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meets

DESMOND PENROSE



DARREN HARBAR

The great de Havilland test pilot looks back on an aviation career lasting 70-plus years — one that also saw him flying a splendid array of vintage machinery

WORDS: BEN DUNNELL

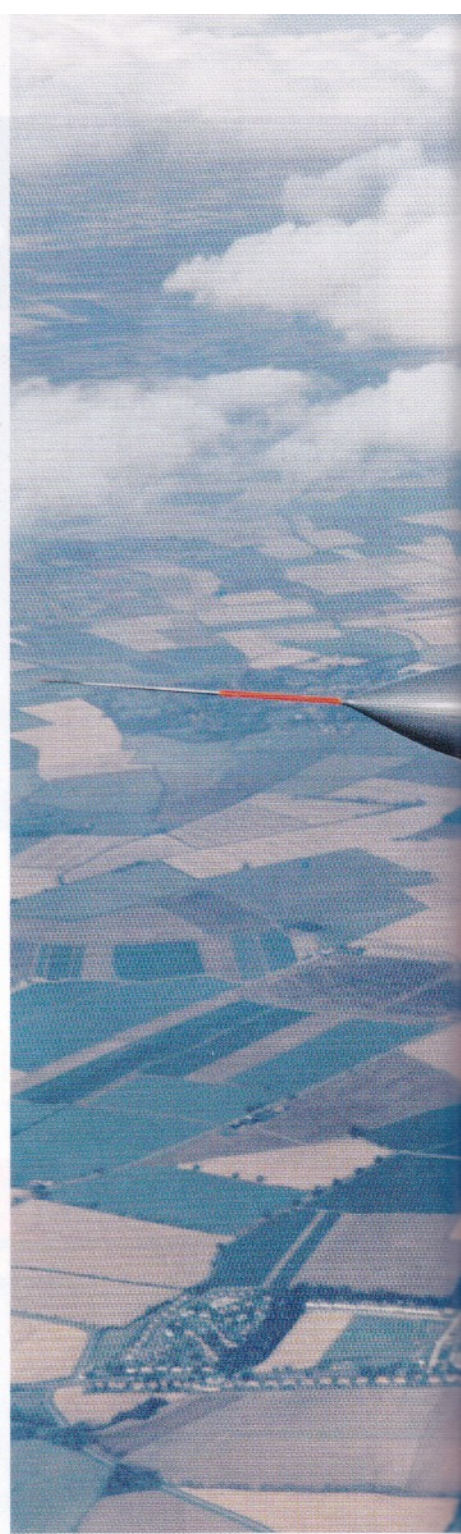
On 14 April 2018, the historic grass airfield at Henlow witnessed a special celebration. Former de Havilland test pilot Desmond Penrose marked the anniversary of his maiden solo by flying DH82A Tiger Moth G-AZZZ, it having been 70 years earlier to the day that he first took to the air himself — fittingly enough, in a Tiger. A year later, this great aviator made his final flight. In typical fashion, he thought to leave a thank-you note to the owner of 'ZZ, DH Moth Club supremo Stuart McKay.

The figures relating to Desmond's career speak for themselves. Within the pages of his logbooks can be found more than 300 different types, ranging from some of the lightest British vintage civilian aeroplanes to supersonic military jets. He has conducted in excess of 600 flying displays, including demonstrations of manufacturers' aircraft at Farnborough, Le Bourget and Hanover, and occasions such as sales tours or the opening of Washington's Dulles Airport. For

more than 40 years he flew historic machines at Old Warden, whether as a Shuttleworth Collection pilot or in his own charges, Arrow Active II G-ABVE and Percival Mew Gull G-AEXF.

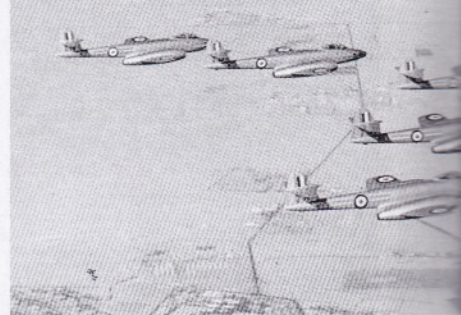
Desmond came back to Old Warden in late September, guest of honour at Shuttleworth's de Havilland centenary show. There he shared with the author, and the audience, some of his DH recollections. A couple of weeks later, I went with present-day Shuttleworth pilot Scott Butler to hear more over a good lunch. We duly repaired to the Wicked Lady pub near Wheathampstead, Hertfordshire, where the tales of a great career flowed forth. Now the sole surviving de Havilland development test pilot, there was a time when Desmond never thought he'd last so long. "I didn't expect to get past 42, I really didn't", he comments. His era was, after all, a perilous one for the test-flying fraternity. But he was undeterred, for this was the fulfilment of an ambition.

