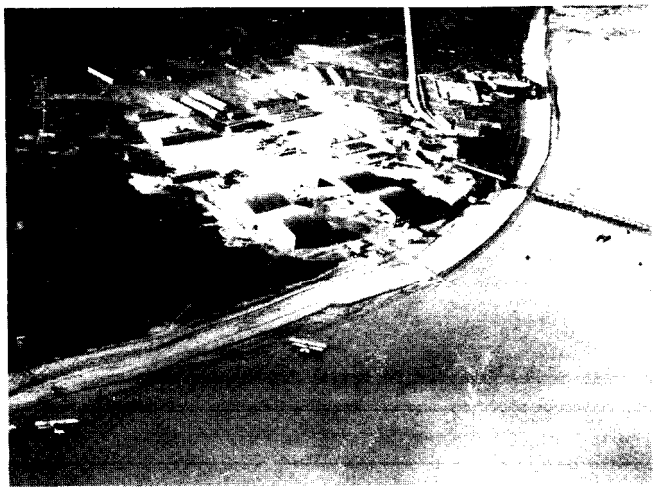
AT THE TURN OF THE YEAR

The growth was accelerating and Naval Aviation was gaining stature and recognition. Training programs were adjusted to war needs, new aircraft were delivered, more stations were put into operation and the coverage of war patrols was extended.



NAS FROMENTINE, FRANCE; CONSTRUCTION BEGAN IN FEBRUARY

JANUARY 1918

1—The Experimental and Test Department at Pensacola was transferred to the air station at Hampton Roads to overcome difficulties arising from the remoteness of Pensacola from principal manufacturing and industrial plants in the northern states.

1—NAS DUNKIRK, France, was commissioned with Lt. Godfrey deC. Chevalier in command.

7—Progress in building H-16 flying boats at the Naval Aircraft Factory was marked by the start of planking the first hull.

19—NAS ANACOSTIA was established to provide a base for short test flights, to provide housing and repair services for seaplanes on test flights from Hampton Roads and Langley Field, and to display new seaplane types for study by men working in Navy Department offices concerned with their construction and improvement.

21—The First Marine Aeronautic Company, Capt. F. T. Evans commanding, arrived at Naval Base 13, Ponta Delgada in the Azores, to establish a base from which it would fly antisubmarine patrols. It was the first American aviation unit completely trained and equipped to be sent overseas.

24—Specifications and blueprints drawn up by the Bureau of Construction and Repair for the Davis gun carrier were received at the Naval Aircraft Factory. Later designated N-1, this was the first airplane designed and built by the Navy for the attack role.

25—The Supervisor, Naval Reserve Flying Corps, requested that Dr. Alexander McAdie, Director of Blue Hill Observatory, Harvard University, be enrolled as a lieutenant commander in the Naval Reserve and assigned to the Aviation Office in CNO to direct the establishment of a Naval Aerological Organization.

28—A group of 50 enlisted men from Pensacola reported to the Naval Aircraft Factory for training in aircraft repair prior to assignment overseas.

During January, NAS CHATHAM, Mass., was commissioned with Lt. E. H. McKitterick in command.

FEBRUARY

1—The first H-16 flying boat assigned to operational service was delivered to the air station at Hampton Roads. A twin-engine tractor biplane built by Curtiss and the Naval Aircraft Factory, the H-16 was used on antisubmarine patrol from stations on the East Coast and in Europe and for that purpose was equipped to carry two 230-pound bombs and five Lewis machine guns, one forward, two aft and two amidships.

3—Aerial gunnery training for prospective Naval Aviators and enlisted men began under RCAF instructors at the Army field at Camp Taliaferro, Fort Worth, Texas. Although the program was of short duration, 38 officers and 80 enlisted men completed the course before its closing on 16 March 1918.

8—A change in national aircraft insignia was promulgated to the Navy. It discarded the white star design and replaced it with concentric circles of red and blue around white and reversed the order of the red, white and blue vertical bands on the rudder, placing the red nearest the rudder post.

