BUCCANEER BOYS 2

More True Tales by those who flew the 'Last All-British Bomber'

AIR COMMODORE
GRAHAM PITCHFORK

FOREWORD BY
AIR MARSHAL SIR PETER NORRISS KBE CB AFC

BUCCANEER BOYS 2

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Buccaneer Boys 2

More True Tales by Those Who Flew

'The Last All-British Bomber'

AIR COMMODORE
GRAHAM PITCHFORK MBE, FRAeS

FOREWORD BY

AIR MARSHAL SIR PETER NORRISS KBE, CB, AFC, FRAeS

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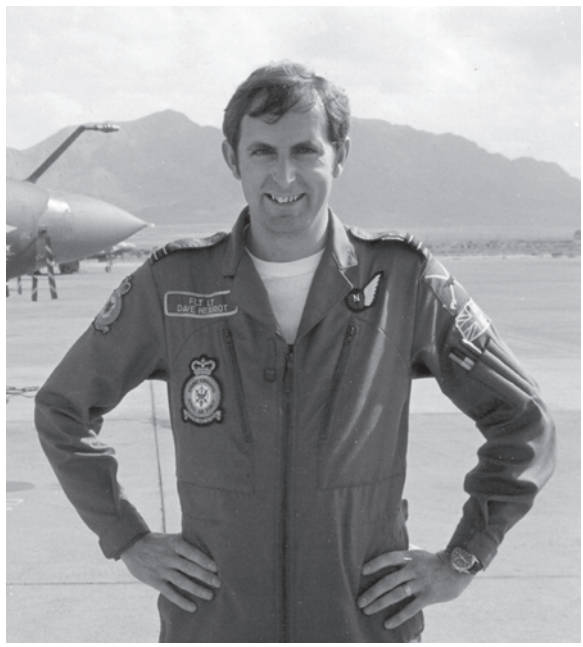
WING COMMANDER DAVID HERRIOT

(1949–2020)



Throughout the preparation of *Buccaneer Boys 2*, David Herriot was my 'chief of staff'. When we discussed the idea for another volume, he immediately encouraged me to start the project. From that day, until a few days before he passed away, he proof-read all but two chapters, in addition to sourcing material and photographs for me, just as he had done in the first volume of *Buccaneer Boys*. Until his final days, his trademark enthusiasm never wavered.

David Herriot was the epitome of a 'Buccaneer Boy' who knew how to balance his professionalism with the world of fun. A superb navigator and tactical instructor, his zest for life was infectious and his contribution to the unique brotherhood of the Buccaneer world was immense.

I dedicate this book to his memory – a brilliant airman, a fine officer and a great friend.

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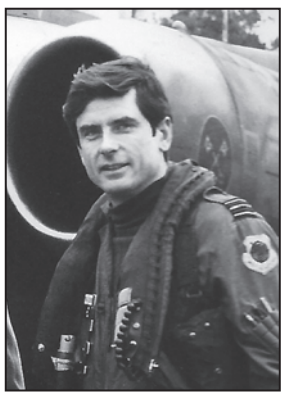
FOREWORD



AIR MARSHAL SIR PETER NORRISS KBE, CB, AFC, FRAeS

When Graham Pitchfork asked me to write the foreword for *Buccaneer Boys 2*, I initially wondered if the chapters could match the wonderful tales of the 2013 edition of *Buccaneer Boys*. I should not have worried, as the authors have more than risen to the occasion, and Graham has created a fine book to read.

My first direct involvement with the Buccaneer was in November 1971 when I was posted to No. 15 Course on 237 Operational Conversion Unit at RAF Honington. However, I had previously had indirect connections through my father, who was a production manager at Blackburn Aircraft working on the Beverley, and at various air shows in the summer of 1971, where I was displaying the Jet Provost. My father had been aware of some of the teething problems experienced during the aircraft's development and so was intrigued to see some of the engineering solutions on the aircraft when I showed him round one in the hangar at RAF Laarbruch. The Air Day at Lossiemouth not only enabled me to get physically closer to the aircraft, but it also introduced me to the splendid *joie de vivre* for which Buccaneer aircrew are renowned.

Hailed as the last all-British bomber, the Buccaneer proved itself to be a highly adaptable and versatile machine. It was designed initially to operate off an aircraft carrier and to toss a nuclear store at a Sverdlov-class cruiser, but initiatives by Royal Navy personnel enabled its weapon-aiming system to be used for the delivery of conventional weapons from a variety of attack profiles. The South African Air Force subsequently made serious use of the Buccaneer's attack capabilities during the Bush Wars. Following the Wilson government's decision to cancel both the TSR-2 and the F-111, the Buccaneer entered service with the Royal Air Force in the maritime and overland strike/attack roles, and its operational development continued, with new weapons and capabilities being introduced during its life.

