

Preparing for

US aircraft of the late 1930s propelled the Army's air arm toward greatness.

Photos from the National Archives compiled
by Warren E. Thompson



A preproduction P-38—YP-38—on a test flight over California in 1941.

World War



In the years before World War II, the US slowly built the foundation needed for a massive air effort. The 1920s and 1930s budgets were tight, airmen were scarce, and inventories were small, yet the aviation plans of that era were critical. By the late 1930s, many of the designs that would help create the mighty wartime Army Air Forces were in design or test. Even aircraft no longer state of the art by the time of Pearl Harbor had helped set the stage for the more advanced designs. [1] The North American O-47B was an advanced observation aircraft when introduced in the late 1930s. [2] Vital to efforts in the China-Burma-India Theater was the Curtiss C-46 Commando, flying here in the foreground. The C-46 first was delivered in July 1942.



[3] The Bell Airacuda never went into mass production. Only 13 were produced. [4] Ryan PT-22 Recruits such as this one were Army Air Corps primary pilot trainers. The PT-22 was the Air Corps' first monoplane trainer. [5] First flown in 1938, the P-40 Warhawk was a new-design front-line fighter that later served with distinction with the Flying Tigers. All told, more than 13,000 Warhawks were produced.



[1] Consolidated B-24s, seen here, first flew in 1939 and became operational in 1941. B-24s were more numerous than any other aircraft in Air Force history. [2] US heavy bombers took the war directly to Germany and Japan. Seen here is an early Boeing stab at meeting the requirement for a four-engine bomber. The XB-15 first flew in 1937. [3] The North American B-25 Mitchell bomber first flew in August 1940. Nearly 10,000

were built. The B-25 gained lasting fame for the 1942 Doolittle Raid on the Japanese home islands. [4] The AAF also leaned on proven fighter designs early in the war. The most widely produced fighter of the era was the P-47 Thunderbolt, seen here. [5] In 1939, the Air Corps relied upon the North American BT-14 to train aviation cadets. The two-seat BT-14 had a top speed of 175 miles per hour.

[1] Randolph Field in Texas, dedicated in 1930, became a focal point of World War II pilot training. Randolph still serves as headquarters for Air Education and Training Command. Here, airmen march past a Randolph Field parking area in 1941. The base prepared the instructors needed to train rank-and-file pilots. **[2]** This lineup showed the breadth of the Air Corps' tactical fighter force just before World War II. Seen here, top to bottom, are the YP-38 Lightning, P-39 Airacobra, P-40 Warhawk, and YP-43 Lancer.



[3] The Douglas A-20 Havoc was a light bomber that entered operational service in early 1941. **[4]** The Vultee BT-13 Valiant first flew in 1939 and was a mainstay of the Air Corps and Navy flight training programs. **[5]** The Curtiss Shrike was boldly styled but didn't last. Only 13 of these A-18s were manufactured, and they flew from 1935 to 1940.



[1] The unconventional Grumman XF5F, a design that looked like it could have been inspired by a child's toy airplane, first flew in April 1940. The Skyrocket never went into mass production. [2] Airmen swarm over a Douglas A-20C Havoc as they prep the aircraft for its next mission. [3] Curtiss P-36 Hawk pursuit fighters belonging to the 27th Pursuit Squadron line a parking area at Wright Field, Ohio, in September 1939. [4] Another P-36 Hawk undergoes flight tests near Wright Field. After a first flight in 1935, 245 of the fighters were built for the Air Corps. [5] After first flying in November 1940, the Martin B-26 Marauder was entering squadron service when the US entered World War II. The AAF had procured more than 5,200 Marauders by the end of the war.



[1] The C-47 Skytrain was an icon of World War II, but the DC-3 on which it was based first flew back in 1935. More than 10,000 "Gooney Birds" were built. [2] The Grumman F4F Wildcat, first flown in 1937, was used by the Navy to combat the agile Japanese Zeros in the Pacific Theater. [3] This prototype, XF4U-1, led to the speedy F4U Corsair, designed by Vought Aircraft. The Navy, impressed with the aircraft's capability to reach speeds in excess of 400 mph, placed an initial order for almost 600 Corsairs. More than 12,500 would be built before the production line was shut down.



[4] A variant of the North American P-51, designated NA-83 Mustang, on a test flight in late 1941 or early 1942. The RAF ordered 300 of the classic fighters. [5] P-36 and P-40 pursuit fighters can be seen among the aircraft on a parking area at Hawaii's Wheeler Field.



Photo from the Garrett Collection



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[1] The legendary B-17 Flying Fortress first flew in July 1935, and B-17s began filling up bomb squadrons in 1938. This particular B-17C was flying out of Wright Field in 1941. [2] Bell cranked out nearly 10,000 P-39 Airacobras such as these. [3] Two airmen compare notes beside a wartime rarity. This light observation aircraft is the Stinson O-49 Vigilant. Just 142 were built. [4] The Bell P-39 saw wide service in the Air Corps. This model is seen during a test flight in early 1941.

Note its midengined design. [5] Aircraft designers began working on building a long-range flying boat in 1935. This Martin XPB2M rolled off the assembly line in 1941, but it was deemed too risky to fly the slow boat over enemy waters. Until the US aircraft industry was able to ramp up with wartime designs and quantities, AAF airmen had to hold their own against the Axis with prewar designs such as these. The airmen and their equipment performed with honor and distinction. ■