
Francis A. Cartier English For Careers

The Language of
The Air Force
in English

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FOREWORD

This book is one of a series of texts called *English for Careers*. The series is intended to introduce students of English as a foreign language to the specialized language of a number of different professional and vocational fields. The career areas that are covered are those in which English is widely used throughout the world, including air travel, computer programming, international finance, and so on.

Each book in the series serves several purposes. The first is to give the student an introduction to the particular vocational area in which he or she is involved. Different kinds of jobs are discussed, as well as the places where people work. In this particular book, a selection of the many jobs in an air force are described, including the jobs of the people who fly the aircraft, the men and women who assist and support them, and others who operate the air base where they work and live. The discussion is based primarily on the United States Air Force. The air forces of other countries differ from each other in many ways, but they also have much in common. Most of what is said here is relevant to any modern air force.

From the point of view of teaching English as a foreign language, these books are intended for a student at the high intermediate or the advanced level. In other words, the student who uses these books should be acquainted with most of the structural patterns of English. His principal goals as a learner should be mastering vocabulary, using the various structural patterns in a normal mixture, and improving his ability to communicate in English.

Each unit begins with a glossary of special terms in which words and expressions used in the vocational area being discussed are defined. This glossary is followed by a vocabulary practice that tests the student's comprehension of the special terms and gives practice in their use. In the reading selection that follows, these terms are used

again within a contextual frame of reference. Each selection is followed by questions for comprehension and discussion. They give the student the opportunity to use, in a communicative situation, both the vocabulary items and structural patterns that have occurred in the reading.

Each unit ends with an exercise or exercises, some of which provide additional contexts for the terms. In some of the books in this series, these exercises sometimes pose problems that might occur if the student were working on the job. Other exercises require him to make up short dialogues or sentences to practice the special terms and the necessary structural patterns.

A great deal of successful language learning comes from experiences in which the learning is largely unconscious. In offering these books, it is hoped that the student's interest in his chosen field will increase his ability to communicate more effectively in English.

I wish to express my appreciation to the United States Air Force. Much of the reference material I used, and many of the illustrations, have come from official sources, and I have received much valuable information in conversations with United States Air Force personnel. If they find some of my definitions and narratives simplistic, it is because I have tried to treat an enormously complex subject as simply as possible and to make the book relevant to the air forces of other nations as well—particularly those of the North Atlantic Treaty Organization (NATO). *The opinions expressed in this book are my own, and do not necessarily represent the policies of the Department of Defense, the Department of the Air Force, the Department of the Army, or the Defense Language Institute.*

My Air Force friends will realize, too, that air forces change with remarkable rapidity. What is said about an air force today may very likely not be true tomorrow. This may be frustrating for a writer, but it is the source of much of the excitement of an air force career.

FRANCIS A. CARTIER
Pacific Grove, California

UNIT ONE

THE AIR FORCE BASE

Special Terms

Air Force Base: An Air Force installation that provides the services and facilities necessary to its personnel and its aircraft. It is often informally called an *air base* or merely a *base*. The part of the land that is reserved for the movements of the aircraft is the *airfield*. In NATO countries in Europe and elsewhere, you may hear *airdrome* (and sometimes *aerodrome*) instead of air base. The civilian term, "airport," is never used.

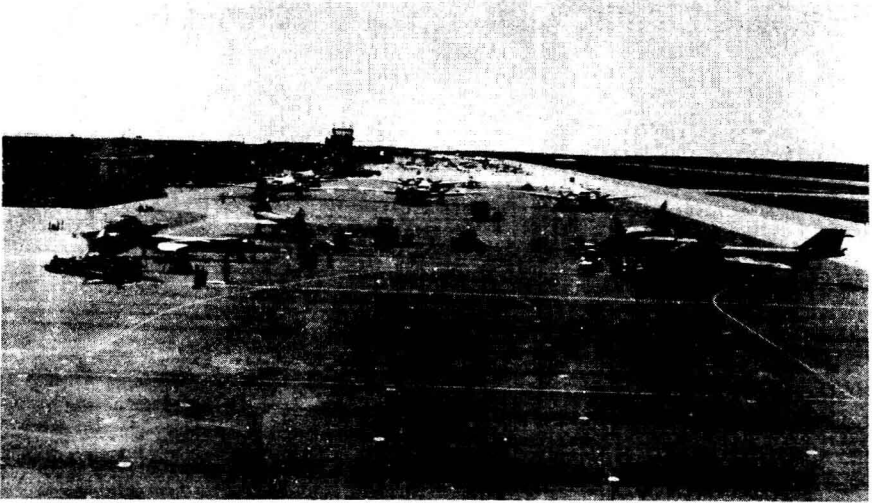
Quarters: Sleeping and off-duty living space for military personnel. Quarters for unmarried Air Force men and women who are not officers (that is, for unmarried *enlisted personnel*) are called *barracks*.

