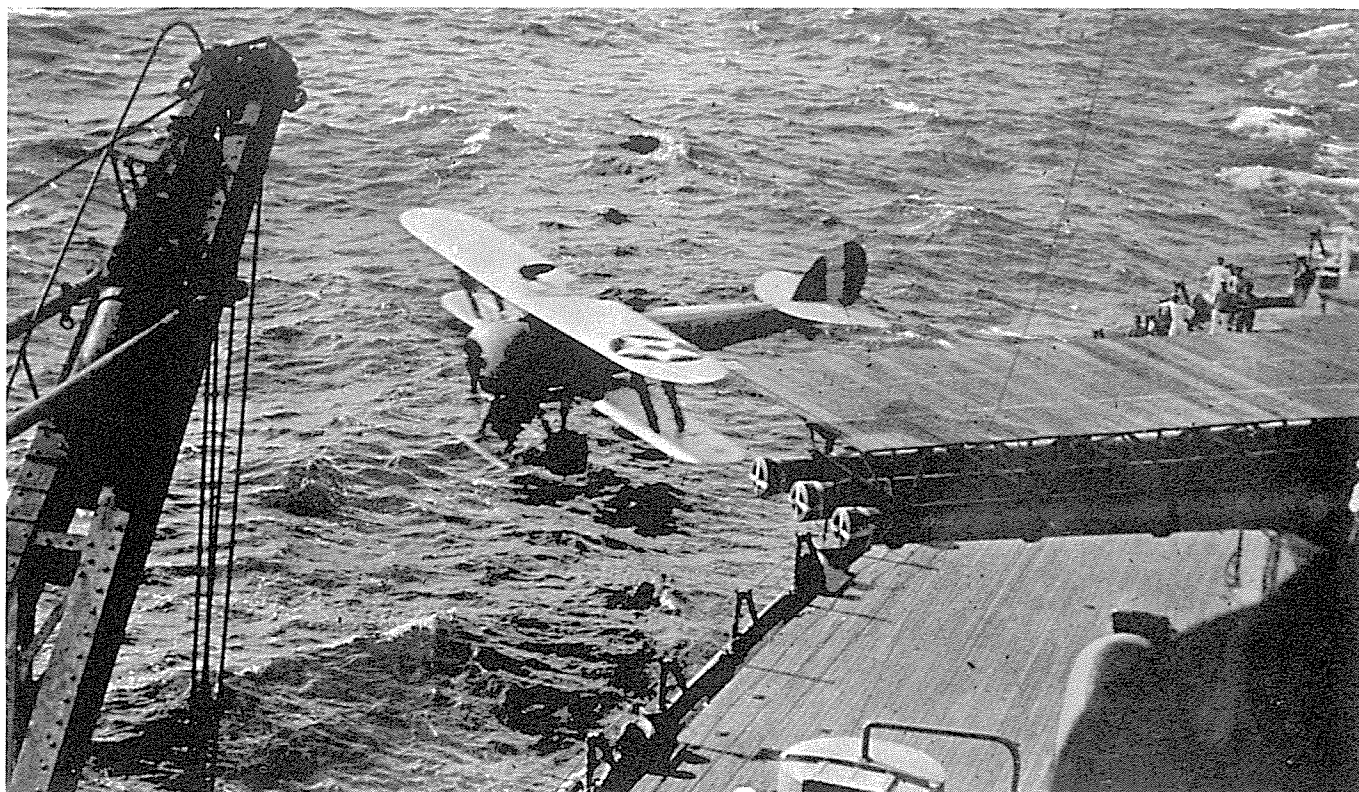




Lt A. M. Pride flying a Nieuport 28 off the turret platform of the Battleship Arizona during March 1920 maneuvers.

U.S. Navy Ship Plane Units

By FRED C. DICKEY, JR.

[The following article is excerpted from a speech by Fred C. Dickey, Jr., Regional Vice-President of the American Aviation Historical Society before the Central States Aero Historians' Meeting on May 22nd. Mr. Dickey, son of Rear Admiral F. C. Dickey, USN (Ret), is a former Navy pilot himself and a longtime collector of early Naval Aviation history. His previous contributions to the JOURNAL include "Sling Shot Flyers" and "Patrol Planes and Patrol Squadrons" published in Vol 6 during commemoration of the 50th Anniversary of Naval Aviation.]

