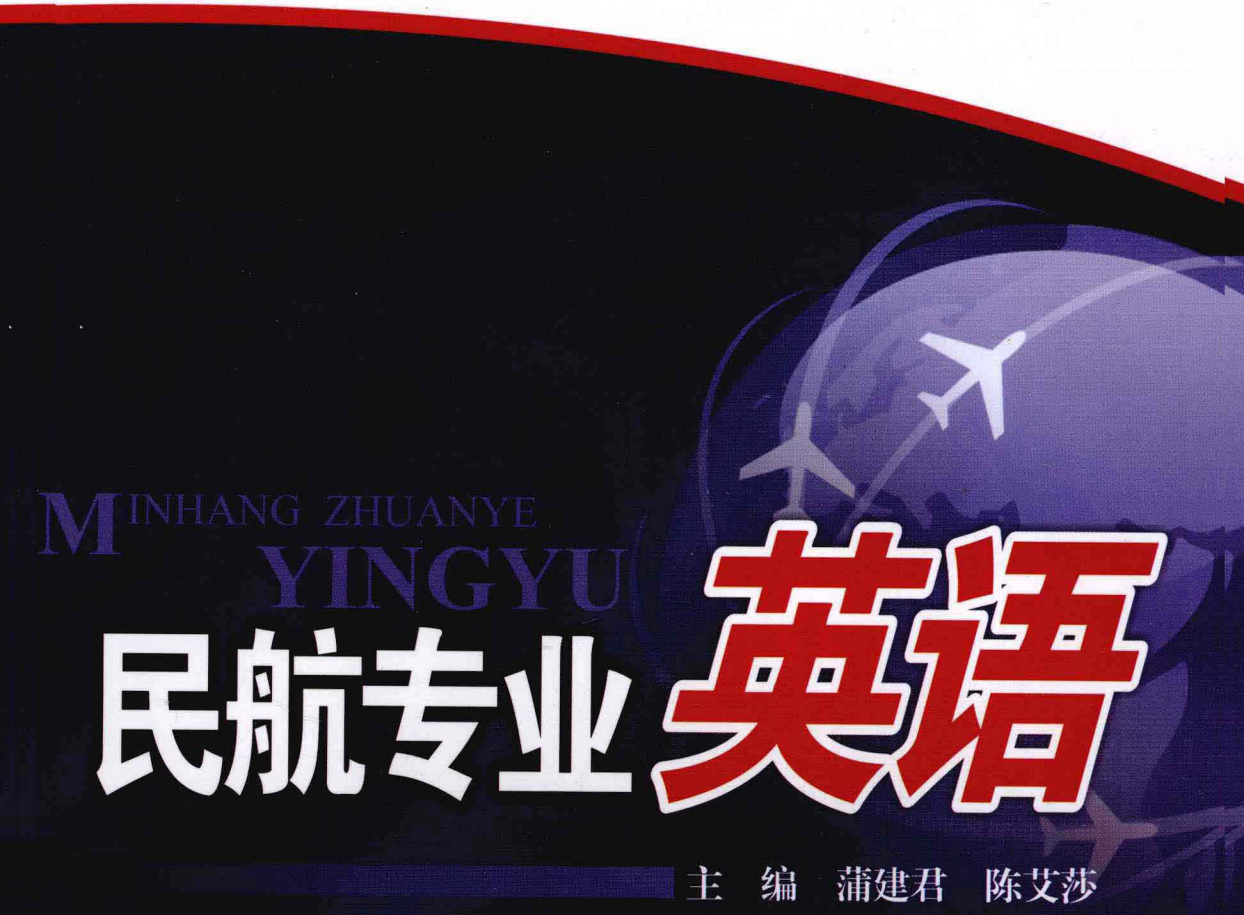
中国民航飞行学院研究生系列教材

ZHONGGUO MINHANG FEIXING XUEYUAN YANJIUSHENG XILIE JIAOCAI



MINHANG ZHUANYE YINGYU

民航专业英语

主 编 蒲建君 陈艾莎

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前　言

《民航专业英语》（*Aviation English Course*）是民航工学类硕士研究生的必修课程。课程开设的目的是让民航工学类研究生了解民航英语，掌握一定量的民航英语词汇，培养民航英语的阅读能力、听说能力、翻译能力和写作能力，为将来进入民航系统工作打下坚实的行业英语基础。

