

# Safety Management System & Flight Data Monitoring

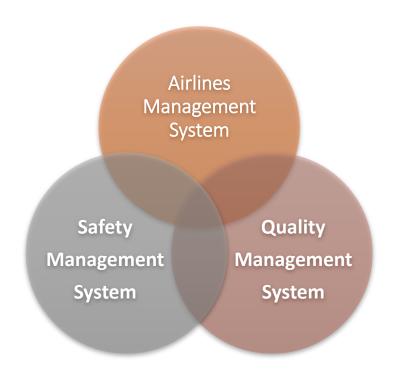


The International Civil Aviation Organization (ICAO) has mandated all contracting member states to urge their operators to implement a Safety Management System.

FDM is specified as a requirement in Annex 6 of the ICAO Convention on International Civil Aviation for aircraft over 27 tones.

It is recommended for aircraft over 20 tones.

This requirement was taken further by Europe through the JAR-OPS 1.037





#### **JAR-OPS 1.037**

#### Accident prevention and flight safety programme



- Maintain Risk Awareness
- Occurrence Reporting
- Identify Adverse Trends
- Evaluate Relevant Information
- Flight Data Monitoring
- Accountable FDM Programme Manager
- Proposals for Corrective Actions
- Quality Assurance Manager to monitor the effectiveness of changes resulting from the Corrective Action



#### ASRA® - Introduction



#### What is ASRA?

ASRA stands for Aviation Safety Risk Assessment, it's an advanced dynamic facility which provides a comprehensive <u>END TO END</u> risk management and quality assurance solutions to airlines.

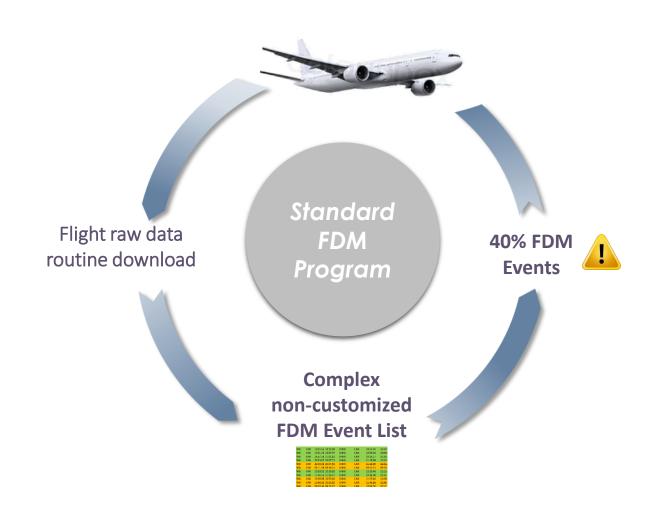
#### For Whom?

For Airlines with Aircraft above 20 Tons. However all Aircraft operators who cares about the safety of their operation should implement the program.



# The Standard Process





## **ASRA's Process**







Flight raw data routine download

Transfer raw data via a secure internet connection to ASRA

ASRA® Program 3% FDM Events

Based on FDM output reports provided by the Airline

- ✓ Analyze events
- Provide recommendation reports
- ✓ Report possible root causes



Validation and evaluation by ASRA's Team

Applicable Policies & procedures

FDM system analysis raw flight data into useful information



## **ASRA's Process**



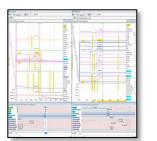




Plan and apply Corrective Actions



ASRA's deliverables



**Deviation Report** 



Google Earth Trajectory





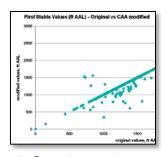
Technical Department



Quality Assurance



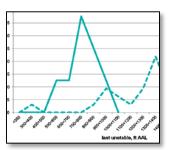
Targeted reports to each and every involved department



Safety Campaign



3D Animation



**Routine Reporting** 



## ASRA - Deliverables



- Event Detection and Measurement
- Deviation & Exceedance Reports
- Safety Campaigning
- ▶ 3-D Animations
- Routine Reporting
- Other applications beyond FDM including: Engineering Studies, Trend Monitoring, Navigational Analysis, Fuel Optimization.



### How ASRA works?



ASRA brings the most advanced technologies available in the market and a highly experienced team to come up with one integrated solution which is highly capable to take raw flight data into the following stages:



Transfer

**Process** 

Validate

**Evaluate** 

**Entrust** 



# ASRA Service capabilities



- Monitor results 24/7 from any internet connection
- No resident flight data expertise required
- Identifies operational and maintenance events
- Access to dedicated team of flight data analysts
- Access to investigation specialists
- Interactive 3-D flight animation of complex events
- Track safety action taken
- Ability to share results through the central service
- Service uses the same technology used by air safety investigators
- Analysts validate events and conduct custom analysis
- High volume, high IT demands, event detection, reporting and maintenance of parameter data maps outsourced
- Restricted confidentiality procedures regarding circulation of information



## ASRA Return on investment



#### **ASRA** reduces risks and cuts costs:

- Risk assess safety and quality information, standardize on best practice and improve operational efficiencies.
- Maintain full ownership and access to your flight data without the infrastructure costs typically associated with housing an internal FOQA/FDM program.
- Up to 1.5% savings of total recurring yearly fuel budget
- Save on insurance costs by deploying a recognized integrated safety management tool.
- Reduce damage and operational disruptions from turn-back, go-around(s) or diversions.
- Pay as you fly (per aircraft per month)
- Save manpower for your company
- Provide your Flight Data for research projects and get money back



#### Thank You



For more information about ASRA marketing@aphrodite-mgmt.com

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