

AIR FORCE

**CAREER
PATHS**



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BOOK

1

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Scope and Sequence

| Unit | Topic | Vocabulary | Function |
|------|-----------------------|--|-------------------------------------|
| 1 | Parts of an Airplane | cockpit, fuselage, aileron, rudder, turboprop, turbine engine, landing gear, horizontal stabilizer, vertical stabilizer, flap, elevator, wing, tail, nose, fixed wing | Identifying objects |
| 2 | Parts of a Helicopter | rotor blade, stabilizer bar, swashplate, cowl, mast, motor mount, skid, tail boom, tail skid, tail rotor, synchronized elevator, rotary-wing aircraft | Showing agreement |
| 3 | Spatial Relationships | pitch, roll, yaw, axis, maneuver, rise, dive, above, below, ascend, descend | Giving advice |
| 4 | Radio Communication | radio communication, phonetic alphabet, proword, roger, over, say again, wilco, affirmative, negative, connection | Asking for repetition (radio) |
| 5 | Rank Structure | rank, enlisted, airmen tier, NCO tier, Senior NCO Tier, company-grade officer, captain, lieutenant, field-grade officer, major, colonel, general, flag officer | Greetings |
| 6 | Base Structures | commissary, BX, consolidated support building, dormitory, family housing, officer's club, law enforcement armory, pass and registration office | Offering suggestions |
| 7 | NATO Organization | NATO, military committee, ACO, ACT, SACEUR, SHAPE, JFC, AOR, SACLANT, JWC, JFTC, NURC | Clarifying information |
| 8 | Military Organization | subcommand, wing, group, squadron, flight, operations group, maintenance group, mission support group, medical group, wing staff | Talking about what might happen |
| 9 | Training | Basic Military Training, IED familiarization, basic situational awareness, defensive fighting positions, entry control point, CBRNE, AFSC, technical training, expeditionary training | Correcting an error |
| 10 | Uniforms | Service Dress, insignia, Mess Dress, Utility Uniform, Airman Battle Uniform, headgear, flight suit | Defining / Explaining |
| 11 | Pilot | Initial Flight Screening, ENJJPT, SUPT, contact flight, instrument flight, low-level flight, formation flight, airlift, tanker | Emphasizing difficulty |
| 12 | Air Traffic Control | Air Traffic Controller, airfield, plot, maintain, certify, stress, direct, relay, compute, airspeed, altitude, taxi, runway | Checking information |
| 13 | Maintenance | condition, fully mission capable, inspection, preventative, functional, maintenance, fuel, hydraulic fluid, repair | Offering solutions |
| 14 | Pararescue | pararescue, PJs, search and rescue, treat, injured, paramedic, CPR, proficient, scuba, Physical Ability and Stamina Test | Checking if someone understands you |
| 15 | Weather | analyze, forecast, atmosphere, computer model, meteorology, predict, oceanography, hub, windspeed, ground, lightning, thunderstorm, cloud, fog, snow, hail, gust, turbulence, icing, temperature, atmospheric pressure, precipitation, front | Making comparisons |

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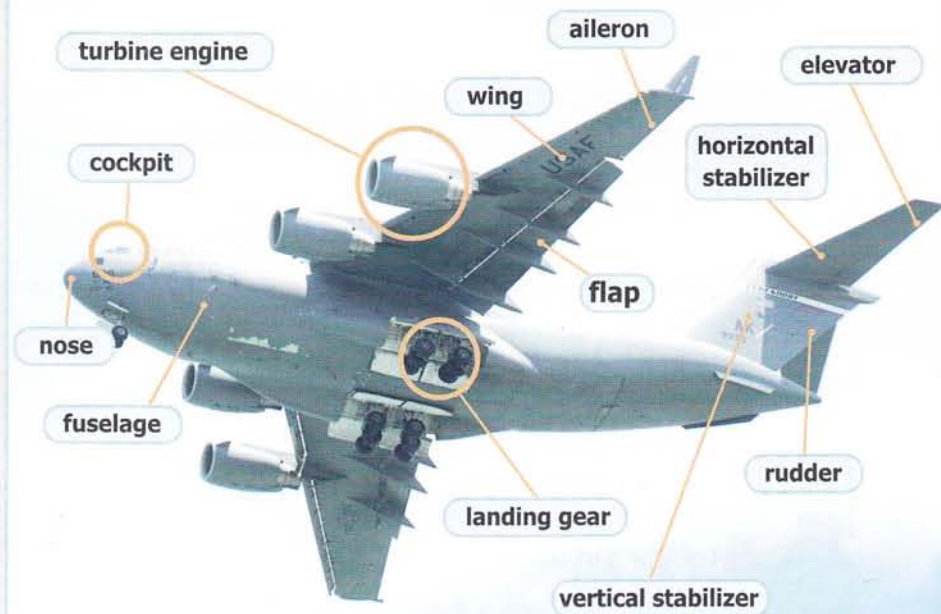
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1 Aircraft Basics: Parts of an Airplane

The differences between small fighters and large cargo planes are obvious. But all **fixed-wing** aircraft require the same basic structures.

Every airplane has **wings** attached to the **fuselage**. The **cockpit** sits behind the **nose**, and the **tail** supports the **vertical** and **horizontal stabilizers**. **Rudders**, **ailerons** and **elevators** control direction. Flaps provide lift. Aircraft roll on **landing gear** during takeoff and landing.

