Weather Update - Airlines

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What issues from Operations?

- - In Europe still limited use of weather radar information by ATC to strategically re-route traffic, as normally done in the US
- - Issues with contingency planning for unexpected severe weather conditions at major hubs, including alternate airport availability

Operational Issues

- Flight planning systems are configured to produce minimum cost routes, however weather conditions at the time of planning are not necessarily the actual weather conditions, there is a need to have a more efficient system to update pilots while en-route and review the chosen route shortly before departure

Operational Issues

- The change from conventional weather radar to multi-scan radars - ensure pilots are trained in the use of the new system.
- Operators flying into critical weather and facing the ATC reluctance to authorize deviations.

Operational Issues

- IATA is developing guidance material to address environmental factors associated to LOC-I serious incidents and accidents
- In the context of SESAR, IATA participated to the validation of graphic display of SIGMETs on onboard EFBs
- Use of weather information from third parties
- SAFA – validity of weather charts?

Operational Issues

- Automated Wx Data Sharing – one of the “hottest” topics being discussed currently. Proposals to IATA to coordinate a broader data sharing initiative. Currently, this is done only in the USA.
- EASA’s thoughts? Feedback?

Operational Issues

- SIGMET Deficiencies – IATA has a joint-WP being written in collaboration with WMO and ICAO regarding SIGMET deficiencies in regions for the Meteorological Information and Service Development (MISD) Meeting. The status of SIGMET deficiency will have a large bearing on the next steps for Regional Hazardous Weather Advisory Centres (RHWAC) and thereby on information that pilots obtain. So, we are trying to gather information from operators whether there are any significant SIGMET deficiencies in any of the regions that they operate. (Major focus areas are CAR/SAM, and most of AFI).

Operational Issues

- SIGMET deficiencies can be:
  - no SIGMETS issued for FIR
  - intermittently issued
  - not all phenomena reported in SIGMET e.g. Cb
  - notoriously late or inaccurate SIGMET
- What Areas? Is it mostly over EU or more widely in all areas where EU operators are flying?
- The need for the consistent delivery of reliable weather information from all areas where EU operators fly.

Operational Issues

- Regions where weather information is inconsistently issued (e.g. METARs, TAFs, SIGMETs), especially some States in AFI and CAR/SAM. While this forum seems to mainly be focused on weather data access in the cockpit, we believe that it is important to underline these issues since the consistent availability of reliable weather information is the underpinning of any new technologies.

Operational Issues

- Training of flight crews in the use of weather information received into the cockpit to which they currently don't have access is critical.
- Many possibilities - satellite imagery and other graphics (e.g. lightning strike positions).
  - Problematic since something as seemingly obvious as a date/ time stamp might not be read, giving a false impression to the flight crew of current weather conditions

Operational Issues

- Interpretation of satellite imagery may be challenging.
- The differences between a visible satellite image / an infrared satellite image / depicting water vapor
- Training = Crucial!

The Future?

- Weather information - integrated into decision support tools – minimizing the amount of interpretation by pilots
- It is important that whatever weather information is available to the flight crews, (with the exception of tactical avoidance tools such as weather radar), it should be made available to flight dispatchers/followers for the purposes of shared situational awareness.
- Space weather?

To Conclude

- IATA engaged at Global and Regional levels to improve the quality of weather data provision and work with all the stakeholders


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