

FDM

Challenges in a ACMI Specialized Airline



3rd European Operators FDM Forum

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The HiFly logo, consisting of the word "Hi" in dark blue and "fly" in light blue, is positioned in the bottom left corner.



Profile

- Hi Fly is an EU - OPS carrier, FAA approved, EASA and IOSA certified;
- Wet leasing (supply of aircraft with crew, maintenance and insurance - ACMI) is Hi Fly core and sole business;
- Aircraft are placed in medium and long term contracts mainly for major airlines and governments.



Fleet

- Hi Fly operates presently 12 wide-body long haul aircraft:



A310 (x1)



A330 (x5)



A340 (x6)



Operation Areas

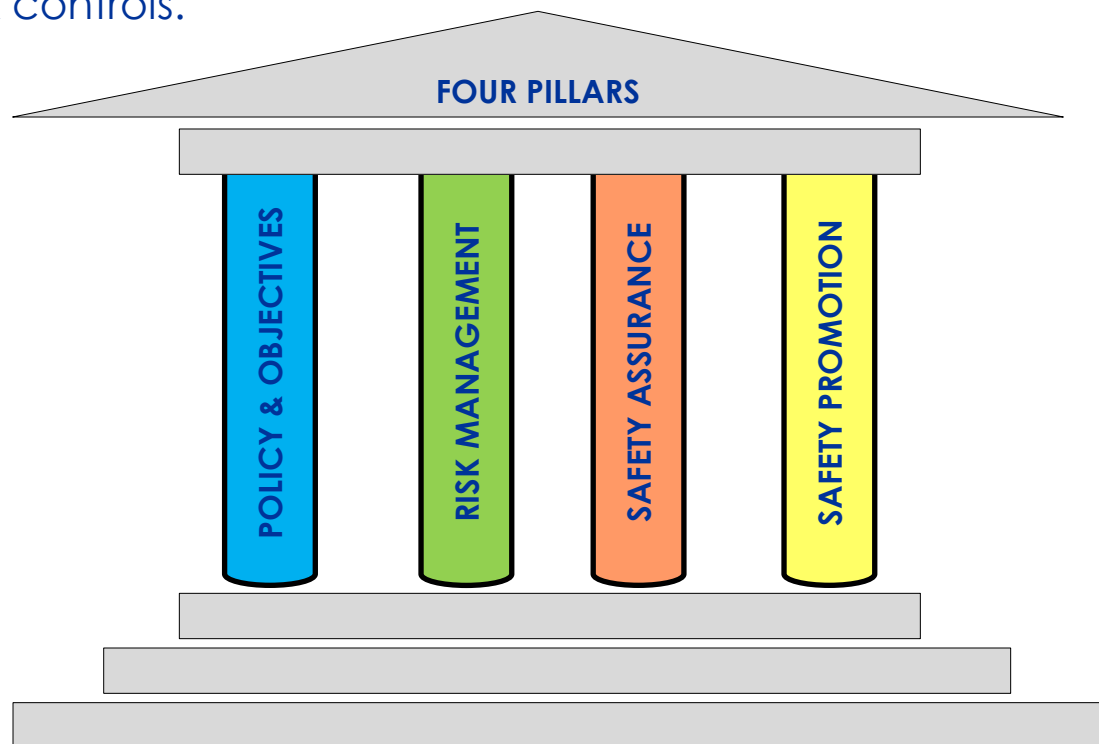
- Hi Fly aircraft cross the five continents and the three major oceans on a daily basis.





Safety Management System (SMS)

- In a performance based environment, safety regulations are used as... safety risk controls.





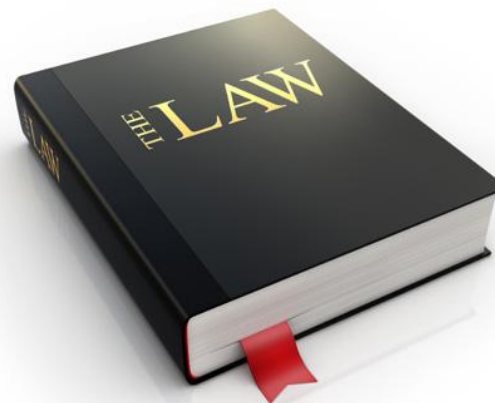
Objectives

- The goal is to control the operation by:
 - Collecting and analyzing data;
 - Identifying hazards;
 - Identifying “practical drifts”;
 - Determining adverse trends.