But not all airplanes have the same type of engine. Most modern military airplanes have **turbine engines**. Other airplanes use **turboprops**. These are more efficient for medium-sized transports.



Parts of an airplane



Comprehension

1 Read, listen, and choose the correct answers.

- Which structure is located at the tail of an airplane?
A the cockpit
B the landing gear
C the vertical stabilizer
D the turboprops
- The following parts all control direction, EXCEPT the...
A fuselage.
B ailerons.
C elevators.
D flaps.
- What does the passage say about turboprops?
A Heavier military airplanes use them.
B They attach to the vertical stabilizers.
C They are not used for large transports.
D They create higher speeds than turbines.

Vocabulary

2 Match the definitions (A-H) to the correct parts of an airplane (1-8).

- | | |
|-------------------|--------------------------|
| 1 __ fuselage | 5 __ cockpit |
| 2 __ turboprop | 6 __ tail |
| 3 __ landing gear | 7 __ nose |
| 4 __ flap | 8 __ vertical stabilizer |

- A the rear part of an aircraft
B a part that increases force
C the central part of an aircraft's body
D a part that prevents sideways motion
E the part of an aircraft where pilots sit
F the structure that supports an aircraft
G the front part of an aircraft
H an aircraft engine that uses a propeller

3 Complete the sentences with the terms below.

rudder elevator turbine engines
fixed-wing ailerons wings
horizontal stabilizers

- 1 The roll planes from side to side.
- 2 The pilot can't turn because the is broken.
- 3 move planes at high speeds.
- 4 Aircraft need to keep the nose level.
- 5 create lift and store fuel.
- 6 The guides planes up and down.
- 7 Airplanes are aircraft.

Listening

- 4 Listen to a description of a C-130 Hercules. Write down key vocabulary (that is, words in bold in the text on p. 4) that you hear.

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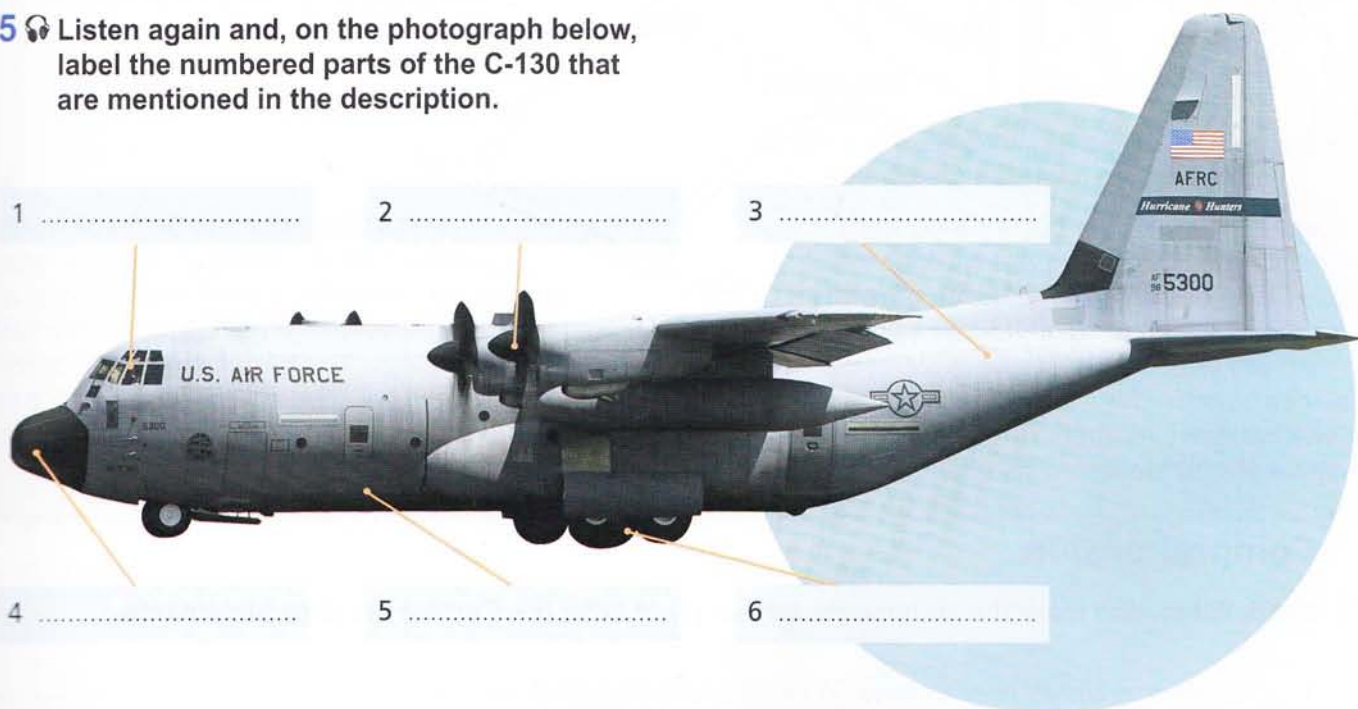
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C-130

- 5 Listen again and, on the photograph below, label the numbered parts of the C-130 that are mentioned in the description.



Speaking

- 6 Identify the parts of an aircraft that control motion. Explain what each part does.