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ASSEMBLY — 37TH SESSION

TECHNICAL COMMISSION

Agenda Item 46: Other issues to be considered by the Technical Commission

MAIN PRINCIPLES FOR INSPECTING RUSSIAN AND FOREIGN AIRCRAFT IN THE RUSSIAN FEDERATION

(Presented by the Russian Federation)

| EXECUTIVE SUMMARY | |
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| This document contains information about conditions for creating and practice of implementing, in the Russian Federation, flight safety inspections for the aircraft of both Russian and foreign operators. | |
| The Assembly is invited to take this information under advisement. | |
| Strategic Objectives: | This working paper relates to Strategic Objective A. |
| Financial implications: | N/A |
| References: | Doc 8335, Manual of Procedures for Operations Inspection, Certification and Continued Surveillance |

1. **INTRODUCTION**

- 1.1 In 1996, the European Civil Aviation Conference (ECAC) began to implement the SAFA programme (Safety Assessment of Foreign Aircraft) governing ramp inspection of the foreign aircraft that arrive at ECAC Member State international airports.
- 1.2 Even with all their similarities, ramp-based inspections done at ECAC Member States and in the Russian Federation nonetheless had significant differences. To eliminate these differences, in 2006 in the Russian Federation, special rules were published that define the way civil aviation aircraft will be inspected at airports.
- 1.3 Over the course of six months in 2010 in the Russian Federation, 17,171 ramp inspections were done on aircraft, including 1,689 foreign aircraft inspections. Based on the results of the inspections, 6,700 comments were made regarding crews and aircraft status.

¹ Russian version provided by the Russian Federation.

1.4 On 11 September 2009, principles were adopted in the Russian Federation for aircraft inspection that comply with principles set forth in the *Manual of Procedures for Operations Inspection, Certification and Continued Surveillance* (Doc 8335) (Fifth edition, 2010).

2. AIRCRAFT INSPECTION PROCEDURES

- 2.1 The Federal Air Transportation Agency (Rosaviatsia) has established procedures for the way aircraft are inspected and the way the results obtained are used. These procedures define:
 - a) foreign and Russian airline aircraft inspection task form;
 - b) ramp inspection report form and how to fill it out;
 - c) commercial load inspection report form;
 - d) classification of subsequent actions based on categories of violations identified during aircraft inspections; and
 - e) how to calculate the risk factor based on violations identified during aircraft inspections and based on measures taken to correct them.
- 2.2 At any Russian Federation airport, any civil aircraft, be it foreign or Russian, can be subject to a ramp inspection as the main way of confirming its safe operation. When doing the inspection, we comply with the no-discrimination principle: the ramp inspection is done equally on Russian and foreign aircraft.
- 2.3 The inspection includes, mainly, crew member documents, the actual status of the aircraft, the presence and status of mandatory cabin equipment, commercial load, aircraft and flight documentation. The main reference materials for such inspections of foreign airline aircraft are Chicago Convention Annex 1 *Personnel Licensing*, Annex 6 *Operation of Aircraft*, and Annex 8 *Airworthiness of Aircraft*. With regard to Russian aircraft, in addition to the requirements in the Chicago Convention Annexes, regulatory and technical documentation governing civil aviation activity in the Russian Federation is also used.
- 2.4 Inspections are done by specially trained inspectors from Rosaviatsia regional offices. The Rosaviatsia flight safety inspection administration is the main coordinating branch for organizing ramp inspections and summarizing, analyzing, and using the results.
- 2.5 The number of flights through Russian airports greatly exceeds the inspection capacity. This means that ramp inspections are done either by random selection or in accordance with certain directions. Meanwhile, when selecting a subject for inspection, the following priority directions apply:
 - a) certain State where the operator is registered;
 - b) certain type of aircraft;
 - c) certain type of transport (scheduled, charter, passenger, cargo, etc.);
 - d) certain operator;
 - e) certain aircraft with individual characteristics of registration or design;

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- f) commercial load aircraft.
- 2.6 To conduct a ramp inspection of Russian and foreign aircraft located in controlled zones of international airports of the Russian Federation, a special procedure has been developed regarding the interaction between Rosaviatsia and customs and border services. The procedure facilitates unfettered access by Rosaviatsia inspectors aboard these aircraft.
- 2.7 Rosaviatsia inspectors cannot go aboard an aircraft or conduct an inspection without submitting their credentials in advance to the aircraft commander and/or the operator's representative. In the event there is no operator's representative, members of the flight or cabin crews, or the service or technical personnel of the operator on-board the aircraft or near it, a ramp inspection shall not be conducted.
- 2.8 To conduct a ramp inspection of foreign aircraft, Rosaviatsia inspectors are permitted to recruit specialists from Russian Federation organizations and aviation enterprises who are fluent in English. If loading rules are violated, the recommendation is for inspectors to use photo and video equipment.

