

Name:

## PLEASE NOTE: REPRODUCTION WITHOUT WRITTEN PERMISSION FROM THE U.S. AIR FORCE MUSEUM IS STRICTLY PROHIBITED.

Welcome to the National Museum of the United States Air Force!

This informational scavenger hunt will lead you through buildings 1-3 of the NMUSAF. Your journey will take you from the first flight to today's modern jet aircraft. Follow the directions and look for the clues. Answer as many questions as you can. To begin, enter the museum and walk through to the end of the "Entrance Hall" and make a right. Follow the stanchions and start in front of the 1909 Flyer.

Begin the tour in the Early Years Gallery. (The Wright 1909 Military Flyer).

- 1. Because it was the first military aircraft, the official name of the 1909 Flyer was:
  - a) Wright Flyer No. 1
  - b) Signal Corps Aeroplane No.1
  - c) Military Flyer No. 1
- 2. Look closely at the signs on the aircraft: who is depicted flying this plane?
  - a) Wilbur Wright
  - b) Orville Wright
  - c) Lt. Frank Lahm

Look behind you at the wall panels. On the beige panel you will see a photograph of the first official flight of the 1909 Wright Flyer.

The Wright brothers first used wing-warping to control flight. Later aircraft used a control surface called an aileron. Look at the aircraft hanging behind and to the left of the Wright Flyer. This is the Curtiss **1911 Model D**.

- - a) Wings
  - b) Wheels
  - c) Pilot's seat

Continue along the gallery to your right. The next aircraft you will see is the **SPAD VII**.

- 4. The SPAD VII made its first flight in July 1916, just seven years after the first military aircraft was flown. What are some of the major differences you see in the SPAD and the 1909 Wright Flyer?
  - a) The SPAD had wheels and the pilot sits inside the plane
  - b) The SPAD had the propeller in the front
  - c) All of the above
- 5. Americans who flew the SPAD in World War I were known as the:
  - a) Lafayette Escadrille
  - b) FrenchEscadrille
  - c) American Escadrille

As you continue through the Early Years Gallery, you will pass many fascinating aircraft that played a variety of important roles during World War I and the years immediately following the war. By the time World War II started, military aircraft had been used in many different ways: as barnstormers, fighters (pursuit), observation planes, bombers and trainers.

Throughout the remainder of this gallery, try to find a sample or two of each type of aircraft. Some aircraft may fit into more than one category!

6. Fighter (Pursuit)		
7. Bomber		
8. Observation	-	
9. Barnstormer	-	
10. Trainer	-	
11. Attack	-	
	-	

Continue walking through the Early Years Gallery. Stop in front of the **De Havilland DH-4**.

12. The De Havilland DH-4 was the only American-built aircraft to see combat during World War I. After the war, it was used in a variety of different ways. Nine different uses are noted in the exhibit. List at least three of them:

The 1920s and 1930s were a particularly busy time of major technological advancements in aviation history. Walk through the gallery, looking for the colorful **P-12** (yellow and red), the **P-26** (yellow and blue) and the **B-10** (yellow andblue).

Looking at these three aircraft, answer the following four questions:

- 13. Which describes the Boeing P-12E?
  - a. Two wings, open cockpit, fixed landing gear
  - b. One wing, open cockpit, fixed landing gear
  - c. One wing, closed cockpit, retractable landing gear (wheels go up inside the plane)
- 14. Which describes the Boeing P-26A?
  - a. Biplane, open cockpit, fixed landing gear
  - b. Monoplane, open cockpit, fixed landing gear
  - c. One wing, closed cockpit, retractable landing gear (wheels go up inside the plane)
- 15. Which describes the Martin B-10?
  - a. Biplane, open cockpit, fixed landing gear
  - b. One wing, open cockpit, fixed landing gear
  - c. One wing, closed cockpit, retractable landing gear (wheels go up inside the plane)
- 16. The B-10 was 50% faster than its contemporary biplane bombers and as fast as most of the fighters because
  - a. It was smaller
  - b. It was larger
  - c. It was so advanced in design

Continue on toward the end of the Early Years Gallery and stop at the last plane, the **Hawker Hurricane Mk.IIa**. Listen to the sound of its engine! It is one of the most famous British fighters of World War II.

