FLAIRJET

JET TRAVEL IN A CLASS OF ITS OWN

Mike Chamberlain
Ground Operations Director
Flight Safety Officer

SMS Conference
13th September 2011

SMS – A Small Operator's Perspective

FlairJet

- Relatively new operator (began operations in January 2010)
- Operate three Phenom 100 and one Phenom 300 aircraft
- Operations are predominantly in western Europe

SMS Barriers?

FLAIRJET

- It's too expensive and resource intensive
- It's only for large operators
- It will hold our business back
- It's not worthwhile

SMS Challenges for FlairJet

FLAIRJET

- New company with no existing crew or established culture
- Brand new aircraft types – first commercial operator of Phenom 100 and then Phenom 300 in Europe
- Started in a recession so limited budget
- Not much time available

It's not what you've got it's what you do with it!

FLAIRJET

- The SMS is a small document but…….

the output from the SMS is what matters.

- The SMS is a tool with which to manage your business not one to hold your business back
- We use readily available IT such as
  - Sharepoint
  - Excel/Word
- Over 100 ASR's in 20 months of operation

It's not what you've got it's what you do with it!

FLAIRJET

HRF017

Class 1 EFB approval for iPad use on Phenom aircraft

Hazard/Subhazard	Pre-Mitigation			Migation	Post-Mitigation		
	Severity	Probability	Acceptability		Severity	Probability	Acceptability
Removal of hard copy AFM/POH/QRH leading to incident due to crew unable to access data following loss of iPad	Hazardous	Remote	Unacceptable	Risk considered too significant with no alternative should iPad fail. These manuals to remain in hard copy.	N/A	N/A	N/A
Removal of hard copy Operations Manual leading to an incident in flight due to crew unable to access data following loss of iPad	Major	Remote	Review	Risk considered too significant with no alternative should iPad fail. These manuals to remain in hard copy.	N/A	N/A	N/A
Incorrect weather or NOTAM information leading to an incident	Major	Remote	Review	1) Crewbriefing remains the primary source of weather and NOTAM information. One app will be tested and checked against crewbriefing. 2) Weather and NOTAM information checked in pre-flight briefing so alternative sources available at that time even if iPad fails	Major	Improbable	Acceptable
Device unavailable due to battery level	Major	Occasional	Unacceptable	1) iPad can be charged on flight deck 2) App to be loaded on iPad to advice crew of remaining battery time	Major	Improbable	Acceptable
Device unavailable due to breakage/malfunction	Major	Remote	Review	1) Critical information still available in hard copy 2) Other information either briefed on ground or available by other means in flight	Major	Improbable	Acceptable
Out of date Jeppesen data stored on iPad for reference	Major	Remote	Review	1) Expiry dates monitored in Leon and advised to EFB administrator 2) Jeppesen data on iPad not used in flight and not primary reference as hard copy remains on board	Major	Improbable	Acceptable
Risk of distraction from iPad on Flight Deck due to unauthorised downloads	Major	Remote	Review	Device is locked down by the EFB administrator	Major	Improbable	Acceptable
Fire risk due to lithium batteries contained in the device	Hazardous	Improbable	Review	Procedures for containment of lithium fires to be re-iterated in crew documentation prior to use	Hazardous	Extremely Improbable	Acceptable

FLAIRJET

SAFETY BULLETIN

SEPTEMBER 2011

THREAT AND ERROR MANAGEMENT

Although not a new concept in CRM, threat and error management is a practical tool that we wish to develop in normal operations throughout Flairjet.

Threats are defined as "events or errors that occur beyond the influence of the flight crew, increase operational complexity, and which must be managed to maintain the margins of safety".

Regardless of whether threats are expected, unexpected, or latent, one measure of the effectiveness of a flight crew's ability to manage threats is whether threats are detected with the necessary anticipation to enable the flight crew to respond to them by using countermeasures.

Errors are defined "actions or inactions by the flight crew that lead to deviations from organizational or flight crew intentions or expectations".

Regardless of the type of error, an error's effect on safety depends on whether the flight crew detects and responds to the error before it leads to an undesired aircraft state and to a potential unsafe outcome.

Threat and Error Management training will be undertaken during recurrent CRM over the next few months but the concept is worthy of consideration before and during every flight.

Examples of some typical threats that should be considered and should be factored into each and every briefing are:

- **Weather:** thunderstorms, turbulence, icing, wind shear, cross/tailwind, very low/high temperatures.
- **ATC:** traffic congestion, TCAS RA/TA, ATC command, ATC error, ATC language difficulty, ATC non-standard phraseology, ATC runway change, ATIS communication, units of measurement (feet/metres).
- **Airport:** contaminated/short runway; contaminated taxiway, lack of/confusing/faded signage/markings, birds, aids U/S, complex surface navigation procedures, airport constructions.
- **Terrain:** High ground, slope, lack of references, "black hole".

As a starting point all category B airfield briefings will now include a "TEM factors" section that aims to draw your attention to the specific threats that have led to the categorisation of the airfield in question as cat B. This is not to say that there aren't more threats – there will be.

Also, it does not imply that threats don't exist at category A airfields – they do. However, hopefully, it will help to focus attention on specific threats that exist and allow anticipation of the threat so that effective countermeasures may be considered and undertaken by the flight crew.

More to come on TEM – watch this space.

Typical Issues

FLAIRJET

- New aircraft teething troubles - systems misbehaviour
- Short runways and non-radar environment (Oxford/Cannes)
- No TCAS on the first aircraft
- Multi-fleet flying

SMS Barriers?

FLAIRJET

- It's too expensive and resource intensive
  - Cheap "tools" can be used
- It's only for large operators
  - Every operation needs to be safe – small or large
- It will hold our business back
  - SMS becomes a tool to drive your business forward safely
- It's not worthwhile
  - Safety is always worthwhile

FLAIRJET

JET TRAVEL IN A CLASS OF ITS OWN

Thank you