



In March 1942, the Doolittle Raiders trained in the Florida Panhandle for their historic mission.



gearly March 1942, 140 men from the 17th Bombardment Group, recently reassigned from Pendleton AAF, Ore., to Columbia AAB, S.C., had arrived at Eglin Field, Fla. They were there to prepare for one of the most daring and famous air missions of World War II, an air attack on Japan. The mission was to raise American morale after months of doom-and-gloom news from the war fronts.

Later known as the Doolittle Raiders, the men would spend three weeks at Eglin Field in preparation for their famous mission against Japan.

After the Japanese attack on Hawaii on Dec. 7, 1941, President Franklin D.

The Roosevelt wanted to retaliate. On Dec. 21, he asked for a plan to-in the words of Lt. Gen. Henry H. "Hap" Arnold, Chief of the Army Air Forces-bring "home to Japan proper, in the form of a bombing raid, the real meaning of war." By the end of January, Lt. Col. James H. "Jimmy" Doolittle, special assistant to Arnold, and Navy Capt. Francis S. Low, a submariner on the staff of Adm. Ernest J. King-commander in chief of the US Fleet and later Chief of Naval Operations-had independently concluded that an AAF B-25 Mitchell medium bomber could take off from a Navy carrier with a 3,000-pound bomb load and hit Japan. The crews could fly the 2,000 miles from a launch point 400 miles east of Japan, attack military targets, and safely reach bases in Chinese-held territory. After reviewing the AAF's B-25 bomb

After reviewing the AAF's B-25 bomb groups, Doolittle selected the 17th Bombardment Group (Medium), consisting of the 34th, 37th, 95th Bombardment Squadrons and the 89th Reconnaissance

Top: Doolittle Raiders B-25s on the ramp at Eglin Field, Fla., in March 1942. Center: Raiders, including Lt. Richard Joyce (far left)—who had an accident during training when the nose gear of his aircraft collapsed after landing spend some leisure time in the quarters at Eglin. Bottom: Mechanics work on the engine of a raider B-25.

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Squadron. Stationed at Pendleton in northeast Oregon, the group had been conducting anti-submarine patrols off the northwest US coast. On Feb. 3, the group received orders, transferring them to Columbia Army Air Base.

Meanwhile, Doolittle informed Lt. Col. William C. Mills, the 17th BG commander, that he had selected the unit for a hazardous mission that would require a high degree of skill and be of great value to the US defense effort. Without providing any other details, Doolittle diverted their aircraft to Minneapolis on the way to South Carolina, for various modifications.

The 17th BG arrived at Columbia by Feb. 16, and Doolittle showed up a day or two later, asking for volunteers for but had no accurate idea of where they would be going.

Their most important task at Eglin was to learn how to launch a fully loaded B-25 (31,000 pounds—aircraft, crew, fuel, and bombs) from a standing start in less than 500 feet. Normally, a fully loaded B-25 needed about 3,300 feet at sea level with zero wind to take off safely. However, the B-25s that would launch from the carrier USS *Hornet* would have about 450 feet, the front half of the carrier's flight deck, for their takeoff since the B-25s would take up the rear half.

From NAS Pensacola, Fla., Navy Lt. Henry L. Miller, who had never seen a B-25, much less flown one, arrived crews at Field 3 to provide a ranking order, based on their performance. By March 24, all of the crews could lift a fully loaded B-25 off the ground with a speed of 55 to 60 mph with full flaps in less than 500 feet without stalling. At the start of this training, the average takeoff distance was 800 feet, but by the end the shortest takeoff roll was 287 feet.

In 1980s interviews, several raiders made comments such as, the fields were "away from prying eyes," "close to Eglin," and "out in the boondocks." The remoteness of the auxiliary fields and the early morning risings made it difficult, if not impossible, for the raiders to remember the specific fields where they trained.

Raiders at Eglin

a hazardous top secret mission. Since the entire group volunteered, the bomb squadron commanders, Capt.Edward J. York, Capt. Al Rutherford, and Capt. Karl Baumeister, selected 24 crews (80 men) and 60 enlisted personnel (maintainers, armorers, and other specialists) from the group for the "Special Project."