3. USING THE RESULTS OF RAMP INSPECTIONS

- 3.1 For each of the items in the inspection three categories of discrepancies have been identified depending on their impact on flight safety:
 - a) Category 1 discrepancies: these are insignificant discrepancies that do not have a major effect on the safe completion of the flight;
 - b) Category 2 discrepancies: these are discrepancies that have a marked impact on flight safety;
 - c) Category 3 discrepancies: these are discrepancies that have the greatest impact on flight safety or the safety of passenger and cargo transportation.
- 3.2 Based on categories of discrepancies, subsequent actions are defined that need to be taken.
- 3.2.1 Considering that Category 1 discrepancies do not have a significant impact on safe operation of the aircraft, the Rosaviatsia inspector limits himself to spoken information to the aircraft commander or providing him a copy of the ramp inspection report.
- 3.2.2 Actions after a Category 2 discrepancy is identified consist of several elements:
 - a) Class 1 actions: information to the aircraft commander;
 - b) Class 2 actions: sending to Rosaviatsia regional offices, the inspector of which conducted the inspection a report about the ramp inspection, to the attention of the authorized body of the operator's State, as well as to the Flight Safety Inspection Administration.
- 3.2.3 Actions after Category 3 discrepancies are identified are also not set in stone and depending on the degree of the impact on flight safety may be as follows:
 - a) constraints are placed on the aircraft operator;

- b) corrective actions are applied (eliminating identified defects). If it can be fixed only at the technical maintenance base, then there is a provision for a flight to the base without a commercial load;
- c) stopping the aircraft at the inspection airport;
- d) suspending or withdrawing the permit for flights to the Russian Federation.
- 3.2.4 An aircraft is forbidden to fly in a situation when the commander doesn't concur with discrepancies belonging to Category 3 and does not act to fix them.
- 3.3 If significant deviations are identified during the aircraft inspection, this information shall be sent as soon as possible to the Flight Safety Inspection Administration in order to take corrective actions not only in relation to the inspected aircraft, but also in relation to other aircraft that may have the same deviations from the accepted standard.
- 3.4 The average risk factor is calculated monthly for Russian operators of air transportation taking into account the results of inspecting their aircraft at foreign aerodromes. When the risk factor averages 2.0 and higher, there is a need to tighten control of the operator's aircraft. When the risk factor averages 2.5 and higher, the question is considered of introducing prevention measures for the operator of the aircraft including: constraints of flight areas, flights of types (samples) of aircraft and/or an ad-hoc inspection of its base facilities in the realm of flight safety assurance.
- 3.5 In relation to foreign airline companies, the Federal Air Transportation Agency did not use the practice of forbidding flights in the Russian Federation in the event the airline's rating drops below the established level. The Federal Air Transportation Agency believes that this measure is an extreme one and any decrease in the rating must first be thoroughly analyzed to prevent gross errors, since the criteria that the inspectors use in inspections may be subjective.
- 3.6 At the same time, if inspectors' credible comments are met with no response or if rules for flight safety in the Russian Federation are violated regularly, the Federal Air Transportation Agency retains the right to take measures to limit the flights to the Russian Federation by these airlines without waiting for the rating to decrease to a certain number. Such decisions will be taken by the Russian Federation in coordination with interested States in full compliance with the Chicago Convention.
- 3.7 Since 1 June 2010, at the Flight Safety Inspection Administration, experimental operation has been underway on a system to do a comprehensive analysis of the results of Russian and foreign aircraft inspections. This system is designed to quickly obtain complete and reliable information and keep up to date a single database with the results of Russian and foreign operator inspections. The system is distributed throughout all Rosaviatsia regional offices.

4. **CONCLUSIONS**

4.1 The Russian system (which complies with the provisions of Doc 8335) of conducting inspections on aircraft to assess safety and doing an integrated analysis of the results of inspections is used in practice consistently. The experience of applying it can be used for national, regional or global ends in international civil aviation.