The use of landplanes in operations from naval warships began on 14 November 1910 when Eugene Ely flew a Curtiss Pusher from the bow of the U.S.S. Birmingham which was at anchor in Hampton Roads, Virginia. The feat was repeated on 18 January 1911 from a platform erected over the stern of the cruiser U.S.S. Pennsylvania in San Francisco Bay.

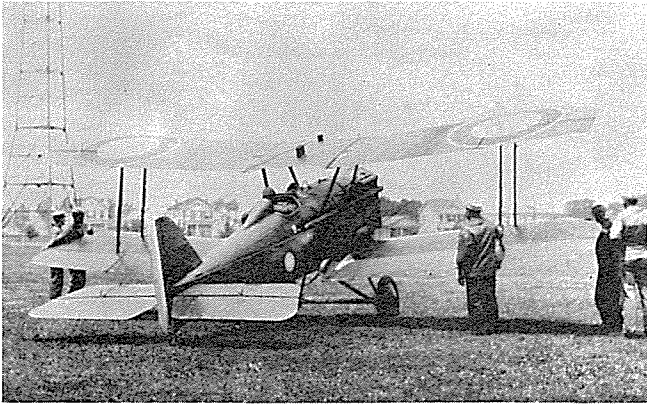
During WW I the British Navy conducted many tests involving the use of aircraft with the Grand Fleet. Lt Commander C.H.B. Gowan, RN, suggested a platform be built over a ship's turret which could be pointed into the wind to assist the airplane's takeoff. Such a platform was constructed on the battle cruiser H.M.S. Repulse, and a Sopwith Pup made the first takeoff on 1 October 1917, repeating several days later. As a result of the tests it was decided to build platforms on all battle cruisers and light cruisers so they could carry fighter type aircraft.

It was not until late in the war that the U.S. Navy renewed its interest in ship-based landplane experiments.

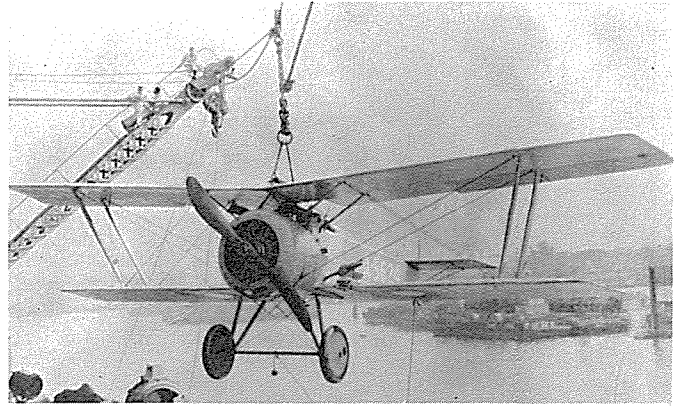
A platform was built over the No. 2 and 3 turrets of the U.S.S. Texas in November 1918 while in England and was first used in March 1919 during annual maneuvers in the Caribbean. Aboard the Texas were two Sopwith Camels and a Sopwith 1½ Strutter. The "Ship Plane Unit" was under the command of LCdr Edward O. McDonnell (Naval Aviator 18) and the pilots were Lts Carlton D. Palmer (NA 116) and Willis B. Haviland (NA 577). The first flight was made by McDonnell on 9 March 1919 when he flew a Camel from the No. 2 turret of the Texas while she was at anchor in Guantanamo Bay, Cuba.

When the U.S.S. Mississippi arrived at Guantanamo a platform was erected over her turrets, and a Hanriot HD-1 was operated by this battleship. In all, three flights were made from each of the two large ships. Two S.E.5s joined the Ship Plane Unit at Guantanamo, but they were never flown off the turrets of either ship. The Ship Plane Unit returned with the battleships to the East Coast and went to Hampton Roads, its aircraft being sent to the Naval Aircraft Factory for overhaul. The S.E.5s returned on the turrets of the Mississippi.

