

**54th CONFERENCE OF
DIRECTORS GENERAL OF CIVIL AVIATION
ASIA AND PACIFIC REGION**

*Ulaanbaatar, Mongolia
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**AGENDA ITEM 3: AVIATION SAFETY AND
 AIR NAVIGATION**

FLIGHT STANDARDS OVERSIGHT MOBILE TOOLS

(Presented by People's Republic of China)

SUMMARY

The paper presents CAAC flight standards oversight mobile tools, and discusses the main functions as well as the current status of their promotion and usage.

FLIGHT STANDARDS OVERSIGHT MOBILE TOOLS

1. INTRODUCTION

1.1 The flight standards oversight mobile tools, one of the key development projects of the CAAC Flight Standards Oversight Program (FSOP) phase-II, are Android applications (Android APPs) on tablet computers (Pads). The APPs will replace traditional paper checklists and become the major tool for CAAC flight standards inspectors to conduct field inspections of administrative counterparts (including certificate holders of CCAR-121, CCAR-129, CCAR-135 and CCAR-91). Besides, flight standards inspectors can access other types of information via the oversight mobile tools, such as the administrative counterpart's safety oversight performance record and safety risks, etc., and regulatory requirements and inspection criteria corresponding to various types of checklists.

1.2 The FSOP is a unified and shared internet-based working platform that the CAAC began to develop from 2010. Based on the concept of system safety, the platform covers all flight standards oversight business processes. Administrative counterparts of flight standards oversight, include air operators, maintenance organizations, training agencies and professional aviation personnel, etc. FSOP Phase I includes more than 10 subsystems, e.g. CCAR-121 oversight system, continuous airworthiness and maintenance oversight system, airman qualification management system, SDR system, medical certificate system and electronic regulations system, which enable certification and inspection of CCAR-121 airlines and CCAR-145 maintenance organizations, as well as management of airman qualification; FSOP Phase II, whose development began at the end of 2015, includes over 10 subsystems, such as CCAR-135, CCAR-91, CCAR-129, CCAR-141, CCAR-142, CCAR-60 oversight systems, maintenance personnel qualification management system and dispatcher qualification management system, which will fully cover CAAC flight standards oversight business processes.

2. DISCUSSION

2.1 Main Functions of Flight Standards Oversight Mobile Tools

2.1.1 Electronic checklist. It displays the checklist required to complete by the flight standards inspectors according to their duties and tasks. The inspector can complete the checklist on the touchscreen, and activate the camera to take photographs for evidence, when deficiencies are found in the inspection;

2.1.2 Electronic signature. The administrative counterpart and inspector can sign on the oversight mobile tool with a touch pen or finger. Electronic signature is based on digital certificate technology to ensure authenticity, integrity and indisputability;

2.1.3 Safety oversight performance record. When conducting field inspection, the inspector has access to historical safety deficiencies, oversight performance data of the relative certificate holders via the mobile tool at any time;

2.1.4 Off-line usage. The inspector conducting field inspection can use all the functions off-line, even there is no network connection. The tools can automatically connect to the network and upload data to server, when network connection is available; and

2.1.5 Data analysis. The inspector can analyze the administration's oversight inspection performance and certificate holder's safety oversight performance, and can identify the certificate holder's safety trend via the tools.

2.2 Promotion and Usage of the Flight Standards Oversight Mobile Tools

2.2.1 CAAC is promoting the application of the flight standards oversight mobile tools as planned. In April 2017, all flight standards inspectors have been equipped with a mobile toolkit

(including the supporting tablet computer). The function of CCAR-121 airline inspection has already been on line. The CCAR-129 airline inspection will be launched soon. Safety performance management system based on quantitative indicators is now being designed and developed.

3. ACTION BY THE CONFERENCE

3.1 The Conference is invited to:

- a) introduce the functions of CAAC flight standards oversight mobile tools and usage experience to the relevant administrations in the APAC region;
- b) Notify the attending member administrations that the oversight mobile tools will be used in ramp inspection of the airlines operating in China.

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