Mess: Place where military personnel receive their meals. It is also called a *mess hall*. The *officers' mess* is often but not always part of the *officers' club*.

Commissary: A grocery store on a base. It may also sell other things, too, such as clothing. However, most clothing, appliances, watches, and so on are sold at another store called the *base exchange*.

Uniform: The special clothing worn by military personnel. Air Force personnel usually wear a uniform when they are *on duty*, but they wear civilian clothes when they are not working (when they are *off duty*).

Flight Line: The buildings that serve the aircraft and the men who fly them. These buildings are sometimes arranged in a straight line, but not always. The flight line is at the edge of the *airfield*.



A typical flight line. (Courtesy U.S. Air Force)

Vocabulary Practice

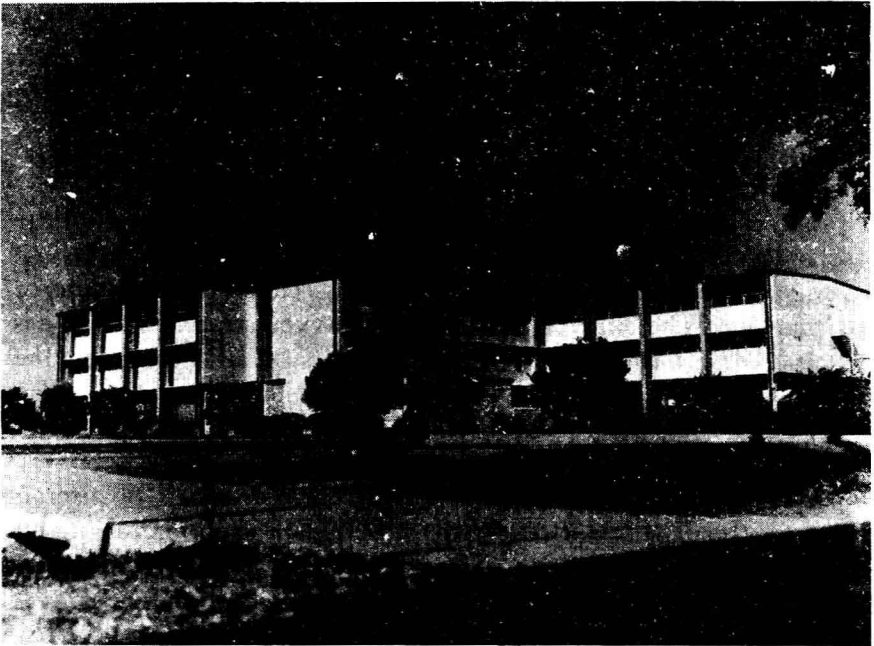
1. What is the difference between the *air base* and the *airfield*?
2. Where would an Air Force officer keep his civilian clothes?
3. Where do *enlisted personnel* eat breakfast?
4. Where would you buy a loaf of bread? A radio?
5. What do military personnel wear while they are working?
6. Where does an unmarried enlisted man sleep?
7. Where would you find a building in which aircraft are repaired?
8. Have you noticed that people in the Air Force are nearly always called *personnel*?

Note: As we have indicated, official NATO terminology sometimes differs from common conversational usage. For example, in NATO-approved terminology, the terms *flight line* and *air base* have technical meanings related to the taking of photographs from the air. However, these terms may be safely used as we have described them unless you are discussing technical aspects of aerial photography.

The Air Force Base

An *Air Force base* is like a small city. It not only provides the facilities necessary for the professional work of its personnel, but for their off-duty living, too.