"When did I know I wanted to be a test pilot? 1943. I used to get



Airborne from Abu Sueir, Egypt, as part of a mass formation by No 208 Squadron's Meteor FR9s during his first tour.

KEY COLLECTION



Desmond at the controls of development Sea Vixen FAW2 XN684 on 27 August 1962, undertaking speed recorder calibration. VIA TONY BUTTLER



No 17 Course at the Empire Test Pilots' School. Desmond is in the second row back, fourth from the left. ETPS

RIGHT: The un-named RAF College aerobatic team of Vampire FB5s in 1956, Flt Lt Bidie leading, with Fg Off Penrose in the number three position.

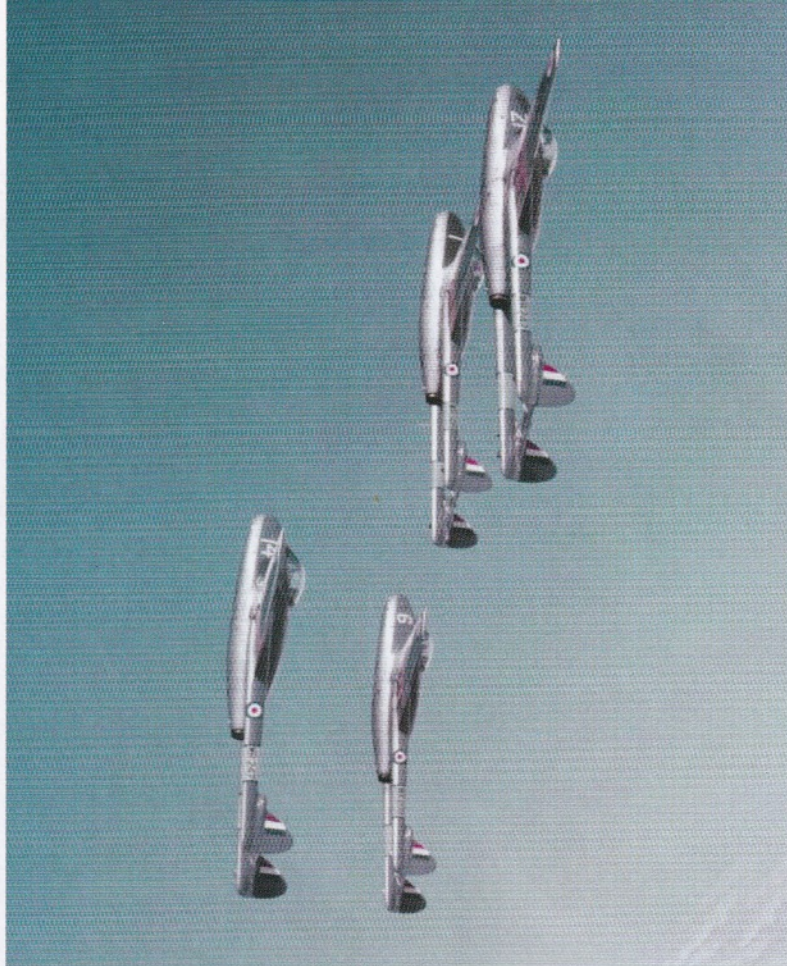
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sixpence a week pocket money, I was away at school in Somerset, and if I had a shilling I could go to a newsagent and get out-of-date copies of *Flight* or *The Aeroplane* — sometimes four, sometimes six, depending on how generous he was. I read that the Empire Test Pilots' School had been set up at Cranfield. Having seen that, I then turned later that day to my closest friend, Peter, and said, 'I'm going to be a test pilot'. I was all of 13. He said, 'Your maths aren't good enough', and he was right. He was bright, I wasn't. I had to work hard."

He put the graft in, and won a place to read aeronautical engineering at Loughborough College, now Loughborough University, in 1946. For the hands-on, practical work, the college had a large fleet of ground instructional airframes. Desmond recalls taking the tailplane off a Spitfire Vc, AR501, and removing the wings from a Sea Hurricane, Z7015. Today, both are flown by Shuttleworth. But even better was the opportunity of learning to fly. He jokes, "I started on a Tiger Moth, and I finished my flying career on a Tiger Moth, so I didn't learn very much."



That start came with Nottingham University Air Squadron, stationed at Newton. Desmond won the Jonathan Cash Trophy for best cadet in 1947-48. "I don't think I was a particularly good pupil, but I had a very good instructor, Charlie Dalziel, who had been a bomber pilot in the Second World War. He was about 15 stone and played rugby. I was having difficulty with my slow rolls, and he would undo the stick in the front, get up, turn round and — this was before the days of bonedomes — hit me with



it. It hurt! So, I waited. I got my slow roll slightly wrong, and he stood up. I lifted the nose up and rolled it. He never did it again...

"I wrote a thesis with the rather grand title of 'The Science of Aircraft Flight-Testing', but I had to at the same time produce something mechanical, so I built a testbed for the Rolls-Royce Trent turboprop engine. There were only three Trents built: two went into the test aircraft, which was a Meteor, and one we obtained. At that time, 1951, it was the only turbine engine in a testbed in an academic establishment.