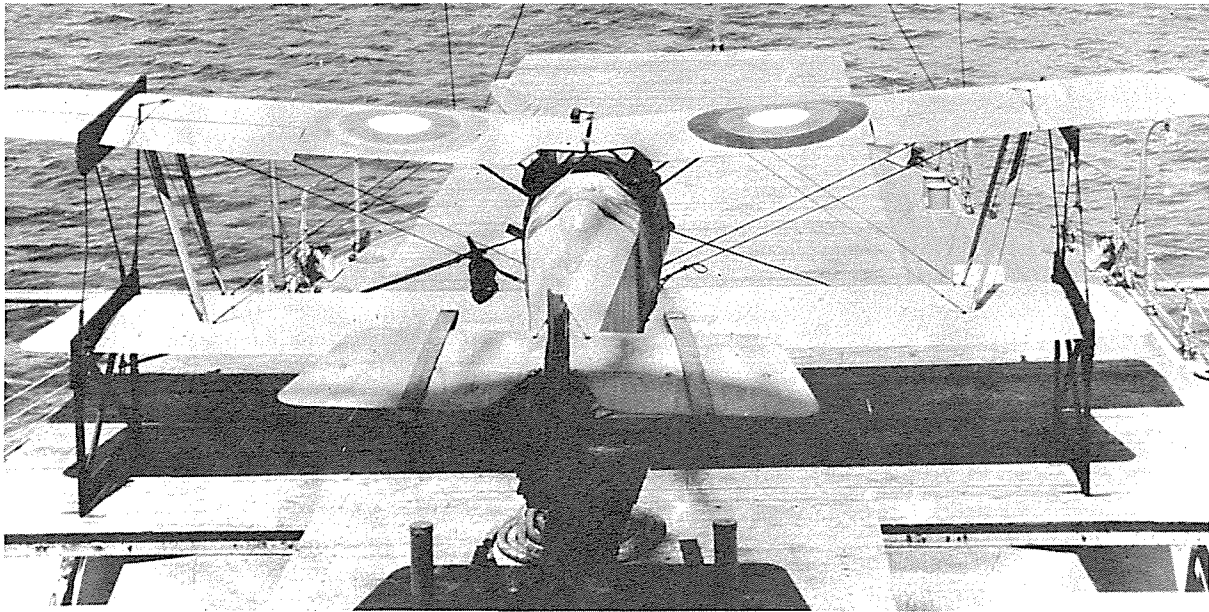
A second Ship Plane Unit was formed in May 1919 under the command of LCdr McDonnell who was relieved three weeks later by LCdr Haviland. Permission was obtained from the U. S. Army to train on landplanes at Langley Field and this activity began on 28 May. Aircraft used by this second unit were twelve JN-4H's, eight DH-4s, two S.E.5s, four Hanriot HD-1s and one Sopwith Pup, and training consisted of elementary instruction in land planes, gunnery, combat flying, formation flying, acrobatics, photographic work and cross country flying. Two accidents marred the training. One pilot Charles H.



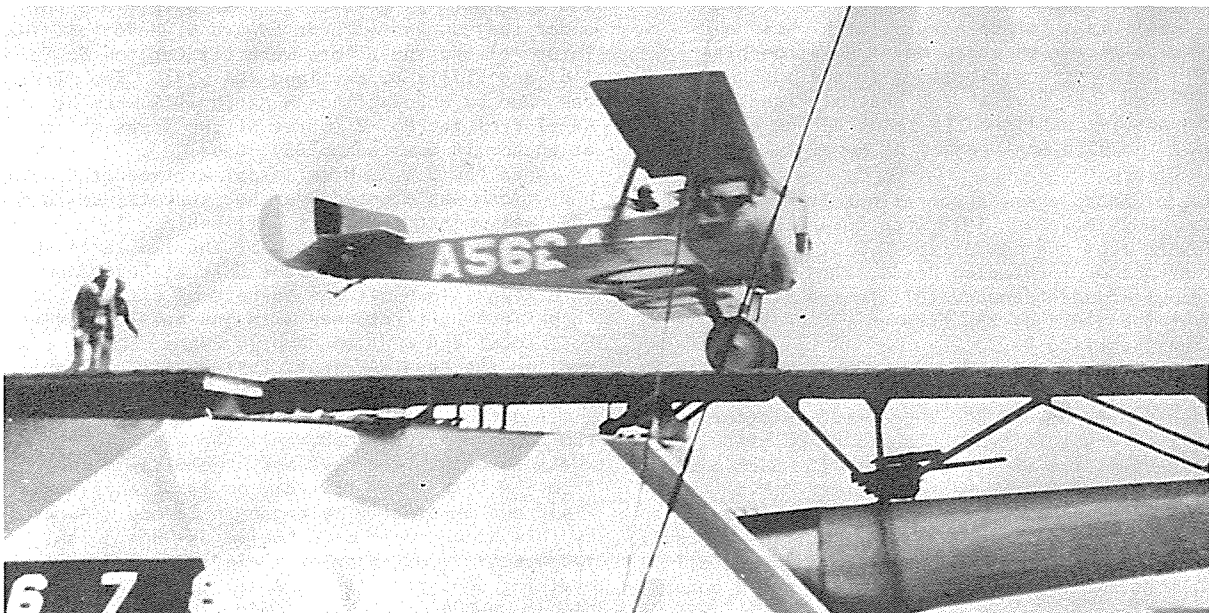
A Navy S.E.5 at Langley Field, Virginia in the Spring of 1919 with generator visible on right lower wing.