一、《民航专业英语》的编写背景

中国民航飞行学院于2007年开始招收第一届工学类研究生。由于当时没有适合本学院研究生培养的专业英语教材，民航英语编写课题组应运而生。《民航专业英语》课程于2007年立项，其间围绕教师队伍、教学内容、课程建设等做了大量研究工作，课题组编写了教学大纲和课程讲义，2009年4月通过了研究生处组织的专家组的验收并投入使用。到目前为止，课题组编写的教学讲义已经过三届民航工学研究生和两届软工研究生的试用，取得了预期的教学效果。此外，课题组还对教材使用者（包括教师和学生）进行了访问，听取了他们对该教材的意见和建议，在原基础框架不变的基础上，进行了多次修改和完善，并对听力部分重新录音。此书参考了使用者的教学需求与反馈，纳入了新的教学内容，采用了学与练的编排体例，力求做到方便教学和自学。

二、《民航专业英语》的主要内容

《民航专业英语》共有九个单元，每单元包括六大部分，分别是：Reading and Vocabulary，Reading and Translation，Reading and Listening，Listening and Retelling，Presentation 和 Further Reading。课文的设计旨在通过大量的素材阅读，反复使用课文要求词汇，达到掌握一定量专业词汇，提高专业听、说、读、译技能的目的。

本课程的内容涉及以下几个方面：飞行、空中交通管理、航空工程、航图认读、陆空通话、航空气象和航空安全。

三、《民航专业英语》的编者

《民航专业英语》由中国民航飞行学院外国语学院蒲建君和陈艾莎担任主编，由蒲建君统稿。参加编写的人员有中国民航飞行学院外国语学院龚琼兰、肖凌、汪洋。

《民航专业英语》由中国民航飞行学院外国语学院黄大勇教授审定。

本书的编写得到了中国民航飞行学院外国语学院民航英语教研室同仁的大力支持和鼓励，在此深表感谢。在出版中得到了研究生处罗小利教授、魏林红研究员和刘晓明副教授的大力帮助；外国语学院黄大勇教授进行了审稿并提出了很多宝贵意见，在此一并表示感谢。

由于编者水平有限，教材中不乏不足之处，欢迎国内民航界专家、学者批评指正，更真诚渴盼能得到教学一线师生和学界同行的反馈评议。

编　者

2012 年 1 月

CONTENTS

Unit One The Air Transportation Industry ····· 1

Section One Reading and Vocabulary ····· 1
Section Two Reading and Translation ····· 8
Section Three Reading and Listening ····· 12
Section Four Listening and Retelling ····· 15
Section Five Presentation ····· 16
Section Six Further Reading ····· 17

Unit Two Airline Operation and Management ····· 22

Section One Reading and Vocabulary ····· 22
Section Two Reading and Translation ····· 29
Section Three Reading and Listening ····· 33
Section Four Listening and Retelling ····· 37
Section Five Presentation ····· 38
Section Six Further Reading ····· 39

Unit Three Jeppesen Chart ····· 45

Section One Reading and Vocabulary ····· 45
Section Two Reading and Translation ····· 56
Section Three Reading and Listening ····· 61
Section Four Listening and Retelling ····· 65
Section Five Presentation ····· 67
Section Six Further Reading ····· 67

Unit Four Aviation Electronics ····· 73

Section One Reading and Vocabulary ····· 73
Section Two Reading and Translation ····· 80
Section Three Reading and Listening ····· 86

Section Four Listening and Retelling ····· 89
Section Five Presentation ····· 91
Section Six Further Reading ····· 91

Unit Five Air Traffic Control ····· 94

Section One Reading and Vocabulary ····· 94
Section Two Reading and Translation ····· 101
Section Three Reading and Listening ····· 106
Section Four Listening and Retelling ····· 110
Section Five Presentation ····· 111
Section Six Further Reading ····· 112

Unit Six Radiotelephony Communication ····· 114

Section One Reading and Vocabulary ····· 114
Section Two Reading and Translation ····· 120
Section Three Reading and Listening ····· 124
Section Four Listening and Retelling ····· 128
Section Five Presentation ····· 129
Section Six Further Reading ····· 129

