



ASSEMBLY — 36TH SESSION

TECHNICAL COMMISSION

Agenda Item 28: Protection of certain accident and incident records and of safety data collection and processing systems in order to improve aviation safety

Agenda Item 30: Other safety matters

AIRPORT REGULATORY OVERSIGHT / SAFETY MANAGEMENT SYSTEMS

(Presented by the Airports Council International)

EXECUTIVE SUMMARY

ACI notes the conclusions in Assembly WP/14 on the insufficient implementation of aerodrome certification requirements worldwide. In an effort to redress this situation, ACI is working with airports to encourage airport operators, together with their regulators, to focus on airport certification as a high priority. ACI recognizes the need for regulation of airports, but calls for consistent and fair forms of regulation. ACI believes that regulators should apply ICAO Standards but avoid an excessively prescriptive approach to safety regulation. The introduction of safety management systems and the development of a “just culture” at airports world wide are key objectives of ACI. The paper lists activities being undertaken by ACI to enhance safety at airports.

Action: The Assembly is invited to:

- a) agree that the number of airports which have been certificated, and the number which have implemented safety management systems, need to be increased speedily;
- b) call on regulators to follow the Standards of Annex 14 Volume 1 and to avoid excessive and costly over-regulation;
- c) agree that States should be invited to adopt regulatory provisions obliging aircraft operators and handling agents to report all incidents and accidents occurring at airports (including on apron areas) to the appropriate authorities and to the airport operators concerned;
- d) agree it is a priority that regulators should adopt a “just culture” in dealing with all aspects of aviation including the management of airports, notably to encourage sharing of safety lessons; and
- e) agree that, following the study made by the Aerodromes Panel of the specifications in Annex 14 for aerodrome reference code F, the Aerodromes Panel and the Secretariat should be tasked to review the specifications for all other codes up to E.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objectives A and D.
<i>Financial implications:</i>	Not applicable.
<i>References:</i>	A36- WP/14.

¹ English, French and Spanish versions provided by the Airports Council International.

1. INTRODUCTION

1.1 The ICAO Secretariat's initiative to carry out a survey and report on the implementation of aerodrome certification requirements (A36-WP/14) is to be commended. Although only eighty-seven Contracting States replied, the survey provides valuable information on the status of implementation. It highlights in particular that many States have not yet:

- a) developed and approved aerodrome certification regulations;
- b) developed and approved safety management regulations; and
- c) implemented safety management systems at all their international airports.

1.2 Whilst it is encouraging to note that over 400 international airports have been reported as being certified, and over 250 have been reported as implementing safety management systems (SMS), this falls far short of the total of 1280 international airports worldwide listed in the ICAO regional air navigation plans. ACI offers its assistance to all airports to apply safety management systems in accordance with ICAO recommendations. ACI is working on a SMS implementation checklist as well as an SMS best practices guide, to be completed by early 2008.

1.3 The issue will also be highlighted at ACI's World Annual General Assembly in November this year, and Airport CEOs attending will be requested to consult their regulatory authorities and recommend solutions to address the issue of slow progress in certification of airports and implementation of safety management systems.

2. BACKGROUND

2.1 ACI Activities Related to Airport Safety

2.2 In order to support and assist its members, ACI conducts many activities in the field of airport safety, which are complementary to those of ICAO. These include:

- a) monitoring of apron safety at member airports world-wide, through an annual survey of accidents and incidents, now in its 19th year. This survey's results and related commentary has been progressively expanded to make it more informative. In 2007, the survey has been redefined to address a specific cross section of airports, to allow the trends in apron safety to be more reliably shown. The first publication of this redefined survey is expected in early 2008;
- b) airport operational safety conferences, most recently held in Prague in November 2004 and Budapest in December 2005. These well-attended events have proved valuable in disseminating expert knowledge and "best practices". The proceedings of these conferences form an increasing body of documentation available to member airports and other interested parties;

