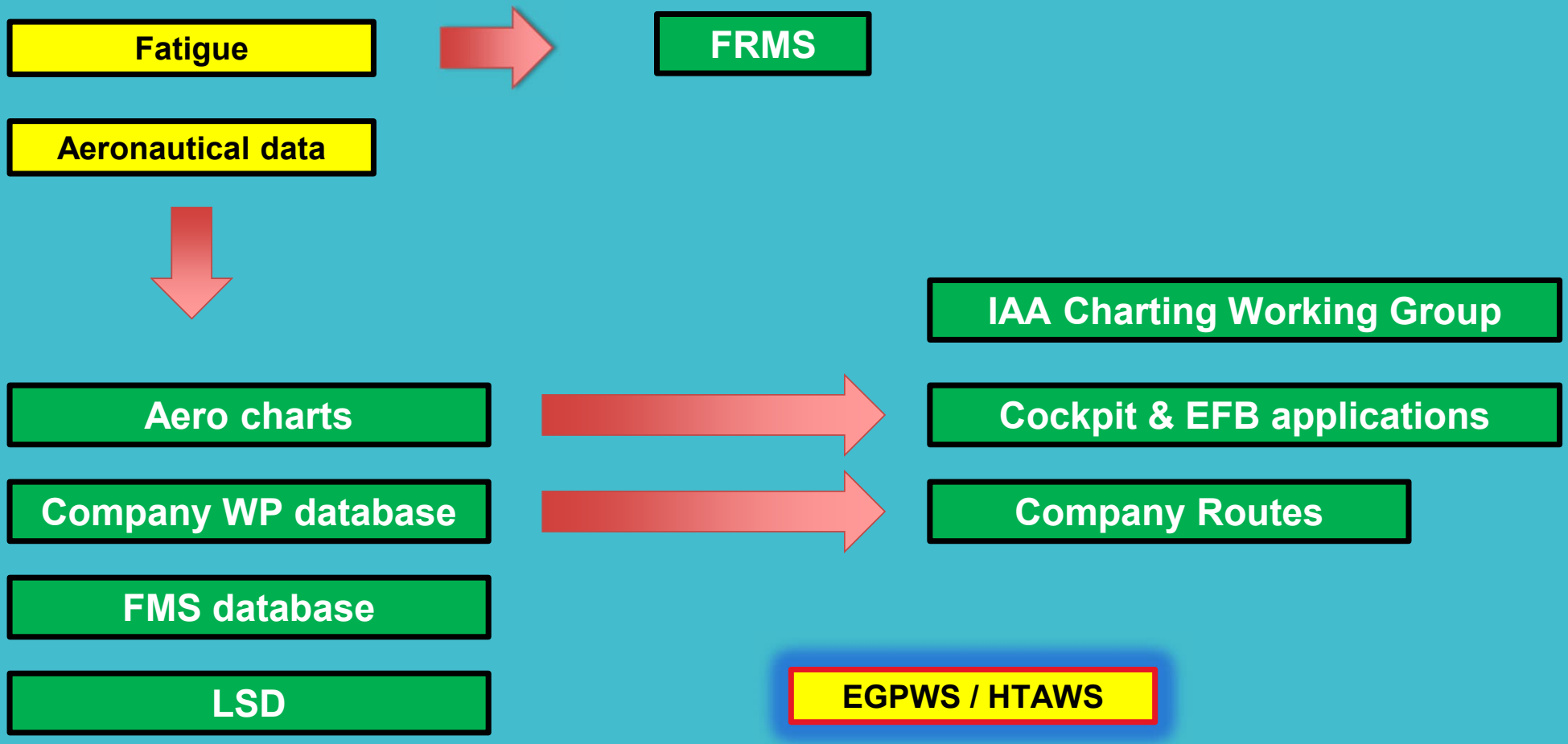
2017 – RESCUE 116 - SAR civilian S-92 - SAR mission at night

- **Management (13)**
- **SAR regulatory framework (8)**
- **Operational Control (6)**
- **Design, Cockpit and Equipment (5)**
- **Aeronautical data (4)**
- **Training (4)**
- **Fatigue (2)**



Overview of AAIU Safety Recommendations	
SR Addressed To	Number
IAA	5
CHC Ireland	19
Sikorsky Aircraft Corporation	2
Minister for Transport	14
EC/EASA	2

Lessons learnt from the accident report published in November 2021



Section_06

The regulatory oversight structure and system

The Irish regulatory oversight structure and system

REGULATORY FRAMWORK FOR SAR / CG OPERATOR IN IRELAND

EASA AOC issued by the IAA (including a **SPA.HEMS & NVIS** Approval)

