



# MID Safety Summit

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General Authority of Civil Aviation



# Kingdom of Saudi Arabia State Safety Program

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# Outline

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- ❖ SSP 2013 Achievements (Phase I)
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- ❖ SMS Acceptance Process
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- ❖ SSP Obstacles
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# Saudi Arabia SSP Policy

- ❖ Employing ICAO standards and recommended practices, as minimum international standards and recommended practices, General Authority of Civil Aviation (GACA) will ensure the highest level of safety in the Kingdom of Saudi Arabia aviation system. Mindful of Kingdom of Saudi Arabia's State Safety Program (SSP), GACA will maintain an integrated set of regulations and activities aimed at enhancing aviation safety.
- ❖ GACA will implement proactive and as far as possible predictive strategies encouraging all stakeholders/service providers to understand the benefits of a safety culture, which should be based on an inclusive reporting culture. GACA will foster and assist stakeholders in developing comprehensive Safety Management Systems (SMS) and will develop preventive safety strategies for the aviation system in an environment of a “just culture”.



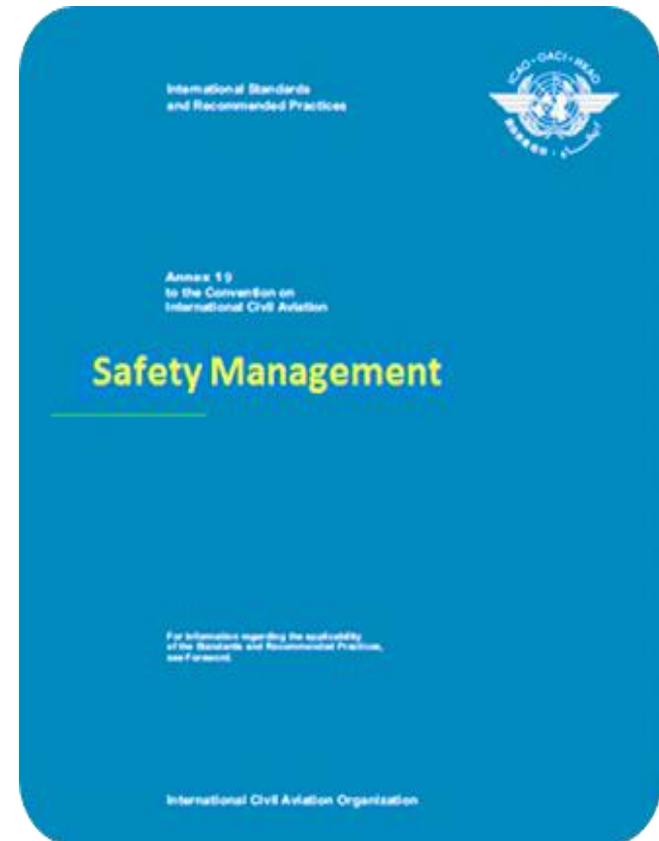
# SSP Achievements Phase I

- ❖ Established a Safety Management regulation
- ❖ Maintained more than three years of Saudi Airspace Aviation Occurrences database (AOTS system)
- ❖ Inquired each service provider to have an accepted SMS manual by the end of 2014
- ❖ Started the review and acceptance of SMS manuals
- ❖ Ensured each service provider has Safety & Quality Assurance Department to carryout SMS functions and duties.
- ❖ Started working on establishing SSP internal procedures and responsibilities



# SSP 2014 Implementation Plan Phase II

- Issued GACAR Circular 15A-2010 to enforce the submitting of service providers SMS Manual by end of 2014 and full SMS implementation by the end of 2016.
- Establishing internal Safety Management committee
- Linking internal departments safety management functions through set procedures
- Starting SMS pre-audit check
- SMS compliance oversight through concerned departments
- Ensuring each service provider database availability and reporting system efficiency
- Building communication with aviation partners



# SSP Achievements Phase III

- ❖ Updating KSA Civil Aviation Law
- ❖ Updating the Safety Management Regulation
- ❖ Updating the Safety Management Guidance Material
- ❖ Established an a Safety Management eBook (review & inspection checklists)
- ❖ Acquiring Safety Management Professional Software
- ❖ Continuous follow up on service provider's SMS acceptance and implementation
- ❖ Establishing SSP ALoSP



# Updating Current KSA civil Aviation laws

- ❖ Currently GACA is updating numerous regulations within the aviation industry.
- ❖ Many of the new regulations correspond to the new direction of the aviation regulation community.
- ❖ Safety is at the forefront of the many of the new regulations put in place for the community.
- ❖ Safety Management Systems (SMS) is perhaps one of the most significant addition to the new regulations



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# SMS Software suitable for the working environment

## Software

- The general Authority of civil aviation GACA is currently looking at two competitive software to enable the wide use of Safety Management functions.
- Some choices of software are:
  1. Visium AQD
  2. Q-Pulse

## Services

- Most software offer state-of-the-art services and resources to do with all aspects of safety management.
- Such services include reporting systems, risk management and statistical representations.





