



International Civil Aviation Organization

ICAO

Thirteenth Meeting of the Air Traffic Management Sub-Group (ATM/SG/13) of APANPIRG

Singapore, 25 – 29 August 2025

Agenda Item 8: Any Other Business

INTRODUCTION TO ENGLISH LEVEL TESTING FOR NON-NATIVE ENGLISH-SPEAKING COUNTRIES' AIR TRAFFIC CONTROLLERS

(Presented by China)

SUMMARY

This paper introduces the testing system, customized test question bank, international promotion, and testing management system of China's Civil Aviation Air Traffic Controller English Proficiency Test.

1. INTRODUCTION

1.1 The International Civil Aviation Organization (ICAO) has clearly defined the requirements for air traffic controller language proficiency in Annex 1 *Personnel Licensing*. As of 5 March 2008, air traffic controllers' language conversation and comprehension skills for radio communication must meet the language proficiency requirements specified in Annex 1. To further clarify Annex 1 and related content, ICAO has issued relevant documents, including the Manual on the Implementation of ICAO Language Proficiency Requirements (Doc 9835), Manual of Radiotelephony (Doc 9432), and Language Testing Criteria for Global Harmonization (Cir 318).

1.2 Since 2005, in accordance with ICAO's requirements for air traffic controller language proficiency, the Air Traffic Management Bureau of the Civil Aviation Administration of China has organized a specialized working group composed of national ATMB (Air Traffic Management Bureau), civil aviation colleges, and enterprises to develop China's own civil aviation air traffic controller English proficiency test (AETS, ATC English Testing Service). For many years, it has been actively committed to promoting the development of computer-based remote testing systems, customized test bank development, international promotion, testing management system establishment, and other related work.

1.3 Currently, AETS provides examination services to air traffic controllers from national ATMB (Air Traffic Management Bureau) and small and medium-sized airports, apron controller, college students, and overseas controllers. There are 22 test facilities across various provinces nationwide with 189 test practitioners. The AETS have a testing capacity of 5,000 person-times annually and have already assessed a total of 13,750 person-times recently. AETS upholds the principle of strict professionalism, fairness, and justice, focusing on serving candidates and continually improving the testing experience.

2. DISCUSSION

AETS Testing System

2.1 The initial batch of testing systems introduced in 2007 was a standalone LAN examination. After ongoing exploration, the testing system has received several upgrades. The new version of the AETS testing system launched in 2022, which utilizes modern information and network technology to enable the computerization of the entire life cycle of AETS (personnel registration, test venue setup, test bank development, examination plan coordination, pre-examination equipment debugging, examination registration, scheduling, execution, scoring, performance management, and statistical analysis). Examination practitioners organize examinations through personalized online management functions to ensure the delivery of high-quality language proficiency assessment services for test takers.

2.2 The AETS testing system takes into account both direct and semi-direct testing as outlined in section 6.2.7 of Doc 9835: in direct testing (face-to-face OPI), test takers communicate with interlocutors online, making the testing more natural and communicative; In semi-direct testing (machine OPI), the testing procedure is standardized, and the testing method is more cost-effective, especially during the period of personnel flow restriction due to the pandemic.

Customized Test Bank Construction

2.3 At the end of 2005, in accordance with ICAO's requirements for air traffic controller language proficiency, the AETS working group gradually carried out preliminary design and revision of test questions and independently developed the AETS question bank. The customized question bank of AETS, launched at the end of 2019, further subdivides the testing content based on the description of the testing context in section 6.3.2.8 of Doc 9835 and incorporates the consideration of the actual operations of China's civil aviation air traffic control. The initial test covers the tower, approach, and area specialties. The refreshment test question banks are correspondingly categorized by tower, approach, and ACC. The refreshment test is conducted according to the enrolled categories of the controller's license.

2.4 The context of the customized test bank aligns more closely with the real working environment of air traffic controllers, which enhances the test takers' testing experience and better supports the assessment of their language proficiency in relevant working environments.

Simulated RTF Communication Questions	<ol style="list-style-type: none">1. There are two questions, each comprising 10 exchanges of dialogue, involving 1 primary abnormal situation, including 5 scoring points.2. The communication scenario may involve a single flight and control activity or multiple aircraft crossings, involving only one of the tower, approach, or ACC specialties.3. In this section, the test takers can see tables displaying the simulated RTF scenarios, such as airports, aircraft callsigns, runways, frequencies, ATIS and other related information. The maximum number of aircraft is limited to four.4. The perspective of RTF communication should focus on the air traffic controller issuing instructions that meet the actual
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	<p>control needs and Doc 9432 based on flight activities, surrounding situations, and narration.</p> <p>5. Focus on using both standard RTF phraseologies and plain English language in situations when standard terminology cannot accomplish the task.</p> <p>6. The unified background airport is the simulated Wuhan airport chart, and the aircraft callsigns are commonly used.</p>
<p>OPI</p> <p>Five topics are randomly chosen to complete one set of OPI papers with 15 questions.</p>	<p>1. The test questions adopt the 5-3 system, with 15 questions divided into 5 topics, each with 3 questions. The questions are stored according to the topic, and questions of the same type are stored in the same bank. Five topics are randomly selected to complete one set of OPI papers with 15 questions.</p> <p>2. Questions 1-3 are general questions related to air traffic controller work, questions 4-6 are related to professional knowledge of air traffic control, and questions 7-15 are drawn according to the license categories of the tower, approach, and ACC. Among them, questions 7-12 are normal situation questions, and questions 13-15 are abnormal situation questions.</p>

2.5 The construction of the customized question bank depends on the AETS testing system and includes five phases, from question design to formal implementation. (phased methodology see the table below), which scientifically enhances the quality of test bank construction and is more convenient and efficient to operate.

Draft Question Bank	The questioner uploads the initial draft of the test questions to the system.
Pre-review Question Bank	The question bank experts review whether the initial draft of the test question is added to the review bank, but they do not modify the test questions.
Review Question Bank	Experts review and revise test questions.
Preparation Question Bank	The AETS Test Centre creates audio and charts in accordance with the standards.
Formal Question Bank	Officially implement the examination question bank.

International Promotion

2.6 In 2023, the AETS Test Centre invited air traffic controllers from South Sudan, Colombia, Morocco, Bangladesh, Grenada, Uzbekistan, and Uganda for exchange and discussion. During the period, the AETS Test Centre introduced the history and development of AETS, the computerized remote testing system, the customized question bank, and the historical examination overview. Representatives of each country exchanged their own organization of air traffic controller English testing and training and the challenges they faced. After the meeting, they registered their personal information in the AETS testing system and participated in a special experiential test.

Testing Management System

2.7 **Well-developed Examination Work Organization Structure.** AETS is organized and managed by the ATMB of the CAAC. The AETS Management Committee is responsible for coordinating and managing the organization. The AETS Test Centre is responsible for the implementation of the test. The test venues scattered across the country are the places to take the test.

2.8 **"Branch-General Association" Decision-Making Mechanism.** According to the ICAO "Branch-General Association" decision-making model, AETS has established a decision-making mechanism for the test venue branch, examiner branch, logistic branch, expert branch, and the General Association of AETS Management Committee.

2.9 **Professional Examination Task Force Team.** Since the launch of the testing project in 2005, a professional examination task force with well-defined roles and a clear division of labour has been established. The team consists of seven types of personnel: test district administrators, test venue managers, test venue administrators, test venue equipment administrators, examiners, raters, and test question bank experts.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the information contained in this paper.

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