"I went from there into the RAF on a direct-entry permanent commission, but I was more advanced than

my fellow junior officers because I'd met so many different nationalities: Indian, Thai (a prince), Norwegian, Portuguese, a Palestinian of Austrian extraction. When I came away from Loughborough I could swear in six languages."

Obtaining his RAF wings after a short course on Harvards at Cottesmore for students with UAS experience, Desmond's jet conversion took place on the Meteor T7 with No 207 Advanced Flying School at Full Sutton. He was rated 'above average' by the Stradishall-

based No 226 Operational Conversion Unit, and stayed on the Gloster twin-jet for his first posting. Beginning in November 1952, this was to No 208 Squadron at Abu Sueir, Egypt, on the Meteor FR9.

"We spent most of our time as a fighter-reconnaissance squadron at between 70 and 100ft", says Desmond, "at round about 400kt. We had three tailplanes come off aircraft, but fortunately we never lost a pilot. They sent somebody out from Farnborough who put a V-G [velocity-gravity] recorder in one

of our Meteors, and there were instantaneous g recordings of up to 20g. Because they were instantaneous, they were not felt by the pilot,

but they were obviously taking their toll on the tailplane.

"One Meteor lost its tailplane in the middle of an exercise called Exercise 'Sunray'. Some Lincolns were sent over from Cyprus, and we did an intercept on them. The defending fighters were Venoms. One of the Venoms got on the tail of Pete Greensmith's Meteor at, I don't know, 35,000ft, and Pete pulled through. As he pulled through, the tail came off. The Venom pilot didn't see anybody eject, and we spent three days trying to find the

BELOW: Lightning XG325 was one of the two development batch aircraft Desmond flew from Hatfield on missile trials, as here in August 1962. The other was XG332, lost in a famously documented crash with George Aird at the controls.

BAE SYSTEMS HERITAGE





LEFT:
The Sea Vixen FAW2 flight test team in the mid-1960s, XP919 behind. Desmond is at front right in the pale suit.

OWEN COCK VIA TONY BUTTLER

BOTTOM LEFT:
Early days at Old Warden: Desmond in the rear cockpit of DH60G G-AAWO in 1965, with Tony Goldspink — then Shuttleworth's public relations man, and father of current collection pilot Stu Goldspink — up front.

NORMAN RIVETT VIA STU GOLDSPIK

BELOW:
Deep in discussion with Hatfield chief test pilot John Cunningham in front of an early HS125. The renowned wartime night fighter pilot acted as something of a mentor.

VIA DESMOND PENROSE

wreckage in the Sinai desert. There was a committee of adjustment, and Pete's kit was auctioned — the money was going to be sent to his family. Vaguely pornographic postcards were thrown away.

"The funeral, a proper funeral with a gun carriage but with sandbags in the coffin, was organised by an RAF Regiment officer. Everything was set up. On the morning, who walked in through the gate but Pete Greensmith? The first chap who met him was this RAF Regiment officer who said, 'You bastard! You might have waited another day!'"

It was with some disappointment that Desmond left the front line in June 1955. He trained as a Vampire instructor with the Central Flying School, winning the Clarkson

Trophy for his aerobatic prowess, and was posted to the RAF College at Cranwell. There he immediately formed a four-ship team on Vampire FB9s, the college's first such outfit to be jet-mounted. With Desmond in the number three position, a debut display took place on 1 May 1956 — that significant date again.

But, finally, test-flying beckoned. "At the end of that tour, in 1958, I went for a three-day test at Farnborough for selection for the Empire Test Pilots' School. I was on No 17 Course". There he flew the Varsity, Chipmunk, Devon, Meteor, Canberra, Hunter and more. Two of the less successful fighters of the day provoke particular memories.

The Swift, he says, was "super at low level, ridiculous at height. If you pulled more than 1.5g it would judder. It was just useless at altitude". As for the Javelin, "I only flew the Mk1. I think the later marks were much better. It was a fighter aircraft whose pilot's notes said 'non-aerobatic'. I've always loved aerobatics, but that was one aeroplane that I never looped. I did roll it. The risk was that if you got it into the inverted position at too low a speed and pulled a little too hard on the stick, you would stall it."

His ETPS Preview assessment was on the Sea Hawk. "It was a joy to fly. Slightly underpowered, but it had powered ailerons. I did fly it with no power, to see what it would be like if they failed. You could get the





ABOVE: There were many memorable sorties in DH60 G-EBLV, such as the memorial flypast to Geoffrey de Havilland on 21 July 1965, and a May 1968 trip from Northolt to Denham with Sir Alan Cobham aboard. This spirited flying was at a Hatfield display.

