

Citation for submission to FAI - CIACA

# United Kingdom

## PHOENIX DIPLOMA

### STEPHEN SLATER AND MATTHEW BODDINGTON

In 1969 Charles Boddington built a replica BE2c biplane for the film "Biggles Sweeps the Skies". The aircraft was taken to the United States where it was subsequently crashed. In 2004 Stephen Slater and Matthew Boddington, the son of the film replica's original constructor, became joint owners of the wreck and returned it to the UK, where the airframe and engine were given a complete restoration, starting in March 2005. The steel tube fuselage needed major repairs from the front of the rear cockpit forward. All four wings had to be rebuilt using new spruce spars although a commitment was made to use as many original components as possible commensurate with safety, a decision which inevitably increased the restoration time. The aircraft's de Havilland Gipsy Major engine, which had been modified to run in an upright configuration, was also fully rebuilt. Assisted by a number of friends, Stephen and Matthew spent six years on the restoration, which led to Matthew making the aircraft's first post-restoration flight in May 2011.

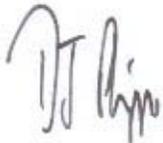
A folder on the aircraft's history and its restoration are attached.

For this effort and the superb results achieved we have pleasure in nominating Stephen and Matthew for an FAI Phoenix Diploma.

Submitted by the Royal Aero Club of the United Kingdom

Chacksfield House  
31 St Andrew's Road  
Leicester  
LE2 8RE

2<sup>nd</sup> February 2012



Dave Phipps  
General Secretary



## **“BIGGLES BIPLANE**

**1914 Royal Aircraft Factory BE-2c WW1 Observation Biplane replica  
Built in 1969 for film “Biggles Sweeps the Skies”. Crashed in the USA in 1977**

**Recovered from a barn in 2005 by Stephen Slater and Matthew Boddington  
First flight after six-year restoration, May 2011.**

**Submission prepared by: Stephen Slater, 7 Meades Lane, Chesham, UK. HP5 1ND  
Tel . +44 1494 77 68 31**

### **HISTORY**

In 1912, with the First World War looming, the Royal Aircraft Factory at Farnborough was tasked with creating Britain's first-ever military aeroplane, for artillery observation. It was one of the first aircraft designed by Geoffrey de Havilland, who later created the famous company bearing his name.

By the time of the outbreak of war, the BE-2 was a mainstay of the British Royal Flying Corps. On 13th August 1914, a BE-2 of No.2 Squadron, piloted by Lieut. H. D. Harvey-Kelly landed near Amiens to become the first British aircraft to arrive in a theatre of war and the first military aircraft ever to be deployed overseas. Over 4,000 of the type saw service between 1914 and 1918.

The “Biggles Biplane” BE-2c replica, registered G-AWYI, was built by Charles Boddington at Northampton, England in 1969. It was commissioned by Universal Studios for a planned big-budget movie, “Biggles Sweeps the Skies”, based on the books by Captain W.E. Johns. However, filming was never completed.

The replica was shipped to the USA and sold to a WW1 flying circus, before being heavily damaged in a takeoff accident on 14th June 1977. The remains then disappeared until 2004, when they were discovered, stored in a barn in upstate New York.

