

them in the air. This was a good fault we both had. He's tops in my book.

Joe and I left Hoog Huis for Issoudon via tender and Boulogne. At Boulogne met Conrad Mathiessen and Freddy Luff with the same kind of orders as ours. They were with the 74th Squadron, R.A.F., flying S.E.5's, Freddy with D.F.C. My war flying so far adds up to about ninety hours.

For the month of August, 1918, No. 29 Squadron had confirmed 51 crashed Huns with losses of 4. This is the best record of any squadron in the business in the R.A.F. to date and it brought telegrams of congratulations from General Plummer and General Salmond. Good results due to good leadership, meaning good C.O. (Major Dixon), good flight commanders and deputy leaders, good aeroplanes well maintained (the beloved S.E.5) and good, stout pilots who stuck it out, good cooperation among them and, perhaps equally important, good shooting.

During my short period with the 29 Squadron R.A.F. from July 16, 1918 until September 19, 1918, the squadron was credited with 87 crashed Huns and suffered the loss of four pilots: Venter, Tison, Wright and Fleming.

Total crashed Huns for squadron - 87

Total credited to pilots 39

Pilot	Confirmed Crashes Credited	Information Added at a Later Date
Rath - Canadian	4	Killed
Tison - Fr. Canadian	0	Missing - Prisoner
O'Leary - Canadian (U.S.A.)	1	Prisoner
Dougan - Canadian (U.S.A.)	4	Wounded
Brown - Canadian (U.S.A.)	3	
Cunningham - V.C.; S. A.	0	Washed Out
Harrison - D.F.C.; Br.	5	
Osbourne - British	0	Home Est.
Reed - D.F.C. and Bar; Br.	9	Home Est.
Diamond - U.S.A.S.	2	25 U.S.A.S.
Lauer - U.S.A.S.	2	25 U.S.A.S.
Waring - D.F.C.; British	5	Killed
Rolfe - British	2	Missing - Prisoner
Davies - B. Br.	0	Killed stunt landing
		squadron air field
Wolfendale - Br.	0	Washed Out
Robertson - Canadian	2	Heme Est.
Total	39	

The balance of 48 enemy aircraft were divided among the eight flight commanders and deputies, each having at least five E.A. credited, or an average of six. These were Captains LaGesse, Amm, Venter, Wilson, Hoy, Davies, Holme and Ross.

S.E.5a TESTED IN THE U.S.A.

By BERGEN HARDESTY

EDITOR'S NOTE: In the Spring 1962 issue of the JOURNAL we presented Bergen Hardesty's drawings and photographs of the S.E.5a (Vol. 7, No. 1, pp 32-35) and in the Summer issue was printed his description of the S.E.5a colors and markings as used by the 25th Aero Sqdn. Herewith is Bergen's report on the S.E.5a in the U.S.

The S.E.5a was one of the Allied designs selected for production in the U.S. The Curtiss Aeroplane and Motor Corp., Buffalo, N.Y., was awarded a contract for 1000 S.E.5a's to be fitted with the Wright-Martin 180 h.p. model E Hispano-Suiza. In addition to the original contract, Curtiss was also selected to assemble, and repair as necessary, some 56 British built S.E.5a's. These examples, mostly built by Vickers and Austin, were received by Curtiss in crates from the General Supply Depot, Fairfield, Ohio.

Initial production on the 1,000 unit contract, in the form of a small sample run of parts and spares, was started in the summer of 1918. The first and only U.S. built S.E.5a, designated as No. S.C.43153, was received at the Dept. of Military Aeronautics, Technical Section, Wilbur Wright Field, Fairfield, Ohio. The airplane arrived in mid August of 1918 and was assembled and readied for testing, which began on Aug. 20, 1918. The initial testing revealed that the engine over-heated very badly and testing was terminated for that day. The airplane was checked and trials were again resumed on Aug. 21. On this occasion it was found that the water in the radiator boiled at altitudes above 1,000 feet and water was also exhausted continuously from the overflow tube during the test. Testing was again stopped and the machine was sent to the Motor Repair Shop where an auxiliary radiator of about 175 square inches of area was fitted to improve cooling. The additional radiator was mounted between the two main radiator cores directly below the propeller. With this arrangement it was necessary to remove the adjustable louver assembly.