- c) production of handbooks on safety. The third edition of the ACI Airside Safety Handbook, published in 2006, contains a number of checklists, of safety recommendations as well as other guidelines for airports, compatible with the ICAO SMS approach. The first edition of the ACI Aerodrome Bird Hazard Prevention and Wildlife Management Handbook, published in 2005, contains detailed guidance on the mitigation of wildlife hazards at aerodromes. The ACI/IATA Apron Markings and Signs Handbook was published in April 2001 with input from ICAO and IFALPA. A second edition of this handbook is currently in preparation, in consultation with the ICAO Visual Aids Working Group;
- d) development of self assessment checklists and audit tools. ACI is working to produce a number of checklists and “self-help” tools, especially related to SMS and risk assessments;
- e) contribution to ICAO’s activities, especially the Aerodromes Panel, the Air Navigation Commission (ANC) and its working groups, as well as providing advice to ICAO on safety implications in the development of ICAO technical Standards for airport design, construction, maintenance and operation;
- f) liaison with IATA, IFALPA, the Flight Safety Foundation (FSF) and other international organizations on safety-related issues;
- g) participation in the FSF Runway Safety Initiative, which aims to identify methods of further mitigating risks related to runway incursions, excursions and confusion. The RSI is analysing existing materials including those published by ICAO, concentrating on areas where existing guidance could be augmented, especially runway excursions and confusion. The working group, which includes all industry stakeholders, aims to deliver recommendations that can be implemented by the different segments of the industry;
- h) establishment and promotion of new safety related policies. The current (2006) edition of the ACI Policy Handbook includes many policies on airport design, operations and safety management;
- i) review of airport safety deficiencies. When any such deficiencies have been reported to it, ACI encourages dialogue between all concerned at the local level, with the aim of improving the level of safety;
- j) provision of training courses on airport safety and operations through the ACI Global Safety Network. Courses include, Aerodrome Operations, Handling Agent Licensing, Safety Management Systems, Apron Management, Airside Safety and Operations, Emergency Planning and Crisis Management, Runway Incursions and Hazardous Materials Management. In addition, ACI and ICAO intend to produce a high-level course on safety for airport senior managers; and
- k) provision of a web-enabled safety information sharing platform (www.aci-safetynetwork.aero) where ACI members as well as industry partners can view best practices, guidelines, updates on regulations as well as participate in an exchange forum.

3. ISSUES

3.1 Aerodrome Certification and Regulation

3.1.1 ACI provided comments on the ICAO *Manual on Certification of Aerodromes* (Doc. 9774), and the ICAO *Safety Management Manual* (Doc. 9859). ACI aims to ensure that all possible safety measures are implemented and that the resources expended at airports provide the greatest safety benefit.

3.1.2 Patterns of regulatory oversight differ considerably between countries. ACI is concerned that some States' regulatory authorities apply *all* the provisions of Annex 14, even the Recommended Practices, as mandatory conditions for all aircraft operations at existing airports, not just for the design of new airport facilities. In ACI's view, the Recommended Practices in Annex 14 should not be made mandatory, since many of them relate to the design of new aerodromes, and are not required to regulate aircraft operations, as such. For those parts of Annex 14 used for safety regulation, the concept of a "target level of safety" should be used, where appropriate, to determine consistent operational safety standards and procedures.

3.1.3 Airport ownership structures and statutes differ significantly between countries and individual airports. However, under all types of ownership, the *separation* of regulatory oversight from day-to-day management is highly desirable, as this should ensure greater clarity and definition in the regulatory regime. Where there are deficiencies in airport safety oversight, ACI will endeavour to support ICAO's world-wide efforts, for example by applying "best practice" guidelines. However, most airport operators are not responsible for:

- a) air navigation (the responsibility of airlines and pilots);
- b) air traffic control services (the responsibility of ATC providers); and
- c) safety regulation and oversight (the responsibility of States).

3.1.4 ACI believes that regulatory systems should be efficiently and fairly administered, and avoid imposing additional costs and administrative burdens which are disproportionate to the potential gains. Fees charged for licensing and certification should be kept to a minimum and should not exceed the cost of providing the service. Also, the responsibility of the airport operator should be clarified with respect to third parties, such as fixed base operators, since, within a safety management systems approach, the airport operator can play an important co-ordinating role with respect to overall safety, but may not be responsible for service delivery. Regular communication between the regulator and the airport operator is essential, and a single point of contact on licensing issues is desirable.

3.1.5 ACI agrees that ICAO should set minimum safety standards required to mitigate risk, for worldwide application. However, ACI has noticed that, over the years, international, regional, national, and even sub-national regulatory organizations have tended to move steadily towards a more prescriptive approach towards aviation and airports. An alternative approach, better in ACI's view, is for airports to be allowed to take their own measures to implement best industry practices, in order to maintain and improve safety. ACI is also concerned that multiple regulators applying overlapping and sometimes different systems and standards can lead to "over-regulation" which can raise costs, cause confusion and negatively impact operations. ACI therefore urges all regulators to apply ICAO Standards (not create new ones) and avoid an excessively prescriptive approach to aviation and airports.