### **RESTORATION**

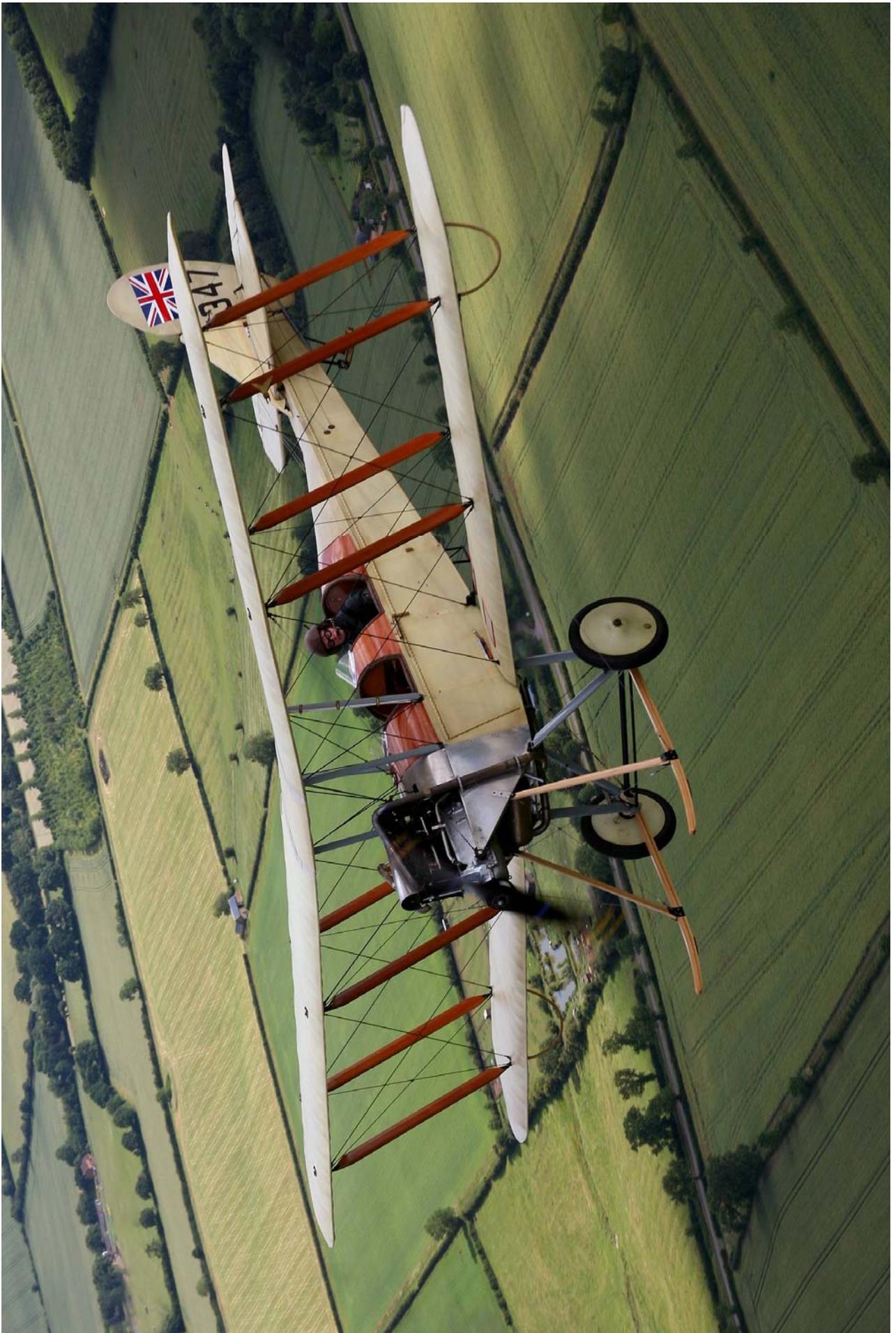
Stephen Slater and Matthew Boddington, the son of the film replica's original constructor Charles Boddington, became joint owners of the wreck and returned it to the UK, where the airframe and engine became the subject of a complete ‘ground up’ restoration which started in March 2005.

The steel tube fuselage (based on a de Havilland Tiger Moth) required major repair in every area ahead of the rear cockpit. All four wings were rebuilt using new spruce spars although a commitment was made to use as many original components as possible commensurate with safety. This of course increased the restoration period.

The aircraft's de Havilland Gipsy Major engine (modified to run in an upright configuration) was also fully rebuilt. Assisted by a number of friends, Stephen and Matthew spent six years on the restoration, which led to Matthew making the aircraft's first post-restoration flight in May 2011.

### **SPECIFICATION:**

Length: 7.4m (24 feet). Wingspan: 9.4m (30.83 feet). Height: 3.02 (9.9 feet). Weight (MTOW): 884.5 kg.  
Engine: de Havilland Gipsy Major 10.2. 145 horsepower.





