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中国民用航空总局适航司主持编写

English for
Airworthiness
Engineering

Extensive Reading Course

适航工程英语

泛读教程

李建琄 李 真 杨 铭 编著

中国民航出版社

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前 言

为了更好地巩固学员在精读课上所学的知识,尽快提高英语阅读能力,扩大专业知识和英语词汇,按照《适航工程英语》教材编写大纲的要求,编委会组织编写了该泛读教程。为有利于读者学习现代科技英语的句型、用词和修辞特点,保证语言文字的规范化,课文全部选自有关专业外文书刊的原著,但视内容和篇幅略有删改。

为贯彻把提高科技英语的应用技能,与了解现代航空器适航和维修管理的基本知识相结合的原则,本教材既考虑与精读教材内容相配合,又要保持其相对独立性。本教程是对精读教程的补充和扩展,内容包括民用航空器适航和维修管理,并对航空维修管理在篇幅上有所侧重。全书共 30 课,前 12 课分别与精读教程中的 12 课课文相对应,内容相近,侧重于适航管理,后 18 课侧重于航空器维修管理。在使用本教材时,可根据教学大纲规定的学时和教学对象的具体情况灵活选配必读和选读内容。

本教材各课均配有词汇表、注释、思考题,书

后附有总词汇表、常用英语缩略语。这样既有利于提高读者阅读过程中的分析、归纳、综合和推断的能力,又可以提高本教材对继续工程教育与养成教育的适用性,并提高其可自学性。

本书具有选材精细、内容新颖、题材广泛、词汇丰富;知识性、趣味性和实用性强等特点。

本书可作为对民航系统从事航空器适航管理的各类监察人员和航空维修人员及有关工程技术人员实施适航工程英语培训/考试的教材;也可作为民航院校有关专业开设《适航工程英语》课程的教材;并可供希望提高专业英语水平及了解民用航空器适航和现代航空维修管理基本知识的航空界其他人员阅读参考。

本书由中国民用航空总局航空安全技术中心李建瑀(第2,4,6~8,10~13,28课,共10课)及中国民航学院李真、杨铭、马士忠(第1,3,5,9,14~27,29,30课,共20课)编写,由马士忠审校,并由中国民用航空总局航空器适航司徐超群和中国民用航空总局航空安全技术中心刘加祯对全书作了专业审校。《适航工程英语》教材编委会对本书的结构和内容提出了许多修改和补充意见,并对全书进行了最后审定,编者在此表示衷心感谢。由于受编者学识水平所限,加之时间紧促,书中不妥和错误之处,敬请广大读者和有关专家批评指正。

编者



2001年7月于北京

序

1987年，国务院颁布了《中华人民共和国民用航空器适航管理条例》，这标志着我国民用航空适航管理工作已步入了轨道。十多年来，我国民用航空适航管理工作不断完善和发展，取得了长足的进步。

总结十多年来我国适航管理的经验和教训，归根结底还是要提高民用航空器适航管理与维修人员的素质，充分发挥高科技时代人力资源在适航管理和提高航空企业运营效能中的能动作用。为此，1997年中国民航总局适航司提出编写《适航工程英语》教材，并经民航总局科教司审批立项。其目的在于：提高中国民用航空器适航管理人员、维修工程管理人员及维修技术人员的专业英语水平，促进中国民用航空器适航和维修管理工作尽快与国际接轨。随后，由民航总局航空器适航司组织适航中心（后改为航空安全技术中心）、中国民航学院及中国民航管理干部学院等单位有关人员组成了编委会，并在适航司的领导和有关部门的支持下全面开



展此项工作。

《适航工程英语》丛书具有题材广泛、内容新颖、词汇丰富和实用性强等特点。编写这套教材时遵循以下基本原则：以现代民用航空器适航与维修管理的内容与范围、现状与未来为线索组织编排教材；力求把学习现代科技英语句型、用词和修辞特点，及提高对适航工程英语的读、写、听、说、译能力，与学习了解现代民用航空器适航与维修管理方面的基本知识相结合；努力提高和实现这套教材的多功能性，使它既能作为继续教育工程教材，又可作为院校有关专业成人教育教材。为此，从教材所选内容的英语语言和专业内容范围及难易程度上加以控制，适当加大跨度，以满足我国民用航空器适航和维修管理人员专业英语培训的适用性和可自学性要求。

《适航工程英语》丛书除包括《精读教程》、《泛读教程》和《听说教程》外，还有《适航工程英语应试指南》、《现代民航英语结构精要》等作为辅助材料。随着这套教材的完成，还将陆续编写出版《适航工程英语培训/考试大纲》、《适航工程英语考试题库》，以及制定《适航工程英语考试实施细则》等。

根据《民用航空器维修许可审定的规定》(CCAR 145)、《民用航空器运行适航管理规定》(CCAR 121AA)、《民用航空器维修人员合格审定的规定》(CCAR 65)及《民用航空器适航委任代表和委任单位代表的规定》(CCAR 183)等有关法规

规定的精神,《适航工程英语》将作为我国航空器适航管理系统的各类监察人员、机务维修工程系统的各类管理和技术人员实施专业英语培训的教材,并作为各类维修人员资格审定和颁发维修人员执照的标准和考试科目;本教材也可作为民航院校有关专业开设《适航工程英语》课程的教材;并可供希望提高专业英语水平或了解民用航空器适航和维修管理、现代航空技术基本知识的航空界其他人员阅读参考。

