

1957 BUCKER JUNGMAN BIPLANE

BUCKER JUNGMAN



BUCKER JUNGMAN

Year: 2018

Chassis no:

Registration: GBEDA

Price: SOLD

VEHICLE DETAILS

ADDITIONAL INFORMATION / SERVICE HISTORY

The aircraft is a CASA 1-131-E Series 2000, otherwise known as a Bucker Jungmann. It was built in Spain for and used by the Spanish Air Force in November 1957 (Construction Number E3B-504) until being imported into the UK by Tony Bianchi in October 1971. The engine is a ENMA Tigre G-IV-A5b 125 HP with full inverted oil and fuel system. It has a hand start cranking handle to the side of the engine.

I have to stress what fine condition this aircraft is in. It is used regularly. The paint & fabric coverings are as new. The machine is mechanically perfect having been properly looked after & cared for.

On arrival in the UK, the airframe hours were 1200:35 and the engine 805:20

Current hours are: Airframe 1710 Hours Engine 1252 hours.

The owner purchased the aircraft in 1981 and has owned it since (37 years) and has a detailed maintenance record for the whole of that time.

The Aircraft was shipped to Albacete, Spain where it underwent total restoration by and ex CASA apprentice (now in his 70's). The result was perfection and the new covering was with Polyfibre. It was brought back to the UK for assembly and painting. At the same time, the engine underwent some necessary maintenance before being reinstalled in the aircraft. The test flight was carried out on the 8th June 2014 and has been regularly flown from a grass airstrip in Norfolk since then.

The aircraft has a valid Permit issued by the LAA

There is a spare engine (150HP) which has no paperwork, but could be restored.

Numerous spares including 2 starter motors, 4 magnetos, a full set of engine valves and a multitude of other small items such as newly manufactured clevis forks.

Bücker Flugzeugbau GmbH

Adolf Hitler came to power in Germany in 1933 and appointed the famous First World War fighter pilot, Hermann Göring, to head the Reichsluftfahrtministerium (Aviation Ministry). Expansion plans for civil and military aviation were drawn up though it was to be two more years before the existence of the Luftwaffe was officially announced. The need for large numbers of training aircraft was realised and in the early stages nearly half of the orders for new aircraft were allocated to them.

It was against this background that Carl Clemens Bucker returned to Germany from Sweden bringing with him a brilliant young engineer, Anders J Andersson. They formed a new company, Bucker Flugzeugbau GmbH in October 1933 with the backing of Ambi-Budd Presswerke GmbH in whose premises at Berlin-Johannisthal the new arm was housed. Within six months the young company had produced its first aircraft, the (Bücker Bü 131 Jungmann, a small biplane trainer described in detail later.

The success of the Jungmann was such that the company moved to new, larger premises at Berlin-Rangsdorf in 1935. It was from this airfield, south of the city, that the company's most famous product, the Bucker BU 133 Jungmeister made its first flight later the same year. In 1936 a more powerful version of the Jungmann entered production and the Jungmeister began to make a name for itself in aerobatic competition starting with the Olympic Flying Day contest on July 30. That year also saw the appearance of a small high-wing monoplane intended for touring, the Bucker Bu 134 but it did not enter production.

The company's next design the Bucker Bu 180 Student first flew in November 1937. It was a light two-seat low-wing training and sports aircraft, cheap to build and operate. However, it was only produced in small numbers. This was followed by two more monoplanes developed in parallel as successors to the biplanes, namely the two-seat Bucker Bu 181 Bestmann and single-seat Bu 182 Kornett. The latter flew first in November 1938 and the Bestmann followed in February 1939. The Bestmann was ordered into production in 1940 and eventually supplanted the biplanes on the production lines at Rangsdorf, by which time deliveries had been made to some twenty-one countries.

Andersson returned to Sweden on the outbreak of the Second World War where he joined Svenska Aeroplan AB, better known as SAAB, which had been formed in April

1937 at Trollhattan and which merged with ASJA in 1939. Andersson designed the SAAB Sabr which made its first flight in November 1945 and was a three/four seat primary trainer very similar in size and layout to the Bestmann except that it was made of metal and had a retractable undercarriage. It served with the air forces of Austria Ethiopia. Finland. Sweden and Tunisia as well as civil operators such as the Air France and Lufthansa flying schools.