Little did I know in 1971 that over the following 12 years I would achieve some 1,500 hours on the Buccaneer and 600 on the Hunter during three tours: one as a squadron pilot with XV Squadron, one as chief flying instructor on the OCU, and one as the squadron

commander of 16 Squadron. The flying was exhilarating and challenging. Carrying out Fam1 sorties with pilots new to the aircraft, when you did not have a dual-controlled aircraft, often caused the adrenaline to flow, as did my few deck-landing practices on *Ark Royal*. As the Buccaneer display pilot in 1975 I had some 'interesting moments', not least at the Toronto Air Show when a light aircraft with a wing walker appeared in front of us at crowd-centre as we ran in at 550 kts.Rebuilding the squadron following two structural failures, including the Red Flag accident in February 1980 that led to the fleet being grounded for nearly five months, brought different challenges, and it is a testament to the resilience of the crews that less than 15 months after the restoration of flying, with limited aircraft availability, the whole squadron took part in that year's Red Flag exercise and performed splendidly. During that tour I was also privileged to form and lead the five-ship formation display team, the Black Saints, which carried out a number of displays at air shows in Germany.

The chapters in this new book cover the whole gamut of what Buccaneer life was like, for aviators and interested readers to enjoy. The authors bring out loud and clear the commitment to what they were doing, the fun they had doing it, and the strong bonds among those who flew and serviced the aircraft, irrespective of the service to which they belonged. Those bonds exist to this day and manifest themselves in a number of ways, not least the annual Buccaneer Blitz, a December lunchtime gathering in London of those who have flown the Buccaneer whether on squadrons or in supporting roles such as test pilots.

While the Buccaneer Aircrew Association was officially formed after the 'final hurrah' at Lossiemouth in 1994, there were early stirrings some 10 years previously when a small cohort of aircrew met up for a reunion in a Greek restaurant one lunchtime, and this event grew into a very popular curry and beer bash at the Nag's Head in Knightsbridge, an event that was soon known as the 'Blitz'. Attendance grew to a point where more space was needed, and so HMS President has now become the annual port of call for some 130 of us. In parallel Buccaneer ground crew now hold an event in Norwich to which local aircrew also go along.

So sit back and soak up the tales of the Buccaneer Boys who flew a remarkable aircraft over its 35-year life and who believed in what they were doing. They lived life to the full and, despite the ageing process, many of them still do. While calling them 'Boys' may be something of a misnomer, it is said that flying keeps you young at heart, and when you see them at play, you'd have to agree it appropriate. Enjoy the read!

ACKNOWLEDGEMENTS

Following the success of *Buccaneer Boys*, and the encouragement of the committee of the Buccaneer Aircrew Association and the publisher, I accepted the challenge of trying to match the earlier volume. This attempt to achieve that aim could not have happened without the great support I have been given by my colleagues, 'The Buccaneer Boys'. They have trawled their memories, logbooks and sought the recollections of other chums in order to provide the chapters that follow. Their names appear with their own chapter and I trust they will accept this as due recognition for their superb narratives.

I want to thank my old colleague and the president of the Buccaneer Aircrew Association, Sir Peter Norriss, for his eloquent foreword and the support he gives to the Buccaneer Aircrew Association. My old friend Tom Eeles has been a great help with ideas, support and proof reading. Finally, I want to single out the help and support of David Herriot. I have paid a personal tribute to him at the beginning of this book. It was an immense pleasure working with him, just as it was for the 24 years we shared steering the Buccaneer Aircrew Association. My great regret is that he will not see this book that captures so much of which he was proud. I hope you would have approved David.

The vast majority of photographs have been provided by the authors and from my own collection. I am grateful to Angie, widow of Willie Steele, for the photograph in Chapter Twenty. I also want to thank Colin Buxton, 'Skids' Harrison, Podge Middleton, Mark Rahaman, Norman Roberson, Steve Ryle and Terry Thomas for their help in sourcing and providing additional photographs. Every care has been taken to identify and seek the permission of their copyright holders. However, if I have unwittingly transgressed, I apologise.

Finally, I must thank the Grub Street team. As always, the support and help given by John Davies, Francesca, Natalie and Tess has been outstanding. It is a pleasure to work with them.

"What an incredible bunch of people we all are and a more unified group of aviators there cannot be across the world."

