In 1941, Lt. Gen. Walter Short’s, CG, Hawaiian Department, request to construct a pursuit field on a plateau four miles northeast of Schofield Barrack was turned down by the War Department, with the insistence that the base be located on the northern tip of Oahu at Kahuku Point. Because the site was being used by the Navy as a bombing range, no further action was taken until December. Portions had been occupied by the Radio Corporation of America (RCA) and predecessor “Marconi Wireless” in 1914 as the site for a transmitter/receiver radio station and antenna farm. The old RCA administration building was converted to air base headquarters for the duration.

The military reservation was named the “Kahuku Airfield Military Reservation” also known as “Kahuku Air Base.” General coordinates: N21.707246° - W157.972208°.

Construction of the first of two runways was preceded by the creation of a supervising entity known as Field Area Thirteen established by Lt. Col. Theodore Wyman, Jr., District Engineer, Army Corps of Engineers, on November 25, 1941, by Order Number 101. The engineers of the newly created field area, which occupied the old RCA wireless transmitter building, were responsible for construction of two additional north shore airfields at Haleiwa and Kawaihapai (Mokuleia).

Mokuleia AAF was renamed Dillingham AFB in 1948 in honor of Capt. Henry Gaylord Dillingham of the 411th Bombardment Squadron, 502nd Bombardment Group killed in action over Kawasaki, Japan, during a B-29 bombing raid on July 25, 1945. Captain Dillingham was the grandson of Benjamin Dillingham, founder of the Oahu Railway and Land Company (OR&L Co.), the narrow gauge (3’ 0”) common carrier that ran from the port of Honolulu to Kahuku and the sugar mill.

Construction of the airfield began on December 10, 1941, by a civilian conglomerate known as “Hawaiian Constructors” formed in Washington, D.C., on December 20, 1940. Lt. Colonel Wyman, with the approval of the Under Secretary of War, Chief Engineer and the National Council of Defense, signed a “cost plus fee” contract to build fortifications, aircraft warning stations, ammunition storage facilities, and other defense projects in the Hawaiian Islands including airfields.

Lt. Gen. Delos C. Emmons, CG, Hawaiian Department and his engineer, Col. Albert K.B. Lyman met with Maj. Gen. Clarence L. Tinker, CG 7th Air Force in March 1942 to discuss airfield construction in the Hawaiian Islands. It was decided to speed up construction of runways and housing at Kahuku due to the field’s importance.

Interestingly, after all this activity, the U.S. Government waited until December 31, 1945, after the end of hostilities with Japan, to petition for condemnation some 1,200 acres at Kahuku Point owned by the James Campbell Estate.
Command Structure

Kahuku AAB was under the overall command of the Hawaiian Air Force (HAF) headquartered at Hickam AAF, Oahu. The HAF was activated by General Order 37, October 28, 1940, as the first Air Force outside the Continental U.S. (Maj. Gen. Frederick L. Martin, CG) with headquarters at Ft. Shafter, which moved to Hickam Field on July 14, 1941.8

The HAF was redesignated as the 7th Air Force on February 5, 1942, (Maj. Gen. Clarence L. Tinker, CG); assigned to U.S. Army Air Forces, Pacific Ocean Area (USAAFPOA) on August 1, 1944. On August 1, 1944, Maj. Gen. Millard F. Harmon was appointed CG USAFPOA with headquarters at Hickam AFB. Harmon reported to Lt. Gen. Robert C. Richardson, Jr., CG, U.S. Army Forces, Pacific Ocean Area headquartered at Fort Shafter, Territory of Hawaii, for logistics and administration and to Adm. Chester W. Nimitz, commander in chief Pacific Ocean Area (CINCPOA) for operations except those of the 20th Air Force. General Harmon was appointed deputy commander of the 20th Air Force, and reported directly to Gen. Henry H. Arnold, Chief of the Army Air Forces in matters affecting the 20th Air Force.9

Air Base Construction Commenced

The project at Kahuku was authorized by Work Order No. 414-eng-602 (District Engineer, ACE). Early attempts at building a single runway on the limestone, lithified dunes, sand dunes and wetlands at Kahuku Point by Hawaiian Constructors were foiled by poor drainage, which necessitated that the runway being relocated three times before a suitable location was found. To mitigate drainage problems at the location, a system of canals, subterranean drain pipes and culverts were built.10