By Feb. 28, the selected crews and enlisted men had arrived at Eglin Field near Fort Walton. In 1942, the Eglin military reservation consisted of Eglin main, seven auxiliary fields, and several ranges for bombing and gunnery training and weapons testing in the Choctawhatchee National Forest. The airfields in the forest, the absence of large cities (in early 1942, Okaloosa County only had about 12,900 inhabitants, and the largest town, Crestview, north of Fort Walton, had only 2.900 inhabitants), and the proximity of the Gulf of Mexico for overwater navigation training made Eglin Field perfect for the required training.

During the first two days of March, the crews flew around the Eglin reservation to locate the auxiliary fields. Doolittle arrived on March 3 and provided them with a few additional details about the mission and the training, specifically emphasizing their top secret nature. By the end of the training at Eglin, the raiders had figured out that they would be taking off from an aircraft carrier to train Doolittle's crews on the short takeoffs.

By the end of the first week, the crews began the short takeoff landing training, with their day normally beginning at 7 a.m. and often ending at 10 p.m. Early each morning, they checked their aircraft at Eglin main, and the pilots and navigators received a separate briefing. The pilots then told their navigators what was on the day's schedule: short takeoff, bombing, or gunnery training at one of the auxiliary fields or navigation training over the Gulf of Mexico.

For the short takeoff training, white lines, simulating a carrier flight deck, were painted onto the runways of several auxiliary fields. Flags were placed at the 250-foot markers and at 50-foot intervals from 400 to 700 feet to help the crews judge their takeoff distances. The pilots started out with a light aircraft, weighing 27,000 pounds, and tested combinations of takeoff speed, application of brakes, flap positions, and throttle positions to find the right combination to achieve a takeoff in less than 350 feet without stalling.

As this training progressed, the pilots worked up to a full load and recorded the exact distance from start to takeoff, wind velocity, and load condition. During the training, Doolittle and Miller evaluated the short takeoff performance of the 24

NOT HURLBURT

Little definitive evidence exists, but it appears the raiders trained at Auxiliary Field 1 (later Wagner Field) and at Auxiliary Field 3 (later Duke Field). The 1944 Master Plan for Eglin Field specifically mentions Field 1 as a training field. History of the Amy Air Forces Proving Ground Command, Part 3, Gunnery Training 1935-1944, mentioned that the raiders trained at Field 3. Several raiders remembered training on a field north of Eglin toward Crestview-Field 3 is about 15 miles north of Eglin main, approximately halfway between Valparaiso and Crestview. On March 23, an aircraft flown by Lt. James Bates stalled, causing the aircraft to crash just after taking off from Field 3. The raiders probably used other auxiliary fields to practice the short takeoffs.

Using photographs of the short takeoffs as evidence, some believe that the raiders trained at Field 4, Peel Field. However, those pictures are not originals from March 1942 but stills from the 1944 Metro-Goldwyn-Mayer movie "Thirty Seconds Over Tokyo" about the Doolittle Raid. The history of the AAF Proving Ground Command identifies Peel as Field 4 where the filming of the movie occurred.

Finally, some believe the raiders trained at Field 9, now Hurlburt Field. A



former Hurlburt Field base commander in the 1950s may have started this story, and several official histories and raider interviews have perpetuated this belief. After Miller retired, he mentioned that the training occurred at "an airfield near the water," possibly Santa Rosa Sound, just south of Field 9.

However, the story is a total myth, as Field 9, much less a hard-surfaced runway there, did not exist in March 1942.

The Doolittle raiders also practiced long-distance, low-level overwater navigation to enable them to fly long distances without visual or radio references or landmarks and to provide data for determining fuel consumption under actual flying conditions that the raiders expected during the actual mission. They flew from Eglin Field to Fort Myers, Fla.; then to Ellington Field, Texas; and after resting and refueling, back to Eglin Field. The first accident during the training occurred on March 10 at Ellington Field when the nose gear of Lt. Richard O. Joyce's aircraft collapsed after landing.

In addition, the raiders conducted low-altitude bombing by dropping 100-pound practice bombs on Eglin's bombing ranges and over the Gulf of Mexico from 1,500, 5,000, and 10,500 feet. They also buzzed some of the towns along the Florida Gulf Coast, producing complaints by local citizens to the Eglin base commander, Maj. George W. Mundy.