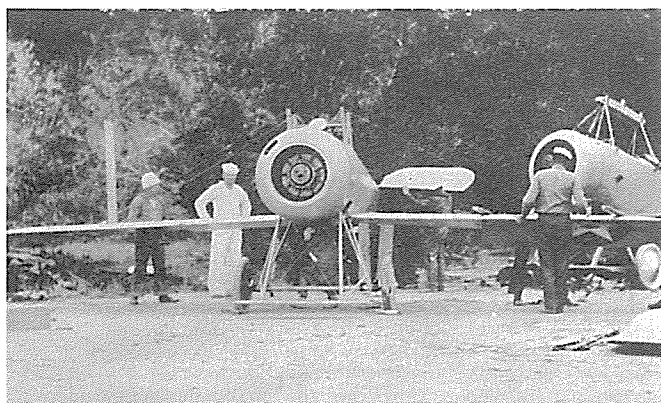
Hanriot HD-1, Designating Number A-5624, being hoisted aboard the U.S.S. Mississippi in the Summer of 1919.



Hanriot in hold down position at the end of the platform with tail raised in level flight attitude.



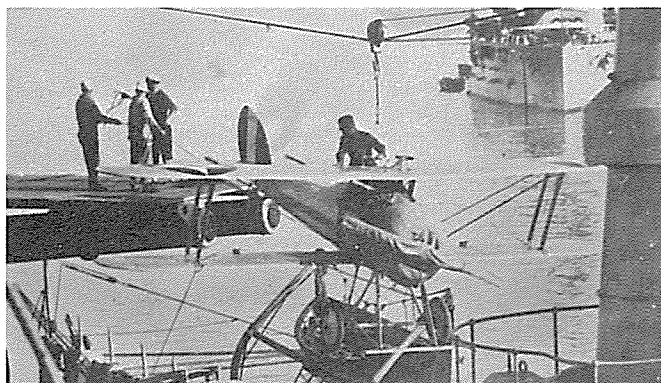
Hanriot during takeoff. If wind over turret was 22 knots, plane almost touched water before climbing.



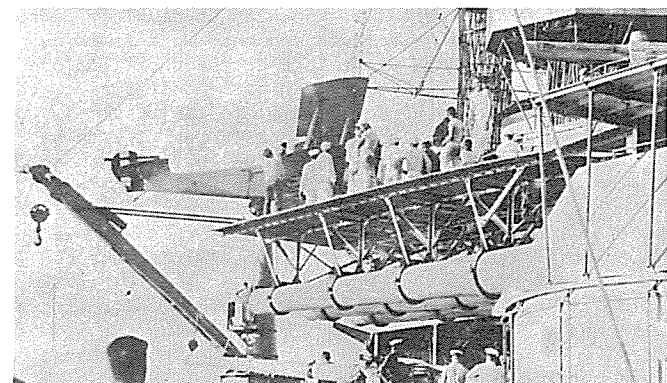
A Nieuport 28 and a Sopwith 1½ Strutter, rear, in the process of being erected at Guantanamo, January 1920.