3.2 Safety Management Systems

3.2.1 ACI supports the principle that airports should establish safety management and audit programmes covering all safety-critical systems at the airport, including those operated by other companies. Airport operators should move away from the simple monitoring of compliance with rules and regulations to the development of a safety management system. Such systems consist of a cyclical process, including: setting a written safety policy which identifies hazards and risks; organizing and training staff; establishing a safety culture and communication systems; planning and setting standards, including the effective control of risks; and performance management, including active monitoring of compliance and reactive monitoring of incidents. Such programmes should be adapted to the airport in question.

3.2.2 It is a management responsibility to establish standard operating procedures for all tasks regularly carried out on operational areas of airports, to train personnel to adhere to such standards and to be responsible for their own work. Safety audits should be carried out regularly to ensure that international, national and local standards and procedures are fully observed. Audits, in co-operation with local management and personnel, are an effective method of checking the actual level of safety, whereas the traditional system of checks carried out by inspectors does not necessarily detect flaws or hazards. The establishment of a regular and systematic audit process is a vital element of a safety management system.

3.3 Target Level Of Safety Approach To Design

3.3.1 In 1998, the ACI General Assembly adopted a resolution which stated that ICAO SARPs and aeronautical studies, especially those related to aerodrome separation criteria and geometry of movement areas should be based on an assessment of the appropriate “target” level of safety, using the best available analytical methods for risk assessments. Since 1998, ACI has urged ICAO to initiate and support a comprehensive and scientific examination of the underlying rationale for the calculation of minimum airport dimensions (based on the appropriate aircraft dimensions, plus clearance distances/safety buffers). This would ensure that SARPs fully reflect the research, technology, knowledge and experience of airport operators, aircraft operators and aircraft manufacturers in maintaining safety.

3.3.2 ACI has indicated its willingness to assist in such studies in every practicable way. Such an approach is particularly important for existing airports, in order to allow them to handle new large aircraft (NLAs) with minimum changes and without prejudice to safety. In this context, ACI welcomes the ICAO guidance (Circ. 305) - produced on this subject (with ACI’s participation), fulfilling the first part of ICAO’s Action Plan on New Large Aircraft. ACI is encouraged that the ICAO Aerodromes Panel has re-examined the specifications for aerodrome reference code F, carrying out the second part of its Action Plan on New Large Aircraft. ACI proposes that ICAO should extend this re-examination to codes A to E as soon as practicable, since certain proposed changes to Code F would make sense only in the context of changes to other Codes (so that safety buffers progress logically according to aircraft size).

4. CONCLUSION

4.1 Safety at airports should be the subject of a continuous improvement process, using a formal Safety Management System. ICAO Contracting States, international organizations and their members (especially airlines, airports and air traffic control authorities) should work together, across traditional divisions of responsibility to implement such systems at all airports. ACI will work closely with ICAO and other international organizations, to meet the challenge of improving safety standards

beyond the high level already achieved in most regions of the world, and to bring about greater uniformity in the application of standards in all countries. ACI is able to offer assistance in areas such as: collaborative initiatives to improve safety at airports (e.g. work with airlines, handling agents and other organizations concerned with ground safety); training of staff, development of airport design, auditing and certification requirements; and preparation of “best practice” guidelines in these areas.

4.2 Airport operators have a particular responsibility for safety on movement areas. However, not all incidents are currently reported to them, and without such reporting, consolidated at airport level, it is difficult to develop a comprehensive view of the risks encountered, in order to reduce them in future. There appears to be a particular problem with disclosure by airlines and handling agents of incidents occurring on leased areas, including parts of the apron areas at some airports.

4.3 ACI urges ICAO to invite States to make regulatory provisions to oblige aircraft operators and handling agents to report all incidents and accidents occurring at airports to the appropriate authorities and to airport operators. ACI supports confidential (“privileged”), “no-fault” collection of data, and agrees with the draft Assembly Resolution on protection of information from safety data collection systems presented in A36-WP/52 – this approach should apply to airport and ground handling operations as well as to flight operations.

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