**INTEGRATED SAFETY AND RISK MANAGEMENT SOFTWARE**

# HOW IT WORKS

AQD employs safety, quality and risk management principles to facilitate a cycle of continuous improvement, using a variety of flexible and easy to use tools to support each phase of the process.

## Collect

Capture Incident/event reports across all areas of the business for flight, maintenance, cabin and ground safety, security, environment, occupational safety and beyond via a browser-based interface using customisable forms.



## Assess

Proven tools for assessing risk and the management of the Investigation and audit processes, recording of objective data and findings. Includes implementation of risk and causation models to facilitate identification of the root/primary cause.



### James Reason Model



Uses causal factors based on James Reason model to identify why the defences have been breached. This facility is fully customisable to accommodate other causation models.

## Monitor

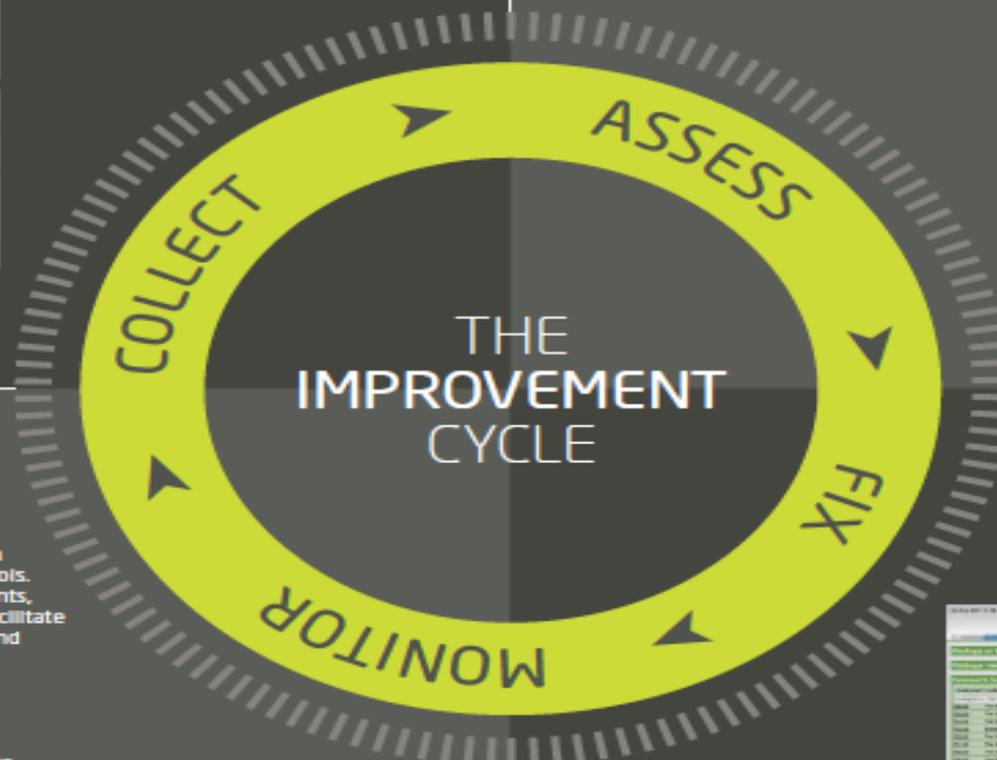
The effectiveness of the actions and resulting improvements are determined through the on-going monitoring processes of audit/evaluation and trend analysis using a variety of flexible and easy to use tools. Proactive risk reviews and assessments, risk registers and automatic alerts facilitate a cycle of continuous improvement and reduced risk across the organisation.

## Audit & Compliance

Manages quality assurance, internal evaluation, safety, audit and compliance programs, both internal and external, with scheduling tools and checklists.

## Fix

Corrective and preventive actions solve the problems identified by risk assessments, audits and investigations to mitigate risk. Their implementation can then be precisely managed and tracked to ensure the benefits are realised.





*Gael*  
 **Q-Pulse®**

Aviation Safety, Risk and Quality Management Solution



## Falcon Aviation Services (FAS) manage safety, security and risk with Gael's full suite of solutions

Operating a fleet of four business jets and 24 helicopters for charter, private customers and in support of the Abu Dhabi offshore oil and gas industry, Falcon Aviation Services (FAS) are subject to strict safety requirements in the highly regulated aviation sector.

With significant hazards present during everyday operations, Falcon faced considerable safety and quality assurance tasks, all of which needed to be co-ordinated and documented to meet the requirements of regulators and customers alike.