GORDON RILEY

aircraft up to height after a length of time, rather like a higher-powered Vampire. I rolled it on its back, and tried to point it vertically down. When you think you're vertical, you're probably only at 70°. I took my hands and feet off the controls, the air speed indicator gradually went up and up and up, and it reached Mach 0.87. When you got to about 0.78, the Meteor would buffet seriously. The Sea Hawk would hold its speed until it got down into denser air, when it would show it was doing about 400kt, and it would just recover all on its own". For his Preview, incidentally, Desmond received a comment of "well done, Above Average."

The natural progression was to become a Royal Aircraft Establishment test pilot, also at Farnborough. There he flew "up to 13 different types in one month. I did a lot of work on very low-frequency navigation systems with the Comet 2E, and some of the first fly-by-wire development with the Avro 707C. That was a very interesting aeroplane to fly. It was not difficult to take off, not difficult to handle, but you had to make certain that you *put* it on the runway — not to over-rotate, because if you did, it would drop a wing.

RIGHT: Proudly circuiting the Wren, previously thought the sole domain of a lightweight female pilot due to its lack of power and performance.

VIA DESMOND PENROSE

"I was coming to the end of my tour when John Cunningham" — de Havilland's chief test pilot — "asked me whether I'd resign my commission and join him at Hatfield. I had not thought about it. I'd just thought I'd stay in the air force until I reached a certain rank. It took me two months to make my mind up, which rather strained my relationship with John. But I joined de Havilland in 1961, and I never looked back."

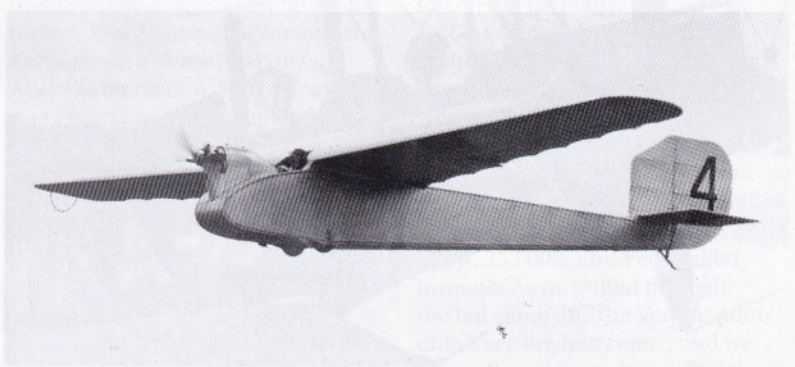
Desmond started out as project pilot on the Sea Vixen FAW2, with its revised weapons system, fuel distribution and aerodynamics compared to the Mk1. In those days, test pilots would report back directly to the design and engineering team, which in this case meant R. E. Bishop, the man

behind the Mosquito and the Comet. "I used to see him regularly for a Monday morning meeting, round about 11 o'clock with coffee and biscuits, to tell him how the Sea Vixen programme was going.

"On one occasion he asked me to give his son Dick a flight. I got him airborne in a Heron and let him handle the controls. It happened to be on the day that we ceased to be de Havilland and became Hawker Siddeley, and Dick asked me what I thought about it. Well, because he was a 16-year-old I didn't use any expletives, but I was fairly blunt in my description of what I thought about Hawker Siddeley. What I didn't know was that we'd got an open transmitter on the company frequency, and everything went out to all of the company airfields. My career went on a plateau.

"With the Sea Vixen, Hawker Siddeley said they would not put forward the funds for a spin trial. I spoke to R. E. Bishop, and he said they couldn't put forward the £20,000 we needed for telemetry. Well, I couldn't have a fighter going into service without doing a spin trial. I told [flight test observer] Robin Potts one day that I was going to fly it solo. He said, 'Oh, I'll come with you,' but I said no, I wanted just to go and do a handling test. What I had done was to leave an envelope in my desk, in which I'd laid out the spinning programme. There were going to be eight spins: normal entry, accelerated entry, steep turn entry and unusual position entry, all left and right, making eight altogether. I explained why I was doing it, just in case I didn't come back. It was a great anticlimax. I came back, I picked up the envelope and burnt it at home that night. It was unauthorised — I'd put my career on the line.

"The fastest I have been closest to the earth was in a Sea Vixen. It was



less than 80ft at RAE Bedford. The Javelin at Boscombe Down had gone unserviceable — it was supposed to be doing our PEs, position errors, on the Sea Vixen. I didn't want to hold the programme up, so they set up two theodolites and I did the various speeds: 250, 300, 350, 400, 450, 500, and then as fast as I could go. That was 614kt, which is over 700mph. It had to be below 80ft, and you really did feel you were travelling."

In parallel, Desmond joined de Havilland's Firestreak and Red Top missile test efforts, for which two pre-production development batch Lightnings took up residence at Hatfield. In this guise, he says, "It was limited to Mach 1.7. I took it up to 1.98, and at 1.98 it was starting to go sideways, because it had the small fin. I throttled back very, very gently. If I hadn't done it gently it would have departed. I spoke to [English Electric chief test pilot] 'Bee' Beamont the following day, and he said, 'You realise you were running out of directional control?'

