

Date and Hour.	Pilot.	Machine Type and No.	Passenger.	Height.	Remarks.
14 5 18	Self	B2522		1-5	Two 2 seats seen
15 5 18	"	B2522		2-70	2 Galy Scouts 1st down out of control.
15 5 18	"	B2522		1-30	No EA seen
16 5 18	"	B2522		1-45	No EA seen
17 5 18	"	B2522		1-75	EA seen
17 5 18	"	B2522		1-15	EA seen
18 5 18	"	B2522		1-15	EA seen
18 5 18	"	B2522		1-15	EA seen

LOG BOOK

Wireless BE2a's by Paul R. Hare

The development of airborne Wireless Telegraphy occurred almost contemporaneously with that of military aviation itself and yet, at the outbreak of WWI only a handful of aeroplanes, were equipped with wireless equipment.

The Royal Engineers had begun wireless experiments in 1908 with transmissions from a balloon, and, during the army manoeuvres the actor Robert Loraine successfully sent brief messages, in Morse code, from a Bristol Boxkite using a Marconi wireless set.

Capt H.P.T. Lefroy of the Royal Engineers was placed in charge of army wireless experiments, and in co-operation with the Royal Aircraft Factory made experimental transmissions firstly from airships, in which the weight of the equipment was more easily accommodated, and then, in March 1912 experimented, briefly, with a wireless installation in the original BE2. The airship Gamma contributed to the premature ending of the 1912 manoeuvres by transmitting details of the opposition forces location by wireless to a receiver on the ground, facilitating their early defeat and again demonstrating the practicality of airborne wireless.

The RFC then set up an experimental unit, under the command of Major Herbert Musgrave, two members of which, Lts Donald Swain Lewis and Baron Trevener James, made significant advances in the use of wireless, several practice shoots being conducted in collaboration with the Artillery,

and on 18 June 1914, during the 'Concentration Camp', the pair each flew a BE2 from Netheravon to Bournemouth, effectively communicating with each other from distances of up to ten miles apart.

The machines had to be flown solo as the wireless sets each weighed some 75lb and was fitted ahead of the forward cockpit, their power being obtained by a chain drive from the engine, the set needing to be screened from the magneto. In order to install the generator that powered the wireless set it was necessary to remove the gravity tank, which on the BE2a was situated ahead of the front cockpit, together with the forward decking between the front cockpit and the engine, and to substitute a streamlined tank suspended beneath the upper centre section, as on the original BE2. In addition, an aerial, consisting of approximately 200 feet of wire, weighted at the end, was held on a drum secured to the side of the fuselage, which had to be wound out before transmission, and wound back up before landing. Due to the additional weight of the wireless apparatus it was common for the machine to be flown solo, the pilot operating the Morse key as well as the controls. As a result of their success in demonstrating the utility of wireless, a wireless flight was formed within 4 Squadron, to which Lewis and James were assigned, together with Lt. S.C.W. Smith.

Records indicate that when the RFC flew to France on 13

220, with a mechanic working on the generator that powered the wireless positioned behind the engine.