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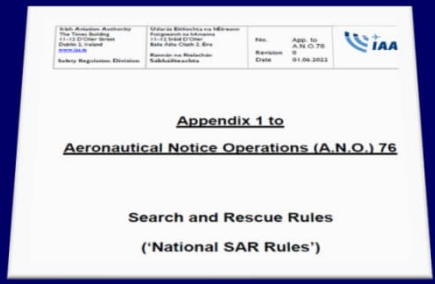
SAR / CG Approval in accordance with Aero Notice 76 – **SAR RULES**



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Exemptions **to SERA** & **National Regulation**

The regulatory oversight structure and system

IAA oversight EASA oversight is conducted in accordance with AMC2 ARO.GEN.305(b) which dictates these categories for organisations to which a certificate has been issued

Category 1 **INFRASTRUCTURE**

Category 2 **MANUALS**

Category 3 **TRAINING**

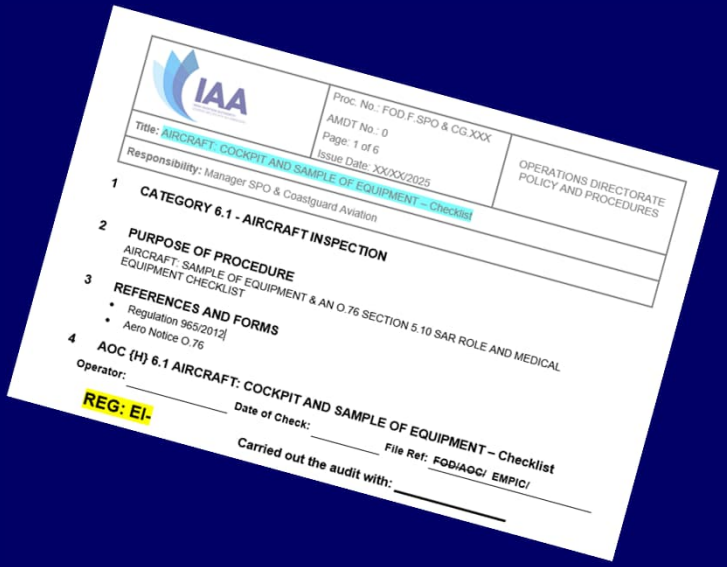
Category 4 **CREW RECORDS**

Category 5 **EQUIPMENT**

Category 6 **RELEASE OF FLIGHT/DISPATCH**

Category 7 **DANGEROUS GOODS**

Category 8 **ORGANISATION'S MANAGEMENT SYSTEM**



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Proc. No.: FOD.F.SPO & CG.XXX
AMDT No.: 0
Page: 1 of 6
Issue Date: XX/XX/2025