After erection, or flight, aircraft such as this Nieuport were taken to the dock, then out to a battleship.



A Nieuport 28 while going aboard a battleship which is at anchor in Guantanamo Bay during early part of 1920.



A Sopwith 1½ Strutter being lowered onto turret platform of a battleship at Guantanamo in March of 1920.

Hammann, was killed in a crash and another pilot lost a leg in a second crash. In August the unit was disbanded with some of the pilots being sent to the west coast while others went to ships on the east coast.

During October 1919 a third Ship Plane Unit was formed at Carlstrom Field, Arcadia, Florida. Instruction on landplanes was again given by the Army, advanced instruction for those pilots who had been at Langley, using JN-4s and Thomas Morse S4C's. Two pilots, Flood and Bailey, who had been trained earlier at Langley, were killed while at Carlstrom. The unit finished its training in December and on the 23rd returned to Hampton Roads where assignments to ships were made.

Arrangements for its aircraft had been started in August 1919. Lt (jg) B. Rhodes was ordered to the Army Air Base, Americus, Georgia to select the best Nieuport 28s and Sopwith 1½ Strutters and have them shipped to the Naval Aircraft Factory at Philadelphia for overhaul. Rhodes selected twelve Nieuport 28s and an unknown number of 1½ Strutters and got them to Philadelphia in time so that they would be ready to join the Fleet no later than 15 December.

The Fleet, including the battleships Arizona, Nevada, Oklahoma and Pennsylvania, departed for Guantanamo and the annual maneuvers in January 1920. With it went six or seven Nieuports, one Sopwith Camel and a number of 1½ Strutters. After the Fleet arrived in Guantanamo, the aircraft were erected and test flown. One Nieuport and one 1½ Strutter were assigned to each battleship, the Nieuports to operate off the No. 3 turret and the 1½ Strutters off the No. 2 turret. For operations, the planes had to be transported out to the ships and hoisted aboard, and the ships had to remain close enough to shore, so after launch, the planes would be able to fly to the beach and land. All of the planes were equipped with flotation bags which could be inflated if the

plane was forced to land in the water, and the landing gear could be dropped to prevent the plane from being nosed over on touching the water. There was also a hydrovane attached to the landing gear to prevent nosing over.

During the time the unit was operating at Guantanamo there were quite a few accidents, but only one pilot is known to have been killed, Lt Eckhout. He was flying a Nieuport and had just taken off from the field when the plane went over on its back at low altitude, either starting a slow roll or a vertical turn, dropped its nose and crashed to the ground before the pilot could recover control.

Four of the Nieuport 28s were forced to land in the water after being launched from the battleships. One was flown by Hardendorf and was not recovered. Another went into the water when there was not enough wind over the turret at launch. The third was flown by Lt A. M. Pride. Fifteen minutes after launch from the Arizona his engine began to miss but a throttle adjustment seemed to correct the problem. Ten minutes later a cylinder stopped firing and as the engine grew worse, the plane began to lose altitude. An attempt to drop the landing gear failed but the flotation bags were inflated before the plane hit the water. It touched down in a level attitude and nosed over, but the flotation bags kept it afloat, albeit in an inverted position. A seaplane picked up Lt Pride and flew him back to base while the Nieuport was salvaged by the U.S.S. Shawmut, tender for the Fleet's seaplanes. Because of extensive damage, the Nieuport was not repaired but was replaced by the spare Sopwith Camel which Pride then used until the Fleet returned to the east coast.

Another very unusual accident occurred when Lt E. A. Letzkus had the tail assembly come off of his 1½ Strutter at 1800 feet. By opening and closing the throttle he

was able to bring the plane down and walk away from the crash. Lt (jg) Jacob Wolfer crashed his 1½ Strutter, No. 5727, on 4 March while taking off of the No. 2 turret of the Arizona. A gust of wind lifted the right wing before the aircraft had gained speed and threw it off the platform to crash into the forecastle. One man was killed and the plane was a total loss.