B. E. 2. C.

70 H. P. RENAULT (Old Machine). 90-100 H. P. R. A. F. (New Machine).

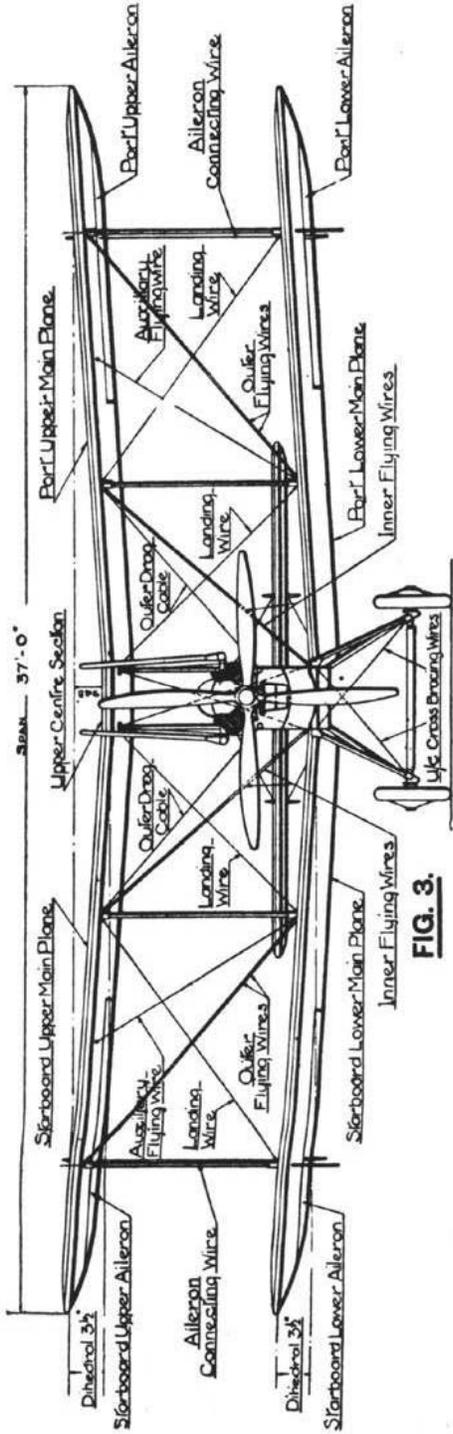


FIG. 3.

**CENTRE SECTION**  
Centre section struts perfectly vertical and parallel when viewed from the side. Viewed from the front, both front and rear centre section struts slope upwards and outwards on an equal distance on either side. Check as indicated on Fig. 7.

**FLYING POSITION.**

Engine bearers perfectly level laterally and longitudinally. Longarons laterally level throughout. Horizontal centre line cutting bisection points of all side struts except No. 4. (see note under Fuselage Adjustment) Angle of incidence on both planes  $3\frac{1}{2}^\circ$ , measured as indicated on Fig. 6.  
Centre Section struts vertical viewed from the side.

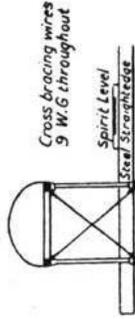


Fig. 2.  
CROSS SECTION OF FUSELAGE

B. E. 2. C.

70 H. P. RENAULT (Old Machine). 90-100 H. P. R. A. F. (New Machine).

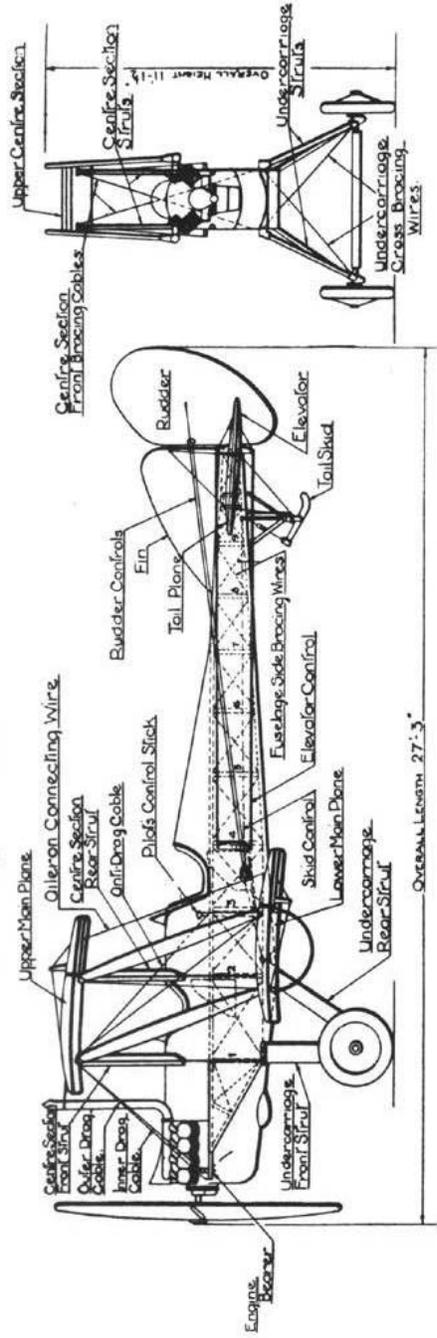
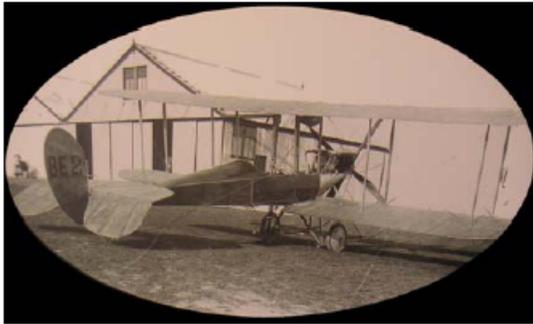