OPERATIONS DIRECTORATE
POLICY AND PROCEDURES

Title: AIRCRAFT: COCKPIT AND SAMPLE OF EQUIPMENT – Checklist

Responsibility: Manager SPO & Coastguard Aviation

1 **CATEGORY 6.1 - AIRCRAFT INSPECTION**

2 **PURPOSE OF PROCEDURE**
AIRCRAFT: SAMPLE OF EQUIPMENT & AN O.76 SECTION 5.10 SAR ROLE AND MEDICAL EQUIPMENT CHECKLIST

3 **REFERENCES AND FORMS**
- Regulation 965/2012
- Aero Notice O.76

4 **AOC {H} 6.1 AIRCRAFT: COCKPIT AND SAMPLE OF EQUIPMENT – Checklist**

Operator: _____ Date of Check: _____ File Ref: FOD/AOC/ EMPIC/

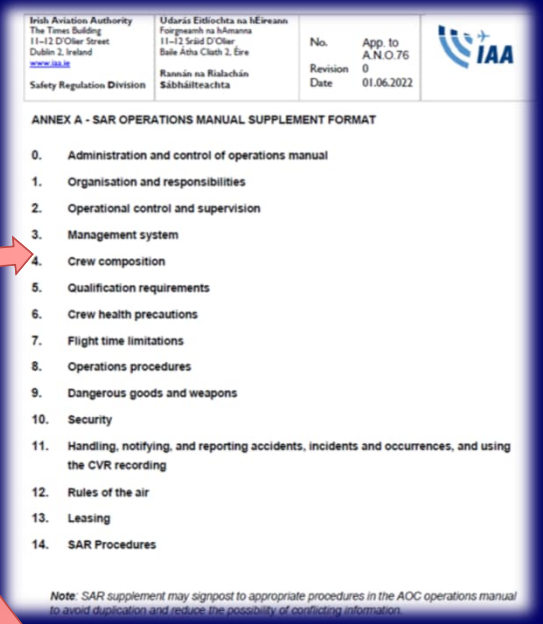
REG: EI-

Carried out the audit with: _____

The regulatory oversight structure and system

Category 2 – Manuals

ASPECT	OVERSIGHT FOCUS
AOC Manuals **SAR-Specific Manuals**	**SAR Supplement** **Safety Equipment Manual (SEM)**
SAR Currency Requirements	Included in the SAR Supplement for FC & TC
SAR Equipment Manual (SEM)	The management system used to control this equipment
Standard Setting	EASA Air Operations ANO.76 – SAR RULES & included on the oversight programme



Irish Aviation Authority
The Times Building
11–12 D'Olier Street
Dublin 2, Ireland
www.iaa.ie
Safety Regulation Division

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No. App. to A.N.O.76
Revision 0
Date 01.06.2022

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ANNEX A - SAR OPERATIONS MANUAL SUPPLEMENT FORMAT

0. Administration and control of operations manual
1. Organisation and responsibilities
2. Operational control and supervision
3. Management system
4. Crew composition
5. Qualification requirements
6. Crew health precautions
7. Flight time limitations
8. Operations procedures
9. Dangerous goods and weapons
10. Security
11. Handling, notifying, and reporting accidents, incidents and occurrences, and using the CVR recording
12. Rules of the air
13. Leasing
14. SAR Procedures

Note: SAR supplement may signpost to appropriate procedures in the AOC operations manual to avoid duplication and reduce the possibility of conflicting information.

SAR Equipment Maintenance Manual S92A

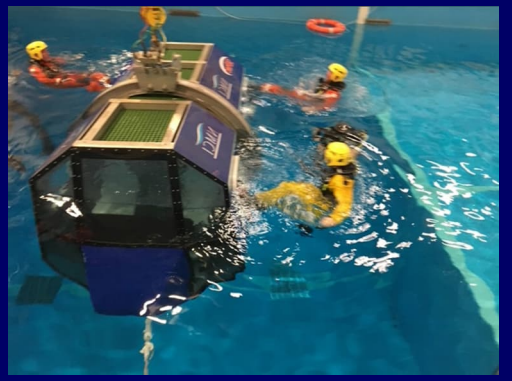
Document reference: S92-SE-00

Publication date: 31 Jan 2025

The regulatory oversight structure and system

Category 3 – Training & Category 4 – Crew records

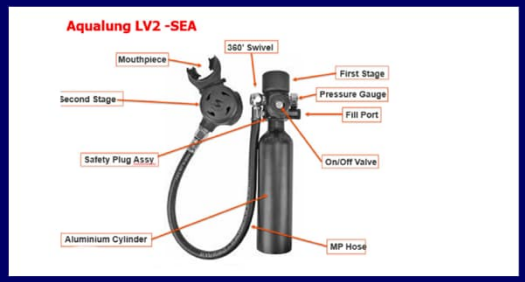
ASPECT	OVERSIGHT FOCUS
Training & Checking	Similar standards to CAT operators due to AOC requirements & all AOC crew training requirements in the AOC manuals
SAR-Specific Disciplines	SAR disciplines included in the SAR Supplement, including HUET
SAR Currency Requirements	Defined for FC and TC roles in the SAR Supplement
Tracking System	iSAR software with traffic light compliance monitoring
Standard Setting	Based on SAR operator experience and practices



The regulatory oversight structure and system

Category 5 – Equipment & Category 6 - Dispatch

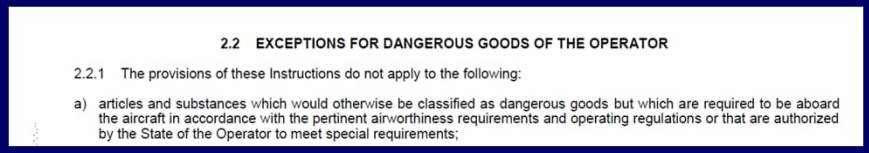
Aspect	Oversight Focus
Scope of Oversight	Covers equipment required for CAT operations and **SAR Role Safety Equipment**, and the management system used to control this equipment
Certification Standards	Ensures equipment is suitable and certified to the highest standards (e.g. conformance certification, ETSO compliance)
Documentation	A Safety Equipment Manual is required, detailing: – Equipment description – Certification standards – Servicing requirements and procedures
Serviceability Control	Reviews the operator's database used to monitor equipment serviceability and location
Audit Locations	Audits conducted to sample check the SAR Role Equipment: – On the line aircraft – In stores – In office accommodation.
Audit Tools	Use of developed checklists to support structured and consistent audits.