Unmarried men and women in the Air Force live in *barracks* and eat in a *mess hall*. Married personnel and their families live in *quarters*



The exterior of a modern barracks. (Courtesy U.S. Air Force)

that look very much like houses anywhere else. The base may also provide schools for their children and shops where *uniforms*, civilian clothes, hardware, sporting goods, or almost anything except an automobile can be purchased. The largest of these shops is similar to a small department store and is called the *base exchange*. The *commissary* sells meat, vegetables, and other groceries. In other shops you can get a haircut, have your watch repaired, or buy a bottle of wine.

Most bases offer a wide variety of facilities for recreation: a movie theater (or cinema, as the British and many others call it), a library, and

places and equipment for football, basketball, ping pong, handball, and many other sports. There may also be a swimming pool and a golf course.

An air base must also have all the usual requirements of a city: a water system, sewers, gas and electricity, a hospital, a fire station, a police force, and even street cleaners.

The base has its own telephone system and post office. For its official communications, an Air Force base relies on a very complex and powerful system of radio transmitters and receivers. With these, it maintains contact with other bases and with aircraft on the ground and in the air. The base is also likely to have its own newspaper and bank.

Churches called *chapels* are available to people of a variety of religious faiths. If there is only one chapel, it is designed to be adapted quickly and easily for Protestant, Catholic, or Jewish services.

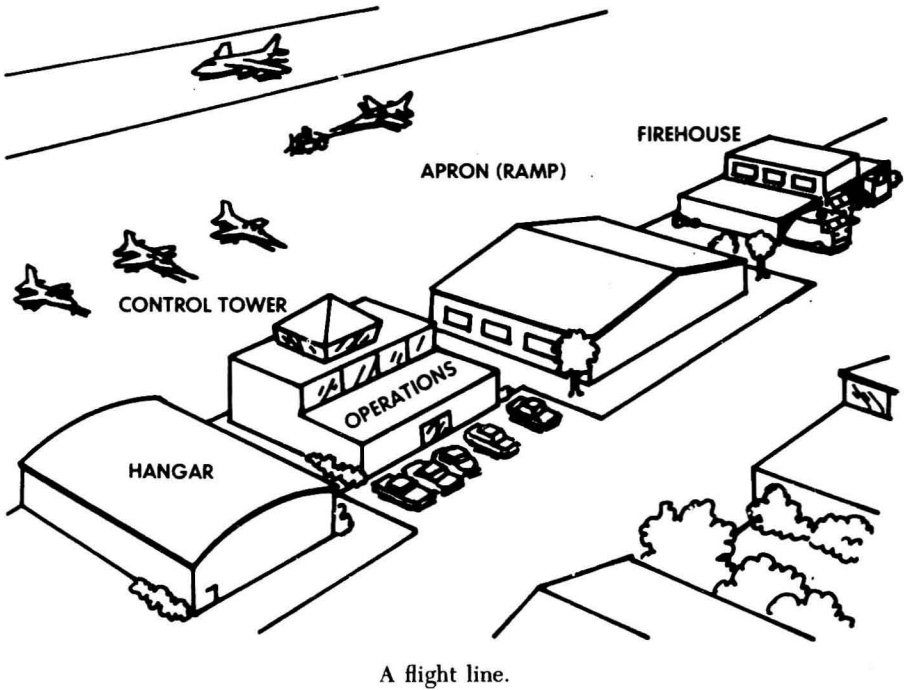
The central activity is, of course, flying. Most of the land of the base is devoted to the *airfield*, which is usually called "the field." At the edge of the field, there is a line of buildings called the *flight line*, or just "the line." The building you notice first as you approach the line is the *air traffic control tower*. The movements of all aircraft on the ground or flying near the base are controlled from the *tower*. Incidentally, since the airfield may be active both day and night, there is often a snack bar or a cafeteria on the line.

Other buildings on the line provide for the repair of aircraft radios, for the issue of personal flight clothing and equipment, and for the issue of fuel and oil. At least one building on the line is large enough to hold several aircraft during inspection and repair. A building of this kind is called a *hangar*.

The center of all activities on the line is a group of offices usually referred to under the general term, *Flight Operations*. Actually, *Operations* is only one of several related activities. (Notice that the word *Operations* is a singular noun.) These include the weather station, a flight planning room with maps and charts, a passenger waiting room, and the flight scheduling office. Only this scheduling office is correctly called *Flight Operations*.

