



WORKING PAPER

ASSEMBLY — 39TH SESSION

Montréal, 27 September – 7 October 2016

EXECUTIVE COMMITTEE

Agenda Item 16: Aviation Security — Policy

**THE VIDEO SURVEILLANCE SYSTEM IN AIRCRAFT AS A MEANS
TO ENSURE OBJECTIVE MONITORING, USED IN THE PREVENTION
AND INVESTIGATION OF ACTS OF UNLAWFUL INTERFERENCE**

(Presented by the Russian Federation)

EXECUTIVE SUMMARY

This working paper contains information regarding the discussion of the proposed use of a video surveillance system on board passenger aircraft and at aircraft stands, intended as a means to ensure objective monitoring for the prevention and investigation of acts of unlawful interference.

Action: The Assembly is invited to:

- a) Take note of the contents of this working paper; and
- b) Entrust the Council of ICAO to consider the relevance of developing requirements to be included into Annex 17 — *Security — Safeguarding International Civil Aviation against Acts of Unlawful Interference* and guidance into the *Aviation Security Manual* (Doc 8973) related to equipping aircraft and aircraft stands with video surveillance recording systems for the prevention and investigation of acts of unlawful interference.

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| <i>Strategic Objectives:</i> | This working paper relates to Strategic Objective C — <i>Security and Facilitation</i> . |
| <i>Financial implications:</i> | |
| <i>References:</i> | Annex 6 — <i>Operation of Aircraft, Part I — International Commercial Air Transport — Aeroplanes</i> Annex 17 — <i>Security — Safeguarding International Civil Aviation against Acts of Unlawful Interference</i> Doc 8973 — <i>Aviation Security Manual</i> |

¹ Russian version provided by the Russian Federation

1. BACKGROUND

1.1 Considering the heightened concerns over the issue of terrorist activity related to air transport, it seems appropriate to draw the attention of the Assembly to the urgency of expanding the use of video surveillance systems in aircraft, and of monitoring unauthorized access to aircraft during maintenance and other services, including passenger cabin cleaning and safety inspections, to prevent acts of unlawful interference.

1.2 The video surveillance recording system is a means to ensure objective monitoring, which can be used at all the stages of flight preparation and implementation in order to enhance the effectiveness of measures for the prevention and investigation of acts of unlawful interference.

2. DISCUSSION

2.1 Currently, objective monitoring systems are widely being used in civil aviation, including on board aircraft, so as to increase the efficiency of aircraft operations and the prevention and investigation of aircraft occurrences related to safety. Moreover, in the investigation of aircraft occurrences, the availability of means to ensure objective monitoring does not always make it possible to establish an act of unlawful interference.

2.2 In order to ensure safety and aviation security, Annex 6 — *Operation of Aircraft*, Part I — *International Commercial Air Transport* — Aeroplanes, already contains the following provisions that regulate the use of different means to ensure objective monitoring on board aircraft:

- paragraphs 4.1.1 and 4.2, Appendix 8: provision is made for Airborne image recorder (AIR) and airborne image recording system (AIRS), which “captures the general cockpit area in order to provide data supplemental to conventional flight recorders... “shall start to record prior to the aeroplane moving...” “and record continuously until the termination of the flight when the aeroplane is no longer capable of moving...;”
- paragraph 13.2.3 b) Chapter 13: “b) means shall be provided for monitoring from either pilot’s station the entire door area outside the flight crew compartment to identify persons requesting entry and to detect suspicious behaviour or potential threat;”
- paragraph 2.1, Appendix 8: provision is made for the flight data recorder which shall “start to record prior to the aeroplane moving... and record continuously until the termination of the flight when the aeroplane is no longer capable of moving...;”
- paragraph 3.1, Appendix 8: provision is made for Cockpit voice recorder (CVR) and cockpit audio recording system (CARS), which shall “start to record prior to the aeroplane moving... and record continuously until the termination of the flight when the aeroplane is no longer capable of moving...”

2.3 Regrettably, in terms of aviation security, the aforementioned means to ensure objective monitoring do not provide a complete picture of what happens on board an aircraft or in the area on the way to aircraft, or when the aircraft is parked during maintenance and other services, including cleaning and inspection of the passenger compartment for safety reasons.

2.4 Currently, of all the stages of the carriage process using means to ensure objective monitoring (video surveillance) only the areas for ground pre-flight screening of passengers, hand baggage and baggage are being ensured in accordance with ICAO Standards; while on board aircraft, only two areas are being monitored – the entrance to the cockpit and inside the cockpit.

2.5 When analyzing preventive measures to ensure aviation security, it is almost impossible to assess their effectiveness without the means to ensure objective monitoring, particularly, without video surveillance.

2.6 In the first stages of an aircraft occurrence investigation, as a rule, it is not so simple to determine the cause of a catastrophic event, whether it is a technical failure, crew or ground service error, the result of a natural phenomenon or a conscious act of unlawful interference, including a terrorist act. The investigation of such an aircraft occurrence is complicated even further with the absence of the appropriate video material.

2.7 In addition to aircraft occurrences directly related to acts of unlawful interference, there are incidents involving unruly/disruptive passengers. It is known that "unruly" or "disruptive" passengers refers to passengers who do not observe the rules of conduct on board aircraft or do not comply with the instructions of crew members. Such incidents often pose a threat to aviation security and safety.

2.8 It is obvious that the use of means for recording to ensure objective monitoring (video surveillance) on board aircraft, on the ground and in flight will provide monitoring of the aviation security condition and will significantly enhance the effectiveness of security measures, especially in the area of prevention and investigation of acts of unlawful interference. In addition, if it is known that video surveillance recording is taking place in the aircraft cabin, the behaviour of passengers inclined to disrupt the order is likely to be quite different, not connected with the display of aggression transforming into an act of unlawful interference.

2.9 Another current issue is the task of ensuring aviation security and the investigation of acts of unlawful interference in the case of suicide bombers coming on board aircraft, who can use non-traditional means of interference against flight crew without bringing on board the aircraft prohibited articles and substances, as in the events of 11 September 2001 in the United States.

2.10 Therefore, it is necessary to consider the relevance of installing in aircraft, including in the passenger cabins, video surveillance recording systems that will record the inflight movement of the crew and passengers, including unruly/disruptive passengers and individuals on board aircraft with malicious intentions. Objective monitoring systems can also monitor the actions of staff from all the airport services involved in the service system both on the ground and in the aircraft cabin.

2.11 Despite the fact that the requirement to equip aircraft with video surveillance recording systems could generate a number of issues of a monetary, technical and legal nature, nevertheless, this issue deserves discussion and a reasonable solution based on the experience in the field of safety. Moreover, in a number of States, including the Russian Federation, specific requirements already exist for equipping the passenger cabins of new aircraft with video surveillance systems.

2.12 It is proposed to consider the relevance of developing requirements to be included into Annex 17 — *Security — Safeguarding International Civil Aviation against acts of unlawful interference*, and guidance into the *Aviation Security Manual* (Doc 8973) related to the use of means for objective monitoring (video surveillance) in order to ensure aviation security in the passenger cabin and at aircraft stands during maintenance and other types of service.