Launching from the platform was accomplished by raising the tail of the aircraft to level flight attitude with the tail skid placed in a trough, about four feet long. The plane was restrained by a "release hook" until the throttle was fully advanced and the turret was trained so the wind was right down the center line. Then the pilot released the hook. It was found necessary to have at least 22 knots of relative wind down the turret, and even with this amount of wind, the planes sank after leaving the platform until the wheels barely cleared the water.

One of the major drawbacks to this type of operation was that after launching the planes had to fly into the field, a salt flat known as Conde Bluff. From there, the wings were removed and they were towed by oxen through the town of De Sura to the docks, before being transferred back to the ships. Additionally, the 1½ Strutters had to have the complete tail assembly unbolted and removed in order to get through the town.

At the time the third Ship Plane Unit was formed on the east coast, there was another such unit formed on the west coast at North Island, California. Under command of LCdr Marc A. Mitscher (NA 33), this unit went to March Field, California where the pilots received landplane instruction. While known as a Ship Plane Unit, it never operated from a battleship. Its aircraft were DH-4s, JN-4s and 1½ Strutters. During the summer of 1920 there were at North Island four Thomas Morse S4Cs obtained from the Army, two Hanriot HD-1s which had been brought west by the U.S.S. Mississippi in August 1919, and four Nieuport 28s, two of which had flotation gear and generators on the upper wing and probably arrived in the summer of 1920 when several battleships were transferred to the west coast.

As far as is known, the only flying from gun turrets on the west coast was carried out by planes aboard the Mississippi. She arrived in August 1919 under the command of Captain William A. Moffett who headed the Bureau of Aeronautics from 1921 until 1933 and is regarded as the "father of Naval Aviation."

In the east, after the fleet problem was completed, the ships and aircraft returned to the east coast, departing Cuban waters on 25 April 1920. All pilots reported to Hampton Roads and the remaining aircraft appear to have been scrapped.

After the pilots returned from leave, they reported to Mitchel Field, New York where the unit was under

the command of LCdr Godfrey deC. Chevalier (NA 7). With the U. S. S. Langley (the Navy's first aircraft carrier) under construction, the days of flying aircraft off of gun turrets were numbered, and the unit was to make only one more trip to Cuba in mid-1920. Pilots were assigned to ships, but all flying was conducted from Haicacal Beach with DH-4B's, Vought VE-7s and Loening M-80s.

As far as can be determined, the last flights from the gun turret platforms were made in August 1920 from the U.S.S. Oklahoma. AVE-7 made one flight on 10 August, two on 11 August and one flight on 12 August. Pilots were Virgil C. Griffin (NA 41) and Wagner, with the latter making the last flight.

During the time aircraft operated from the battleships, it is known that the following had "flying off" platforms installed:

- U.S.S. Texas
- U.S.S. Mississippi
- U.S.S. New Mexico
- U.S.S. Arizona
- U.S.S. Nevada
- U.S.S. Pennsylvania
- U.S.S. Oklahoma
- U.S.S. Idaho

The types of aircraft flown from the gun turrets were:

- Sopwith Camel
- Sopwith 1½ Strutter
- Nieuport 28
- Hanriot HD-1
- Vought VE-7

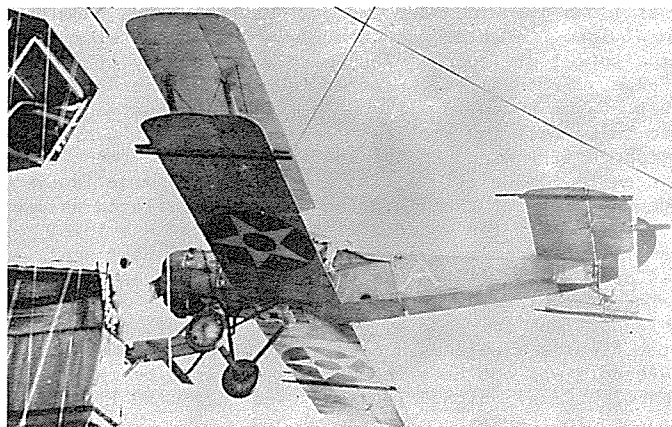
While the S.E.5 was used by the unit in Cuba during the January cruise of 1919, it should be repeated that it was never flown off of a gun turret. Admiral Pride has said it was too heavy, and of all the types of planes there, he liked the Camel the best.