10—The Marine Aeronautic Detachment, Capt. Roy S. Geiger commanding, transferred from Philadelphia to Miami to set up a Marine Flying Field for landplane training adjacent to the naval air station.

13—Lt. G. C. Dichman took command of the air station at Brest which served as a base for seaplane and kite balloon operations and an assembly plant for aircraft shipped overseas. This is comsidered the beginning of NAS BREST.

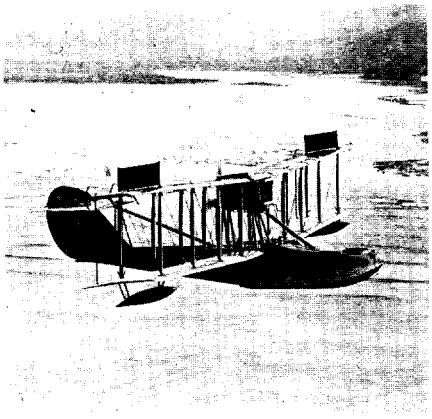
21—NAS BOLSENA was commissioned with Ens. W. B. Atwater in command. The first of two stations established in Italy, Bolsena was used primarily for training.

22—The Director of Naval Communications was requested to provide wireless transmitting and receiving equipment at five naval air stations on the Atlantic coast and at San Diego and Coco Solo to permit pilots on patrol to communicate with their bases.

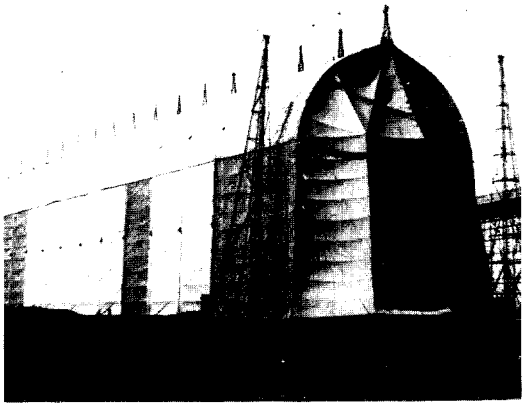
22—NAS QUEENSTOWN, an assembly and repair station serving all naval air stations in Ireland, was commissioned with LCdr. P. J. Peyton in command.

26—The Chief of Naval Operations established an aerographic equipment allowance list for air station abroad.

28—The President issued a Proclomation, effective in 30 days, prohibiting private flying over the United States,



HS-2 PATROLLED AT HOME AND ABROAD



THE CANVAS BLIMP HANGAR AT NAS PAIMBOEUF

CAPT. F. T. EVANS, USMC

its territorial waters and its possessions without a special license issued by the Joint Army and Navy Board on Aeronautic Cognizance.

MARCH

1—The dirigible station at Paimboeuf, where a number of aviation personnel had been on duty with the French since November 1917, was taken over by American forces and commissioned as a Naval Air Station, LCdr. Louis H. Maxfield in command.

3—The AT-1 (Astro Torres) blimp, acquired from the French two days before, made its first flight under American control at Paimboeuf.

4—A seaplane, piloted by Joseph Cline with F. Lovejoy as observer, started on patrol from NAS LeCroisic and, just as the plane took off, the port bomb fell into the water and exploded, also setting off the bomb under the starboard wing. The blast cut the flying boat completely in two just aft of the cockpit but neither the pilot nor the observer was injured.

6—The Bureau of Navigation established navigation instrument allowances for naval aircraft, allotting a compass, two altimeters and a clock for service airplanes; a compass, altimeter, clock and statoscope for blimps and free balloons; and an altimeter and clock for kite balloons and training planes.

6—An unmanned flying bomb was successfully launched by a falling-weight type catapult and flown for 1,000 yards at the Sperry Flying Field, Copiague, Long Island.

7—The Office of the Director of Naval Aviation was established and the status of aviation was raised from a section to a division of CNO.