As detailed later the Bucker company's designs were also produced in Holland, Czechoslovakia, Japan, Spain, Sweden, Switzerland and even in Egypt. where manufacture of the Bestmann has only recently ceased. Bucker aircraft influenced other designers and, in particular, displays of the Jungmerster in the USA inspired Curtiss Pitts to produce the legendary Pitts Special. Similarly the Zlin factory in Czechoslovakia after producing the Bestmann went on to produce a long line of Treners and Akrobats.

Few details of design studies by the Bucker company have survived but one alternative layout for the Bestmann investigated was for a more radical design. This consisted of a low-wing monoplane with a tricycle undercarriage. The engine was placed behind the cockpit driving a pusher propeller and the tail unit was supported on twin booms. The company also developed its own engine, the 80 hp Bu M700. which was intended to power the Komett and later versions of the Student.

In addition to production of its own designs the company carried out major overhauls on other types, such as the Heinkel He 46 reconnaissance aircraft, and produced other aircraft or parts under licence. In 1938 a batch of Focke- Wulf Fw 44J Stieglitz (Goldfinch) trainers were produced and by 1940 examples of the DFS 230 assault glider were coming off the production line. Wing parts for the Junkers Ju 87 •Stuka• were also produced and in a particularly secret Operation some 4.000 Henschel Hs 293 radio-controlled winged bombs were built. During the winter of 1941/2 a number of motorised sledges were assembled for use on snow-bound air fields on the Russian front, powered by surplus engines from the Jungmeister production line.

During the war a branch factory was established at Wernigerode in the Harz district. some 200 km south-west of Berlin. where components for fighter aircraft were made.

Although situated close to Bedin. which was one of the main targets of the Allied-bombing offensive the factory at Rangsdorf was not damaged. At the end of the war both factories were over-run by Russian troops and today are situated in East Germany.

Carl Clemens Bucker

Carl Bucker was born on February 11. 1895 at Ehrenbreitstein near Koblenz in Germany and in 1912 joined the Imperial German Navy as a cadet. In March 1915 he transferred to the Naval Air Service and within two months had passed his pilots qualifying examinations and was promoted to Lieutenant. For the rest of the First World War he flew seaplanes from various bases on the North Sea coast The Treaty of Versailles. signed by Germany on June 28. 1919. ordered a drastic reduction in

the size of both the Army and Navy and the complete abolition of military aviation, so in 1920 Bücker moved to Sweden where he was employed by the Swedish Navy as a technical adviser and test pilot.

Svenska Aero AB

Bücker formed his own company in Sweden on September 10, 1921 and named it Svenska Aero AB. His first task was to erect and test a Caspar S I ordered by the Swedish Navy. When the Hansa und Brandenburgische Flugzeugwerke AG went into liquidation in 1919 its chief designer Ernst Heinkel joined Caspar-Werke taking with him the design for the Hansa-Brandenburg W37. This was a monoplane seaplane powered by a 260 hp Maybach engine and a development of Heinkel's highly successful Hansa-Brandenburg W29. This was then built by Caspar as the S I.

After erection by Svenska Aero the aircraft was delivered to the Swedish Navy on November 11, 1921 who gave it the serial number 31 and by whom it was known as the Hansa-Brandenburg 31. Ten production aircraft followed in 1922 and 1923, powered by the 240 hp Armstrong-Siddley Puma. They were known by the Swedish Navy as the Hansa-Brandenburg 32 after the serial number of the first aircraft. These were followed starting in 1924 by five examples of an enlarged and improved aircraft, the Caspar S II, powered by the 360 hp Rolls-Royce Eagle though the Swedish Navy designation was Hansa-Brandenburg 42 or Rolls-Hansa.

However, Heinkel had left the Caspar-Werke in order to set up his own company Ernst Heinkel Flugzeugwerke at Warnemünde on the Baltic coast of Germany on December 1, 1922. He reached an agreement with Bücker whereby Svenska Aero AB would produce those Heinkel designs which could not be built in Germany because of the restrictions imposed by the Inter-Allied Control Commission. In fact many aircraft were secretly built in Germany and the parts shipped across the Baltic to Sweden for erection and testing. However, as time passed these restrictions were relaxed and this subterfuge became less necessary.