"I shot down Jindiviks with both Firestreak and Red Top. It was super work, but getting all the way to Cardigan Bay and finding there was a delay of 10 minutes..." Given the English Electric aircraft's parlous fuel capacity, this could make the return flight to Hatfield a nervous affair. "Boscombe Down was the en route diversion, but one didn't want to do that."

All the while, John Cunningham was acting as something of a mentor. "What I didn't realise was that John was projecting me forward. He was giving me responsibility for one job to then take me on to another.

My skill as a test pilot was improved, and he was a joy to fly with. He never gave an order — it was always a request. But he was a very

firm individual. I had a call from him one day to say ETPS were coming for lunch and he would like me to help host them. I said I couldn't do that, as there was an aeroplane coming up for me to fly. There was a pause, and he said, 'Is this a clear line?' I said yes. There was a click. I ended up having lunch."

As Hatfield's involvement in military programmes diminished, so Desmond found himself engaged on the civil side. Already he'd been involved in the maiden flight of the



Trident, on 9 January 1962, flying the Canberra chase aircraft. He went on to test many more examples of the tri-jet airliner, and to play a central part in development of the DH125 — later HS125 — executive jet, which took to the air just seven months later. Both were very enjoyable assignments. "I used to loop and roll the 125", he says, "but I will never admit to rolling the Trident."

As time went on, it became clear that the Trident was not a

roaring success. Desmond puts the blame at the door of British European Airways, which moved the goalposts by demanding

a smaller aircraft. "If we had not acquiesced to what they wanted, we wouldn't have had the money to fund the build. It was a mistake. But it was a beautiful aeroplane to fly. It would cruise at [Mach] 0.86, and on one occasion, in a gentle dive, I took it up to 0.97. I didn't take it any further because I could feel the beginning of a 'Mach tuck'. The nose was just wanting to tuck down.

"Commercially the 125 was superb, and yet the publicity it was given against the Trident was

minimal. The money from the 125 actually brought in the resource to continue the Trident. In 1967 I did two three-month tours, one of South America, one of the Far East, in the 125 — over 42 countries. I'd like to think that we sold a fair number of aeroplanes."

A few years earlier, a rather older de Havilland product had entered Desmond's story, in the form of DH60 Moth G-EBLV. The world's oldest airworthy Moth, 'BLV' had been kept in the company's ownership, and he was tasked with looking after it. On 14 June 1964, Desmond was involved in a piece of history when he flew the machine in the Shuttleworth Collection's inaugural public display at Old Warden. Also participating were Dickie Martin in the Avro 504K, Godfrey Auty at the controls of the Bristol F2B, Allen Wheeler in the Avro Tutor and 'Willie' Williamson with the ill-fated Bristol Bulldog, which crashed at Farnborough that September. Desmond remembers, "Much to the chagrin of the other pilots, the *Air Pictorial* article said that I 'excelled', which pleased me."

It was Wheeler who recruited Desmond to the Shuttleworth pilot roster. "There was a display at Henlow on a Saturday and Sunday. All the senior chaps turned up

TOP:
A rather different Old Warden crowdline is in evidence as Desmond displays the Avro 504K in the early 1970s.

AIR PORTRAITS

ABOVE:
Getting airborne in the DH53 Hummingbird during June 1975, maybe for a few aeros...

AIR PORTRAITS



TOP:
Trident 2E G-BBVT
in Hong Kong during
its delivery flight to
CAAC, which whom
it became B-282 and
later B-2205.
SAMBA COLLECTION/
AIRTEAMIMAGES.COM

ABOVE:
Despite its foibles,
and a couple of
mishaps not of his
making, Desmond
savoured his time in
Mew Gull G-AEXF.
AIR PORTRAITS

ABOVE RIGHT:
With restorer
Glenn Peck and the
magnificent DH-4M2,
owned by Al Stix
of Creve Coeur,
Missouri.
VIA DESMOND PENROSE

and flew the exotic aircraft, and I flew the Tutor. I knew my place. Came the Monday, I turned up at Henlow and flew the Tutor back to Old Warden. I came back to Henlow to get in my car and go home, or go to work. 'Jacko' [Leonard Jackson, then manager of the collection] was there, and I asked him what was happening. He said, 'I don't know, because nobody's turned up.' We killed time for about an hour. He'd obviously been thinking about it, because he asked, 'Do you think you could fly the Avro 504?' Yes, I said. He gave me a brief on the rotary, and I delivered it to Old Warden. I came back, and he said, 'Do you think you could fly the Sopwith Pup?' I told him, 'In the First World War they went from 504s to Pups, so I think the answer is yes.' So, I delivered that. I ceased to be a tyro and became the rotary expert, just like that.