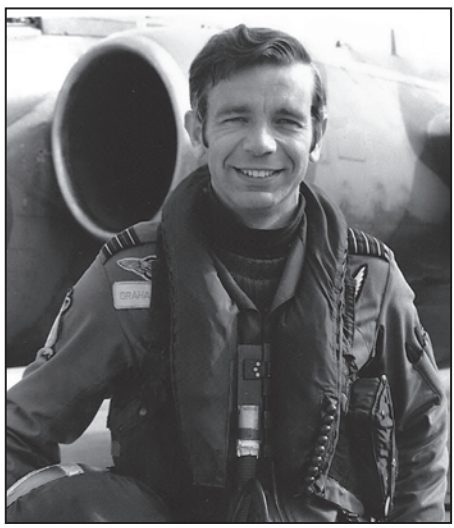
Colonel Jan Guyt, South African Air Force

"Being a Buccaneer Boy was certainly memorable. Even now, long after the last aircraft has flown, Buccaneer ground crew are immensely proud of our role in making the Buccaneer the most formidable aircraft, crewed by elite aircrew, and no matter which squadron we served on."

Corporal Mark Rahaman, 16 Squadron and 237 OCU

CHAPTER ONE

ENTER THE BUCCANEER



GRAHAM PITCHFORK

In November 1940, 21 elderly Swordfish bi-planes took off from HMS *Illustrious* and effectively destroyed the Italian Fleet at Taranto. Just six months later, in May 1941, the torpedo-carrying Swordfish of HMS *Ark Royal* crippled the *Bismarck* and sealed the fate of the mighty German battleship. Within a few months, carrier-borne aircraft of the Imperial Japanese navy had wreaked havoc at Pearl Harbor and, three days later, sent two of the Royal Navy's battleships, HMS *Prince of Wales* and HMS *Repulse*, to the bottom of the South China Sea. As the war came to an end in 1945, aircraft carriers operating in the Pacific had formed the cornerstone of the Allied victory against the Japanese. The reach and devastating power provided by carrier-borne aircraft had been amply demonstrated, and the aircraft carrier had quite clearly replaced the battleship as the capital ships of the Fleet.

The end of World War Two may have seen the demise of the menace of Nazism and Japanese imperialism, but it would soon herald an uneasy peace, and the outbreak of the Korean War in 1950 emphasised the dangers inherent in the new world order of the 'Cold War'. The Soviet navy had previously been limited to coastal operations geared to the defence of the Soviet Union, but a significant increase in their warship-building programme highlighted the emergence of a global capability posing a great threat to the security of the vital sea-borne trade of the Western Powers. Pre-eminent in the Soviet shipbuilding programme was the development of the 17,000-ton, heavily gun-armed Sverdlov cruiser.

During the war years there had been major developments in radar technology, and the capability to detect high-flying aircraft at long range had been achieved. However, the shape of the earth dictated that an aircraft flying just above the surface would not enter the 'lobe' of enemy radar until it reached a range of some 26 miles. Flying at very high speed and very low level, an attacking aircraft would give a target as little as three minutes' warning

of an impending attack. The surprise element of such an attack had been recognised by the staff of the Naval Air Warfare Division and in 1952 they realised that this was the answer to the threat posed by the Sverdlov. The following year the Navy Board issued Specification M.148T for a two-seat, carrier-based strike aircraft capable of delivering nuclear and conventional weapons over long ranges and at high speed. Naval Air Requirement NA.39 was issued the following year.

The primary role of the aircraft, as specified in the requirement, was to be effective at attacking ships at sea, or large coastal targets, which would be radar-discreet and identifiable at long range. The primary weapons were listed as the 'Green Cheese' anti-ship homing bomb and a tactical nuclear bomb, with an additional requirement to deliver a large range of secondary weapons. The aircraft also would have the ability to act as an air-to-air refuelling tanker. The operational profile envisaged a 400-mile radius of action, with a descent from high level to very low level just outside the detection range of a target's radar, followed by a high-speed low-level dash to and from the target. Stringent weight limits were imposed so the aircraft could operate from and be supported by the Royal Navy's current aircraft carriers. This meant having maximum take-off and landing weights and ensuring the aircraft's size enabled it to be lowered to the ship's hangar by the lifts.

The naval requirement set a daunting technical challenge, but most of the major British aircraft companies submitted designs. At the end of March 1954, five companies were invited to tender for the order of 20 development aircraft. The Blackburn and General Aircraft Company at Brough were successful with their B.103 design and the initial go-ahead for production was given in July 1955. Although a small company compared to other British aircraft manufacturers, Blackburns had a long history of producing aircraft for the Royal Navy, but B.103 was their first venture into the jet age.