9—A revised flight training program was initiated which divided the syllabus into elementary, advanced and advanced specialization courses; it designated the stations at which each would be given, and provided that, after a period of general training, all students would specialize in one of three general types of seaplanes.

14—NAS Ile Tudy, France, was commissioned with Lt. Charles E. Sugden of the Coast Guard in command.

15—Warrant Officer Ward of the Royal Navy Flying Corps arrived at the Naval Aircraft Factory to deliver plans for the F-5 flying boat that had been developed at Felixstowe, England, and which, after modification, would be used by the Factory to build the new boats.

16—The first HS flying boat assigned to service was delivered to the air station at Miami. A single engine pusher biplane built by several companies from a Curtiss design in both HS-1 and HS-2 configurations, the HS was used in coastal patrol and was the first of the American-built planes sent overseas.

18—The Receiving Ship of the Naval Air Detachment at MIT went into operation with accommodations for 300 men who would receive indoctrination and preliminary training prior to their assignment to Ground School.

19—As combat operations underlined the need for aviation intelligence officers, Commander Naval Aviation Forces, Foreign Service, defined the functions and duties performed by such officers at Royal Navy Air Stations and suggested that similar services be provided at U.S. Naval Air Stations "as may seem expedient."

19—A formation of flying boats, on long-range reconnaissance of the German coast, was attacked by German seaplanes. Ens. Stephen Potter shot down one of the attackers and was officially credited as being the first American Naval Aviator to shoot down an enemy seaplane.

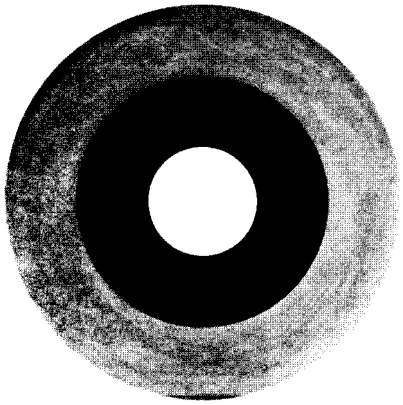
21—The HA seaplane, or Dunkirk fighter, made its first flight at Port Washington, Long Island, with Curtiss test pilot Roland Rohlfs at the controls and Capt. B. L. Smith, USMC, occupying the second seat.

25—Ens. John F. McNamara, flying out of RNAS Portland, England, made the first attack on a German U-boat by a U.S. Naval Aviator. His attack, although successful enough to warrant the commendation of Admiral Sims, was later evaluated as "possibly damaged."

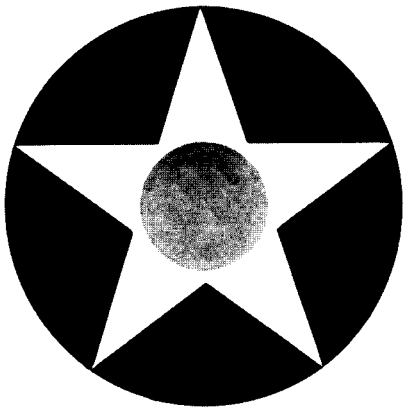
27—Only 228 days after ground was broken for the Naval Aircraft Factory, its first product, an H-16, made its first flight. A few days later, this plane and another were shipped overseas.

30—The Curtiss 18-T or Kirkham triplane fighter was ordered from the Curtiss Engineering Corporation. This single-engine, two-seat landplane was fitted with two synchronized and two flexible guns.

30—A requirement was established for weekly reports from commanding officers of all air stations in the U.S. of weather conditions experienced in flight operations.