- 17. Some of the first American pilots to fly in WW II flew this type of aircraft for the British against Hitler's forces. They were known as the:
  - a. American Squadrons
  - b. American Eagle Squadrons
  - c. British-American Squadrons

*Continue straight ahead, through the* **Holocaust Exhibit** *and into the* **World War II Gallery**.

Look at the first two aircraft, the **Curtiss P-36** and the **Seversky P-35**. These were the types of planes stationed in Hawaii and the Philippines at the beginning of World War II.

America entered World War II as a result of the Japanese attack on Pearl Harbor. American forces in Hawaii were completely surprised.

18. The Museum exhibit depicts Lt. Rasmussen rushing to jump into his aircraft that fateful morning, still wearing his pajamas! He climbed into one of the first six Army Air Force fighters to get off the ground to meet the Japanese attack:

a. P-35 b. P-36A c. P-40

Continue walking through the World War II Gallery, looking at the aircraft that were used during that era. Straight ahead you should see an airplane painted with a shark face.

19. This plane was America's foremost fighter at the *start* of WW II:
a. P-39
b. P-40
c. P-47

Continue walking to the North American B-25 "Mitchell" exhibit. The exhibit depicts one of the B-25's aboard the aircraft carrier Hornet as it awaits take-off. This raid on Japan did not cause a great deal of damage to the enemy, but it was a great morale booster for the Americans.

- 20. What name was given to this famous raid?
  - a. Billy Mitchell Raid on Japan
  - b. Doolittle Raid
  - c. Mitscher Raid on Japan

Continue walking through the World War II Gallery, observing many different types of aircraft from the era, including trainers, targets, cargo, bombers, and fighters. Aircraft designations that begin with the letter P are primarily pursuit (fighter) aircraft; C are cargo aircraft; B are bombers; PT, BT and AT are trainers. You will also see aircraft from other nations, including Britain, Germany, Italy and Japan.

Look for the silver airplane with the black and white engine cowlings (behind the propellers) and the glass "nose".

21. This plane was the most used of all training bombers. About 90% of our bombardiers trained in a plane like this one. This exhibit shows the famous Norden bombsight in the nose being guided by a bombardier student during a bombing run.

a. AT-9 b. AT-10 c. AT-11

Continue through the World War II Gallery and observing the different kinds of aircraft. You will soon come to the most famous of all World War II bombers, the **Boeing B-17 "Memphis Belle"**.

- 22. Best known for its bombing raids on German targets, the B-17 was nicknamed:
  - a. Superfortress b. Megafortress c. FlyingFortress

Continue walking through the gallery and look for the French railroad car. This car is representative of the type that transported World War II Allied prisoners of war and other deportees from occupied countries to German detention camps.

- 23. This railroad car was called the "Forty and eight" because it:
  - a. was 48 feet long
  - b. cost \$48 to make
  - c. could carry 40 people or eight horses

Continue on through the World War II Gallery. Look for two smaller planes on your right: the **Messerschmitt 163** and the **Messerschmitt 262**. These two aircraft look very different from those you have seen previously.

- 24. What is missing from the Me163 and the Me 262 that you have seen on all previous planes in the Museum?
  - a. wings b. cockpit c. largepropellers
- 25. The engine on the Me 262 is very different from earlier aircraft. This German plane is the world's first operational
  - a. jet aircraft b. piston aircraft c. rocket aircraft
- 26. The Me 163 was an even faster aircraft. This German plane was one of the most unusual aircraft of World War II. It was powered by a

  a. jet engine
  b. piston engine
  c. rocket engine

## Continue on through the World War II Gallery. Look for the blue and white aircraft that also looks like a boat! This is the **Consolidated OA-10** "Catalina".

- 27. This plane was used primarily for:
  - a. carrying cargo
  - b. air-sea rescuework
  - c. escorting heavy bombers

*Turn around and go to the large silver plane near the end of the World War II Gallery. This is the* **Boeing B-29**.

- 28. The B-29 on exhibit here is known as "Bockscar". It is referred to as the aircraft that ended World War II, as it is the B-29 that dropped the second atomic bomb on:
  - a. Hiroshima b. Nagasaki c. Tokyo
- 29. The B-29 is nicknamed:a. Flying Fortressb. Megafortressc. Superfortress

As you exit the **World War II Gallery**, turn left and walk through Kettering Hall. Continue straight ahead, following the hallway all the way to the Museum's second building.