Examples of the S I and S II produced by Heinkel's new company were designated the Heinkel HE 1 and HE 2, and the German Navy secretly placed an order for ten HE 1 seaplanes at the time of the Ruhr crisis in 1923 when France and Belgium annexed parts of German territory. It is believed they were built by Heinkel and the parts shipped to Sweden for erection and testing by Svenska Aero AB amid stories that they were for a South American country. In fact they were crated and stored until 1926 when they returned to Germany. Also in 1923 Heinkel produced a smaller training and touring aircraft, designated HE 3, which could be quickly changed from a landplane to a seaplane. It was demonstrated by Bücker in the aeronautical section of the Swedish Tercentenary Exhibition (ILUG) held at Gothenburg between July 20 and August 12, 1923 where it received first prize in its class. In 1924 Heinkel delivered an example of his HD 14 torpedo bomber biplane to the Swedish Navy through Svenska Aero but after testing it was not accepted. In 1925 the prototype HD 17 two-seat reconnaissance and general purpose biplane was shipped to Svenska Aero for testing. It was then shipped to the USA where licence-built examples were to be produced by the Cox-Klemin Aircraft Corporation. The type was also used at the secret German Air Force training base at Lipetsk in Russia.

A single example of the Heinkel HE 4 was delivered in 1926 via Svenska Aero to the Swedish Navy by whom it was known as the Hansa-Brandenburg 47. It was an improved version of the HE 2 and Svenska Aero also built ten for export to Latvia. On July 1, 1926 the Swedish Air Force (Flygvapnet) was formed and the HE 1, HE 2 and HE 4 received the designations S2, S3 and S4 (S=Spanings/Reconnaissance).

Also in 1926 Heinkel travelled to Japan and showed the HD 25 and HD 26 aircraft to the Japanese Navy with Bucker as his demonstration pilot. Both aircraft were catapulted from the battleship Nagato and agreement was reached with the Aichi company to produce the designs under licence. The following year saw series construction commence of the Heinkel HE 5 by Svenska Aero. A development of the HE 4, it was powered by a Bristol Jupiter and designated S5 by the Swedish Air Force. Series construction also began of the Heinkel HD 24 two-seat biplane trainer designated Sk 4 by the Air Force (Sk—Skol/school). Two Heinkel HD 19 two-seat reconnaissance float biplanes were delivered from Germany and Svenska Aero subsequently built four more in 1929. Powered by the Bristol Jupiter VI performance was so high that they were given the fighter designation J4 (J—Jakt/fighter) by the Swedish Air Force. In 1934 they were converted to land planes and operated for a further three years. During this period Heinkel also delivered two examples of his HD 35 and 36 primary trainers (designated Sk5 and Sk6).

In 1928 Svenska Aero AB produced the first aircraft of its own design, the SA-10 Pirat (Pirate). It was a two-seat convertible land or seaplane, designed as an interchangeable training or fighting aircraft. For the former role it was to be fitted with a 200 hp Armstrong-Siddeley Lynx engine and for the latter with a 425 hp Armstrong-Siddeley Jaguar. The fuselage and tail unit were of steel tube construction with fabric covering, while the biplane wings were wooden and covered in fabric. The prototype was the float training version equipped with dual controls and a Lynx engine. It was accepted by the Swedish Air Force with the designation 07 (0—Övning/training) and operated by F2 at Hagernes (Flyglinjetilt/-wing) between 1929 and 1937. One additional aircraft was built and delivered to Latvia in 1929.

1929 saw the appearance of the Falk (Falcon) trainer. It was designed to be either a primary trainer with dual controls and a 135 hp Armstrong-Siddeley Mongoose engine or an advanced trainer with flexible gun mounting in the rear cockpit and powered by a 200 hp Armstrong-Siddeley Lynx. The structure was entirely of steel with fabric covering and again it was a biplane. One example with the Mongoose engine was built as the SA-12 Skolfalk. It was delivered to the Swedish Air Force as the Sk8 and served at the flying training school at F5 at Ljungbyhed until 1938. The following year an example powered by the Lynx engine was produced as the SA-13 Övningsfalk. It was briefly used by the air force with the designation 08 and served with the Flygstaben (Air Force staff unit).

Also appearing in 1929 was the prototype the SA-11 Jaktfalk, a neat compact biplane fighter with an armament of two machine guns and contemporary with the Bristol Bulldog. The fuselage and tail unit were of steel tube construction faired to an oval section with the forward fuselage covered in duralumin sheet and the rest fabric covered. The wings had two rectangular steel tube spars with either wood or

steel ribs, the whole being covered with fabric. The prototype had a 500 hp Armstrong-Siddeleyh Jaguar engine and was delivered to the Swedish Air Force with the designation J5. It was followed in 1930 by the improved SA-14 Jaktfalk II with a Bristol Jupiter engine. Seven of these aircraft were delivered in 1930-31 with the designation J6 and in 1932 three improved aircraft were delivered under the designation J6A. A single example was produced in 1932 with an Armstrong-Siddeley Panther engine and delivered to the Norwegian Air Force. A further batch of seven, designated J66, were produced later after the design had been taken over by ASJA.

