



## Grumman Martlet AL246 A rare and unusual aircraft

This aircraft is the last surviving example from a batch of 81 American made Grumman G-36A fighter planes ordered by France in early 1940.

With the fall of France in May 1940 this aircraft contract was hastily transferred to Britain and the aircraft arrived for use by the Royal Navy in November 1940.

By the end of the war only a few of the batch remained and by 1946 AL246 was the only known survivor.

AL246 ended up at the Aircraft Training School at Loughborough, Leicestershire sometime around 1943/44, a move which aided its survival.

Here it remained until the late 1950's when it was transferred to the Air Training School here at Yeovilton. In 1964 it was presented to the Fleet Air Arm Museum and has been on permanent display ever since.

Little has been recorded in detail about this odd batch of aircraft that were ordered by France, built in America and ultimately purchased by Britain. However, recent work by the Museum's Engineering Department has unravelled many new facts.

### The Project

Following the success of the in-depth conservation and restoration project concerning another of the museum's aircraft (Corsair KD431) the team embarked on a repeat project in 2007 to begin examining AL246 in great detail.

The work would again involve the painstaking inch by inch removal of any paint finishes applied to the aircraft since leaving the Grumman factory in 1940.

The aircraft had been over painted several times between 1940 and 1964 for various reasons and all references to the very unusual original colour scheme had seemingly been lost.

Only a few colour images of these aircraft exist from the 1940's and due to colour variations in image processing have led to many debates to exactly what colours these aircraft were painted.

The wings, tail plane, rudder and a few small panels still retained their original Grumman factory finish beneath the later over painted layers, and after 6 years of skilled detail conservation work the team have revealed and preserved these original and unique painted areas.

Sadly, the fuselage section had been stripped to bare metal prior to 1964 and so the team have recreated this missing portion with a newly painted finish.

### The New Bit

Great care and attention to detail was shown in making sure the newly painted portion was researched as accurately as possible before any new paint was applied. This was not just a repaint.

Tiny traces of light green, dark green and pale blue paint were discovered in panel joint lines, recesses, crevices and around rivet heads which helped the team plot and map exactly the area of camouflaged paintwork that was missing.

Accurate colour matching was carried out in the laboratory of the Birmingham based company Indestructible Paints Ltd, to ensure as close a match as possible to the original colours was achieved.

The colours are very unusual indeed and research work is still ongoing to establish more information.

Until a colour image showing AL246 in 1940 appears we will never be sure, but the team are confident that from the evidence and details they have found and used, the newly painted area now looks very close indeed to how the aircraft would have been delivered in 1940. The remaining original portions are of course - completely original.

More than 6 years of in depth research has been compiled and will be used to produce a book chronicling the project and all of its findings when the project is finally completed.

### **Work in progress**

Martlet aircraft played a very important role during the Battle of the Atlantic, performing anti-submarine patrol duties. For this reason the team agreed to place AL246 on display in this new exhibition even though some small areas of original paintwork need final conservation treatment.

The final stages of work that you may see being performed are a cross between archaeology, forensic examination and fine art conservation.

The more recent layers of paint are being stripped away using a surgical scalpel (or other suitably controllable tools) to reveal the original 1940's paint layer beneath. The conservation team are constantly looking for any tiny witness marks or pieces of evidence that will help answer questions about Grumman G36A/Martlet aircraft in general and AL246 in particular.

Evidence of in service flight deck or airfield accidents has been discovered along with much new information to update previously recognised facts concerning Grumman G36A/Martlet contract and construction details and of course the colours schemes they were painted in

### **Help our research?**

We are always very keen to hear from anyone who thinks that they have more information concerning Martlet AL246.

Do you (or a family member) have a flying log book with Martlet AL246 listed?

We are also looking for Log Book entries for:

Martlet BJ513

Martlet BJ563

Martlet AL250

Were you at Loughborough College anytime between 1944 and 1960?

Were you on connected with the Air Training School at Yeovilton between 1959 and 1964.

If you have any information that you think will help the team fill in some gaps with AL246's history, please contact the Curator of Aircraft or another member of the Museum staff.

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