The regulatory oversight structure and system

Category 7 – Dangerous Goods

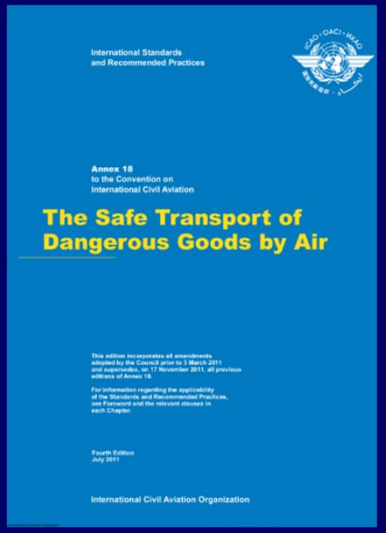
Aspect	Oversight Focus
Scope of Oversight	Not necessary to seek approval. If a CG / SAR operator wishes to seek approval to carry DG the regulatory requirements are exactly the same as required by SPA.DG
Certification Standards	**ICAO DG or National Regulation**
Documentation	ICAO Annex 18 ICAO Doc 9284 Operator RA's
Serviceability Control	
Audit Locations	SAR / CG Bases & aircraft
Audit Tools	DG oversight checklists as part of oversight programme



2.2 EXCEPTIONS FOR DANGEROUS GOODS OF THE OPERATOR

2.2.1 The provisions of these Instructions do not apply to the following:

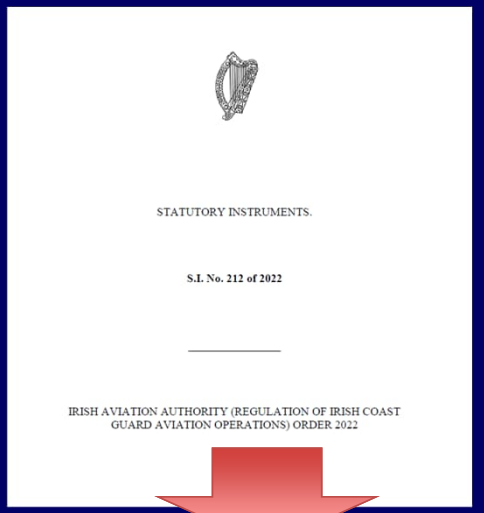
a) articles and substances which would otherwise be classified as dangerous goods but which are required to be aboard the aircraft in accordance with the pertinent airworthiness requirements and operating regulations or that are authorized by the State of the Operator to meet special requirements;



The regulatory oversight structure and system

Category 8 – Management

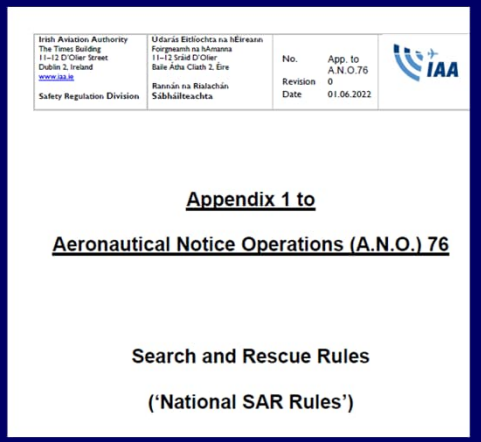
Aspect	Oversight Focus
Scope of Oversight	**Management System**
Certification Standards	EASA and National Regulation
Documentation	EASA - Air Operations & S.I. 212 – Regulation of Irish Coast Guard Aviation Operations SAR Rules (ANO.76) OMA SAR Supplement MSM
Serviceability Control	
Audit Locations	Bases
Audit Tools	MS checklists



STATUTORY INSTRUMENTS.