Unit Seven Airline Operating Costs ····· 136

Section One Reading and Vocabulary ····· 136
Section Two Reading and Translation ····· 144
Section Three Reading and Listening ····· 148
Section Four Listening and Retelling ····· 151
Section Five Presentation ····· 152
Section Six Further Reading ····· 152

Unit Eight Human Factors ····· 154

Section One Reading and Vocabulary ····· 154
Section Two Reading and Translation ····· 160
Section Three Reading and Listening ····· 166
Section Four Listening and Retelling ····· 169
Section Five Presentation ····· 170
Section Six Further Reading ····· 171

Unit Nine Aviation Weather 175

Section One Reading and Vocabulary 175
Section Two Reading and Translation 181
Section Three Reading and Listening 185
Section Four Listening and Retelling 189
Section Five Presentation 190
Section Six Further Reading 191

Bibliography 198

UNIT ONE

The Air Transportation Industry

Section One Reading and Vocabulary

ESSENTIAL words and expressions

certificated	*a.* 有资质的
aviation	*n.* 航空
civil	*a.* 民用的
corporation	*n.* 集团，公司
undertake	*v.* 承担，负责
engage	*v.* 从事
endanger	*v.* 危及，危害
air commerce	航空商贸
in force	有效的，大批的
Civil Aeronautics Board	民用航空局
revenue	*n.* 收入，税收
supplier	*n.* 供应商
supervision	*n.* 监管，监督
enhance	*v.* 提高，改善
life-style	生活习惯，生活方式
travel agency	旅行社
timeliness	*n.* 及时性，合时
on-the-spot	现场，当时
fatigue	*n.* 疲劳

executive	*n*. 管理者，领导层
troubleshooter	*n*. 排故人员
personnel	*n*. 职员，员工
decentralized	*a*. 分散的
distribution	*n*.（商品的）经销，运销
visualize	*v*. 设想，构想
still	*a*. 定格的，静止的
prime	*a*. 初期的，原始的
infancy	*n*. 婴儿期，早期
community	*n*. 商圈
business representative	商业代表
territory	*n*. 地盘，地区
saga	*n*. 长篇故事，传说
fluctuating	*v*. 波动，起伏（flucuate 的现在分词）
team up	联手，合作
sales curve	销售曲线
increment	*n*. 增长
heighten	*v*.（使）加重
unique	*a*. 独特的
adaptive	*a*. 适应的
extraordinarily	*adv*. 格外地，异常地
promote	*v*. 促进，增进
prior to	在……之前
unsophisticated	*a*. 不复杂的，简单的
product line	生产线
avionic	*a*. 航空电子的
accessory	*n*. 附件，配件
labor force	劳动力
retrenchment	*n*. 精简，紧缩
prelude	*n*. 前奏，序曲
workload	*n*. 工作量
across-the-board	全面的
airframe	*n*. 机身，飞机骨架
long-ranging ballistic weapons	远程弹道武器

fabrication	*n.* 构造，建造
escalate	*v.*（使）升级，扩大

Abbreviations

IATA	International Air Transport Association 国际航空运输协会
EU	European Union 欧盟
ICAO	International Civil Aviation Organization 国际民航组织

Passage One

The Air Transportation Industry

The air transportation industry includes all civil flying performed by the certificated air carriers and general aviation. "Air carrier" means any individual or corporation who undertakes to engage in air transportation. "Air transportation" is any operation or navigation of aircraft within the limits of any airway, which directly affects or which may endanger safety air commerce. No air carrier shall engage in any air transportation unless there is in force a certificate issued by the Civil Aeronautics Board authorizing such air carrier to engage in such transportation.

Like any other industry, air transportation makes a direct contribution to the economy through its employment and revenue generation and an indirect contribution through its purchase of goods and services from supplier industries. Besides, air travel is generally purchased as a means toward some other end, and hence it makes such contributions as improving the efficiency of business and government activity by expanding the potential geographic area of personal contact, communication and supervision of activities; enhancing life-styles by broadening opportunities for vacations, educational travel, and visiting friends and relatives; enabling individuals to respond quickly to personal emergencies by traveling great distances in a matter of hours; supporting travel-related industries, such as hotels, rental cars, and travel agencies, assisting in commerce by providing fast delivery of cargo from supplier to user.