Up till 1932 the J5 and J6 served with F5 at Liungbyhed following which they were transferred to F3 at Malmslätt. Here the single J5 was placed in store but the J6s were supplemented by the J6A. In 1933 they were again transferred this time to FI at Vasteras where they were joined in 1935 by the J6Bs. The survivors were transferred in 1938 to F8 at Barkarby where they joined the Gloster Gladiator (J8) in the defence of Stockholm until replaced by the Seversky EP-1 (J9) in 1940-41. However, in December 1939 three aircraft (one J6A and two J6B) were presented to the Finnish Air Force where they served as fighter-trainers until 1945.

The last design by Svenska Aero was the SA-15, which was intended as a replacement for the Heinkel HE 5 with the designation S8, and the SA-15S ambulance version. However due to the few orders received the company was in financial difficulties and this design was not produced. On January 1, 1933 it was announced that the aviation division of Aktiebolaget Svenska Järnvägsverkstaderna (ASJA) of Linköping had taken over the entire aircraft manufacturing business and goodwill of Svenska Aero AB and Bucker was then able to return to Germany.

Post War

In 1945 Carl Bucker returned to Stockholm. However, in 1956 he took over as representative of the Swedish firm SAAB in West Germany and took up residence in Beuel/Kudlinghoven near Bonn. He gave much encouragement to owners of Bucker aircraft including Frank Price who produced plans of the Jungmeister suitable for home-builders. He was also involved in the efforts by Jack Canary to put the Jungmeister back into production in Germany in the mid-sixties. Also in this period Rim Kaminskis in the USA produced plans for a three-quarter scale Jungmeister which he called the Jungster I.

Bucker died on March 3, 1976 at the age of 81, but his superb aircraft live on as a fitting memorial. According to one of the world's leading aerobatic pilots, the late Neil Williams, **Nothing flies better than a Bucker Bucker Bü 131 Jungmann**

Bücker Bü 131 Jungmann

The achievement of designing, building and flying the prototype Bu 131 Jungmann in less than six months by a newly-established company seems almost an impossibility today, but following its establishment at Berlin-Johannisthal in October 1933 the DVL (Deutsche Versuchsanstalt für Luftfahrt) test pilot Joachim von Koppen flew the young company's Jungmann two-seat primary trainer on April 27, 1934 and it achieved immediate success.

Production orders were placed for the DLV (Deutscher Luftsport-Verband) flying Schools and the Bücker company soon found that demand for the new aircraft was such that the Johannisthal premises were insufficient to cope, necessitating a move to a larger factory at Berlin-Rangsdorf.

In 1936, following the Luftwaffe's selection of the Jungmann as its primary trainer, the 105 hp Hirth 504 engine became standard for the Bu 131B series, the prototype D-3150, designated Bu 131A, had an 80 hp Hirth HM 60R. The new engine offered an increase of eight mph in maximum speed and a much improved rate of climb enabling the Bu 131B to reach, for instance, 1,000 m in 5.2 minutes against 7 minutes for the Bu 131A.

Export orders began to roll in, mostly in small quantities, and there were customers as far away as South Africa, together with Hungary, Czechoslovakia and Switzerland. The last named evaluated the Bu 131B and decided to buy it for the Swiss Air Force and Aero Club, a manufacturing license was granted to the Swiss Dornier-Werke AG at Altenrhein and by the end of 1936 ten Swiss-built aircraft had flown, seven going to the Aero Club and three to the Air Force.

With production steadily increasing in Germany, Bücker was fully occupied with meeting many orders and one of the biggest customers was Spain whose Nationalist forces received more than 100 from the German factory before applying for and being granted license-production by CASA in Cadiz. The first Spanish-built examples, designated CASA 1.131 by the manufacturer and E.3B by the Air Force, appeared in 1938 and were equipped with German built Hirth HM504 engines.

The obvious advantages of using a Spanish engine resulted in installation of the 125 hp ENMA Tigre G.IVA from the 201st aircraft onwards: these were CASA 1.131Es. Production by CASA continued until 1960 when some 500 had been built. Some of these had 150 hp ENMA Tigre G.IVB engines and were designated CASA 1.131L.