Col. Albert K.B. Lyman, Department Engineer who assumed command of all Army engineer units in the Hawaiian Department on December 7, 1941, severely curtailed ongoing projects of Hawaiian Constructors on May 1942. Shortly thereafter, the first jobs were transferred to the government due to many disputes with the civilian contractors. All work performed by Hawaiian Constructors ceased by June 21, 1942. The contract between the government and Hawaiian Constructors was terminated at the government’s convenience by Brig. Gen. Hans Kramer, Department Engineer on January 31, 1943.11
Further construction was carried out by the 1st Battalion, 370th Engineer Special Service Regiment, an American Nisei outfit based at Schofield Barracks. The unit was redesignated on March 21, 1944, as 1399th Engineer Construction Battalion (Nisei). The 805th Engineer Aviation Battalion that arrived on Oahu from Albrook Field, Canal Zone, on December 20, 1943, was assigned to lengthen and widen the landing strip at Kahuku. The runway was being modified to accommodate B-29s. The air base had been planned as a stopover point for the planes on their way to the Western Pacific, though the author is not aware of transient B-29s at Kahuku. Hickam AAF accommodated the bombers instead.

Upon the arrival of the 1st Battalion, 370th Engineers at Kahuku, the single runway was covered with pierced steel planking (Marston Mat). The landing field (NE-SW) was eventually paved with asphaltic concrete to some 6,500 feet in length with compacted coral shoulders 100 feet on either side of its 200 foot width. A second runway was built (NW-SE) after August 1942 with the same paving material and nearly identical measurements.

The length and width of the runways were a clear indication they were designed to accommodate heavy bombers, i.e., B-17 and B-24, as well as cargo transports ranging from C-47 to C-54. The absence of hangers attested to the airfield being in operation for the duration of the war.

Revetments

Some 32 earthen revetments were constructed between both runways to provided minimal protection of aircraft and ground maintenance crews during any aerial or sea bombardment. The revetments were sprayed with gunite to prevent erosion. Construction of these was started by Hawaiian Constructors and completed by the 370th Engineer Regiment.

The typical B-17 revetment was trapezoidal in cross section requiring 5,000 cubic yards of earth for a traverse 14 feet high.

Buildings and Utilities

The usual theater of operations support buildings were constructed, i.e., control tower, barracks for enlisted men, officer’s quarters, mess halls, chapel, dispensaries, cold storage, two fire stations, paint shop, Post Exchange, radio station, telephone exchange, etc., as indicated on the 1943 Engineer map of the base. Air Base HQ, operations and CO’s quarters occupied existing structures vacated by RCA.

Civil engineer projects included a network of roads; utilities included a water distribution system that included distribution mains and several pump houses; a sewer system including lines and pump houses were also built. Commercial power was provided by the local electric company, and emergency power generators were supplied in the event of a power blackout.

Communications System

Two types of landline communications networks served the base, tactical and post, both routed through a splinterproof concrete “blockhouse” located on the post. The telephone exchange, as it was known, was built of reinforced concrete with walls that were 12 inches minimum in thickness, protected by a one-inch thick steel-plated door and shutters of the same thickness. A cable vault four-feet wide by five-feet high as long as the width of the structure was situated beneath the floor. A
latrine and emergency power generator were included in its construction.\textsuperscript{19}

The telephone exchange was connected to subterranean “armored” communications cable from nearby Signal Corps Hut “K” that in turn was connected to an island-wide system known as the “Command and Fire Control Project” initiated by the Hawaiian Department as part of the prewar Hawaiian Defense Project.\textsuperscript{20} The old telephone exchange structure is located at: N21.700050° - W157.971514°.

Two very high frequency (VHF) radio stations were constructed between December 25, 1942, and August 12, 1943, under the authority of Engineer Work Order No. 60.0.\textsuperscript{21}

**Fuel Storage**

The base was equipped with the following fuel storage tanks: 400,000 gallons of aviation gasoline, 25,000 gallons of motor gasoline, 25,000 gallons of diesel fuel, one each 5,200 and 5,000 gallons of white gasoline. Fuel was supplied by the following means: seven fuel dispensers, four overhead fuel dispenser stands, and three remote fuel boxes, distribution pipe lines and pumps.\textsuperscript{22}

**Fire Stations**

Two fire stations provided fire protection and crash rescue services for the base.