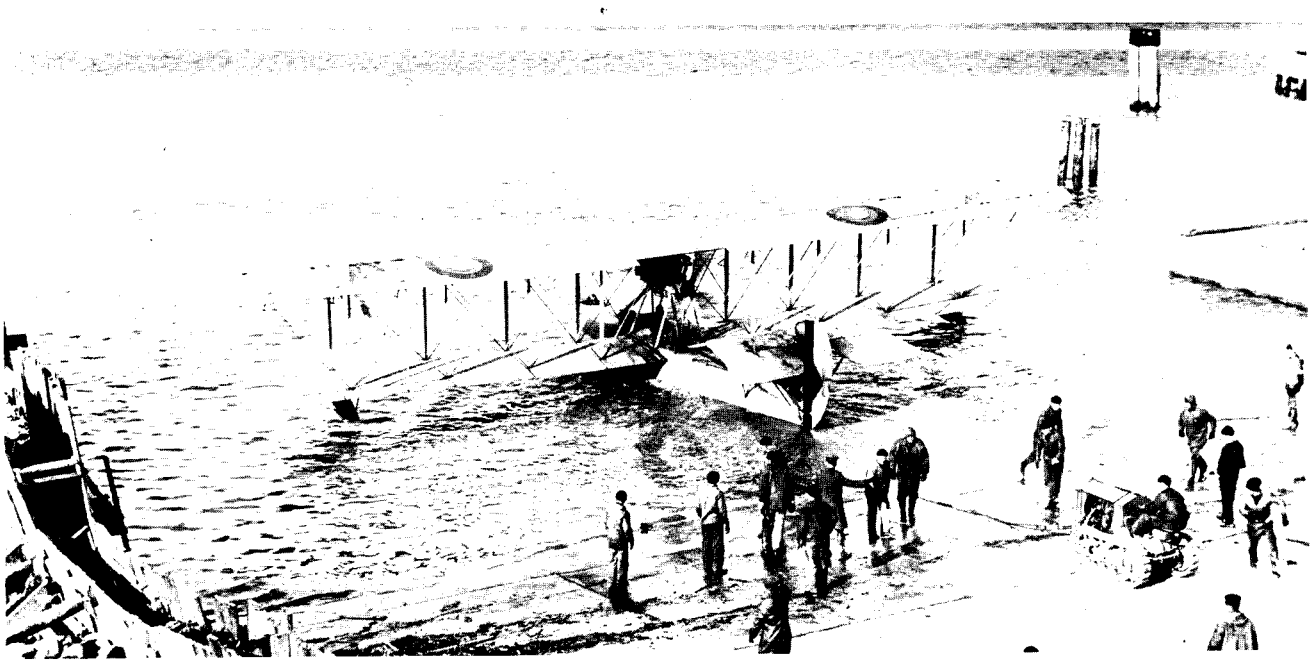
NATIONAL MARKINGS IN WW I

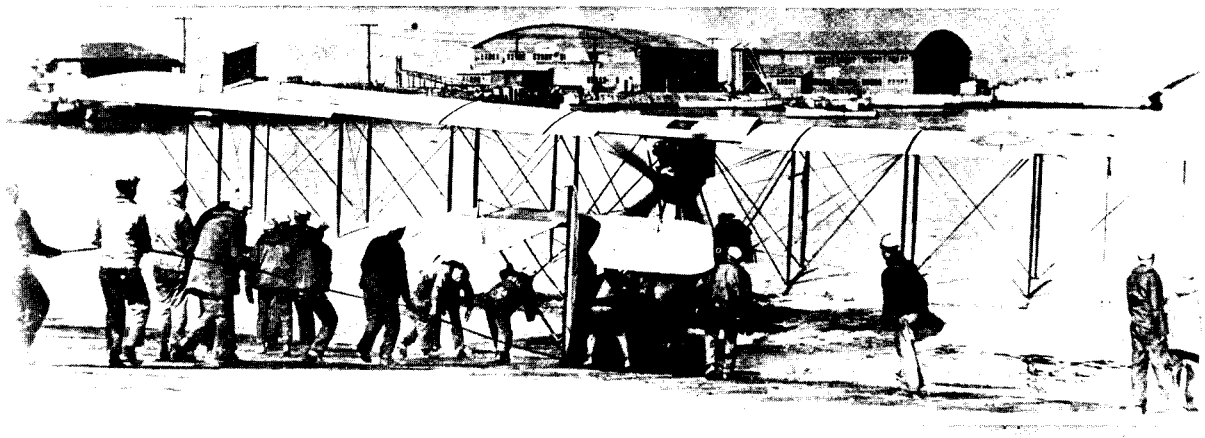


May 19, 1917, the first United States national insignia for aircraft was described in General Order 299 and ordered placed on all Navy aircraft. The design called for a red disc within a five-pointed white star on a blue circular field. Rudders were marked with vertical red, white and blue bands with the blue band forward, nearest the rudder post. The color shades were the same as those of the American flag.