The term *line* also refers to a broad, paved area on which the aircraft are parked. The official NATO term for this area is the *apron*, and you will often hear it called a *ramp*.

Aircraft must move slowly and carefully when they are on the apron and along the narrow, paved strips that connect the apron with



the *runways*. A *runway*, which is built like a broad highway, is where the aircraft accelerate to the speed necessary for flight and is also where the aircraft return to the ground. The narrower strips, like streets, are called *taxiways*. Air Force personnel never speak of “driving” a plane along the apron or a taxiway. This is always referred to as “taxiing.”

All the activities of the base, including those of the line, are administered from *Headquarters*, a term that is used to refer both to the building (which is almost never on the line) and to the personnel, including the Base Commander, who work in it.

Discussion

1. Discuss the various places where one can eat on an air base.
2. What kinds of entertainment are available for off-duty personnel?

3. Many of the activities on a base are operated by civilian employees. Which ones do you think these would be?
4. Which activities do you think would be performed by the men and women of the Air Force? Why?
5. How many different kinds of jobs do you think are available for Air Force personnel on the base?
6. If an Air Force base is really like a small city, what other things would you expect to find there that have not been mentioned?
7. Describe the tower on an air base.
8. What is a hangar? Where are hangars located? What kinds of jobs are performed in a hangar?
9. Describe some of the things you could find out at Operations.
10. What kinds of jobs do you think women can do in the Air Force?

Review

- A. Fill in the spaces in these sentences with the correct terms.
Example: The special clothing worn by Air Force personnel is called a uniform.
1. On an air base, you could buy a bar of soap at either the _____ or the _____.
 2. After work, an unmarried enlisted man would go back to his _____ to change his _____ for civilian clothes.
 3. If part of your job were changing tires on aircraft, you would probably work in a _____ on the _____.

4. If you worked in the tower, you would have a clear view of aircraft parked on the _____, of those moving slowly along the _____, and of aircraft coming down onto the _____.
 5. Officers who are bachelors (unmarried men) live in a building called the BOQ. BOQ therefore stands for _____.
 6. Religious services are held in the base _____.
 7. Just as there is automobile traffic on a highway, there is air _____ around an air base. The men and women who control this traffic work in the _____.
 8. Scheduling of flights is done at _____.
 9. Mechanics often have lunch at the line cafeteria, but they go to the _____ for the evening meal.
 10. The Base Commander's office is in the _____.
- B. Write five sentences, each using the two words given.
- Example: Headquarters, personnel
Personnel visiting the base should go first to the Headquarters.
1. quarters, barracks
 2. airport, airfield
 3. uniform, mess
 4. commissary, flight line
 5. apron, runway

UNIT TWO

THE PLANE

Special Terms

Aircraft: Any type of machine that can be used for flight in the air. Several types of aircraft will be described in Unit Five.

Plane: An aircraft with wings and one or more engines. The word *airplane* is seldom used by Air Force personnel. Instead, they use the word *plane* in informal conversation, and use the word *aircraft* in both formal and informal speech and also in writing.

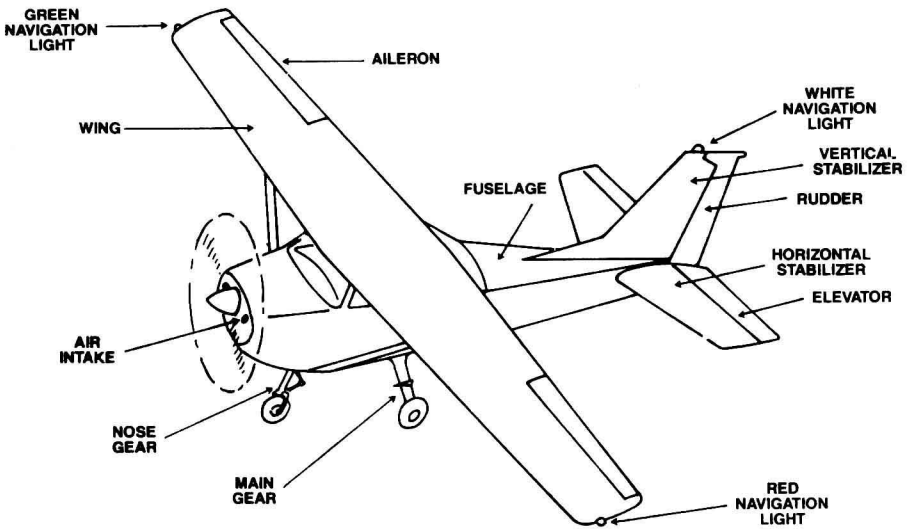
To Check: To inspect or examine. A *checklist* is a printed list of things to inspect. It also specifies the order in which they should be inspected.