Achieving the necessary landing speeds for carrier operations posed a particularly difficult challenge and most companies utilised the benefits of 'jet deflection', which was at the early stages of development. Blackburns investigated the benefit of boundary-layer control, achieved by blowing high-pressure air, bled from the engines, over the leading edges of the wing and tailplane and over the flaps and ailerons in order to obtain increased lift and thus reduce landing speed. The net value of these measures was an approach speed with full flap and aileron droop some 17 knots slower than an 'unblown' approach. This method provided significant advantages over the jet deflection method and also allowed the Blackburn design to employ a smaller wing – an important feature for high-speed low-level flight. The need to generate high bleed-air pressure from the engines for the approach and landing phase resulted in a high engine RPM and an unacceptable landing speed. A large airbrake, forming part of the aft fuselage, was the answer. With it fully extended, the appropriate approach speed could be maintained and this became the standard landing configuration for the aircraft. A T-tail had already been selected but the position of the airbrake made this inevitable.

Another advanced feature was the embodiment of an 'area rule' design, which allowed a reduction in the amount of thrust required to maintain maximum cruising speed. This offered the bonus of a larger internal rear fuselage size for the storage of avionics and fuel.

The structure of the aircraft was based on two large machined steel spars used in the inner wing, with integrally stiffened machined skins on the thin wings and the all-moving tail-plane giving the aircraft added strength. Generations of Buccaneer aircrew have extolled the virtue of their aircraft's strength over the years. To some it was akin to the proverbial brick-built s*** house! The folding nose contained the radar, and the design of a 180-degree rotating bomb door for an internal bomb bay capable of carrying 4,000 lbs of stores was unusual and would provide an added bonus in later years when an external fuel tank was incorporated in the skin of the bomb door.

Selection of the engines presented some difficulties and, eventually, a scaled-down de Havilland Gyron producing just over 7,000 lbs of thrust was chosen. Two engines gave the desired sea-level cruising speed of Mach 0.85, and just sufficient thrust for take-off. It is interesting to note the comments made by an independent audit carried out by American officials who made the telling remarks, 'the airplane seems underpowered and pitch-up could be a problem'. Time would prove them right.

Just 33 months after Blackburns had been given the go-ahead, the first aircraft (XK486) was ready for taxi trials. For such a relatively small design and production team, on what

The Blackburn NA.39 takes off for its first flight.

for its day was a very advanced project, this represented a remarkable achievement, and particularly when compared with the ponderous progress we see on some projects today.

By March 1958, the aircraft was ready for engine runs and these were completed at the company airfield at Brough near Hull. The small airfield was totally unsuited to operate the NA.39 and so the company arranged to lease the former bomber airfield at Holme-on-Spalding-Moor, some 18 miles from the factory. However, the Ministry of Supply deemed that the 6,000-foot runway at Holme was still too short for the first flight, so XK486 was partially dismantled, covered in a shroud and transported by road to the Royal Aircraft Establishment's airfield at Bedford. Blackburns' recently appointed chief test pilot, Derek Whitehead, an experienced former Royal Navy test pilot, commenced high-speed taxi runs in April. These trials suffered an early setback when a tyre blew out and damaged the starboard inner wing skin, but the engineers soon had the aircraft ready for its first flight, which took place on 30 April with Whitehead at the controls and the head of flight testing, Bernard Watson, in the rear seat. The first flight was made without using the boundary-layer control system, and the 39-minute flight was a complete success. After a further three months of testing at Bedford the aircraft finally returned to Holme and the test programme continued. Further aircraft became available and they were towed along local roads, in the early hours of the morning, from the factory at Brough to Holme airfield where they made their first flights before being allocated to specific tasks for the flight test programme.

More pilots were converted to the NA.39 before joining the flight test team, and they included Lt Cdr Ted Anson, an experienced Royal Navy test pilot who went on to become 'Mr Buccaneer Royal Navy', filling every Buccaneer appointment up to captain of HMS *Ark Royal* before retiring as a vice admiral.

The NA.39 made its public debut at the SBAC Show at Farnborough in September 1959, when Derek Whitehead and 'Sailor' Parker demonstrated XK490. In the following January, deck trials took place on board HMS *Victorious* and Derek Whitehead, flying XK523, made the first carrier landing on 19 January 1960 in difficult weather conditions. A second aircraft, XK489, the first 'navalised' aircraft, joined the programme and 31 successful sorties were completed, together with important deck handling, aircraft lift and hangar stowage trials.