AUTHOR'S NOTE: Without the help of the following people it would not have been possible to put this story together:

- My father, Rear Admiral F. C. Dickey, USN (Ret)
- Commander H. E. Elliott, USN (Ret)
- Captain B. Rhodes, USN (Ret)
- Mr. C. D. Palmer
- Mr. Bergen Hardesty
- Mr. Hal Andrews

and Admiral A. M. Pride, USN (Ret) without whose time and help it would have been impossible to do this story of Naval Aviation.

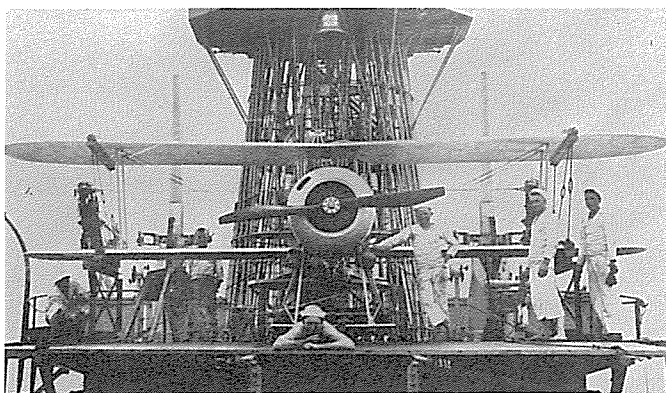
PHOTO NOTE: All photos illustrating this article come from the author's collection.



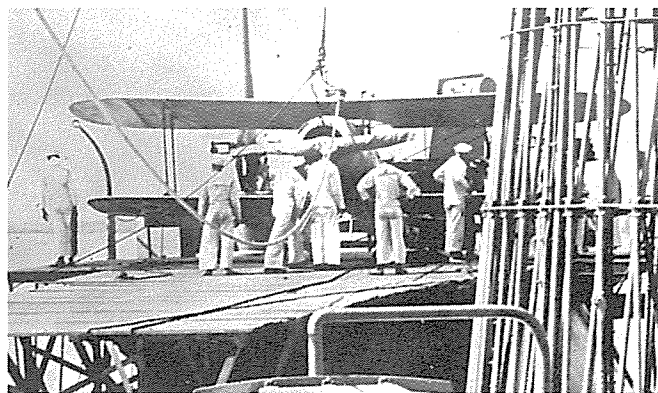
Sopwith 1½ Strutter in the process of being brought on board the battleship Arizona during March of 1920.



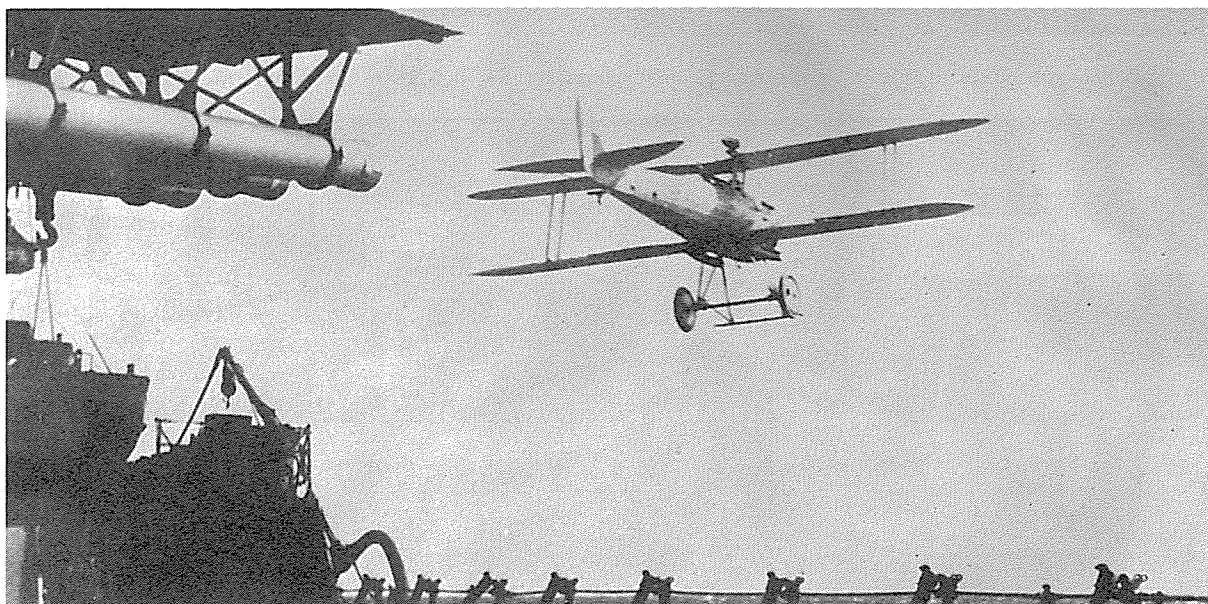
The 1½ Strutter, after being lowered to turret platform, is put into position with tail skid placed in trough.