"Following on from that I flew the Bristol Fighter. 'Jacko' would invite me to tea at his house. This was a very formal, almost Victorian affair, with china cups, silver teapot, cake stand. It was also rather boring. He 'phoned one day and said, 'What are you doing tomorrow? Would you like to come to tea?' Since he was the manager and I wanted to

ingratiate myself, I told him, 'Yes, I'd be *delighted*'. He said, 'We'll take the Bristol Fighter.' Where will we take the Bristol Fighter, I wondered? 'We'll go and see Sir George Whitworth at his house in Essex.' I got in the Bristol Fighter, I flew it down, and fortunately managed to find this place. He had been a pilot and he'd got a bit of a strip. I put the Bristol Fighter down, we stayed and had tea — cucumber sandwiches — and we came back. You wouldn't do that in a Shuttleworth aeroplane nowadays..."

After its starring role in *Those Magnificent Men in their Flying Machines*, Desmond delivered the replica Avro Triplane to Old Warden. "Once filming was finished I picked it up at Elstree. I routed via Hatfield and went past John Cunningham's office window". He flew the Bristol Boxkite, too. "I enjoyed it on a calm day — not a hot day. It has such a limited speed range, 28-35mph, if I remember correctly.

"Some time in the late '60s, I was the first male to circuit the English

Electric Wren. I was very proud to do that — everybody else said it had to be Delphine Grey-Fisk. I said to [chief engineer] Wally Berry, 'One evening I'll come up here and see if I can circuit the beast.' I got Wally to go over the engine, and I went on a diet. I'm not over-hefty, but I made certain I was lighter. I got it up to over 200ft, and 72-73mph. Then I did a display on the Sunday.

"And I aerobated the DH53 Humming Bird. I read that Hubert Broad had, and I thought that if Hubert Broad could, so could I. Often I would craftily aerobate an aeroplane when nobody else was

“John wittered at me all the way through my display. I took no notice”

watching. Don't believe any of the stories about the malign habits of the DH53. They're wrong. There is nothing wrong with that aeroplane at all, except the fact that it's underpowered."

As Shuttleworth opened more regularly to the public, so Desmond supported an idea to attract a new generation. The result was Schools' Day, which ran for many years. "On one Schools' Day I drove up to Old



ABOVE:
A July 1993 jaunt
over the Old Warden
parkland in Arrow
Active II G-ABVE.

AIR PORTRAITS

Warden, got a whole lot of children round the Triplane and discussed it with them. I said, 'Remember, this is a Triplane. The same pilot's going to come back in another aeroplane called a Trident'. It was the first production flight of a Trident — I got into the air, went away and did 30 minutes to make certain all was well, and then gave a display for these children. Nearly 20 years later, a chap came up to me at Old Warden and said, 'You won't remember me, but I was a little boy when you spoke to me about the Triplane and the Trident, and you flew past in the Trident. I'm now an air traffic controller, thanks to you! How nice.'

Being a Shuttleworth pilot opened certain doors. In October 1969, Desmond flew the 1918 Hanriot HD1 the collection had sold seven years earlier. Its new owner was Marvin Hand, who'd given the fighter a full restoration to airworthiness. When he lifted off from Sonoma County Airport in California, Desmond became the first Briton to fly the HD1 since Richard Shuttleworth before the war. "I thought it was nicer than the Pup", he opines.

Back at work, the Trident received a boost when Chinese state carrier CAAC ordered 35 new-build

examples, 33 2Es and two Super 3Bs. "Originally John Cunningham was going to do the first delivery", says Desmond. However, following the tragic loss of BEA Trident 1C G-ARPI at Staines in June 1972, Cunningham had to become involved with the public inquiry. "Before the crash, he had entrusted me with all the planning. It wasn't just planning how long it would take for us to get, say, from here to Athens, but the groundwork, the hotels, everything. In the event, I did the first delivery flight, and we were never more than three minutes out. I also trained the Chinese.

"The Chinese did one thing for Hatfield: they insisted on a better build and a better paint finish. Before delivery to Canton we stopped in Hong Kong and got the aeroplane cleaned. Then we did the short flight to Canton. Once you flew into China you were there for a while, two or three months at a time. I got so bored in the hotel I started playing snooker, and I used to read the labels on the tonic water bottles. 'Most efficacious for the urinary tract', they said. It must have been translated in Victorian times.

"It was at the time of the Cultural Revolution, and we worked out of what looked like a Nissen hut in Canton that had Chinese hieroglyphics and, underneath, an English translation: 'Lackey Imperialist Running Dogs'. But they looked after us very well, and they were clever in their choice of pilots — some very experienced, some less so, and some not very good at all. I had to instruct through an interpreter, which didn't cause me a problem but did cause Pat Fillingham a problem on one occasion. The chap was landing a Trident, and I was watching. It was a thump of a landing, and he jammed his feet on the brake. Pat said, 'Less brake', which got translated as 'brake'. That was a short-field landing."