FDM Regulatory Framework

- EU-OPS 1.037 (a);
- AMC1 ORO.AOC.130;
- AIC 14/2010 (from the Portuguese National Aviation Authority stating that a minimum of 85% of flight data from each aircraft of the fleet shall be collected and analyzed by the operator).





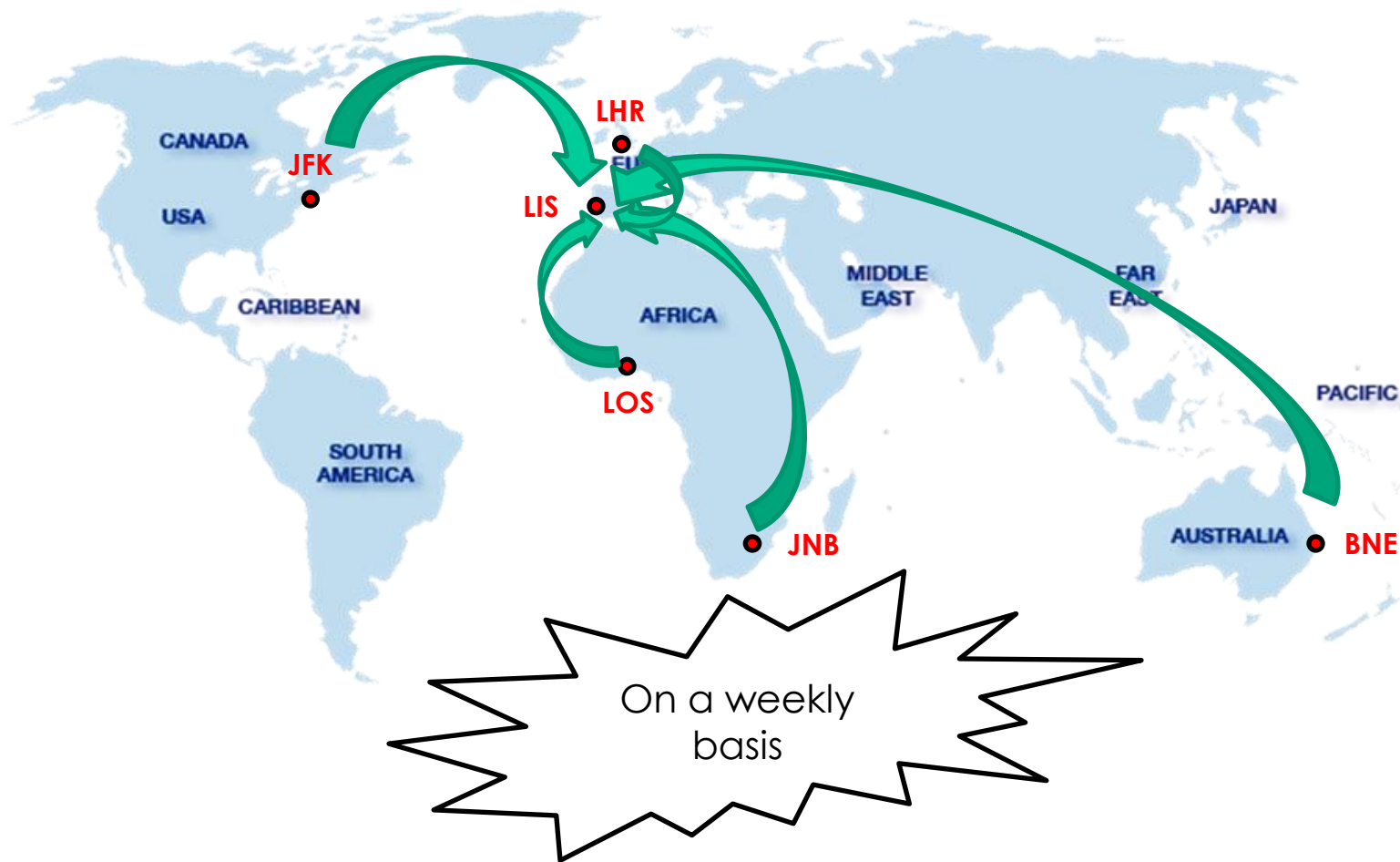
FDM Programme

- Safety Management Manual (SMM), defines the programme and the organizational structure;
- Safety Note, describes access, security policy, de-identification, retention policy and accountability as well confidentiality removal in case of gross negligence or significant continuing safety concern;
- Link with the Occurrence Reporting System.