中国民用航空总局航空器适航司

《适航工程英语》编委会

2001 年 4 月



符号或代号说明

<i>a.</i>	.....	adjective (形容词)
<i>ad.</i>	.....	adverb (副词)
<i>conj.</i>	.....	conjunction (连词)
<i>n.</i>	.....	noun (名词)
<i>prep.</i>	.....	preposition (介词)
<i>pron.</i>	.....	pronoun (代词)
<i>v.</i>	.....	verb (动词)
<i>vi.</i>	.....	intransitive verb (不及物动词)
<i>vt.</i>	.....	transitive verb (及物动词)
<i>sb.</i>	somebody (某人)
<i>sth.</i>	something (某事)
[<i>pl.</i>]	指名词复数
[单]	指名词单数
[计]	计算机
[法]	法语
[英]	英国英语
[美]	美国英语
[拉]	拉丁语
[欧]	欧洲

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Lesson 1

The Civil Aviation Authority and Its Legislation

The Chicago Convention of 1944 set up ICAO, founded in 1947, to promote agreement between nations in aviation. One of the ICAO functions is to promote international standards and recommended practices for air safety; these are written in the Annexes to the Convention. Annex 8 covers Airworthiness of Aircraft, giving broad standards to be enforced by national authorities.¹

The United Kingdom is a member of ICAO. The UK national authority for airworthiness is the Civil Aviation Authority (CAA). UK

The UK air safety legislation is contained in the Civil Aviation Act and described in the Air Navigation Order (ANO) and Regulations—available as CAP 393.

The Civil Aviation Authority was formed in 1972, to regulate air transport in the UK. It combined the economical and technical functions previously performed by separate bodies. ^{to regulate} ^{regulate!}

Airworthiness and operating standards are the responsibility of the CAA Safety Regulation Group (SRG), based at London Gatwick Airport, which includes the following divisions:

Operating Standards;

Design and Manufacturing Standards;

Licensing Standards;

Medical Support Services.

Aircraft maintenance involves the first three of these divisions, providing aircraft maintenance standards, airworthiness requirements and airworthiness notices, maintenance engineer licensing, respectively.

These cover the design, production, testing, operation and maintenance of aircraft and equipment. They are published in sections, under various headings. Some BCAR (British civil Airworthiness Requirement) sections have been superseded by European Joint Aviation Requirements (JAR), and more progress in this direction is expected, including requirements for maintenance. The objective is that products certificated in one country using JAR should be validated in another with minimum additional requirements.² The intention is to integrate European JAR and United States of America FAR into one code at a future date.

An aircraft must have a current C of A (Certificate of Airworthiness) in order to fly; this is issued under the law of the country in which the aircraft is registered. The UK C of A becomes invalid if the aircraft is repaired, replaced, removed, overhauled, or modified in a manner not approved by the CAA, or any inspection, or modification classified as mandatory by the CAA that ensures the aircraft remains airworthy has not been carried out.

When the C of A is issued, the category of use is also specified. For large civil aircraft this will normally be Transport Category (Passenger) or Transport Category (Cargo); thus a cargo aircraft is not allowed to carry passengers.

Aircraft registered in the UK must fly on public transport in accordance with the terms of the Air Operator's Certificate (AOC) granted by the CAA. This signifies that the holder is considered to be competent to secure the safe operation of the specific aircraft detailed on the AOC. For this purpose, the CAA appraises the organisation, staff, training, equipment and maintenance practices of the operator.

Before granting an AOC, the CAA has to be satisfied that the (organisation seeking approval) is competent to undertake maintenance of the aircraft types operated by it or has made provision for the aircraft to be maintained by another organisation suitably approved by the CAA for such maintenance in accordance with the Approved Maintenance Schedule (AMS).³ This wording makes it clear that the aircraft registration, operator's certificate, and maintenance schedule are all associated — the AMS is issued to the operator for that aircraft type; if another organisation owning similar aircraft types then maintains it the original registered operator's AMS must be used for that maintenance work.⁴ Conditions for AOC are given in CAP 360.

CAA approval is needed for handling of materials, processes, repair and overhaul, modification, maintenance. After approval, the CAA can make periodic supervisory checks of the organi-

sation to ensure that appropriate procedures are being maintained.



New Words

legislation [ˌledʒɪsˈleɪʃən] <i>n.</i>	立法, 法规
convention [kənˈvenʃən] <i>n.</i>	公约
promote [prəˈməʊt] <i>vt.</i>	筹划, 发起, 提升
annex [əˈneks] <i>n.</i>	附件
broad [brɔ:d] <i>a.</i>	宽的, 广泛的
combine [kəmˈbeɪn] <i>vt.</i>	兼有, 使结合
license, -ce [ˈlaɪsəns] <i>vt./n.</i>	发许可证/执照; 许可 (证), 执照
heading [ˈhedɪŋ] <i>n.</i>	标题, 题目
supersede [ˌsju:pəˈsi:d] <i>vt.</i>	取代, 接替
validate [ˈvælideɪt] <i>vt.</i>	(正式)使合法化, 使生效
code [kəʊd] <i>n.</i>	规则, 标准, 法典
invalid [ɪnˈvælid] <i>a.</i>	(尤指法律上)无效的
modification [ˌmɒdɪfɪˈkeɪʃən] <i>n.</i>	更改, 修改, 改型
appraise [əˈpreɪz] <i>vt.</i>	鉴定, 评价
provision [prəˈvɪʒən] <i>n.</i>	预备, 防备, 规定
registration [ˌredʒɪsˈtreɪʃən] <i>n.</i>	登记, 注册
supervisory [ˌsju:pəˈvaɪzəri] <i>a.</i>	监督的, 管理的