As more of the development batch aircraft became available the flight test programme gathered momentum. Lessons learned from earlier trials were embodied in the newer aircraft and minor structural changes were made. Hot weather trials were conducted in Malta, weapons trials commenced at West Freugh, and three aircraft were attached to A&AEE Boscombe Down for completion of the Controller Aircraft (CA) Release, obtained in April 1961. These trials by C Squadron at Boscombe included full carrier trials, some being conducted from HMS *Ark Royal* in the Mediterranean during January 1961. One aircraft (XK526) was then shipped to Singapore for tropical trials. In the meantime, the aircraft had finally been given a name and, on 26 August 1960, the NA.39 acquired the very appropriate designation of Buccaneer S.1, the 'S' indicating the aircraft's strike (nuclear) capability.

As the manufacturer's and Boscombe Down trials continued, the Royal Navy formed its

The officers of 700Z Flight with Cdr 'Spiv' Leahy standing in the centre.

first unit with the specific task of developing operational and engineering techniques and capabilities.

The Royal Navy's Buccaneer Intensive Flying Trials Unit, (IFTU) 700Z Flight, was formed at RNAS Lossiemouth (HMS Fulmar) on 7 March 1961, when Rear Admiral F.H.E. Hopkins CB DSO DSC, the Flag Officer Naval Flying Training, took the salute at the commissioning parade held in Hangar Two. Cdr Alan 'Spiv' Leahy DSC, a highly experienced ground-attack pilot and Korean War veteran, commanded the flight.

In April 1965, I joined Graham Smart at Lossiemouth on an exchange posting and we formed the first RAF crew to operate the Buccaneer. It was the beginning of three years of exciting flying that took me to the Far East, to Aden and to East Africa. After a year at sea, it was back to Lossiemouth to spend two years as an instructor with 736 Squadron – the Buccaneer training squadron – with later detachments to 803 Squadron conducting weapons trials. My abiding memory of this period of my service life was the opportunity to fly with some great aviators and make some marvellous friends.

Whilst I was with the navy at Lossiemouth, the first South African Air Force crews began their conversion onto the new, and only, export version, the Buccaneer S.50. They loved their new acquisition and flew it aggressively until 1992.

The plan for Graham and me was to gain experience on the new generation of 'fast jet' before heading for the TSR-2, but this was not to be. During our time at sea, two political

The first South African Air Force Buccaneer S.50 over Holme-on-Spalding-Moor.

decisions were to change my RAF career pattern. First, TSR-2 was cancelled, and then it was announced that the Royal Navy's new carrier programme (CVA-01) was also cancelled. This latter decision was to see the end of fixed-wing flying in the navy for the foreseeable future. As a result, an increasing number of RAF officers were loaned to the Fleet Air Arm to maintain the strength of their three Buccaneer squadrons until the eventual demise of navy Buccaneers in 1978.

The cancellation of TSR-2, and later its replacement the US-built General Dynamics F-111, left a huge gap in the RAF's tactical strike/attack capability. The answer was to inherit the navy's Buccaneer fleet, and order a new build of the aircraft to create six RAF squadrons – in the event there were only five plus the OCU. The RAF would then assume responsibility for providing tactical support of maritime operations (TASMO), and a strike capability operating from RAF Laarbruch in Germany and assigned to the NATO strike plan.

With the impending run down of the Fleet Air Arm squadrons, Lossiemouth was to close as a naval air station, with 809 NAS re-locating to Honington where the training of all Buccaneer crews, both RN and RAF, was to be carried out on the newly formed 237 OCU. The instructors were drawn from both services. It was this close professional, and social, relationship, initially on RN front-line squadrons, and then at Honington, that established the unique and lasting bond amongst the Buccaneer fraternity.

With the cancellation of the TSR-2, and then the F-111, there was a need for Buccaneer

experienced crews to establish the RAF's Buccaneer force at Honington. From a cast of one, I was dispatched to Honington to join Wg Cdr Roy Watson to establish the operations wing pending arrival of 12 Squadron in October 1969, the RAF's first Buccaneer squadron. Little did I know that I was to spend another 12 years involved with the Buccaneer, culminating in command of 208 Squadron, the highlight of my 36 years of RAF service. The aircraft was to see a further 12 years of service with the RAF.

Finally, on 31 March 1994, the RAF said farewell to the mighty Buccaneer when 208 Squadron, commanded by Wg Cdr Nigel Huckins, stood down. In the intervening 33 years the aircraft went to war in the First Gulf War, and in the wars of Southern Africa, it deployed and operated worldwide, and it was a cornerstone of NATO's deterrence capability.

Above all, it generated a breed of aircrew and ground crew that were second to none. So, let the 'Buccaneer Boys' tell their own stories of operating and servicing the 'Last All-British Bomber'.