The third day of the 1972 Farnborough show produced a unique occasion, when Desmond captained Trident 3B G-AWZH with Cunningham as his co-pilot. "That was the only time John ever sat in the right-hand seat at an SBAC display, and he wittered at me all the way through my display. I took absolutely no notice and did the display that I wanted to do. I reefed it round the corner on finals, at a speed about 10kt less than he would have

had, and pulled off — fortunately — a gentle landing but a very short landing, with full reverse just before touchdown. He didn't say a word."

Desmond retired from Hawker Siddeley in 1974. "I kept in touch with John Cunningham," he recalls, "and we often had lunch together, either locally or in London. The day before he died [in 2002], he asked to see me. We bade farewell."

With more time to enjoy older aeroplanes, he got involved with the Arrow Active during 1978. It was acquired from Tiger Club stalwart Lewis Benjamin by a syndicate of which Desmond was part, called the Active Preservation Society. Each member paid £10,000 for a quarter-share.

"Every year we would meet at the Steering Wheel Club in London and have an AGM, which consisted of just having a meal together. At one of these meetings we came to an end and somebody said, 'Any other business?' 'Yes,' said someone else. 'We've decided Desmond should buy the Active. He can fly it, he can restore it.' So I did. I never regretted it. I owned that aeroplane for 23 years. It was a little tricky, shall we say, simply because it had a short fuselage and, once the tail was down, there wasn't enough airflow going over the rudder. You had to be very careful. It would ground-loop on you at the drop of a hat.

"I raced the Active in the King's Cup at Finningley in September

1980. This was before I restored it. I hadn't done any air racing ever, and I made the mistake of coming first in the qualifying race. It was an anachronism. I was the only biplane, the only open cockpit, non-radio, no wheel brakes, tailskid, operating off grass. Having come first in the qualifying race I got handicapped again, and I got second in the race itself. It was close. I did see the handicapper and said, 'You robbed me of the race.' He told me, 'You were jolly lucky you weren't disqualified, because you were just outside the 10 per cent rule.'

“I don't miss flying by day, but I do dream about it”

"The Mew Gull I bought almost by default. I wanted to buy it, but I had an incident at Redhill in May

1985. They didn't tell me there was a ditch. You don't see very much forward from the Mew Gull, so I up-ended it on landing. I'm not the type of individual who sticks his neck out unnecessarily, and if I'd known there was a ditch I wouldn't have taken off. I spoke to [previous owner] Tom Storey, agreed a price and had it restored, back to Alex Henshaw's 1939 Cape record configuration". G-AEXF again became a jewel in the crown of British historic aviation. He kept it and the Active until 2002, when they were sold to the Real Aeroplane Company.

Desmond's expertise continued to be called on. When the Home Office evaluated the Grob G109 as a police observation platform, he was one

of four pilots who flew the motor-glider — provided by Shuttleworth pilot Bill Bowker — with officers from Hertfordshire Constabulary. Anders Sæther asked him to ferry the Scandinavian Historic Flight's Vampire FB6 from Roskilde to Oslo. Other noteworthy trips were purely for enjoyment's sake. Nick Grace gave Desmond his Spitfire, two-seat MkIX ML407, to fly solo. The same opportunity in relation to the Mustang was afforded by Spencer Flack with P-51D *Sunny VIII*.

Friends across the Atlantic have been extremely generous, too. One is John Penney, best-known for his Reno racing exploits in Bearcat *Rare Bear*. He arranged for Desmond to fly both single- and two-seat MiG-15s, together with a MiG-17. As a young RAF pilot, Desmond reflects, "I believed the Meteor could out-fly the MiG-15. When I got to fly the MiG-15, I realised how wrong I was. That aircraft was a little 'pocket rocket'. Its low-speed handling was treacherous, and its high-speed handling was equally lethal. But if you'd had RAF training on the MiG-15, you would have avoided those two areas, and it was a joy to fly. The MiG-17, on the other hand, was docile at both far ends". On flying a Canadair Sabre, his conclusion was that the F-86 would "out-do" the MiG-15.

A particular joy came in June 2007, when Desmond broadened his de Havilland experience. This was with the newly restored DH-4M2 mail-plane owned by Al Stix, and based at Creve Coeur, Missouri. "My late wife Francine and myself had been doing a Far East tour, and we were in Australia. I was having withdrawal symptoms from not having had anything to do with aeroplanes, so I said to my wife I was going to a newsagent so I could get myself a magazine. I went in and I picked up a magazine from New Zealand, and lo and behold, there was this article on this DH-4. Weeks later, when we got back to England, I penned a letter to Al Stix saying, as a former de Havilland employee, I was delighted to see he'd restored the DH-4 and that he had my sincere thanks. I got a letter back saying, 'Come and see us sometime.' I replied that I would.