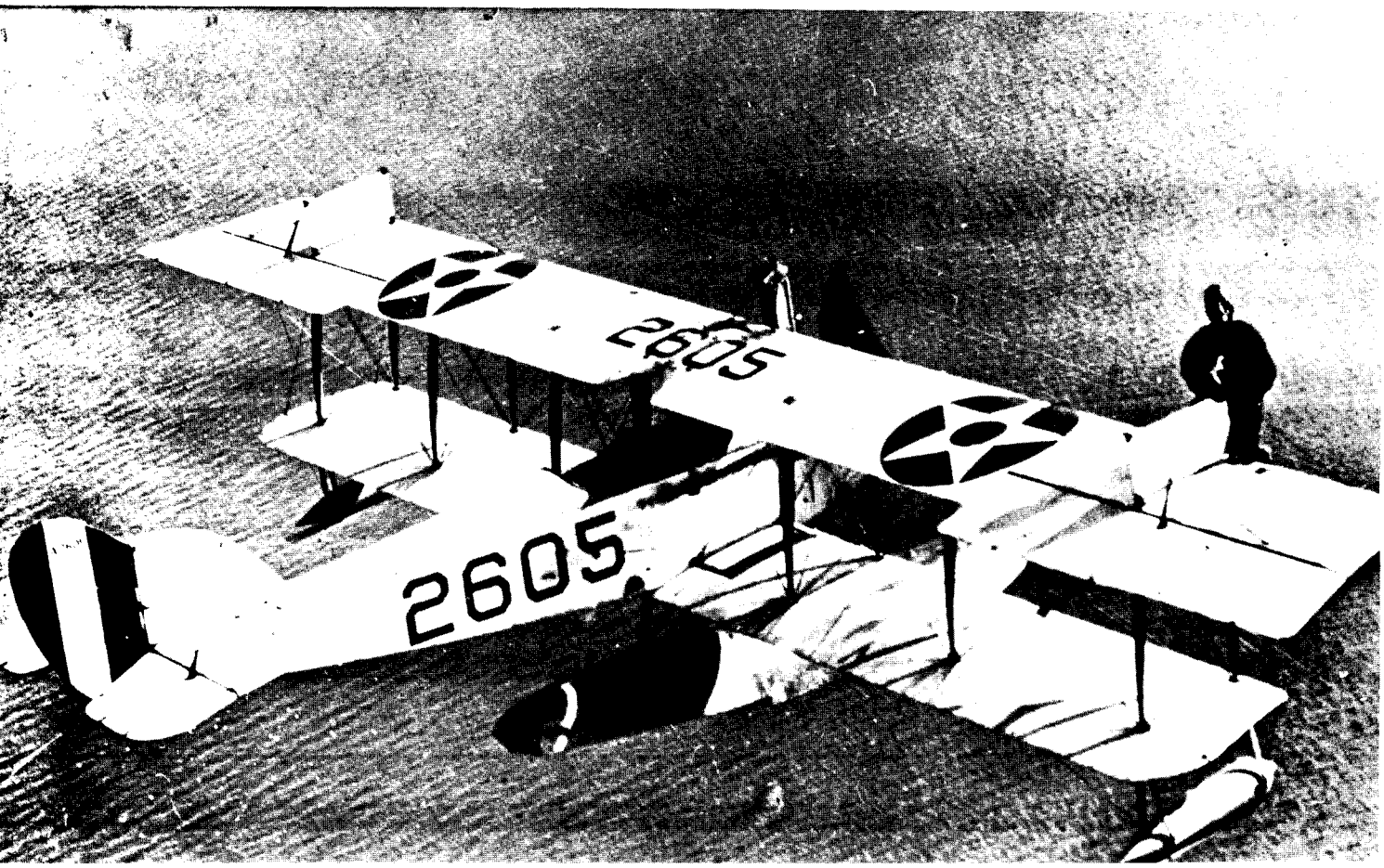
February 8, 1918, the roundel was adopted by the United States "to avoid confusion with enemy markings and to conform with Allied markings." Britain, France and Italy all used a variation of the roundel. The U.S. roundel consisted of concentric circles of red and blue around a white ball. Tail band colors were reversed, with the red band nearest the rudder post.

