



June 2002

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**This month's meeting: Thursday 13th June**

As nothing special has been planned for this month's meeting, we will be having an open forum, ie, chat over a glass of beer! With the Cranfield Rally on the horizon there will be discussion about our running of the Sales Park, and who will be attending. We also hope to consolidate the "Old Buzzard" scheme which was introduced by Gordon a couple of months ago. If you have any other interesting topics to discuss, please bring them along!

**Last month's meeting: Thursday 9th May**

We welcomed Paul Brown, the Operations Manger of Kemble aerodrome, to our May meeting at BAWA. Many changes have occurred since the new management team took over a year ago last March, and the future of the airfield seems more secure than it's ever been. Paul described how the communications equipment in the Tower has been overhauled, and much of the infrastructure improved in order for their CAA licence to be approved. If granted, they hope to encourage more commercial traffic, which will provide much needed income. On the subject of income, Paul did confess that landing fees have recently been increased to £10.00, however, a reduction of £2.00 will be given if we buy 30 litres of fuel when we visit. The former fire station is currently being developed into a high-class restaurant called AV8, and this should be opening in August.

Paul concluded his chat with an overview of the forthcoming Air Day on June 16th, which this year will feature the Folland Gnat and of course the RAF Red Arrows. All this and more is on their website: [www.kemble.com](http://www.kemble.com)

**Bill Townshend Retires**

After 50 years in aviation PFA Inspector and L.A.E., Bill Townshend has retired. Bill and Pat will be leaving the UK at the end of June for retirement in Spain.

Bill's skills and knowledge are well known to many of our Strut members, having frequently benefited from his expertise. He was one of the last persons to fly a light aircraft out of Heathrow in 1972. On behalf of us all in the PFA Bristol Strut, we wish Bill and Pat a long and happy retirement.

**G-BZRV update**

Painting of the airframe should be complete by the time this goes to press. The colour scheme is white, yellow and blue trim, which we are sure will be of the best possible standard. Assembly of the main airframe parts is the next phase, which should commence during the second week of June!

**Aircraft for sale at Cranfield**

As reported last month, the Bristol Strut has been invited once again to run the Aircraft-4-Sale park at Cranfield. In preparation for the event, John Shufflebottom has been asked to supply names of those volunteers who intend participating, so that they can be checked in at the Worker's tent on arrival. If you are going to the Rally, and are able to put in a few hours over the weekend helping to match buyers to sellers, then John would be glad to hear from you. He will no doubt be discussing arrangements at our meeting on Thursday, so come along and be counted!

**Places to go in June / July**

June			
8th-9th	Popham	PFA roadshow and Europa club fly-in	01256 397733
9th	Tatenhill	PFA West Midland Strut fly-in	01902 333798
15th	Old Warden	Shuttleworth sunset display	PPR: 01767 626200/ 627288
15th	Eggesford	PFA Devon Strut fly-in	PPR: 01363 83746 / 07970 251386
16th	Kemble	Golden Jubilee air day	
16th	Branscombe	PFA Devon Strut fly in	01297 680259 or 07970 251386
21st-23rd	Cranfield	PFA Rally 2002	01273 461616
29th-30th	Shobdon	Herefordshire Fly-in	PPR: 01568 708369
July			

6th-7th	Waltham	PFA roadshow (provisional)	01273 461616
7th	Kemble	Balloon Meet	01285 771177
7th	Old Warden	Shuttleworth summer display	PPR: 01767 626200 / 627288
7th	Halwell	PFA Devon Strut fly-in	PPR: 01548 857513 / 07970 251386
14th	Popham	Jodel & Canine fly-in	01256 397733
14th	Lundy	PFA Devon Strut fly-in	PPR: 07970 251386
20th	Old Warden	Shuttleworth sunset display	PPR: 01767 626200 / 627288
20th	Belle Vue	PFA Devon Strut Intn'l fly-in	PPR: 01805 623113
27th	Eggesford	PFA Devon Strut fly-in	PPR: 01363 83746 / 07970 251386
28th	Branscombe	PFA Devon Strut fly-in & Classic cars	PPR: 01297 680259

Continuing his occasional series of articles concerning the early days of aviation in Bristol, John Shufflebottom has assembled the following description of another little-known rarity:

## LOCAL LIGHTS 4

### The Parnall Pixie

Hello folks, here we go back to 1923 again, to the Lympne trials. First of all, some background to the trials.

In 1923 the Daily Mail offered a prize of one thousand pounds in a "motor glider" competition, and at the same time the Duke of Sutherland promised five hundred pounds to the pilot of the aeroplane that could make the longest flight on one gallon of fuel, the engine of which was not to exceed 750cc. This combined challenge resulted in the light aeroplane trials organized by the Royal Aero Club.

The chief designer of George Parnall & Co of Yate was Harold Bolas. He realized that no single aeroplane could win all the prizes, so decided to design an aeroplane that had interchangeable components. This design used a fuselage, tail and undercarriage, which could be fitted with two different sets of wings and two different engines. Called the Pixie, the Mk1 consisted of large wings with a span of 29ft and a small 3½ h.p. (500cc) two cylinder Douglas motorcycle engine for the fuel consumption tests, and a 6 h.p. (750cc) Douglas engine for the height test. The MkII Pixie had small wings of 18ft and the larger engine for the speed test.