Air transportation is now as much a part of the American way of life as the telephone of the computer. Speed and efficiency, comfort, safety, economy — these are the symbols of both modern civilization and modern air transportation. If you want to get there in a hurry, as most businesses do, because time means money, then fly comfortably, safely and economically.

Air transportation has enabled employees of business and government organizations to reach any point in the world within hours. Whether flying by air carrier or general aviation aircraft, there are values associated with this timeliness: Value of quicker on-the-spot decision and action; value of less fatigue arising from the use of air transportation; the value of greater mobility and usefulness of trained, experienced executives, engineers, technicians, troubleshooters, or sales personnel; the value of decentralized production and distribution; the value of being able to expand market areas through more effective use of management and sales executives.

To visualize a world without modern air transportation, consider the world of 1940, when surface transportation was still in its prime and air transportation was in its infancy. A New York-Chicago trip of 800 miles took 17 hours each way in 1940 on the fastest rail routing. The same trip today can be made in a couple of hours. Consider the thousands of smaller communities now served by business representatives flying in and out the same day—it took days and weeks to cover the same territory back in the 1940s.

Exercise I. Answer the following questions based on Passage One.

1. What is the air transportation industry?

2. What contributions does air transportation industry make?

3. What is an air carrier?

4. What are the values of air transportation?

Passage Two

Characteristics of the Aerospace Industry

The history of the aerospace industry has been a saga of continuing adjustment to changing national policy and economic conditions. Since 1960, fluctuating government demands and a variety of international events have teamed up to produce a sales curve: up to a peak, down to a valley. Over the years, the industry's operation has become increasingly complex, each increment of complexity heightening the industry's difficulty in adapting to change. Today the industry's unique characteristics make the adaptive process extraordinarily difficult. A better understanding of the current predicament of the aviation industry is reached in consideraton of its changes in the past 25 years.

Prior to 1950, the industry was relatively unsophisticated. Its product line was entirely aeronautical—aircraft, engines, propellers, avionic components, and accessories. Line-run production of many airline types was the order of the day. The labor force, during the Post-World War II retrenchment period, was less than one-fifth of the later peak. Three fourths of the workers were moderately skilled production workers. Research and development was an essential prelude to production, but the subsonic aircraft then being built were less demanding of technological advance, and research and development represented a considerably less significant portion of the total workload than it does today.

The transformation began in the early 1950s, with the coming to production

of the jet-powered supersonic military airplane, which brought about across-the-board changes in the industry—new types of engines, totally different airframes, different on board equipment, new tooling and facilities, and , most of all, a vastly greater degree of complexity in the product and in the methods employed in producing it. New airplane performance dictated that far greater emphasis be placed on research and development. The combination of research and development and product complexity required a major shift in the composition of the work force to include ever-increasing numbers of scientists, engineers, and highly-skilled technicians. All of these changes placed much greater emphasis on an ever more sophisticated managerial process.

While the industry was adjusting to these changes, it fell heir to a new responsibility—development and production of guided missiles, particularly the long-ranging ballistic weapons. Then came another major change—the application of turbine power to commercial airliners, whose resemblance to military jets ended with their propulsion systems: the need to transport large numbers of people at high subsonic speeds and multi-mile altitudes involved a further modification of the industry's methods. Finally, in the late fifties, the industry was assigned still another responsibility: fabrication of equipment to meet the nation's goals in space exploration.

Each of these changes compounded the need for change in the entire industry —more research and development, greater product complexity, more personnel per unit produced, higher skill levels in the workforce, longer program development time, and greater need for new facilities with only single-program utility because of their specialized natures. Such changes contributed to higher costs of the end products, and the demand in the sixties and seventies for still more advanced aerospace systems further escalated the change and cost. In defense output, cost—together with the greater capability of the individual system — influenced a trend away from volume production and toward tailored manufacture of fewer types of weapons and fewer numbers of each type.

Exercise II. Answer the following questions based on Passage Two.