Data Recovery Strategy

- Due to the worldwide and remote operation, a temporarily maintenance station with allocated technicians has to be established in each operation for Line Maintenance purposes;
- Extraction of the flight data is performed at these maintenance stations by the technicians as it is included in the Weekly Tasks for each aircraft;
- Flight data is sent by FTP (File Transfer Protocol) or, alternatively, by an online file-transferring service such as “WeTransfer”.





Data Recovery Strategy (cont.)

- The maximum elapsed time between a recorded event and its detection and analysis in the FDM programme is usually no longer than a week;
- In circumstances where doubt exists about a possible occurrence, the Safety Department requests an earlier extraction of the flight data;
- The data recovery strategy is efficient. However, there are occasionally some issues related with the transfer of the flight data mainly due to the reduced internet connectivity in some places in Africa.



Training

- Given the data recording technology diversity within the fleet (Micro QAR's, Optical QAR's and PCMCIA's), all the technicians involved in the flight data extraction are properly trained about the following topics:
 - features of each ARMS (Aircraft Recording and Monitoring System);
 - objective/importance of the related tasks like downloading and uploading the data and also formatting the media device;
- Furthermore, the Safety Department provides to the technicians a checklist for all the mentioned tasks (extraction, uploading and formatting) for each of the media devices;



Training (cont.)

- FDM staff participate, whenever possible, in relevant forums and courses in order to be familiar with the latest best practices and share experiences.