Preflight Inspection: Examination of an aircraft before flying it. The preflight inspection is often called the *preflight check* or simply the *preflight*. The term *preflight* can sometimes be used as a verb, as in the sentence, "Did you preflight the plane yet?" or "I'll go and preflight it now."

Engine: The source of power that makes an aircraft fly. It is *never* called a motor. The engine burns gasoline or a similar fuel. To burn the fuel, the engine also requires a great amount of air.

Air Intake: A hole or opening that points forward and takes in air for the engine.

Elevators: The elevators are fastened to the *horizontal stabilizers* with hinges. (See the illustration.) They can therefore swing up or down. When the plane is flying, the elevators are used to make the nose of the plane point upward or downward, or to keep it level. The elevators are also used when the plane turns.



Rudder: The rudder is hinged to the *vertical stabilizer*. (See the illustration.) The rudder makes the nose of the aircraft turn toward the right or left. Many people therefore think the rudder makes the aircraft turn, just as the rudder of a boat makes the boat turn. However, the rudder alone does *not* make the aircraft turn.

Ailerons: The ailerons are hinged at the back edge of the wings. (See the illustration.) They are used to keep the wings level and are also used when the plane turns. You will learn more about ailerons in Unit Three.

Fuselage: The central body of the aircraft.

Nose Gear: The wheel under the nose of the aircraft and the parts that fasten this *nose wheel* to the fuselage.

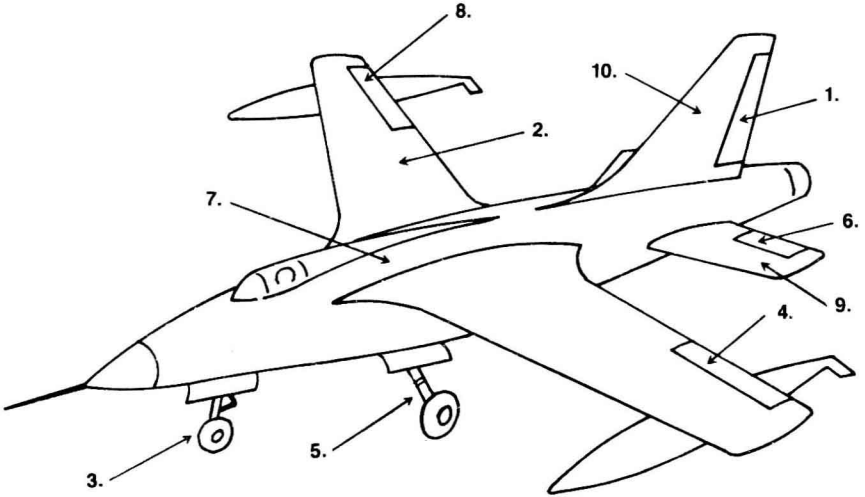
Main Gear: The wheels under the wings of the aircraft, plus the parts that fasten them to the wings or fuselage. Very small aircraft have wheels that are fixed in place, but larger, faster planes have gear that can be lifted into the fuselage or wings when the plane is flying. The motors that raise the wheels are also considered to be part of the gear.

Navigation Lights: Small lights at the end of each wing, on the tail, and sometimes on the fuselage. The navigation lights assure that the

plane can be seen by other aircraft at night. The light on the left wing is red. The one on the right wing is green. The others are white.

Vocabulary Practice

1. What are the red, green, and white lights on an aircraft called? Tell where each one is.
2. Name and define each of the six parts of the tail of an aircraft. Tell what each of those parts is attached to.
3. Describe what you do, and what you use, to be sure your aircraft is ready to fly.
4. Each part of the plane in the following picture has a number. Write the name of each part in the numbered blanks.



1. _____
2. _____
3. _____