In August 1919, the Secretary of the Navy ordered that naval aircraft markings revert to the 1917 star insignia and that the tail bands again be reversed with the blue band nearest the rudder post.





AS A RESULT *of General Orders which changed U.S. markings during WWI, prepainted parts might appear on aircraft of a different period, HS-2, top, has only one roundel in evidence; tail stripes are reversed. Above, N-9 has 1918 roundels but 1917 stripes. N-9, below, has correct markings for period after August 1919. Researchers' problems are complicated by photographs in which the tonal density of red and blue colors is not always consistent, as in photographs above.*



AFTER ONE YEAR OF WAR

QUESTIONS of mission were discussed at high levels as plans were formulated for a Navy land-based air offensive against German U-boat support facilities. Navy and Marine Corps units destined to take part began organizing: Flight training goals were adjusted to the new requirement. Trained aerologists began their duties at air stations. American-built aircraft and engines began arriving overseas.

APRIL 1918

l—The first Aviation Squadron transerred from Gerstner Field, La., to the Marine Flying Field at Miami.

10—A training school for women apprentices began at the Naval Aircraft Factory.

15—The Marine Aeronautic Detachment and the First Aviation Squadron were merged at Miami to form the First Marine Aviation Force under command of Capt. Alfred A. Cunningham, USMC.

16—The first formally trained Navy aerologists, a detachment of nine officers and 15 enlisted men headed by LCdr. A. G. McAdie, departed for duty at naval air stations in Europe.

17—Lt. W. R. Reed, Jr., reported to NAS PENSACOLA to provide meteorological services for flight operations or for what was then called "aerographical" duty.

23—A section of planes from NAS ILE TUDY, one manned by R. H. Harrell, QM1c(A), and H. W. Studer, QM2c(A), the other by Ens. K. R. Smith and O. E. Williams, attacked a submarine stalking the convoy they were covering. The plane piloted by Ens. Smith dropped two bombs which brought bits of wreckage and sea growth to the surface and appeared so effective that the second plane did not follow-up the attack. Ens. Smith and observer Williams were officially credited by French naval authorities with having sunk a submarine, were cited in the Order of the Day and awarded the Croix de Guerre with Palm.

23—The first shipment of *Liberty* engines to naval aviation units in France was received at the assembly and repair station, NAS PAUILLAC.

27—The airship AT-1, commanded by Lt. F. P. Culbert, and a crew made up of Ensigns M. P. Delano, A. D. Brewer and T. E. McCracken, completed a 25-hour, 43-minute flight out of Paimboeuf, France, during the course of which three convoys were escorted through a mined zone. For this flight, the longest then on record for airships of this type, the commanding offecer and crew were officially commended by the French Minister of Marine.

29—The RAF kite balloon station at Castletownbere, Ireland, was turned over to the United States and commissioned an NAS with Ens. C. E. Shumway in command.

30—The Secretary of the Navy approved a plan, recommended by the General Board and developed by the U.S. Naval Forces in Europe, for air operations in the Dunkirk-Zeebrugge area against German submarine support facilities by a specially organized unit, later designated the Northern Bombing Group, and directed that bureaus and offices expedite assembly of personnel and equipment.