1. What were the characteristics of the aerospace industry prior to 1950?

2. What changes have been mentioned in the early 1950s?

3. What was another major change in the late 1950s?

4. What were brought about by these changes?

Exercise III. Choose the proper words to complete the following short passage.

recession, radical, revenues, enhancement, profitability, prosperity, load factors, ownership, finance, heavily

Airline's Profitability

Airlines' _____ is closely tied to economic growth and trade. During the first half of the 1990s, the industry suffered not only from world _____ but travel was further depressed by the Gulf War. In 1991 the number of international passengers dropped for the first time. The financial difficulties were exacerbated by airlines over-ordering aircraft in the boom years of the late 1980s, leading to significant excess capacity in the market. IATA's member airlines suffered cumulative net losses of $20.4bn in the years from 1990 to 1994.

Since then, airlines have had to recognize the need for _____ change to

ensure their survival and _____. Many have tried to cut costs aggressively, to reduce capacity growth and to increase _____. At a time of renewed economic growth, such actions have returned the industry as a whole to profitability: IATA airlines' profits were $5bn in 1996, less than 2% of total _____. This is below the level IATA believes is necessary for airlines to reduce their debt, build reserves and sustain investment levels. In addition, many airlines remain unprofitable.

To meet the requirements of their increasingly discerning customers, some airlines have to invest _____ in the quality of service that they offer, both on the ground and in the air. Ticketless travel, new interactive entertainment systems, and more comfortable seating are just some of the product _____ being introduced to attract and retain customers.

A number of factors are forcing airlines to become more efficient. In Europe, the European Union (EU) has ruled that governments should not be allowed to subsidize their loss-making airlines. Elsewhere too, governments' concerns over their own _____ and a recognition of the benefits of privatization have led to a gradual transfer of _____ of airlines from the state to the private sector. In order to appeal to prospective shareholders, the airlines are having to become more efficient and competitive.

Section Two Reading and Translation

International Aviation

The world is enveloped by a net work of air routes. The scheduled airlines of the world now carry millions of passengers and fly billions of miles yearly. The air has literally become a highway for world commerce.

This development of the airplane into a major instrument of transportation has brought with it international problems—the coordination of operational techniques and laws, the dissemination of technical and economic information —far beyond the ability of individual government to solve. The need for safety and reliability in air transportation involves building airports, setting up navigation aids, and establishing weather reporting systems. The standardization

of operational practices for international services is of fundamental importance so that en error may be caused by misunderstanding or inexperience. The establishment of such standards or rules of the air, of air traffic control, of personnel licensing, and of the design of airplanes and airports and other considerations of prime importance to the safety and economic viability of international aviation all require more than national action.

As the airplane developed during the first decade of this century, the question arose as to the sovereignty of each nation in the airspace above it. In 1919 representatives from the allied and associated nations met in Paris and formed the International Commission for Air Navigation and undertook the drafting of the convention, which was referred to as the Paris Convention. The International Commission for Air Navigation drew up a list of the principles:

1. The recognition of the principle of the full and absolute sovereignty of each state over the air above its territories and territorial waters, carrying with it the right of exclusion of foreign aircraft and the right of each state to impose its jurisdiction over the air above its territories and territorial waters.

2. The recognition of the desirability of the greatest freedom of international air navigation subject to the principle of sovereignty, insofar as this freedom is consistent with the security of the state and with the enforcement of reasonable regulations relative to the admission of aircraft of the contracting state and with the domestic legislation of the state

3. The recognition that the admission and treatment of the aircraft of the contracting states was to be governed by the recognition of the principle of the absence of all discrimination on the ground of nationality

4. The recognition of the principle that every aircraft must possess the nationality of the contracting state only and that every aircraft must be entered upon the register of the contracting state whose nationality it possess.

The convention for the unification of certain rules relating to international transportation by air applies to any international transportation of persons, baggage, or merchandise by aircraft for compensations is commonly called the Warsaw Convention of 1929. The Warsaw Convention provided that an air carrier was liable for damage sustained by death or injury to the passengers; destruction, loss or damage to baggage or goods; or loss resulting from delay in the transportation of passengers, baggage, or merchandise. Signed on October 12,