Here you will find aircraft and exhibits regarding the **Korean War** on your right and the war in **Southeast Asia** on your left. In the center are some showcased some special aircraft, including the **Global Hawk**, the **Reaper** and the **F-22**.

Just inside in this building, you will see two unusual aircraft hanging on either side of the entrance.

- 30. The unusual aircraft hanging on the left is the **General Atomics YMQ-9 Reaper**. This remotely piloted aircraft (RPA) is capable of:
  - a. locating and destroying time-critical and highly mobile targets
  - b. providing real-time intelligence, surveillance and reconnaissance
  - c. All of the above
- 31. The large dark aircraft on the right is the **Northrop Grumman RQ-4A Global Hawk**. Used in Operation Enduring Freedom, Global Hawk is also a RPA and is designed for:
  - a. High-altitude flying
  - b. Endurance flying
  - c. All of the above

On the right side of the gallery, you will see a walk-through fuselage of a B-29. Walk inside the aircraft (if currently open) and take a look around!

Walk through both sides of the hangar to learn more about aircraft used in Korea and Southeast Asia. To continue the scavenger hunt, walk straight across this building and enter the long hallway leading to the Cold War Gallery. Inside the **Cold War Gallery**, you will find many of the Museum's more modern aircraft. On your right, you will see the Museum's largest aircraft, the Convair B-36J.

- 32. The *primary* role of the B-36 J "Peacemaker" was:
  - a. Photo-reconnaissance
  - b. "aircraft carrier"
  - c. strategic intercontinental bomber

Among the aircraft on the left side of the Cold War Gallery, you will see three very famous black airplanes: the Lockheed U-2A (hanging); the Lockheed SR-71A; and the LockheedF-117A.

- 33. Besides use as a reconnaissance (spy) plane, the U-2 was also used for:
  - a. Mapping and crop data collecting
  - b. Bombing enemy targets
  - c. Crop dusting
- 34. Also a reconnaissance aircraft, the SR-71 throughout its entire career has been the world's:
  - a. Largest airplane
  - b. Fastest and highest flying aircraft
  - c. Fastest and highest flying operational aircraft
- 35. Known as the Nighthawk, the F-117 was the world's first operational aircraft to fully incorporate:
  - a. Radar-evading (stealth) technology
  - b. Reconnaissance(spy)technology
  - c. High altitude technology

CONGRATULATIONS! YOU HAVE FINISHED THIS INFORMATIONAL SCAVENGER HUNT. WE HOPE YOU ENJOYED LEARNING ABOUT MANY OF THE FASCINATING AIRCRAFT ON EXHIBIT AT THE NATIONAL MUSEUM OF THE UNITED STATES AIR FORCE! Be sure to download the Museum's 4<sup>th</sup> building scavenger hunt to see the Space Gallery, the Research and Development Gallery, the Global Reach Gallery and the Presidential Gallery!

## THANK YOU FOR VISITING THE NMUSAF!



## **INTERMEDIATE TOUR ANSWER KEY**

2.	b
3.	a
4.	c
5.	a
6.	Possible answers include: Nieuport 28, Sopwith Camel, SPAD VII, Fokker D.VII, LUSAC 11, Curtiss P-6 Hawk, Boeing P-12E, Boeing P-26, Hawker Hurricane Mk.IIa
7.	Possible answers include: Caproni CA 36, De Havilland DH-4, Martin B-10B, Martin MB-2
8.	Possible answers include: Caquot Balloon, De Havilland DH-4, Loening OA- 1A, Curtiss O- 52, North American O-47B
9.	Curtiss JN – 4D Jenny
10.	Possible answers include: Wright 1909 Flyer, Ryan YPT-16, North American BT-9B, De Havilland DH 82A Tiger Moth, Thomas-Morse S4C Scout
11.	Possible answers include: Halberstadt CLIV, Northrup A-17A
12.	Possible answers include: transport, air ambulance, photography, training, target towing, forest fire patrol, air racing, mail carrier, flying test bed
13.	a
14.	b
15.	c
16.	c
17.	b
18.	b
19.	b
20.	b
21.	c
22.	c
23.	c
24.	c
25.	a
26.	c
27.	b
28.	b
29.	c
30.	c
31.	c
32.	c
33.	a
34.	c

**35.** a

1.

b