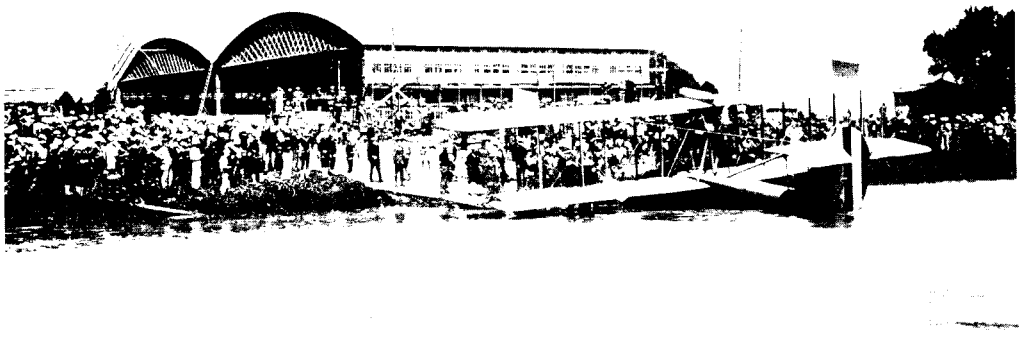
MAY

2—Naval Air Station, Wexford, Ireland, a seaplane station located at the southern entrance to the Irish Sea, was placed in commission.

6—The Naval Air Station Coco Solo was commissioned. Lt. R. G. Pennoyer commanding, as a base for seaplane patrol over the approaches to the Panama Canal.

15—The Bureau of Steam Engineering reported that the Marconi SE 1100 radio transmitter had demonstrated dependability in voice communication at distances up to 50 nautical miles and in code communication at up to 120 nautical miles. Initially designed for use in H-16 flying boats, this was one of the first radio sets widely used in, and the first tube set developed for, naval aircraft.

18—The Chief of Naval Operations scheduled training goals which called for 124 pilots and 62 gunners trained in night bombers by 1 July and 552 pilots and 156 engineers trained in H-16 and HS-1 patrol planes by 1 August. To meet them, it was directed that eight elementary training squadrons be formed, two at Key West, four at Miami



MAKING READY FOR THE FIRST FLIGHT OVERSEAS OF HS-1 AFTER IT WAS ASSEMBLED AT PAUILLAC

LT. HENRY BARTON CECIL

and two at Bay Shore and that six advanced training squadrons be organized at Pensacola where only advanced training would be given as soon as the elementary students on board were graduated.

22—Construction of the first N-1, an experimental seaplane, was completed at the Naval Aircraft Factory.

24—The first shipment of American-built planes, six HS-1's on board the USS *Houston* and two on board *Lake Placid*, was delivered at NAS PAUILLAC, France.

JUNE

4—The first DH-4's assigned to service were delivered to Miami. A two-seat, single-engine landplane built by Dayton-Wright and obtained from the Army by the Navy, the DH-4 was used principally by the Marines.

4—Naval Air Station L'Aber Vrach, was commissioned with Lt. Henry B. Cecil in command. Located on the rocky island of Ehre in the harbor of Vrach near Brest, its seaplanes covered the western English Channel.

5—The E-1, a single-engine pusher type airship, was ordered from the Goodyear Tire & Rubber Company.

8—Naval Air Station Arcachon, southernmost of the seaplane stations in France, was commissioned. Ens. J. N. Brown was acting commanding officer until June 15.