The low-altitude bombing training at Eglin demonstrated the relative inaccuracy of the Norden bombsight, the standard B-25 bombsight. Because of this inaccuracy and the possibility of the bombsight falling into Japanese hands, Doolittle had them removed from the B-25s. Capt. Charles R. Greening, the armaments officer and pilot of aircraft 11, and SSgt. Edwin V. Bain, the gunner on aircraft 14, developed a "20 cent" bombsight, dubbed the "Mark Twain," from two pieces of aluminum in the Eglin Field workshops. It proved to be highly accurate during the bombing training at Eglin Field and on the raid.

Since most of the gunners had never fired the guns on the aircraft, Doolittle allotted time for gunnery practice. They fired both the .50-caliber turret guns and the .30-caliber nose gun on the ground and in the air. The raiders set up targets at one of Eglin's auxiliary fields for ground firing and used sea slicks in the Gulf to practice strafing runs. The shortage of .50-caliber machine gun ammunition and the malfunctioning turrets limited the quantity of training the gunners received. When the raiders left Eglin on March 25, all of the guns were operating satisfactorily, but there were still problems with the turrets.

MODIFYING THE AIRCRAFT

To save weight, Doolittle, at the suggestion of two Mid-Continent Airlines mechanics earlier in February, had two lathe-turned dowels, painted black to resemble machine guns, installed in the rear of each aircraft while they were at Eglin. From Greening's postraid report, it appears these managed to deceive a few Japanese fighters that challenged the raiders during the attack.

Doolittle knew that fuel would be a critical element for a successful mission. He had additional fuel tanks installed in the aircraft. He replaced the belly turret with a fuel tank and had another tank placed in the crawlway above the bomb bay. By the time the Navy loaded the B-25s onto *Hornet* at NAS Alameda, Calif., each one could carry a total of 1,141 gallons of gasoline.

In between the short takeoff training periods, Eglin aircraft mechanics and Bendix Corp. experts replaced the original carburetors with special ones to obtain the maximum performance at the best rate of fuel consumption for low-altitude flying to maximize the B-25's range.

During the raiders' stopover at the SacramentoAirDepot (McClellan Field), Calif., a mechanic replaced the Bendix carburetors on York's aircraft with regular ones. After taking off from the Hornet on the morning of April 18, York realized that his aircraft was burning fuel at a high rate, and, after bombing Tokyo, diverted to Vladivostok in the Soviet Union.

Since the Soviet Union was not at war with Japan, the Soviet government jailed the crew and confiscated the aircraft. After 13 months of internment that involved several moves to a small town 20 miles from the Iranian border, York's crew managed to escape into northern Iran.

Eglin workmen made other modifications to the aircraft. They added deicing boots to the leading edges of the wings and installed cameras in all aircraft to take pictures of the actual bombing, but none of the cameras survived the raid.

Many of the pilots had nose art painted on their aircraft after 1st Lt. Ted W. Lawson, the pilot for aircraft 7, had a caricature of Donald Duck with a headset and crossed crutches painted on his bomber. Finally, since the Army crews would be on a Navy ship for several weeks, Miller taught them Navy terms, courtesy, and etiquette, such as saluting the national ensign on a ship's stern when boarding and leaving a ship.

As the project leader, Doolittle believed he should get checked out on the B-25 and complete the short takeoff training—and he also wanted to lead the mission himself. When Capt. Vernon L. Stinzi fell ill with an ulcer, Doolittle trained with Stinzi's crew to complete the short takeoff training. As the training and aircraft modification progressed at Eglin, Doolittle managed to get Arnold to allow him to command the actual mission.



The crews and enlisted support personnel first stayed in barracks on Eglin. Doolittle allowed the married officers to have their wives with them, and they initially lived in a hotel in Fort Walton, 12 miles away. After a few days, though, Doolittle arranged for them to stay at the Valparaiso Inn, a hotel built in 1924 that overlooked the Choctawhatchee Bay, near Eglin's main gate. During their training, the pilots often buzzed the Valparaiso Inn on their way back to the airfield.

Doolittle, the single officers, and the enlisted men stayed in base quarters, but they had little leisure time at the end of their long days. Still, Miller was appalled by his Eglin quarters and later called them "lousy" and not "appealing as far as living quarters are concerned."