CHAPTER TWO

BUCCANEER INTO NAVAL SERVICE

Mike Clapp, on the right, being greeted by Cdr Ted Anson at Lossiemouth.

MICHAEL CLAPP

In January 1950 I joined the Royal Navy to do my National Service as I was passionate about anything to do with the sea. There was one problem. No one told me I could join as a short service supplementary list officer, so I committed myself to a full career.

Serving in the Korean War as a midshipman was exciting. Shore bombardment to cut the logistic lifeline of the North Korean and Chinese troops made our contribution very popular with soldiers who used us as their holiday camp. We watched the Fleet Air Arm bombing inland targets and attacking MiGs.

In 1955, I was serving as a junior lieutenant in HMS *Comet*, a destroyer in the Mediterranean. One day, my captain told me that I was to attend No. 1 Long Observer Course in HMS Seahawk, RNAS Culdrose in Cornwall. This, he had been told, was because the navy badly needed general list officers in the observer branch.

I had absolutely no desire to fly. After the 'Long 'O' Course', we went to HMS Gannet, RNAS Eglinton, in Northern Ireland to learn about anti-submarine warfare from the air. We flew in the new Gannet aircraft, and I enjoyed the course very much. Life was looking up.

Soon, I came to respect and hugely enjoy the Fleet Air Arm, a branch of the Royal Navy that was too often seen as remote from the 'real' surface navy. Their history, however, showed that they had pioneered a large number of very useful capabilities, and were early developers of airborne weapons when others were still employed basically for reconnaissance.

In the late autumn of 1956, I found myself briefly in 751 Naval Air Squadron (NAS) at RAF Watton flying the Avenger and learning about electronic warfare. This again taught me

Buccaneer XK525 on a fast, low run over Holme-on-Spalding-Moor

something about the advantages of air power, and the different RAF operating procedures.

After a period flying AEW Skyraiders of 849 NAS, and attendance on the RAF's Staff Navigator Course, I was settling into 766 Squadron, the navy's All-Weather Fighter Operational Training Squadron at HMS Heron, RNAS Yeovilton, when I was sent at short notice to Ferranti Ltd in Edinburgh. The company had designed, and was now starting to test, the Blue Parrot radar for the Blackburn NA.39, as the Buccaneer was then called. The radar, with its unusually long pulse length and slow pulse repetition frequency (PRF), was fitted to a Canberra, WV787.

With my ex-RAF pilot, Colin Curtis, who became a good friend, we flew mainly from RAF Turnhouse across Scotland to West Freugh to use the large radar reflector in Luce Bay. During this time, we tested the radar, and later the whole navigation system with the Blue Jacket Doppler ground position indicator (GPI) and master reference gyro (MRG), another Ferranti designed, and made, piece of kit that was a considerable advance at the time. Later, I flew in a Meteor, which was testing the pilot's strike sight (an early head-up display) before the complete system was integrated and fitted to a Buccaneer.

We were told the idea now was for the Buccaneer, on its own, to detect a target at long range, dive below radar detection, and run in at sea level to toss a tactical nuclear bomb or drop a conventional bomb or rocket. There was much talk of a likely target being a Soviet Sverdlov-class cruiser, well defended with modern electronic warfare and anti-aircraft missiles. Based on my time with 849 Squadron, directing Sea Hawks and Scimitars, I could fully appreciate the advantages of this technique.

On 12 November 1960 I made my first flight in a Buccaneer, XK525, with Lt Cdr Ted

Anson, a test pilot from C Squadron, Boscombe Down, but now working closely with Blackburns at their airfield at Brough, not far from Hull. I thought the observer's cockpit rather cramped but it seemed to work. A series of weapons system shakedowns followed in the Buccaneer, together with pilot familiarisation flights. Colin Curtis and I then flew this aircraft on further trials.

In November 1961, I finally returned to the navy and joined 700Z Flight, the Intensive Flying Trials Unit (IFTU) in HMS Fulmar, RNAS Lossiemouth, under the command of the legendary pilot, Cdr 'Spiv' Leahy. C Squadron at Boscombe Down had already put the aircraft through its paces as a machine, but now it was becoming a fully fitted weapons system, the aircrew needed to be trained in its detection and weapon capabilities. This would then lead to developing operational tactics.

