



DIRECTORS GENERAL OF CIVIL AVIATION CONFERENCE ON A GLOBAL STRATEGY FOR AVIATION SAFETY

Montréal, 20 to 22 March 2006

Theme 2: Improving aviation safety

Topic 2.2: Management of aviation safety

SMS BASED INDUSTRY STANDARDS AS A TOOL FOR SAFETY REGULATION AND OVERSIGHT

(Presented by the International Business Aviation Council)

SUMMARY

The value of safety management systems (SMS) has been recognized by ICAO and Contracting States and the concept is increasingly being applied to safety rules. Similarly, the business aviation industry applies SMS as a cornerstone of its industry code of practice, an International Standard for Business Aircraft Operations (IS-BAO). Given the continuing pressure on regulators worldwide to provide safety oversight of a fast growing aviation sector, use of SMS-based industry standards, and monitoring of the standards by the accredited industry representatives, have the potential to leverage the regulator's resources.

1. INTRODUCTION

1.1 The aviation industry has expanded rapidly over the past few decades, as has its technical capabilities. Evolution has been so rapid that it has been difficult for all elements of the system to keep pace. In some instances, infrastructure has lagged behind demand. In others, safety regulatory regimes have experienced difficulty providing safety oversight resources commensurate with industry complexity and growth.

1.2 Since early days of aviation it has been accepted that to provide for a safe aviation system there must be rules of the air and licensing standards. In the 1930s many States established such rules, and

after the Chicago Convention was signed in 1944, Standards and Recommended Practices (SARPs) were developed for most aviation disciplines, thus becoming the foundation for harmonizing rules worldwide.

1.3 Over the years, SARPs and State regulations have been updated to keep them current with new technologies and operational concepts. The workload for regulators and the ICAO Secretariat to keep the rules current has been substantial but necessary, resulting in constantly improving aviation safety.

1.4 Resources required for ongoing safety oversight have been substantial, and using traditional methods, many States have found it difficult to maintain the pace of growth experienced by aviation as a whole. The result is that aviation regulatory authorities have actively sought new concepts for monitoring and ensuring the safety of the aviation system.

2. BUSINESS AVIATION SAFETY STANDARDS

2.1 The business aviation industry sector consists of aircraft used for business purposes. These operations include corporate aviation, owner operated and on-demand charters. There are presently over 23 000 turbine aircraft flying worldwide. For the most part, business aviation operates under general aviation operating rules.

2.2 Although business aviation operates in accordance with rules that are less stringent than those of air transport operations, the broad application of best practice has meant that the safety record has remained excellent. Indeed, the corporate aviation sector, which forms the major part of business aviation, has a safety record that matches the best records in aviation (*Reference: Business Aviation Safety Brief published annually by the International Business Aviation Council*).

2.3 The excellent safety record of corporate aviation has largely evolved through application of high standards and safety driven practices by the industry. The business aviation industry has codified the industry best practices into a comprehensive safety standard that the industry is encouraging its operators to apply. The industry Standard, IS-BAO — International Standard for Business Aircraft Operations, incorporates the provisions of Annex 6 — *Operation of Aircraft, Part II — International General Aviation — Aeroplanes*.

3. SAFETY MANAGEMENT SYSTEMS

3.1 The industry ‘code of practice’ applies a safety management system (SMS) as the cornerstone upon which flight departments can develop process oriented operational systems, programs and procedures that address the hazards and associated risks inherent in the individual company operations. This modern performance-based approach ensures that hazards and associated risks, are reduced to an acceptable level and the mitigation activities are then tracked to ensure that they are appropriate and effective.

3.2 Such a performance-based approach to aviation safety has proven to be an effective means of managing safety.

3.3 ICAO recognizes the value of SMS applications and has been seeking examples of successful programmes and guidance has been issued through the *ICAO Safety Management Manual*

(Doc 9859-AN/460). Increasingly, State safety regulators are recognizing the value of an SMS as the core of an operator's safety programme and requirements are being incorporated into State regulations. It is a progressive and modern approach that ensures that the operator takes the lead role in overseeing the safety of the operation.

4. REGULATORY APPLICATIONS

4.1 The aviation industry as a whole is generally recognized as a leader in the application of a modern approach to safety management, including applications of safety management systems. The result has been a consistently improving aviation safety record. This good safety record can be attributed to a safety conscious industry and to the constant review and updating of safety regulations by ICAO and its Contracting States.

4.2 Corporate aviation is a good example of how a conscientious industry, operating in accordance with very basic regulations can deliver an excellent safety record through use of a systematic, process oriented approach to operations. As noted previously, as corporate aviation is non-commercial, it is regulated in accordance with Annex 6, Part II for international general aviation.

4.3 Since ICAO and Contracting States are increasingly applying SMS in developing rules, it would be a logical extension to recognize SMS as a means to satisfy ongoing safety oversight and as a means of leveraging regulatory oversight resources. In particular, with industry sectors and companies that have enjoyed a good safety record, there is benefit in regulators sanctioning industry safety Standards as a means of demonstrating achievement of acceptable operational safety. Furthermore, mechanisms endorsed by State regulators could be applied such that accredited industry representatives could verify compliance with the standard.

4.4 Such an approach would help regulators to devote attention to significant safety deficiencies and it would help to address constantly increasing regulatory resource requirement issues.

5. CONCLUSION

5.1 The Conference is invited to conclude that:

- a) The value of safety management systems is recognized as a key element in industry safety standards;
- b) Industry standards can serve as a mechanism to assist regulatory safety programmes; and
- c) Safety standards developed and monitored by the industry can add safety value and reduce regulatory resource pressures if they are applied as a means of demonstrating compliance with safety rules.