"Purely by chance, the MiG-17 I was going to fly was at Parks Airport outside St Louis. So, after I'd flown the MiG-17 I went with Francine to have a look at the museum Al had

BELOW: Having missed out on flying a Vultee BT-13 back in 1969, Desmond was delighted to sample Wilbur Owens' example at Torrance Municipal Airport, California, during June 2015.

FRANK B. MORMILLO



[the Historic Aircraft Restoration Museum]. He'd got between 50 and 60 civilian aircraft from the early 1920s onwards. Al asked me what I was doing tomorrow. I told him we were just going to tour around, taking advice from him. He said, 'My advice is that you come here.'

"I left Francine to go and do some touring, and he said we were going to fly his Stearman. I got in the back, he got in the front... We got airborne, and it was rather like a flight commander's check. I had to do 30° turns, 45° turns, 60° turns and stalls. Then we went back to the circuit, and he said he wanted me to land on the hard, but do a wheeler and make it a touch-and-go. I did that, and he said, 'Now on the grass, and I want a three-pointer.' Then, a wheeler on the grass, and a three-pointer on the hard. We taxied in, and as we switched off, one of his chums came up to him and said, 'How did he do?' Al replied, 'It was like teaching Rockefeller to make money.'

"I got out, bemused by all of this. He said, 'Off you go — go and fly the DH-4.' 'Are you coming with me?', I asked. Al said, 'Why, do you need me?' 'No.' So, off I went and flew the DH-4. Being a Shuttleworth pilot, I just did 20 minutes. I was saving the motor. I came in and landed, and Al rushed up and went, 'What's wrong?' 'There's nothing wrong — I'm saving your engine.' Al said, 'Go and fly it.' I did just that, and was quite happy. Then he asked what I was doing tomorrow. I told him I was just going sightseeing. 'No,' he said. 'I want you to do a proper air test on that aeroplane and give me a report.'

"I did, and found two snags. The first one was not terribly difficult: there was play in the stick. It was only about a quarter to half an inch, but there was absolutely no movement of the ailerons. The second one was that if you took your hand off the stick, the aircraft very, very gradually rolled to one side, so it wasn't trimmed properly. It wasn't a heavy load on the stick, but it would mean that if you were doing a long flight, it would become tiring. The stick just needed re-bushing, and I got him to increase the incidence of, I think, the starboard tailplane by half a degree, which gave a twisting moment and countered the roll. After that, she was lovely. I earned my keep. As a result, whenever Al has had a new aircraft, he's always called for — as he puts it — 'his English test pilot.'

It was on 1 May 2005, his 75th birthday, that Desmond performed



his last public display. Fittingly, the venue was Old Warden, the mount a Tiger Moth. But that part of his story wasn't quite over, for on 14 June 2014, 50 years since the very first Shuttleworth show, he was able to turn the wheel full-circle. Thanks to the collection's then chief pilot 'Dodge' Bailey, the Shuttleworth trustees and aircraft owner BAE Systems, he was permitted to fly one more practice routine in DH60 G-EBLV.

That was itself an honour, and there have been others. "The Society of Experimental Test Pilots 'phoned me and said I was getting their highest award, an honorary fellowship. And my old university has been very kind to me. They've named the Aeronautical Engineering Atrium after me, and not too long ago they gave me an honorary doctorate in technology". In discussing this, Desmond is too modest to mention the substantial contribution he's made to Loughborough. Three years ago, he provided a generous donation to fund a two-day residential engineering course at the university for 50 girls aged 14-15, the aim to encourage greater female take-up of STEM (science, technology, engineering and maths) subjects.

Others bear witness to his energy and supportiveness. Historic

Aircraft Association treasurer and Tiger Moth pilot Malcolm Ward says, "Everywhere I turn in aviation, Desmond is there: vice-president of the Historic Aircraft Association, stalwart of the No 208 Squadron Association and leading light of the de Havilland Moth Club". de Havilland Support chief engineer and accountable manager Mark Miller adds, "I have noticed that the mark of great airmen is often that they express more interest in the progress of others than in their own considerable accomplishments. Desmond's kind treatment of me as an equal, though a very basic PPL holder, certainly bears this out". As Stuart McKay puts it, "He is a complete natural, able and willing to offer sound advice from his long experience on an RAF fighter squadron, as an RAF jet instructor, and later as a civilian test, demonstration and display pilot, flying with the precision and flair to which many can only aspire in their dreams."

Does Desmond miss flying, I wondered? "I don't miss it by day, but I dream about it. I always have rather technical dreams. I had one about two or three months ago about an aerodynamic problem, which I solved in my dream. When I woke up I thought, 'No, that's not right'". An exceptional man indeed — and, above all, an exceptional gentleman.



ABOVE:
The final mount:
airborne out of Old
Warden in Stuart
McKay's Tiger Moth,
G-AZZZ, in 2018.
Desmond flew the de
Havilland Moth Club
founder's aeroplane
as part of the RAF100
baton relay staged
that summer.

DARREN HARBAR

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