**Base Commissioned**

Kahuku Army Air Base (AAB) was activated on June 26, 1942, and became an important training facility for pilots assigned to Wheeler AAF situated on the Leilehua or Schofield Plain of central Oahu adjacent to the large Army post of Schofield Barracks. The runways were ideal for training flights as they possessed good approaches, excellent length, and fine takeoff clearance.\textsuperscript{23}

The base accommodated various air groups and squadrons that flew an assortment of aircraft, i.e., B-24, B-25, F-7, P-47, and C-47, which flew out of Kahuku for various periods of time, either pending deployment to the Central Pacific war zone, or rotated back to Oahu for reassignment, or deactivation.

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The following were the first units stationed at the air base in July 1942:

313th Air Base Group
339th Air Base Squadron/Headquarters and Air Base Squadron
313th Material Squadron/Service Squadron
182nd and 563rd Quartermaster Platoons
6th Fighter squadron, 18th Fighter Group\textsuperscript{*}

\textsuperscript{*} The 6th Fighter Squadron was organized on March 13, 1917, as 6th Aero Squadron; on May 15, 1942, it was classified as a fighter squadron operating Douglas twin-engine P-70s, a variant of the A-20 Havoc equipped with SCR-540 radar and an awesome array of armament that consisted of four 20 millimeter forward firing canon located in a ventral bomb bay, the aircraft was soon used in the night-fighter role. P-70s only saw action in the Pacific during WWII. The 6th was assigned to Kahuku from August 30 to November 17, 1942, before being relocated to Kipapa AAF on Oahu.\textsuperscript{24}

**Tactical air units based at Kahuku AAB**

Initial heavy bomber squadrons to touch down at Kahuku included:

431st Bombardment Squadron, 11th Bombardment Group. Squadron assigned to Hickam AAF from October 9, 1939, to July 24, 1942, operated B-17 aircraft. Squadron aircraft were on temporary duty at Kahuku AAB prior to leaving for Viti Levu, Fiji Islands.

319th Bombardment Squadron, 90th Bombardment Group flew B-24s while at Kahuku from September 12, 1942, to November 4, 1942, when it was reassigned to Iron Range, Australia. Squadron constituted on April 15, 1942, and activated on June 28, 1942, at Key Field, Mississippi.

372nd Bombardment Squadron, 307th Bombardment Group flew B-24s out of Kahuku from November 2 to December 22-24, 1942, before being deployed to Midway Island. Squadron constituted on January 28, 1942, and activated on April 15,

38th Bombardment Squadron, 30th Bombardment Group operated B-24s during its brief stay at Kahuku from October 20 to November 12, 1943, before heading to Nanumea. The squadron was constituted on November 20, 1940, and activated on January 15, 1941, at March Field, Calif., flying the YB-17 and B-18s.

Other flying units passed through Kahuku from March 1944 to November 1945, which included the following squadrons and aircraft:

- 42nd Bombardment Squadron (Heavy), B-24; 316th Troop Carrier Squadron, C-47; 86th Combat Mapping Squadron, F-7 version of the B-24;
- 43rd Reconnaissance Squadron, F-7; 27th Bombardment Squadron (Heavy), B-24; 311th Troop Carrier Squadron, C-47; 466th, 467th and 468th Fighter Squadrons, 508th Fighter Group; 47; 16th Tow Target Squadron;
- 819th Bombardment Squadron (Heavy), B-24,
38th Bombardment Squadron (Heavy); 392nd Bombardment Squadron (Heavy), B-24, and others not mentioned previously.

* The 86th Combat Mapping Squadron evolved from the 86th Aero Squadron formed on August 17, 1917, it was redesignated on November 13, 1943, from the 86th Reconnaissance Squadron (Bomber), and on April 14, 1944, flew its first photographic mission over enemy territory. The squadron arrived at Kahuku AAB on November 24, 1944, with its F-7 variant of the B-24.