A plan for license-production in Czechoslovakia by the Tatra Wagon Factory as a private venture proved abortive since the Czech Air Force did not select the Bu 131B, but Tatra built a small number (some sources quote 10, others 35) with the designation T-131 and these were eventually supplied to Czech State aero clubs. A post-war Aero-built Jungmann (OK-AXM) has been repainted to represent the first Tatra-built example OK-TAB and is preserved at the Tatra factory. Several hundred Jungmanns were ordered by east European countries, comparatively small numbers going to Bulgaria (15) and Romania (40), but Hungarian orders reached 119 of which 42 went to the military, 75 to the National Aviation Fund, one to a flying club and one to the Count of Festetics, this being a Bu 131A.

Yugoslavia was by far the biggest export customer with orders thought to have reached around 400.

Further afield, deliveries continued to South African private owners and totalled 16: in 1938 a demonstration tour of South America by a Jungmann and Jungmeister netted orders for Bu 131s in Brazil (19), Uruguay (2) and Chile (2). Other civil

deliveries were made to Sweden (4). Austria (1). and two each to Finland. France. The Netherlands. Poland and Portugal. Six went to the Netherlands East Indies in June 1939 for flying clubs and further north the Japanese Navy followed up an evaluation of a single Bü 131B in 1938 with an order for 20 the following year. Manufacturing rights were secured and Watanabe (later renamed Kyushu) built 278 for the Japanese Navy with the designation K9W1 Navy Type 2 Primary Trainer Model II: a further 61 were sub-contracted to Hitachi.

The Japanese Army also adopted the Bü 131 as its primary trainer and 1,037 were built by Kokusai as the Ki-86a. Both Army and Navy models were powered by 110 hp Hitachi GK4A engines which differed only in detail.

Bücker built one BU 131C with a 90 hp Cirrus minor engine, and the final German production version was the Bu 131D, introduced in 1938 with minor improvements.

By the outbreak of war. Bucker production had topped 1,000 Jungmann and although total figures have been impossible to obtain it is thought that between 3,000 and 4,000 were built in Germany. another 300 were manufactured at the Aero factory in Prague. Hungary received 151 Bu 131Ds from 1939 onwards, but most Hungarian aircraft were destroyed when the Germans retreated. However, by salvaging bits and pieces and building new wings the Hungarians rebuilt 42 Jungmann by 1947 but lack of spares grounded the last one in 1953.

In Czechoslovakia. where 12 Jungmann built as Aero C.4s were salvaged in 1946. it was decided to reopen the production line and 260 more were built as Aero C 104s between 1946 and 1949 with 105 hp Walter Minor 4-III engines. A number of these were sold in 1959-60 to customers in Switzerland. Austria and West Germany.

Dormer-Werke in Switzerland built 84 Jungmann for the Swiss Air Force with 105 hp Hirth engines and when these aircraft began to be replaced by Pilatus P-2s in the late 1950s and early 1960s they were eagerly sought by flying clubs and individuals. In a bid to improve the aerobatic performance, various conversions to higher power were carried out The first of these was in 1962 when FFW (successor to Dornier-Werke) fitted a 170 hp Lycoming into HB-UTH which was subsequently flown into second place at that year's British Lockheed International Trophy Contest by Albert Ruesch.

Other Jungmann were modified by FFW and Pilatus to take a 180 hp Lycoming and a new wing with improved section. designed by Swiss engineer Fritz Dubs. was fitted to the Pilatus modified Jungmann HB-URN by Max Datwyler & Co. This variant became the Lerche (lark).

When the Swiss Air Force later released its final batch of 25 aircraft they were donated to the Swiss Aero Club who arranged with Ateliers de Precision Morand (APM) to replace IO-320-E2As using Hoffman propellers. A condition was imposed that they were only to be sold to Swiss customers.

Swiss. Czech and Spanish-built Jungmann have been converted in the USA to a variety of powerplants from a 150 hp Lycoming to a 225 hp fuel-injection Lycoming

and are much prized by their owners It seems likely that about 120 Jungmann of all variants are still extant, including several preserved in museums.

TELEPHONE / ONLINE

+44 (0) 7967 260 673

Richard@vandp.net

vandp.net

SHOWROOM ADDRESS

Vintage & Prestige of Northampton Ltd

EM Rogers Building

2 Ryehill Close

Lodge Farm Industrial Estate

Northampton

NN5 7UA

VINTAGE AND PRESTIGE OF NORTHAMPTON LTD

Company reg. no: 1257 3400