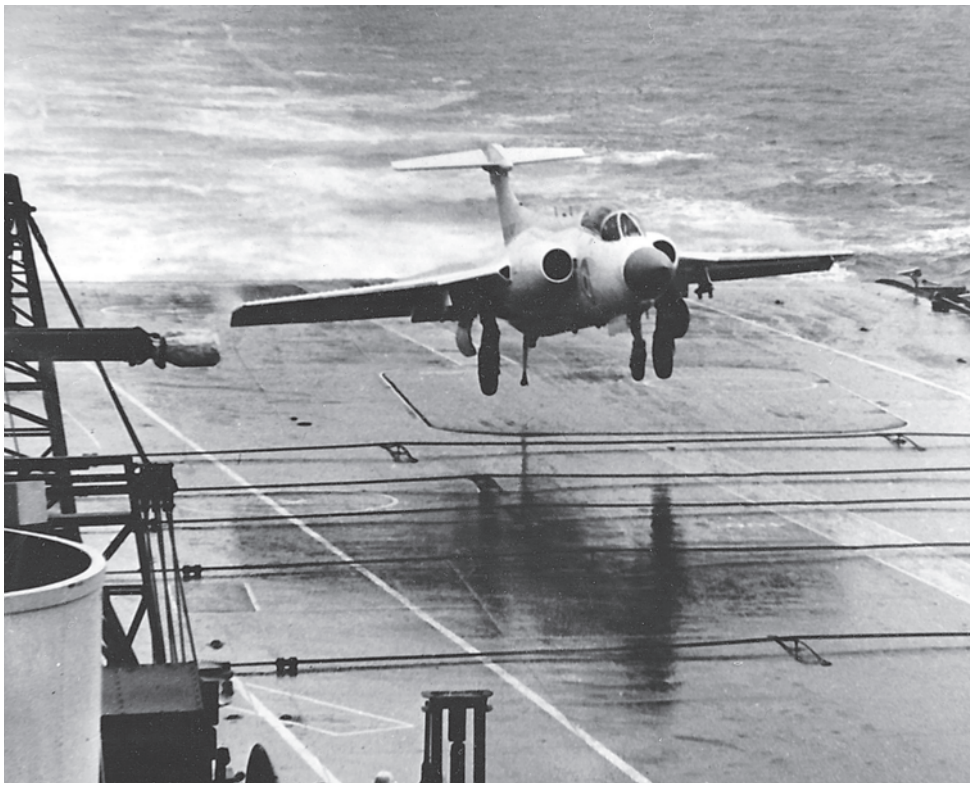
Spiv Leahy and I flew together four times. The sorties were basically system acquaintances with only one sortie remotely operational. On this occasion we took off from Lossiemouth and climbed up through thick cloud with the intention of targeting Rockall after a long low-level approach. This meant we had to let down through cloud over the Outer Hebrides. I had selected a route that took us between two islands and warned him that, when/if we broke cloud, what he could expect to see, low land to port and cliffs to starboard, so I offset a little to port. When we did break cloud, it was at about 200 feet, he swore at me and immediately climbed up turning back for Lossiemouth. Not a word more was said beyond: "Don't ever do that again! Report to me in my office."

Luckily, in the crew room I found John de Winton. As an all-weather fighter pilot, he was the only pilot in 700Z Flight who had flown regularly with an observer. He kindly came with me and explained to Spiv that what I suggested was only what any pilot having an observer working on the radar can expect. That was the whole point of carrying one as they allowed the pilot to concentrate on flying while the observer handled the navigation. "They have the radar and trust you fly safely. They don't want to die either," he said. Spiv calmed down and accepted John's advice. I suspect many of the other pilots who had mostly flown single-seat aircraft, felt the same, but they too learnt. They also learnt about attacks at night, which they could not do before.

As time went on we flew with drop-tanks, bomb-bay tank and in-flight refuelling, all adding to our radius of action. We also practised conventional and nuclear bombing profiles and rocketing. Photo-reconnaissance and tanking had yet to be practised. The single-side-band radio (SSB) proved rather a problem and, in my time, was rarely used. However the passive wide-band homer was a great advantage since it detected long-range radars and provided a homing capability.

The need to understand, and be able to work, the various very different roles was demanding but fun, and was typical of naval aircraft, which needed to be multi-capable to limit the number of different types embarked in a carrier. Squadrons cannot afford the luxury of a single role at which the aircrew are specialised. Any specialisation has to be sorted out within the squadron.

While checking the aircraft's performance and fuel consumption, essential for navigational planning, we maintained a connection with C Squadron as well as Ferranti Ltd.



An 801 Squadron Buccaneer S.1 arrives on Ark Royal *on 21 February 1963.*

Both were, of course, very interested in our results. Some of our aircrew had done time in C Squadron, particularly the senior pilot, Ted Anson, Andy Alsop, a test pilot, and George Oxley, an experienced all-weather fighter observer, who had trialled the aircraft without radar, but with the Blue Jacket Doppler navigation system and MRG at Boscombe Down. They knew the ropes and brought their experience with them to the advantage of the rest of us.