The Pixie was a semi cantilever low wing monoplane. The wings being braced to the top fuselage decking with adjustable streamlined struts, this positioned the pilot above the wings and practically at the aircraft's centre of gravity, and, since the pilot's weight represented more than one-third of the total weight, the reduced inertia resulted in improved control response and the low wing was reputed to give a cushioning effect when landing thus reducing the landing speed. The wings were of mixed timber and steel construction, steel fittings being employed at fuselage attachment points while the internal bracing consisted of grooved steel rods. The wing layout was unusual; the chord and spars were parallel from the fuselage to a point just past the strut attachment position. Past this point the front spar continued to the tip and the rear spar was angled forward to meet the front spar at the tip. The aileron was hinged to the outer spar giving it a raked appearance. The wings were easily removable and could be attached one along each side of the fuselage for transport.

Test pilot Norman Macmillan, MC, AFC, took the Pixie up in its Mk1 form on September 13th 1923, and the MkII flight took place at Filton on October 4th. Capt. Macmillan found that the Pixie in its Mk1 form could not approach the economical consumption of the English Electric Wren, or the ANEC, as they were virtually powered gliders; even so, it completed ten laps of the 12½ mile course, and flew 53.4 miles on one gallon of fuel. He decided to concentrate on the Abdulla five hundred pound speed contest and despite the gusty conditions won at a speed of 76.1 mph. Two days later, again with Macmillan at the controls, the aircraft attained a speed of 81 mph.

A second Trial was set for 1924; this competition was designed to determine selection by the air ministry of a suitable training machine for use by the new flying clubs which were springing up around Britain. Harold Bolas redesigned the Pixie converting it into a two seater, and in

Two Pixie II's were built for the trials, registered G-EBJG and G-EBKK. 'JG was powered by a Bristol Cherub III 32hp flat twin, and 'KK by a Blackburn Thrush three cylinder radial.

The Pixie III made its initial flight on September 5th 1924 at Yate and as a result modifications to the rudder and elevator were found necessary before both Pixies were flown to Lympne. 'JG was numbered 18 and was piloted by Flt Lt "Rollo" A. de Haga Haig, and 'KK numbered 19 was flown by Sqn Ldr W. Sholto Douglas, this machine flying in its biplane form as the Pixie IIIa.

Throughout the trials both Pixies suffered mechanical faults, on September 27th number 18 managed just one circuit before a loss of oil pressure forced it down. On the 28th number 19 was forced down by engine trouble although on the following day it did manage to complete a few laps. September 30th was no better. Flt Lt de Haga Haig was forced down by a broken con-rod, while Sqn Ldr Sholto Douglas had to force land when his Thrush engine seized up.

By October the 1st a spare Bristol Cherub engine had been fitted in number 18, and de Haga Haig flew it in MKIII monoplane form in preparation for the forthcoming Grosvenor cup race. He gave a polished display of aerobatics including rolls and loops believed to be the first such maneuvers to be carried out in an aircraft of that class, and a repeat performance was given the following day while Sholto Douglas flew number 19 in the slow speed trials, despite the fact that his engine was still plagued by troubles.

On the day prior to the Grosvenor cup race Numbers 18 and 19 were joined by G-EBKM one of the earlier Pixie II's powered by a 1,000cc Blackburn Vee twin engine. This aircraft had been kept secretly in a hanger all week and its sudden appearance made it favorite for the race, unfortunately it lost its propeller on landing and the only replacement retarded the performance. In the event, number 19 was withdrawn with engine trouble, number 18 came in 5th and G-EBKM came in 6th place.

Despite its shortcomings the Pixie was considered to be a basically fine aeroplane and the fitting of a more suitable engine would overcome the major problems; consequently, in the 1924 RAF Hendon Air Pageant a Pixie II appeared with a military serial J7323 and was powered by a 696cc Blackburn Tomtit engine.

Meanwhile MKIII G-EBJG went to the aeroplane and armament experimental establishment at Martlesham Heath, for testing by service pilots who found the machine excellent for its intended role as a trainer, the only fault being the downward view over the wing.

In August 1925 G-EBJG returned to Yate where the second Pixie G-EBKK was in use as a test bed. Already the Thrush engine had been discarded and a 1100cc Anzani engine had been fitted which had itself been replaced by a Bristol Cherub III, and it was with this engine that it took part in the races held at Lympne during the 1925 Bank Holiday.

In September 1926 G-EBJG was once again entered in the air ministry trials

which enabled the aircraft to be converted into a biplane to give it a better performance when taking off or landing. The upper wing was strut braced and was over six feet shorter than the lower wing resulting in a very odd appearance when airborne.

where, piloted by Frank Courtney and carrying number 14, it came 4th in the weeklong event. G-EBKK was unfortunately wrecked in a crash in 1930 but G-EBJG, after being sold to the Bristol Flying Club at Patchway, and a further two pre-war owners, survived the war in storage. After the war, the old Pixie had five more owners, the last of whom presented it to the Midland Preservation Society.

John Shufflebottom