Nieuport 28 aboard battleship. Hydrovane to prevent nosing over was attached forward of the landing gear.



Unlike the 1½ Strutters, the Nieuports had the star in circle with red dot national insignia near wing tips.



Lt A. M. Pride taking off from the U.S.S. Arizona off Guantanamo in Nieuport 28 on 17 March 1920.



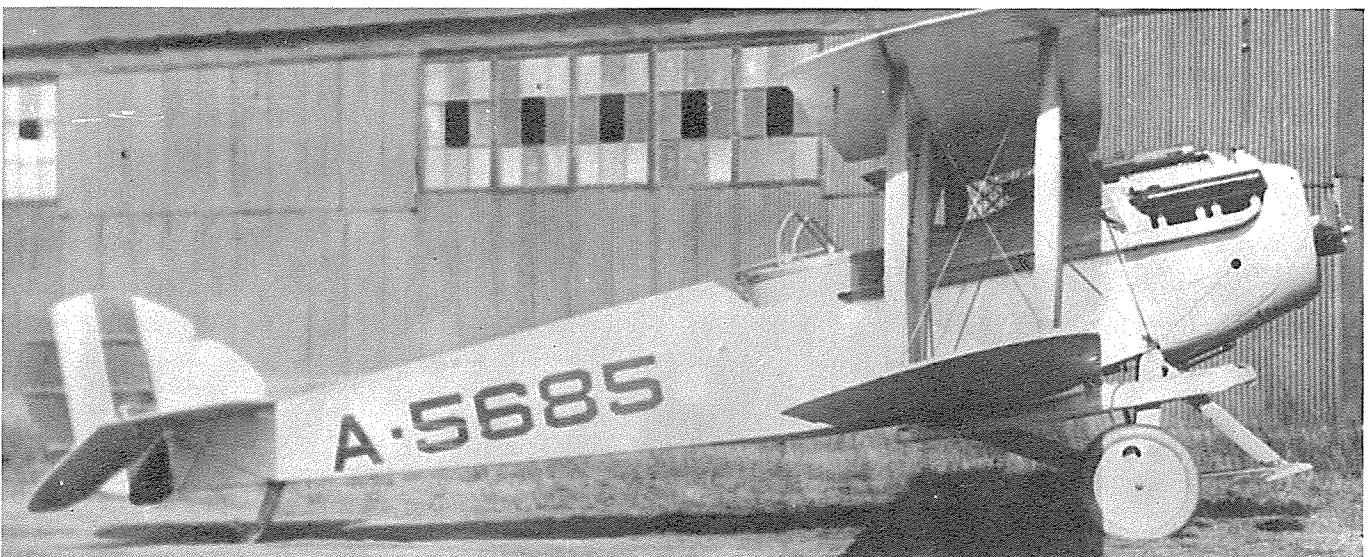
Lt Pride's Sopwith Camel at Guantanamo, 1920. He considered this best plane for flying off turrets.



One of the two Hanriot HD-1s which had come to the west coast on the U.S.S. Mississippi, at North Island, August 1919.



Sister plane to the one shown above, this is Hanriot HD-1, Designating Number A5625, with two machine guns mounted.



With hydrovane mounted, a Vought VE-7 of the third Ship Plane Unit stationed at Mitchel Field during summer, 1920.