At this time modifications for more efficient cooling were made by adding louvers to the upper cowlings and to the side cowlings directly below the exhaust ports. The existing louvers in the lower cowling were reversed to an exit flow type in place of the original intake type.

The airplane was again flown on Aug. 26th over a three mile speed course to calibrate the Airspeed Recorder. On Aug. 28th trials consisted of climbs and speed tests at high altitude. These results were deemed unsatisfactory, because it was thought that the climb tests were adversely affected by vertical currents in the air. The speed course was again flown on Aug. 29th to calibrate the Airspeed Recorder for slow speeds and on Aug. 30th altitude climb tests and speeds at high altitudes were tried once more. At high altitudes a failure was encountered with the air pressure to the fuel tank and it was necessary to use the hand pump to supply sufficient air pressure to fuel system at altitudes above 18,000 feet.

On the last day of testing, Aug. 30th, one of the front center section brace wires failed, during flight or on landing. Examinations revealed that the wire terminals had an insufficient amount of metal remaining around the eye of the fitting. Three other wire terminals were discovered at the point of failure in this Investigation. The tests were then discontinued on the Curtiss built S.E.5a.

Trial results, though not spectacular, did reveal that the Curtiss S.E.5a was a capable machine. With the 180 h.p. motor it could climb to 6,000 feet in 7'-16"; 10,000 feet in 13'-0"; 16,000 feet in 25'-33";

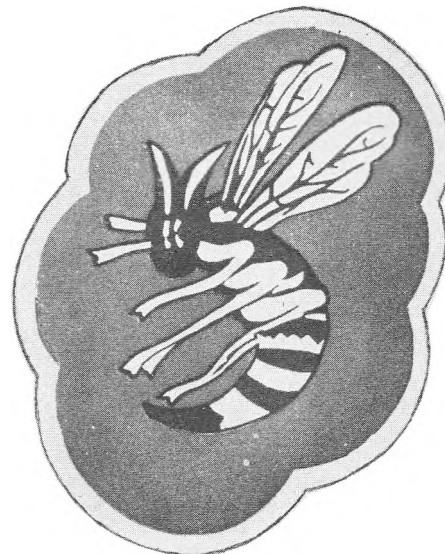
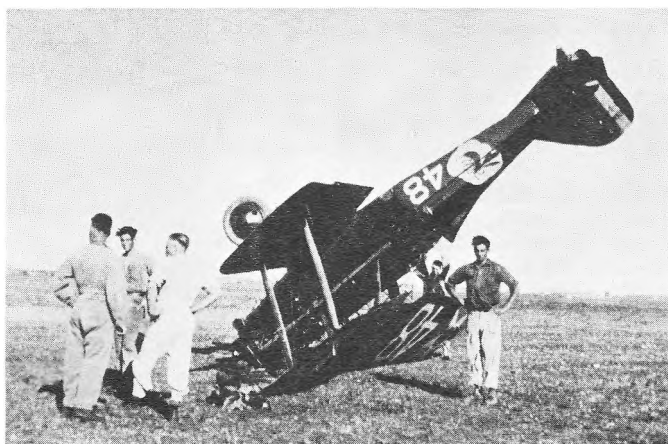
and 20,000 feet was accomplished in 50'-30". The best speed was recorded as 122.3 m.p.h. at ground level, 117.0 m.p.h. at 10,000 feet and 92.5 m.p.h. at 20,000 feet.

On Sept. 6, 1918, Lt. Col. H.C.K. Muhlenberg, C.O., of the Testing Department forwarded a Liaison report with numerous recommendations and findings on the American built S.E.5. Of greatest concern was the

cooling system. The American built radiator, made by Harrison, had a 30 gallon per minute flow compared to the 17.6 gal. flow of the English made radiator. The Curtiss S.E.5 was also found to have only 1/2" clearance between the radiator and the front supporting frame of the motor bed. It was recommended that the radiator be moved 1" forward.

POSTWAR S.E.5's

After World War One the S.E.5's which were built by Eberhardt Aircraft Company were sent to Kelly Field. Designated S.E.5E's, they became the equipment of the 43rd School Squadron, (in WW-II it was the 43rd Fighter Squadron).



Insignia of the 43rd School Squadron.

Colors: Background - blue; Dark portion of wasp - black; Other parts of wasp - yellow; Outer border - yellow.

Photos from Mauno A. Salo Collection.