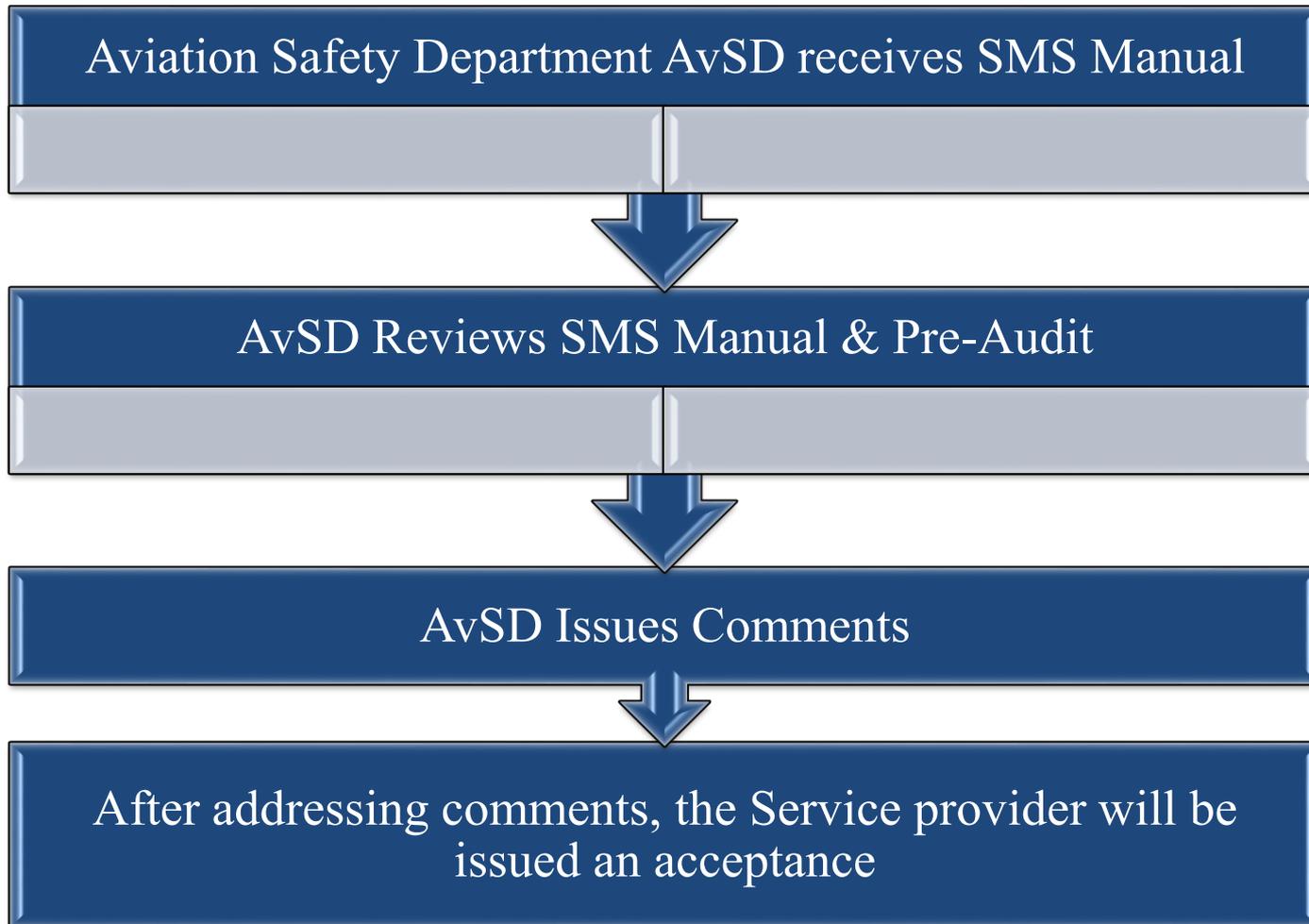
In an attempt to meet these challenges, Falcon had been battling a "sea of paperwork". Documents were stored on personal computers and with all approvals going through the Quality Manager, the process was lengthy and could take days to complete. Implementation and



*"The combination of Q-Pulse and Gael Risk has provided us with a one stop shop for the management of quality, safety and risk."*

Rob Trayhum,  
Post Holder Safety  
FAS

# SMS Acceptance Process



# Service providers compliance to SMS

- Currently, 25% of the Kingdom of Saudi Arabia's airports are in compliance with safety management systems (SMS) requirements.
- 100% of all major airlines are in compliance with SMS requirements