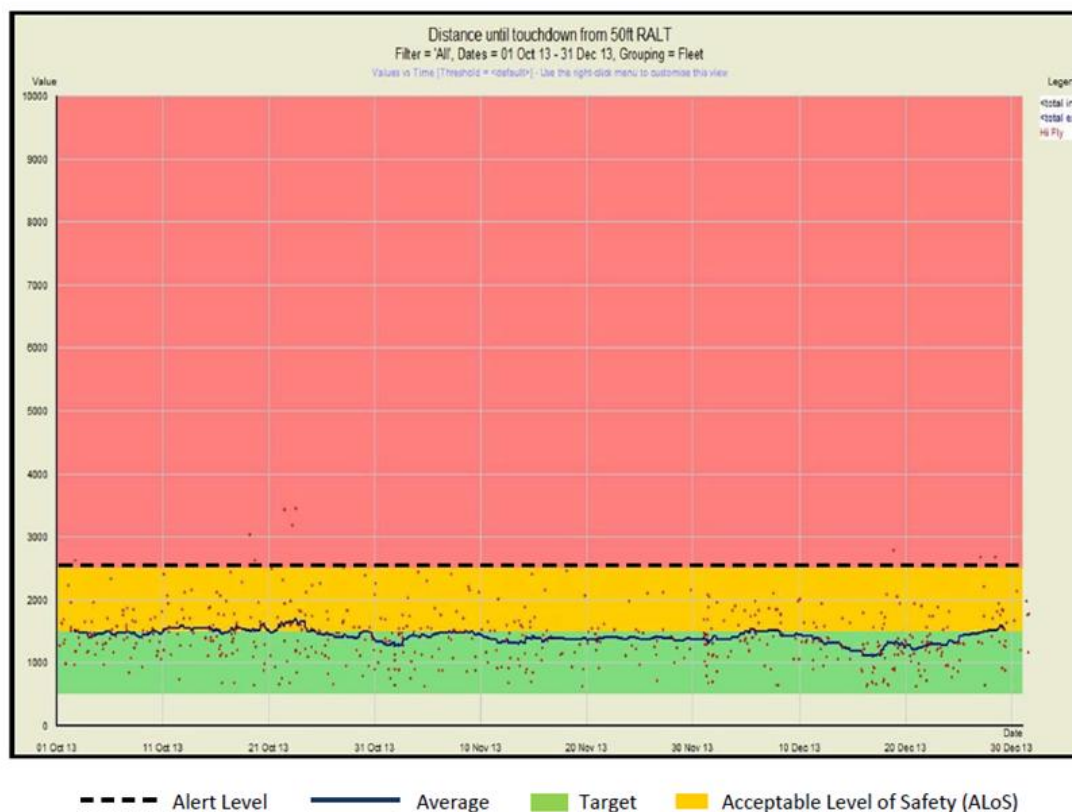


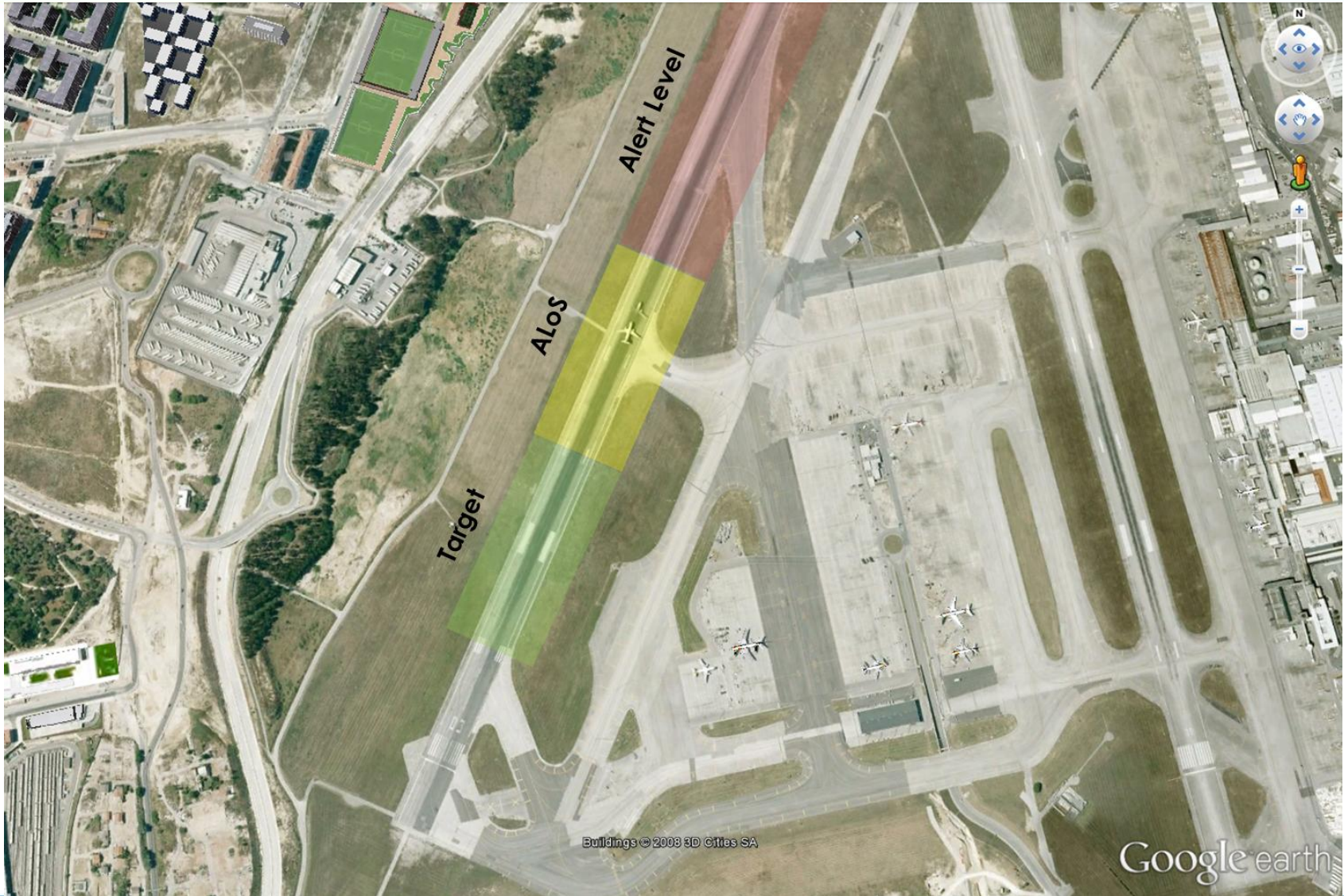
Focus/Operational Monitoring

- Unstable Approaches and/or potential conditions that may lead to a Runway Excursion (by monitoring specific parameters during the approach like A/C speed and sink rate, GLIDE & LOC deviation, A/C configuration and respective power setting);
- Deep Landings (by monitoring the touchdown point).