** Upon its arrival at Kahuku, the 508th Fighter Group, and its three squadrons of P-47s, was assigned the aerial defense of Oahu and replacement training until November 25, 1945, when the 466th, 467th and 468th were inactivated at Bellows AAB.

*** The 16th Tow Target Squadron operated B-25s out of Kahuku from April 11 to November 1945, when all aircraft were turned into Wheeler AAF for disposal. The squadron’s primary mission at Kahuku was to furnish planes and crews for escort missions to escort fighter aircraft being ferried to forward areas; during October 1945, squadron aircraft towed aerial targets for the P-47s of the 508th Fighter Group. Personnel moved to Wheeler AAF on December 20, 1945, for deactivation.

The following were among the service units assigned to Kahuku AAB:

Air Service Groups: 13th, 57th, 386th, 489th
Airdrome Squadrons: 63rd, 87th, 88th
Military Police Company: 1383rd (Aviation)
Quartermaster Companies: 3rd Provisional Truck, 4th Provisional Truck, 1262nd, 1916th Truck, 2272nd Truck, 2273rd Truck

The squadron underwent another redesignation to the 43rd Reconnaissance Squadron (Long Range, Photographic) on June 16, 1945. While stationed at Kahuku, a detachment flew out of Puerto Princesca, Palawan. The 43rd was reassigned to Wheeler AAB on February 22, 1946, where it was inactivated.

Four sailors standing in front of signpost indicating location to barracks at Kahuku. (Photo from author’s collection)

Troops negotiate a makeshift pontoon bridge at the Unit Jungle Training Center, Kahana Bay, Oahu. (Photo from NARA No. 342-FH-3A41124-60513AC, courtesy footnote™)
386th Air Service Group’s Reminiscences

The 386th Air Service Group arrived at Honolulu Harbor from Seattle, from Ft. Lawton, Wash., aboard the Liberty ship John W. Weeks on June 17, 1944. The group spent a few weeks in preparation for deployment overseas. Upon debarking, they were transported to Kahuku AAB aboard an OR&L Co. steam locomotive for a six hour journey that was only 40 miles in length.30

Living quarters at the base consisted of huts, barracks and tents, surrounded with dirt, sand and mud. Within a couple days, the group’s members had settled in their new surroundings and shops and sections had been set up.

By July 1944, the group had been restructured and consisted of: Headquarters and Base Service Squadron, 490th Air Engineering Squadron and the 611th Air Material Squadrons, which were larger in troop strength than prior to the reconstructing. Colonel Cook was the group CO assisted by Captain Mills, the 490th was under Captain Sperry, and the 611th was commanded by Captain Head.

Colonel French came aboard in September 1944, relieving Colonel Cook who assumed the executive officer’s position.

In the final days of September, the 386th ASG underwent jungle training at the “Unit Jungle Training Center” located at Kahana Bay, down the coast from Kahuku. The group had the distinction of being the first USAAF troops to enroll in the rigid course that included handling a variety of weapons, jungle and swamp survival.

While troops of the 386th were in the last phase of jungle training, the unit was assigned a change of station to Bellows AAB located some 28 air miles SSE of Kahuku AAB in October 1944.

Area Defenses

Defenses of the Kahuku area included antiaircraft automatic weapons manned by the 369th Coast Artillery (AA) Regiment (June 1942), Battery A, 840th AA Automatic Weapons Battalion (March 1945); two coast artillery batteries (Batteries Kahuku and Ranch) including three position finding or base end stations. Also a searchlight position that consisted of two 60-inch searchlights mounted on steel towers was erected at Kahuku Pt., along with Antiaircraft Intelligence Service Post No. 5.31

One antiaircraft automatic weapon emplacement with two support structures thought to be an ammunition magazine and a generator shed are found at general coordinates: N21.696074° - 157.970668°. The gun emplacement is similar to three examined by the author in 2009 at Kualoa Ranch, site of the former Kualoa AAF.

An assortment of infantry units defended the locality that included static defense works, e.g., machine gun pillboxes and barbed wire. A partial list included the following units:
Detachments of the 1st Battalion, 27th Infantry Regiment, 24th Infantry Division provided beach patrols from December 7, 1941, to July 30, 1943, when the division departed for Australia.