Mundy, the Eglin Field commander, became concerned over numerous flight safety violations. He received many phone calls from the local inhabitants about the B-25s' low-level bombing practices, flying under bridges, and buzzing the beaches and other areas around the county. After the raiders took him for a low-altitude flight over the Gulf of Mexico and up and down the Florida Gulf Coast, he forgot about the complaints and the safety violations and wanted more flights.

Doolittle had restricted the unaccompanied members to Eglin Field. Still, some managed to get off base and visited several local establishments, such as the Magnolia Club in Fort Walton, Bacon's by the Sea in Mary Esther, a small town several miles west of Fort Walton along Highway 98, and the Silver Bar and Cafe just outside of Eglin's main gate alongside what was then Florida Highway 20.

While the Doolittle Raiders trained at Eglin Field, Navy Capt. Donald B. Duncan worked with Adm. Chester W. Nimitz, commander in chief of the Pacific Fleet, in Honolulu to create a task force around USS *Enterprise* to protect the *Hornet's* task force. At the end of the third week of March, Duncan wired King, who had become the Chief of Naval Operations in Washington, D.C., that the *Enterprise* task group would soon be completed and provided the code phrase, "Tell Jimmy to get on his horse," the signal for Doolittle to depart Eglin Field for NAS Alameda in California, for loading onto *Hornet*.

King then called Arnold with this news. In turn, Arnold notified Doolittle. The crews at Eglin were awakened at 3 a.m. to move out.

RAISING MORALE

Doolittle told them one more time what he'd been harping on all along. "Don't tell anyone what we were doing here at Eglin," he reminded his team. Even if you think you've guessed what our mission is, he said, keep in mind that "the lives of your buddies and a lot of other people depend on you keeping everything you saw and did here a secret."

Doolittle dismissed everyone but the 22 crews chosen to fly out to Mc-Clellan Field for a final inspection and modifications. The crews stopped at McClellan and arrived at NAS Alameda by March 30.

Hornet with 16 B-25s left Alameda on April 1, 1942, for its rendezvous with the *Enterprise* task group and history.

Fog, bad weather, and the considerable time for the aircraft modifications at Eglin had significantly reduced the training time, but in "three weeks, ships and crews were safely operational, although additional training of the crews and work on the ships would have improved their efficiency," wrote Doolittle in his afteraction report to Arnold in June 1942. Far left: Lt. Col. Jimmy Doolittle (center) confers with his crew near Hangar 68 at Eglin. They are (l-r) SSgt. Paul Leonard, Lt. Henry Potter, Lt. Richard Cole, and SSgt. Fred Braemer. Center: Some of the raider B-25s on the ramp at Eglin. Left: An aerial view of Wagner Field.

As it turned out, the training and aircraft modifications at Eglin Field in those brief three weeks in March 1942 were sufficient. The raid "lifted the gloom that had descended upon America and her Pacific allies," retired Col. Carroll V. Glines wrote in *The Doolittle Raid: America's Daring First Strike Against Japan.* "The bomb damage that resulted was not great, compared with that inflicted late in the war, but the raid had some far-reaching effects."

Although the actual raid had virtually no adverse tactical impact on Japan, it significantly raised American morale after four months of glum news and noticeably affected the sense of security of the Japanese people who, until April 18, had not suffered a direct enemy attack on their home islands. Furthermore, the raid caused the Japanese military leaders to pull back fighter squadrons for home defense.

More importantly, Japanese military leaders redirected their strategy from expansion into South Asia and the Indian Ocean to the expansion of their defense perimeter east toward Hawaii. They also began planning a major operation to destroy the American carriers they had missed at Pearl Harbor. This operation ultimately produced a resounding American victory at the battle of Midway, June 3-6, 1942—the turning point in the Pacific War.

On April 15, 2007, close to the 65th anniversary of the Doolittle Raid, Brig. Gen. David W. Eidsaune, the commander of the Air Armament Center at Eglin, dedicated a historical marker to the Doolittle Raiders, commemorating their training at Eglin Field. Subsequently, the base placed the marker near the entrance to Wagner Field.

On May 23, 2014, the Doolittle Raiders were honored with the Congressional Gold Medal. On Sept. 12, 2014, the Air Force Association named its national headquarters building the Doolittle Building, after AFA's first President. Today, only three raiders are living: Richard E. Cole, Robert L. Hite, and David J. Thatcher.

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