S.I. No. 212 of 2022

IRISH AVIATION AUTHORITY (REGULATION OF IRISH COAST GUARD AVIATION OPERATIONS) ORDER 2022



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Search and Rescue Rules

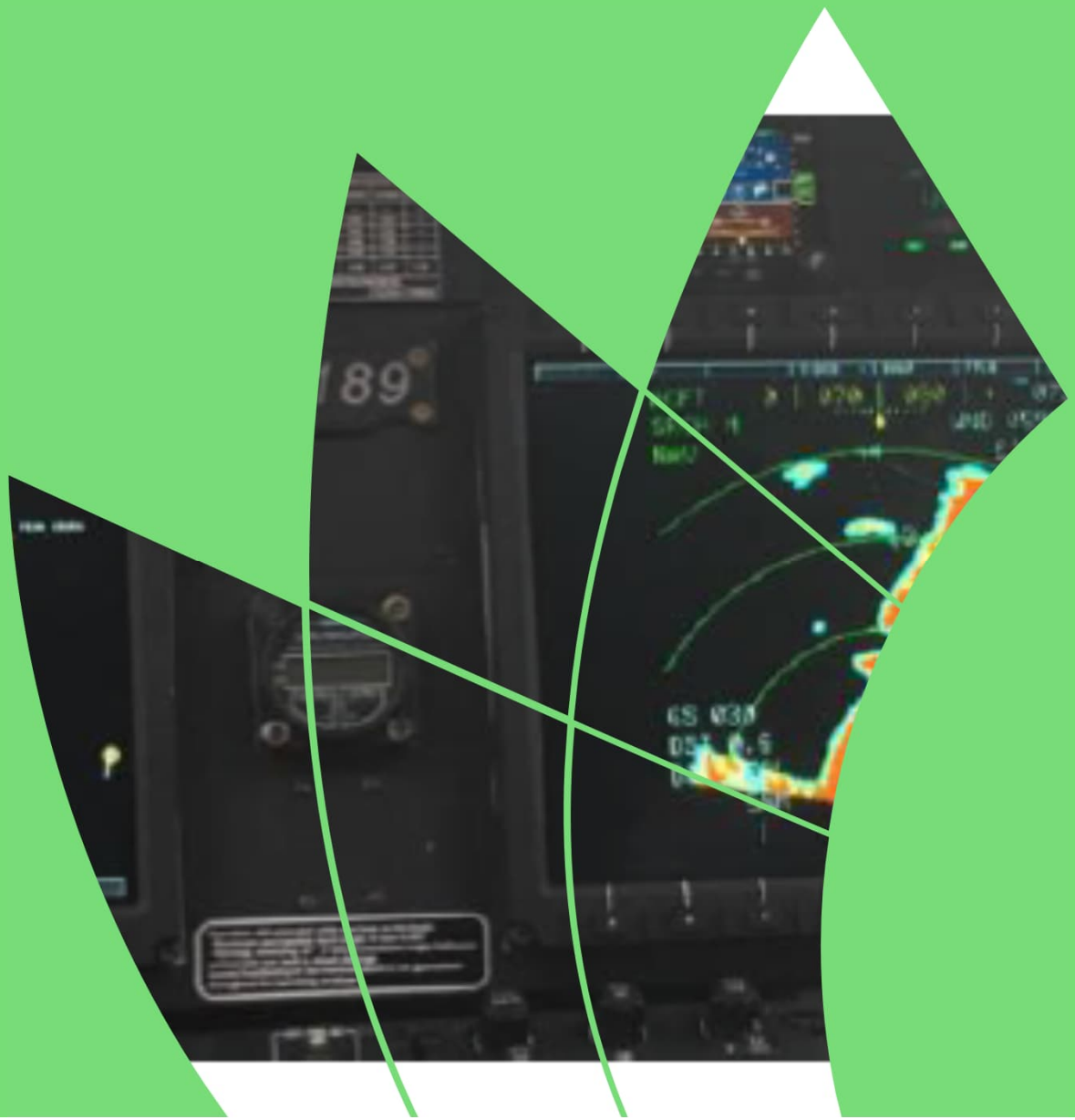
('National SAR Rules')

"Coast Guard Technical Crew" means a member of a coast guard crew, other than flight crew, assigned to a coast guard operations flight for the purpose of operating specific aircraft and role equipment and assisting the flight crew during the mission;

CATEGORY: 8.7 – SAR ROLE AND MEDICAL EQUIPMENT MANAGEMENT SYSTEM

Section_07

Continuous improvement and the future



Continuous Improvement and the Future of SAR/CG Oversight

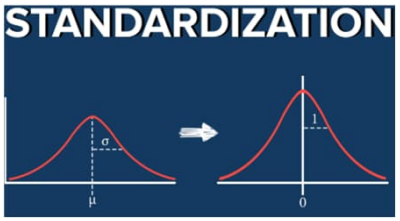
International Challenges

Lack of Regulatory Framework

No unified international or European regulatory structure or guidance for SAR or CG operations.

Absence of Standardisation

Operational and training standards vary widely across jurisdictions.



Emotional Drivers

Decision-making in SAR still influenced by emotional rather than operational or safety-based rationale.

Role Creep in SAR / CG Helicopters

Multi-role aircraft dilute specialist expertise and complicate oversight.

Questions?