One day, flying with Robin Greenop on a low-level navex around the Western Isles in a Hunter we came over a cliff. The wind was strong and flipped us over. Robin recovered and we carried on the mission. That afternoon he flew the same route again, but in a Buccaneer. He reported that as he crossed the cliff there was a small judder but no more. My faith in the Buccaneer grew.

Mike Hornblower, an air warfare instructor, developed plans for attacking shipping with either conventional bombs and rockets or a tactical nuclear bomb. This is where the advantage of the strike sight became apparent as it allowed the pilot to manoeuvre without concerning the observer, as long as the radar was either locked on or was tracking a distinctive feature.

Mike was fun. He had a Bentley with the number plate NA 39 but had a reputation for flying a little riskily. This was generated when one day he returned to the squadron after a low-level sortie with some heather on the aircraft's pitot head!

On 2 July 1962, I left 700Z Squadron and went directly to 801 Squadron, under the command of Ted Anson, as his senior observer. During my time in 700Z, I had flown over 24 hours in the Canberra, with nearly eight hours in the Meteor trialling the radar and strike sight, and then over 85 hours in the Buccaneer proving the kit, teaching aircrew about the weapons systems, and developing attack procedures. Now it would soon be off to sea with new and exciting challenges.

Life continued with trials, but now it was less technical and more operational in preparation for embarking in HMS *Ark Royal* for a few weeks to conduct deck-landing and catapult-launch trials. While embarked, we also worked with AEW aircraft probing targets and practising profiles. The operations went very well and confidence was increasing.

Back in Lossiemouth, we pressed on with conventional dive-bombing and rocketing on Tain Range, as well as nuclear-bombing profiles on the buoy in Luce Bay. We also developed in-flight refuelling, photo-reconnaissance and weapon practice at the range. Finally, in mid-August 1963, we embarked in HMS *Victorious* in the Channel. She was smaller than *Ark Royal* and had a very happy, welcoming ship's company.

We spent little time in the Mediterranean. Our first brief stop was at Aden where we practised close air support for the troops, and I was invited to go on a convoy to an army camp inland. The whole journey was fascinating and I wrote home describing the convoy and pickets racing up the hills on either side. My father, who had served in the Indian army, was delighted as it was exactly the life he had led in the North-West Frontier, but without the motorised transport.

A month later we reached Singapore and disembarked to RAF Tengah. *Victorious* did not stay long before heading for Japan with most of the squadron re-embarked. I was left with three crews to continue tropical trials for nearly a month. By January 1964 we had met up again and we all returned to Lossiemouth.

The 801 Squadron crest was a trident with the squadron motto 'On les Aura' – 'Let's have them', which appealed to us. While embarked, Rob Woodard, a pilot, organised 'Flying Fork Lunches' at which we entertained members of the wardroom who had been helpful to us.

In December 1963, I left a very happy squadron, which had pioneered a wide range of capabilities. During this time in the Mark 1, I flew 128 hours. Then, after a commanding officer designates' course for ship's captains, I flew to Singapore to take command of HMS *Puncheston*, a minesweeper being used as a patrol craft just when the Indonesian Confrontation began.

It was an exciting time. One night off Horsburgh Light to the east of Singapore, we caught a fast sampan carrying 14 Indonesian soldiers attempting to land on the east coast of Malaya. I had used my Buccaneer back-seat experience to drive the ship, and make the interception, from the radar. Other commanding officers relied on a second officer, but

The flight deck of HMS Victorious *in 1966.*

none had the same luck – two sweepers even collided! My time in the Buccaneer and 849 Squadron had come in handy.

In October 1965 I handed over and flew home to take command of 801 Squadron in early January. By now it was the first Buccaneer Mark 2 Squadron. It had only just been formed, and John de Winton had been put in command waiting for me to return. My senior pilot was Brian Giffin a very experienced Scimitar and Seahawk pilot who, like me, had flown in 801 Squadron's Mark 1s. Several others had been in 700Z and 801 Squadron so we were very much a family team who got on well, and we were determined to make a success of the aircraft.

Two weeks later Alan Deacon and I flew to RNAS Brawdy for an air day. Alan was ecstatic about the new Spey engines and the much-improved performance of the aircraft. He wanted to show off the Mark 2's capability to me, so we flew at sea level around the north of Scotland and west of Ireland. Happily, there were no bird strikes and I was indeed impressed.

We worked ourselves up and went through the drills before embarking on 19 April 1966