Distance until touchdown from 50ft RALT







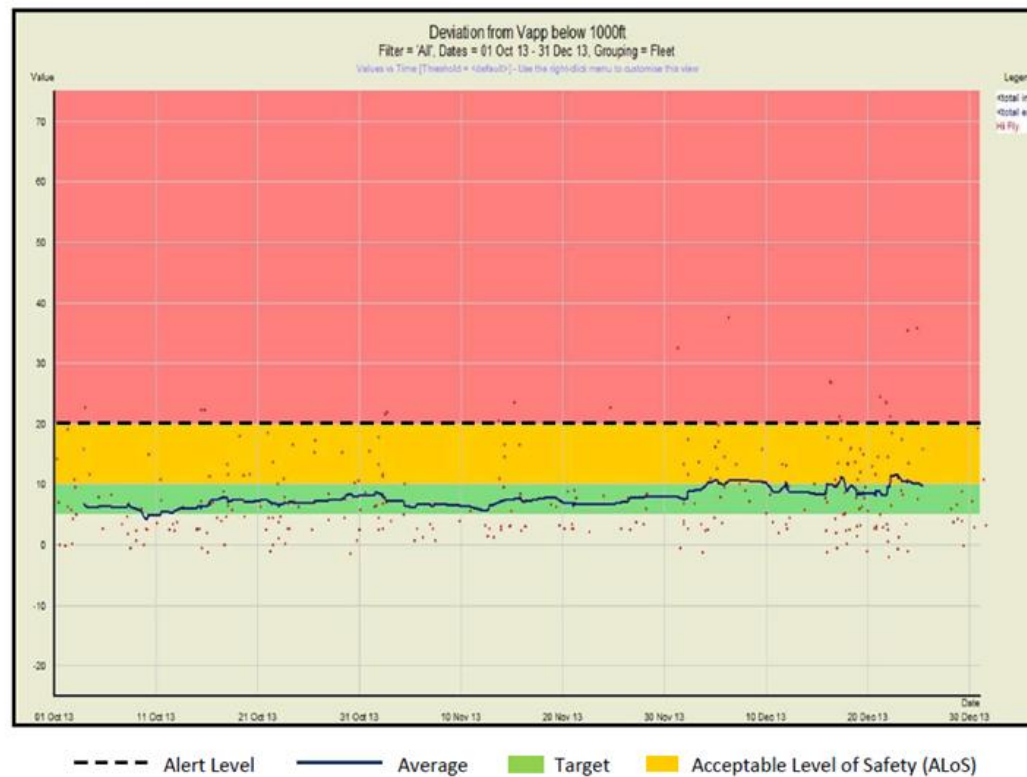
Actions Taken

- Flight crews are contacted in order to clarify abnormal events detected. If necessary, a snapshot or a small video is sent;
- Assess the evolution of the Safety Performance Indicators (SPI's) on a quarterly basis;
- Whenever unacceptable risks are identified all relevant personnel is involved in putting in place appropriate remedial/mitigation actions;
- After taking any remedial/mitigation action, follow-up responsibility is addressed to one particular person or department so that its efficiency is monitored and no knock-on effects are transferred elsewhere.



FDM Quarter Analysis (4Q 2013)

Deviation from Vapp below 1000ft





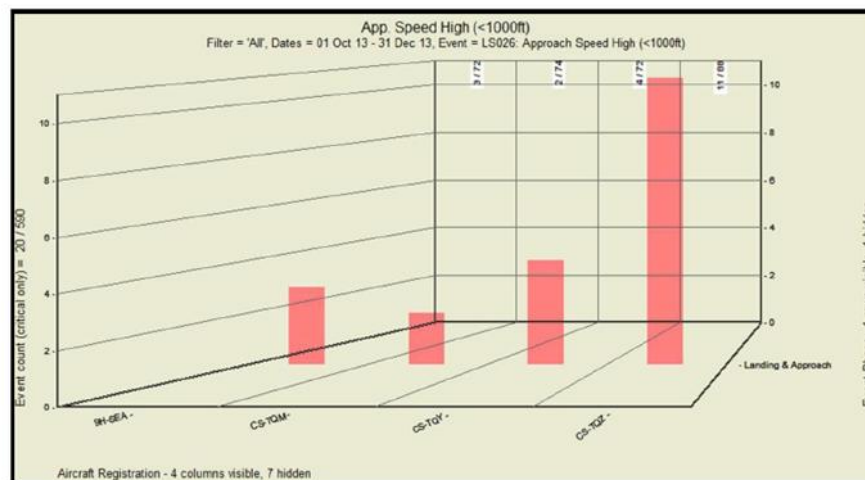
Promotion

- Every quarter statistics are disseminated to flight crews regarding the most frequent exceedances or other significant events/trends;
- Briefings on pilots recurrent training.



Approach speed high below 1000ft (LS026)

This event is triggered whenever the IAS is Vapp plus 20 KIAS.



Graphic 1 – Event **LS026** distribution by aircraft.

20 occurrences registered in 590 flights analyzed.



Thank you for your attention