



Arthur Lee McElmurry (back row, second from right) received his first pilot training in a 65-hp Piper Cub on May 25, 1943. Two years later he was flying combat missions in a B-29 over Japan.

Bomber School

Following a World War II cadet through to a B-29 cockpit, Part 3
BY JEFF SKILES

AFTER ALMOST A YEAR of continual training, a World War II aviation cadet would have progressed from indoc to primary, and subsequently basic aviation training. He would have approximately 150 hours in the air and would be ready to move on to advanced training in high-performance aircraft. Up until this point all cadets more or less had a similar experience, but with advanced training they would follow divergent paths.

FIGHTERS

Pilots headed for the cockpit of a fighter aircraft would accomplish their advanced training in a North American AT-6 Texan before moving on to transition training into their assigned fighter. The AT-6 goes by many names; the Navy calls it the SNJ, the Canadians the Harvard. All refer to a substantial-looking aircraft built by North American, powered by a Pratt & Whitney R-1340 600-hp Wasp powerplant, and swinging a Hamilton Standard propeller.

The design evolved naturally out of the North American BT-9, a basic trainer contemporary of the Vultee BT-13 that was produced in very low numbers. The design was modified to be all metal and to have retractable landing gear. The AT-6 has some unique control placements. The left side of the cockpit fairly bristles with levers and controls, throttle mixture, prop, elevator,

aileron, rudder trims, as well as the landing gear and flap actuators. Operating either the gear or the flaps requires an extra step for the uninitiated. In early models to activate the hydraulic system you must press down a paddle that gives you something like 30 seconds of hydraulic pressure. With the pump appropriately primed, the gear or flaps can be operated as normal. Experienced pilots shove the paddle as they begin their takeoff roll allowing them to snap up their gear smartly after liftoff. Long delays in gear retraction give away many a neophyte AT-6 driver who forgot this important step.

The AT-6 was a good steppingstone for frontline fighters with its relatively narrow retractable landing gear and complex systems. The Texan also had a reputation for often being more difficult to fly than the fighter aircraft that the pilots were eventually destined for, particularly on landing.

The big engine ahead promised power, but that didn't translate into speed as the AT-6 lumbers through the air at a pedestrian 130 knots. While not as forgiving as the PT-23, the AT-6 on landing is straightforward and the tail wheel lock keeps it tracking down the centerline.

Advanced training would be the last opportunity for a cadet to fly with a flight instructor. Subsequent fighter aircraft were only single seat, and other than offering encouragement from the ground, an instructor was powerless to affect the outcome of the mission. Eventually hundreds of thousands of pilots would pass through advanced training in the powerful retractable before moving to P-51s, SBDs, or the many other single-engine aircraft in the Navy or Army Air Forces.

BOMBERS

Those destined for bomber aircraft took a very different path. Multiengine training was the first step in their advanced training. Most found themselves in the cockpit of the ubiquitous Cessna AT-17 trainer.

The airplane was initially developed as a passenger transport by Clyde Cessna before World War II was ever envisioned. Its civilian designation was the Cessna T-50, and it began military service as the AT-17. After 1943 the AT-17's designation was changed to the UC-78. Nicknamed the Bobcat by Cessna, it will be forever be known by the name given to it by the pilots who flew them, the Bamboo Bomber.

The Bamboo Bomber's somewhat large airframe was propelled through the skies by two Jacobs 245-hp engines, making it a lackluster performer on one engine. But like the 150-hp Piper Apache, a low-powered aircraft can be one of the best trainers because it teaches flying skills rather than dependence on power to extract a pilot from a hazardous circumstance.

The AT-17 was prolific with more than 5,400 examples made. But, other than serving as the first twin-engine that any cadet flew, and of course being Sky King's first ride, the Cessna AT-17 has pretty much drifted into obscurity.

Bringing in the new year, our cadet Art McElmurry was transferred to Fort Sumner, New Mexico, for advanced

training. Fort Sumner was an outpost in the desert, and he and his fellow trainees would share the dry, desolate landscape until March 12, 1944.

"Often the air was filled with dust and coal smoke. Lieutenant Burke told us we would really like the place after two weeks. We really liked it better after March 12," Art wrote.

Once the cadets were checked out in the AT-17 they accomplished much of the necessary flying among themselves. They would be paired with another cadet, and since they were headed for heavy bombers, their emphasis was on formation flying, instruments, and cross-country.

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"One thing we observed in a hurry; in the middle of a desert there are few landmarks except for the highway and railroad tracks. We often commented that sometimes the only landmarks seem to be the jack rabbits, and they were not reliable," Art wrote.

Commonly they would train or have ground school until 4 or 5 p.m., sleep until 11 p.m., and then be awakened for a night cross-country.

"On February 23, another cadet and I made a night 900-mile cross-country to Wichita, Kansas. On the ground at Wichita we got lost on the many taxiways and found ourselves on the side of the airport where several B-29s were parked. This was the first one for us to see, and as we taxied under the wings, I remarked, 'These things will never fly; they are too big and heavy.' It was not in my wildest imagination that within eight months I would be flying one," Art wrote.

