

ELEVENTH AIR NAVIGATION CONFERENCE

Montreal, 22 September to 3 October 2003

Agenda Item 2: Safety and security in air traffic management (ATM)

2.1 Safety management systems and programmes :

IMPLEMENTATION OF A MANDATORY, CONFIDENTIAL AND NON-PUNITIVE REPORTING SYSTEM FOR CIVIL AVIATION IN DENMARK

(Presented by Denmark)

SUMMARY

In August 2001 Denmark introduced a new mandatory reporting system for flight safety occurrences. The system gives assurance of confidentiality and is non-punitive for the reporting individuals and is expected to give the best incentives to report and thereby contribute to the pro-active work to enhance aviation safety.

This paper gives a brief description of the system and the results obtained so far.

1. INTRODUCTION

1.1 A flight safety occurrence is defined as:

“Any operational interruption, defect, fault or other irregular circumstance that has or may have influenced flight safety that has not resulted in an aircraft accident or aircraft incident.”

1.2 It has been recognized for many years that it is necessary for the civil aviation safety regulation authority, for service providers and for aircraft operators using safety management systems to get reports of such flight safety occurrences in order to proceed with their work, aiming at enhancing the level of safety for civil aviation.

1.3 E.g. Flight Occurrence Reports (FORs) filed by pilots has been used by airlines and authorities as well, but without safeguarding the report issuers against release to the press upon request and to prosecution in cases where civil aviation legislation have not been adhered to.

1.4 The Civil Aviation Administration in Denmark initiated in the late 1990s the creation of a reporting system, which should give far better incentives to report. However, to do that an alteration of the civil aviation legislation had to be adopted by the Danish Parliament, because it was deemed necessary to make the reporting system:

a) mandatory

reporting is made a requirement; it will be illegal not to report;

b) confidential

disclosure of reports by the authorities will be illegal. The information shall only be used for analysis, aimed at enhancing civil aviation safety; and

c) non-punitive

a reporting individual can not be prosecuted on basis of reports, filed and submitted to the Danish Civil Aviation Administration.

1.5 The legislation came into force in august 2001, and after two years of experience the results so far show a clear improvement in reporting.

2. THE SYSTEM

2.1 Reporting is done in four categories:

- a) Flight Safety Reports (FSR), covering operational occurrences (Earlier covered by Flight Occurrence Reports (FOR);
- b) Technical Safety Reports (TSR), covering technical occurrences;
- c) Airport Safety Reports (ASR), covering airport occurrences; and
- d) Air Traffic Safety Reports (ATSR), covering occurrences related to ATM.

2.2 The regulation governing the reporting system (BL 8-10) in an English version is included in the appendix to this information paper. However, only the reporting form for Air Traffic Safety reports are included as example. The complete regulation, including all forms for reporting is available at the CAA-DK website at this adress:

http://www.slv.dk/Publikationer/Love/BL/BL_8_SERIE/8_10_uk.pdf

2.3 A subsequent amendment is found at

http://www.slv.dk/Publikationer/Love/BL/BL_8_SERIE/8_10a_uk.pdf.

2.4 Attention is drawn to the regulation's paragraphs 4.1, *the note on confidentiality*, 10.2, *the note on non-punitivity*, and 10.1 that reflects that it is *mandatory to report*.

3. THE RESULTS

3.1 By introducing the system, the CAA-DK expected to be able to improve the flight safety proactively by among other things analysing potential risks and failures using the industry's and general aviation's own data. A prerequisite for success is of course that occurrences are reported in accordance with the letter and spirit of the regulation. It is believed to be the case.

3.2 From the review of report analysis for the period August 2001 — July 2003 it can be seen that:

- a) The number of reported occurrences has increased significantly. In the case of Flight Occurrence Reports (FOR) compared to the new Flight Safety Reports (FSR) the increase has been in excess of 75 per cent; and
- b) With the introduction of ATSR, Air Traffic Safety Reports, a substantial number of a type of occurrences, which were previously not reported has been made available for analysis by the Civil Aviation Administration in Denmark (CAA-DK).

3.3 In 2002 a total of 3617 reports were received. The total number of reports can be broken down in the above-mentioned categories as follows:

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|--------------------------------------|---------------------|
| a) Flight Safety Reports (FSR) | approx. 69 per cent |
| b) Technical Safety Reports (TSR) | approx. 6 per cent |
| c) Airport Safety Reports (ASR) | approx. 1 per cent |
| d) Air Traffic Safety Reports (ATSR) | approx. 24 per cent |

3.4 The analysis made until now has e.g. shown a lot of cases which could be characterized as "potential risk of runway incursion" which has caused the CAA-DK and service providers to take focussed action.

3.5 To set an order of magnitude for the Danish civil aviation system: Denmark has more than 6000 licences and around 1700 aircraft on registry. The number of IFR en route operations in Copenhagen FIR is 550,000 pr. year.

3.6 CAA-DK publishes annual summaries and analysis of the reports together with a short briefing about actions taken as a result of the reporting. The public interest – within the aviation sector as well as elsewhere – has been remarkable.

4. **CONCLUSION**

4.1 The introduction of a *mandatory, confidential and non-punitive reporting system* has caused a significant improvement compared to the previously used non-mandatory reporting.

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