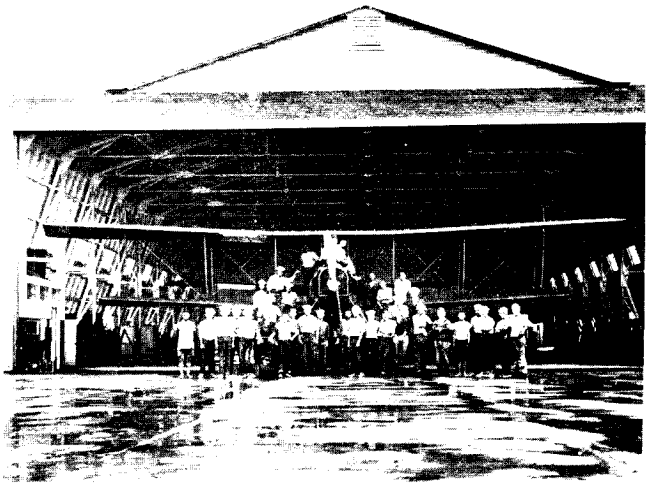
13—The first American-built aircraft to be assembled in France, an HS-1 made its first flight at NAS PAULLIAC, piloted by Lt. Charles P. Mason with Cdr. J. B. Patton and Lt. W. B. Jameson as passengers. This was also the first flight overseas of a Liberty-equipped plane.

16—A headquarters company and four landplane squadrons, designated A, B, C and D, were organized within the First Marine Aviation Force at Miami. Commanding officers of the new squadrons were Capts. Roy S. Geiger, William M. McIlvain, Douglas B. Roben and 1st Lt. Russell A. Presley.

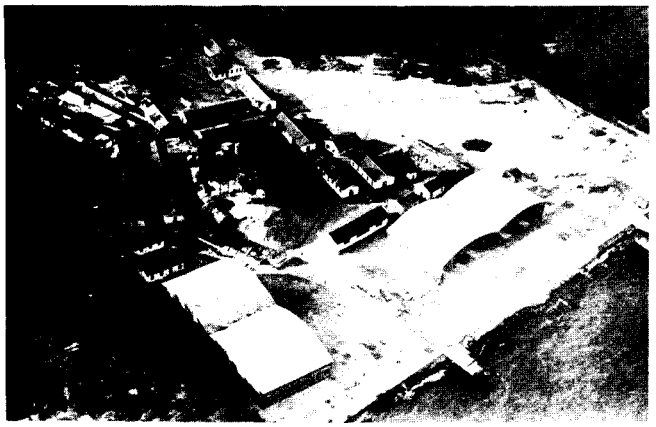
19—The practice of taking regular upper air soundings began at NAS PENSACOLA to provide information on wind velocity and direction needed for navigation training flights. Recording instruments were carried aloft in a kite balloon, a technique developed by the station meteorological officer, Lt. W. F. Reed.

30—The first Navy pilots of the Night Wing, Northern Bombing Group, to take special training with British units marked the completion of their course by participating in a night bombing raid with RAF Squadron 214.

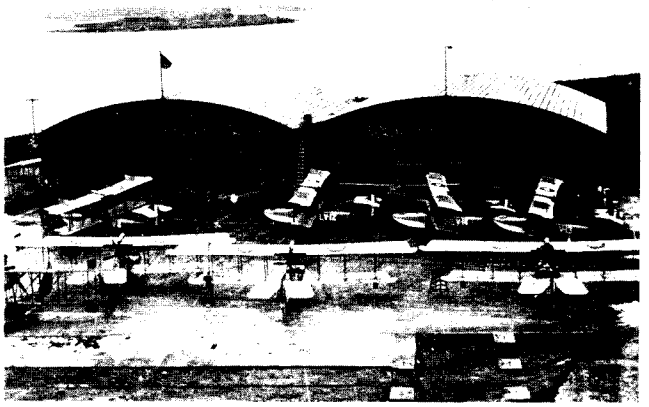
JENNIES OVER AD BUILDING AT MARINE FLYING FIELD, MIAMI



ENLISTED MEN AND CURTISS R TYPE SEAPLANE AT COCO SOLO



NAS ARCACHON, SOUTHERNMOST SEAPLANE STATION IN FRANCE



NAS L'ABER VRACH PLANES PATROLLED THE ENGLISH CHANNEL