27th Infantry Division’s 165th Infantry Regiment; set up a mock hull of a transport ship and other training aids at the air base in preparation for the assault of Butaritari Island, Makin Atoll, accomplished on November 20, 1943.

296th Infantry Regiment, a federalized Puerto Rico National Guard outfit arrived at Kahuku on January 25, 1944, to March 1946 and manned area defenses.

Radar Stations

Early warning radar in the vicinity included the Opana Radar Station (call sign: 6QN changed to DL9 on July 1, 1943), 2.18 miles west of the air base initially equipped with an SCR-270 transportable radar that detected flights of Imperial Japanese Navy aircraft heading for Pearl Harbor and other Oahu military bases on December 7, 1941. Sometime in 1942, the new SCR-271 fixed radar was in operation at Opana Pt. with its operations rooms and power generators contained in tunnels some 40 feet below the surface. The original SCR-270 radar unit was relocated 1.80 miles SSE of the main entrance to Kahuku AAB at “Monument Hill” (call sign: 6JI).32

A Ground Control Intercept (GCI) radar station was built across the highway (seven-tenths mile) from the main entrance atop Punamano Hill, later replaced by AN/CPS-1 search radar. Typical WWII GCI radar sets in the Hawaiian Islands employed the SCR-588, Canadian version of the British “Chain Home Low” radar.33

The radar stations were manned by Co. E, Signal Aircraft Warning Battalion (Special) commanded by Captain Hutchins, billeted at Kahuku AAB.

Signal Corps Radio Station

Kahuku Pt. was an ideal location for radio transmitter stations as evidenced by Marconi Wireless establishing a transmitter there, followed by RCA assuming control of the facilities. Tests conducted by the Army Signal Corps revealed that one-eighth of the power was needed to transmit signals to Washington, D.C., compared to other locations on the island. Consequently, a tunneled radio station was built on the air base.34

The radio station was housed in an 1,130-foot long by 20-feet wide reinforced concrete tunnel that ranged from 65 to 95 feet below the ground. It was self-contained and included air conditioning supplied by a 700 kW generator fueled by a 23,000 gallon capacity fuel tank. Transmitter and receiver cables were routed via shafts that were angled 45° to antennae posts.

Post WWII

The large Tsunami that hit the Hawaiian Islands on April 1, 1946, caused extensive damage to the air base, the NE – SW runway was within 100 yards of the shoreline and the NW – SE runway, 200 yards.

“The wave washed over the protecting sand dunes, rushing inland in some places to a half mile, smashing buildings, uprooting parking areas, and bringing tons of sand and debris onto the runways. Army personnel verbally informed the Estate that their previous fear that the field was too close to the water was amply borne out.” 35

Flight operations ceased, and the property was returned to its owners, the trustees of the James Campbell Estate sometime between June 12, 1947, and March 1948.

Military historian David Trojan wrote that there were two other emergency fields nearby that closed down at the Kahuku Golf Course and Kahuku Village. Both sites appeared on vintage topographic maps and were probably surfaced with grass.36

The formation of the U.S. Air Force on September 18, 1947, saw the continued occupation of a base camp located on 10 acres of the military reservation. The camp housed Det. B, 614th Aircraft Control and Warning Squadron which operated a
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The Society has recently started development of a series of photo CDs. These CDs contain high-resolution scans of negative, slides and prints from the AAHS Image Library. The resolution of these scanned images is sufficient to make an 8”x10” photographic quality print. Each CD focuses on a particular aspect of American aviation history - be that a particular manufacturer, type or class of aircraft.

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1201 Boeing Propeller-Driven Commercial Transports
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John D. Bennett is a retired law enforcement officer with the City of Honolulu residing in Kaneohe, Oahu, Hawaii. He is married with one child and two grandchildren. Bennett served in the Air Force from 1957 to 1961 as a radar operator in Washington State and British Columbia, Canada. He recently joined the AAHS, and has been a member of the Coast Defense Study Group for 10 years and authored more than 30 articles published in the quarterly journal, mainly reporting on Hawaii’s coast artillery history, and WWII garrisons of U.S. Pacific Island possessions, which included airfields.