Fig. 1.

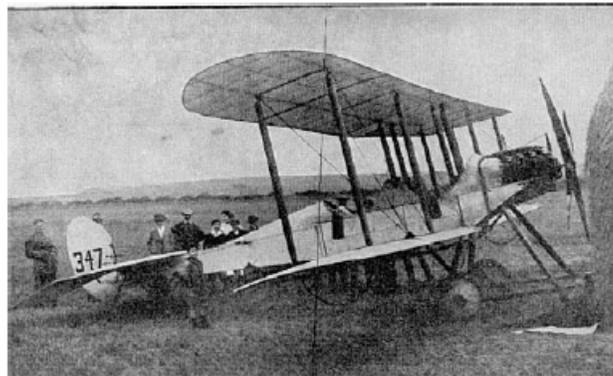


## THE BE-2. THE WORLD'S FIRST PURPOSE-DESIGNED MILITARY AEROPLANE

In 1912, with the First World War looming, the Royal Aircraft Factory at Farnborough was tasked with creating Britain's first-ever military aeroplane. Designed with artillery observation in mind, it was the most stable aeroplane ever built. On 12th August 1912, a BE-2 flown by its designer Geoffrey de Havilland set a new British Altitude Record by climbing to a height of 10,560 feet.



By 1914, the BE-2, was a mainstay of the Royal Flying Corps, along with French types such as the Bleriot monoplane and Farman 'pusher' biplanes. On 13th August 1914, a BE-2 of No.2 Squadron, piloted by Lieut. H. D. Harvey-Kelly landed near Amiens to become the first British pilot to arrive in a theatre of war. Over 4,000 of the type were destined to see service.



The work carried out by the BE-2 aircraft was unglamorous, but vital and extremely dangerous. Mapping and photography of the enemy's positions, along with guiding artillery fire made their crews literally "The Eyes of the Army" from 1914 to 1918.





## The Brief Story of Biggles' Biplane

FLIGHT International, 27 March 1969



Another view Biggles. A fortnight ago we featured a picture of the exact replica built by Slingsby sailplanes for the forthcoming film "Biggles Sweeps the Skies" based on the character created by the late Capt W. E. John. Now comes this B.E.2c replica, commissioned from Mr Charles Boddington (left) made the first test flight and built in only ten weeks in Boddington's workshop under the supervision of Mr Frank Gillingham from design drawings by Mr Boddington's brother David. It includes some Tiger Moth components, and the engine is a 142 H.P. Gipsy 10 Series 1 modified to run upright.



Biggles' Biplane is a unique, authentic replica of a 1914 BE2c, Britain's first purpose-designed military aeroplane. It was built at Sywell in 1969 for the film "Biggles Sweeps the Skies" featuring Capt W E John' fictional hero. The film however was never completed and the aircraft was instead used for the BBC drama TV series 'Wings' and flown by a 'WW1 flying circus' in the USA.



The aircraft crashed in Wisconsin in 1977 and was thought to be lost before the remains discovered in 2005, in the back of a shed in upstate New York.

Stephen Slater and Matthew, son of the film replica's original constructor Charles Boddington, acquired the wreck and returned it to the UK, where the hard work began.....



Following a complete rebuild of every aspect of the aeroplane, 'Biggles Biplane' is taking to the skies again in 2011, offering a unique sight and sound at air shows across the UK



For more information please contact Kingpin Media Ltd. 01494 77681 or check out [www.biggles-biplane.com](http://www.biggles-biplane.com)