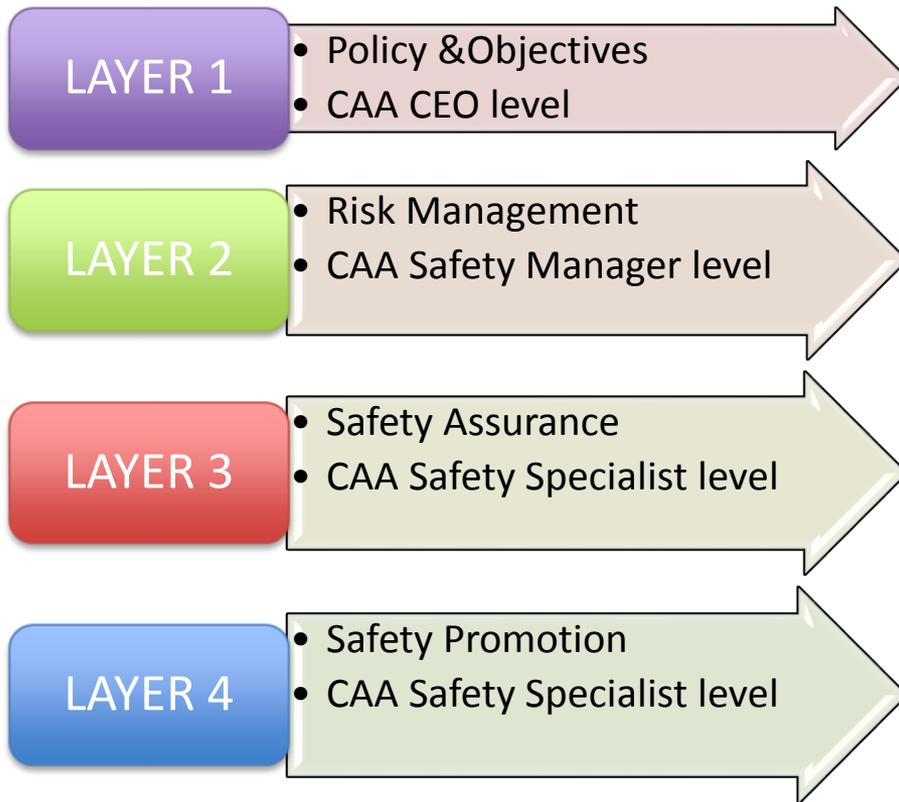
# SSP Obstacles

- Civil Aviation Authorities lack of SSP experts (worldwide)
- SSP as a new program (worldwide).
- Service Providers shortage of SMS experts in the region (MID)
- SSP Internal responsibilities practice
- Safety Culture as a new concept to the MID-Region
- Service Providers lack of database
- The sharing of safety information (Service Providers vs. CAAs)
- Safety cost vs. visible outcomes
- Acceptable Level of Safety Performance (ALoSP) trial & error



# SSP Suggested Management

## CAA MANAGEMENT LAYERS



## CROSS COMMITTEES



**CAA SAFETY SPECIALISTS**

**CAA AIRWORTHINESS**

**ALL GACA INSPECTORS**

Occurrence Report or Voluntary Report

SDR or Malfunction / Defect Report

Surveillance Finding

Is SDR or Regulatory Violation Involved?

No

Violation

SDR

Resolution of Identified Saety Concerns

This activity will often include the involvement of SMEs from other CAA divisions.

SDR Processing

Compliance Enforcement

NCR Raised & Closed

Completed Reports

Completed SDRs

Completed NCRs

The Resolution of Identified Safety Concerns as per ICAO Safety Management Principles.

Safety Data Acquisition, Analysis and Exchange Processes (Managed by CAA Safety Department)

Safety Performance Reporting

Exchanging Data and Intelligence with Partners

Safety Promotion Initiatives

Adjustments to Surveillance Program

Adjustments to SMS Performance Indicators /Targets

Adjustments to Regulations and Guidance Material

Adjustments to Inspector Training

# Recommendations

- In order to implement all four phases of SSP by the end of 2018, ICAO is urged to provide not less than 5 days comprehensive workshop covering the new material presented in Annex 19.
- Starting with the first phase through the second phase of implementation, Civil Aviation Authorities should consider the unification of their database, reporting system, and occurrences classifications to assure future easiness in data sharing and regional analysis.
- MID Civil Aviation Authorities are urged to start working on phase by phase implementation approach for SSP compliance, which should ensure better communication internally with their own service providers and externally with surrounding countries authorities.



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## Summary

- ❖ Kingdom of Saudi Arabia GACA SSP
- ❖ GACA SSP 2013 Accomplishments
- ❖ GACA SSP 2014 Plan
- ❖ Updating regulations
- ❖ Choosing new SMS software
- ❖ SMS compliance
- ❖ GACA SSP Obstacles
- ❖ Recommendations