At the end of advanced training a cadet would become an officer, and those headed for heavy bombers were sent to training in either the Boeing B-17 or the Consolidated B-24. Art became a newly minted second

lieutenant and was asked his preference for assignment.

"My preference was the B-17 Flying Fortress, which had an excellent combat record. It could take a lot of punishment and still fly." Art received orders to Hobbs, New Mexico, for transition training in the Fortress.

The B-17 was an older design that first flew in 1935. It was the first mass-produced bomber with numbers eventually surpassing 12,700. Its four Wright Cyclone engines could power the 65,500-pound bomber to Germany and back while delivering a bomb load on target.

"The first time I saw a B-17 cockpit, the instrument panel was intimidating. There was row after row of dials and switches in front of the pilot as well as overhead. And to think we needed to know what each dial meant and what each switch did," Art wrote.

Pilots learned that flying such a massive aircraft required a lot of muscle compared to the lighter ships they had become accustomed to. But flying it wouldn't be so difficult once they learned arm and leg coordination and synchronization of the four 1,200-hp engines.

"The thermals (updrafts and down-drafts) were throwing that baby all over the sky, and I was under that hood trying to read the instruments as well as fly the plane. By the time we landed, I had blisters on my hands and a flight suit wet from sweat (I think it was sweat). Little did I know that in less than a year, I would be fighting even greater thermals created not by the sun but incendiary bombs. The training was valuable," Art wrote.

The expectations for Art on the ground were equally as challenging.

"Ground school was rough. As a pilot we were to know all about the plane from A to Z—the structural framework, the electrical and hydraulic systems, the engines as well as how to handle emergencies in any area. Much of this was done in ground school along with navigation, plane identification, and weather," Art wrote.

Engine-out procedures and other emergencies were trained relentlessly with cross-country flights offering the occasional respite from hard work.

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“By the end of May I had finished ground school and had given the check pilot a good flight even on a hot afternoon. Now the only thing lacking was to get my required 100 hours of flying time. Word was out that some of the guys would be selected for B-29s, the new Superfortress. The only objection was that on the B-29 the first pilot, called an airplane commander, had to have 1,000 hours in a B-17, so those selected from our group would fly as second pilot but be called the pilot.”

On June 23, 1944, Art received his orders to Fairmont, Nebraska, for transition training for the Boeing B-29.

B-29

In Fairmont, the airmen not only learned the skills necessary to pilot a new aircraft, but also met and bonded with the men who would form their crew when they shipped overseas. The B-29 flew with a crew of 11 men; the officers consisted of a pilot, copilot, bombardier, and navigator, and the enlisted personnel were the radio operator, radar operator, flight engineer, central fire control gunner, right gunner, left gunner, and tail gunner.

“Much of our training at Fairmont was in the B-17,” Art wrote. “At first there were not enough 29s, and they had lots of bugs to be corrected that resulted in downtime. Training was at a serious pace—we often had three to five hours a day in ground school, 30 hours a week flying time plus 10 hours or more a week on the flightline. It was on a seven day a week basis.”

Training consisted of high-altitude cross-country flying over Nebraska, North Dakota, and South Dakota.

“Flying high-altitude formation in a B-17 is nothing but hard work. Often the temperature was a minus 30 to 50 degrees. With those wool-lined flight suits and wearing an oxygen mask, it took the ‘sap’ out of you in a hurry,” Art wrote.

After six weeks in Fairmont flying well-worn B-17s, the crew finally made their acquaintance with the Superfortress.

It was the first mass-produced bomber with numbers eventually surpassing 12,700.

“We had our first B-29 flight on Friday night, August 4. It flew extremely easy, but with a front nose wheel, the landings were entirely different from a B-17,” Art wrote. “The 17 has a tail wheel, which means you do a three-point landing—in the 29 you land on the two main wheels and then ease down the nose wheel. All the crew areas of the 29 are pressurized to 8,000 feet, which greatly adds to the crew comfort. It was two weeks before we could get another 29.”

The crew spent six months working as a team and transitioning into the B-29 before being ready for deployment overseas.

“Staging for our overseas assignment was at Herington Army Air Force Base in Herington, Kansas. During the approximate three weeks we were there, we were assigned a brand-new B-29 that we test flew a few times,” Art wrote. “The crew was as proud of ‘our’ plane as a 16-year-old would be with his own new car. After a crew conference, she was named *Pretty Baby*.”

Art now had completed his training for the Pacific theater. He began advanced training with 145 hours in his logbook. He gained another 70 in the AT-17 advanced trainer, and still 100 hours more in the B-17 before moving on to the B-29. He had been in continuous training from February 26, 1943, to December 27, 1944. It was 22 months before he was qualified to point the nose westward and head overseas in *Pretty Baby*. **EAA**

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