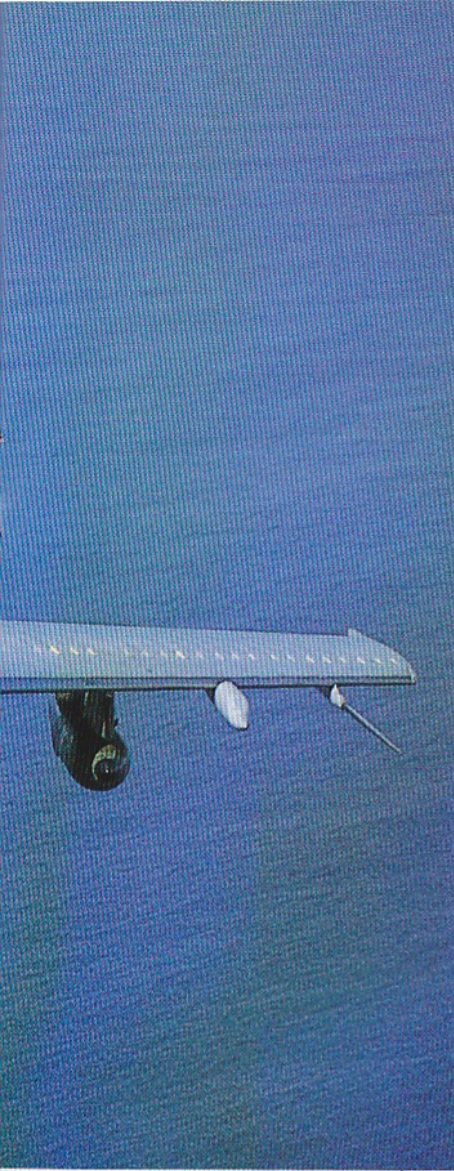




Classic Sortie

AFM joins 208 Sqn, the RAF's last Buccaneer unit, on a typical training sortie as the Bucc enters the last phase of its operational career.





Far left: 208 Sqn Buccaneer S.2B XX895 seen over the Moray Firth carrying an AN/AVQ-23E Pave Spike pod on the port inner pylon, an ALQ-101-10 jammer pod on the starboard outer pylon, and practice bomb carriers on the port outer and starboard inner pylons. (Duncan Cubitt)

Left: The eye-catching nose art which adorned XX900 during Desert Storm when it operated from Muharraq in Bahrain. (RAF Lossiemouth)

the Tornado GR.1s, which are about to replace it. It will be a hard act to follow. Despite the fact that it has never benefited from a proper avionics update, and that some of the airframes are less than 20 years old — good for another ten years' service at least — the type is condemned to disappear without trace by the end of April.

However, since 12 Sqn disbanded at RAF Lossiemouth in October 1993 (See AFM November), its sister unit 208 Sqn has not rested on its laurels placidly awaiting the scrapman's axe.

It surviving 13 aircraft, plus three Hunter T.8s, have been carrying out its normal role, that of low-level attack at sea and over land. Ironically, the Buccaneer finally went to war in February 1991 performing a role for which it does not routinely train, that of high and medium-level target designation with the AN/AVQ-23E Pave Spike laser designator pod, which is limited to daylight operations.

Nevertheless, the dozen Buccaneers drawn from 12 and 208 Sqn flew some 218 sorties in three weeks of *Desert Storm* operations, initially supporting RAF Tornado GR.1s marking targets with their Pave Spike laser designators. They operated from Muharraq in Bahrain, where 20 years earlier 208 Sqn, then flying Hunter FGA.9s, disbanded. All the Buccaneers returned safely to face imminent retirement as outlined in MoD's 1990 *Options for Change*.

Apart from its airframe strength, the Buccaneer's main asset has been its endurance. This was graphically illustrated back in 1969 when two Royal Navy Buccaneer S.1s of 891 Sqn flew from HMS Ark Royal sailing off Florida, to Belize and back, to 'show the flag' when Guatemala threatened the colony's borders in 1972. An unrefuelled round-trip of 2,600 miles (4,184km).

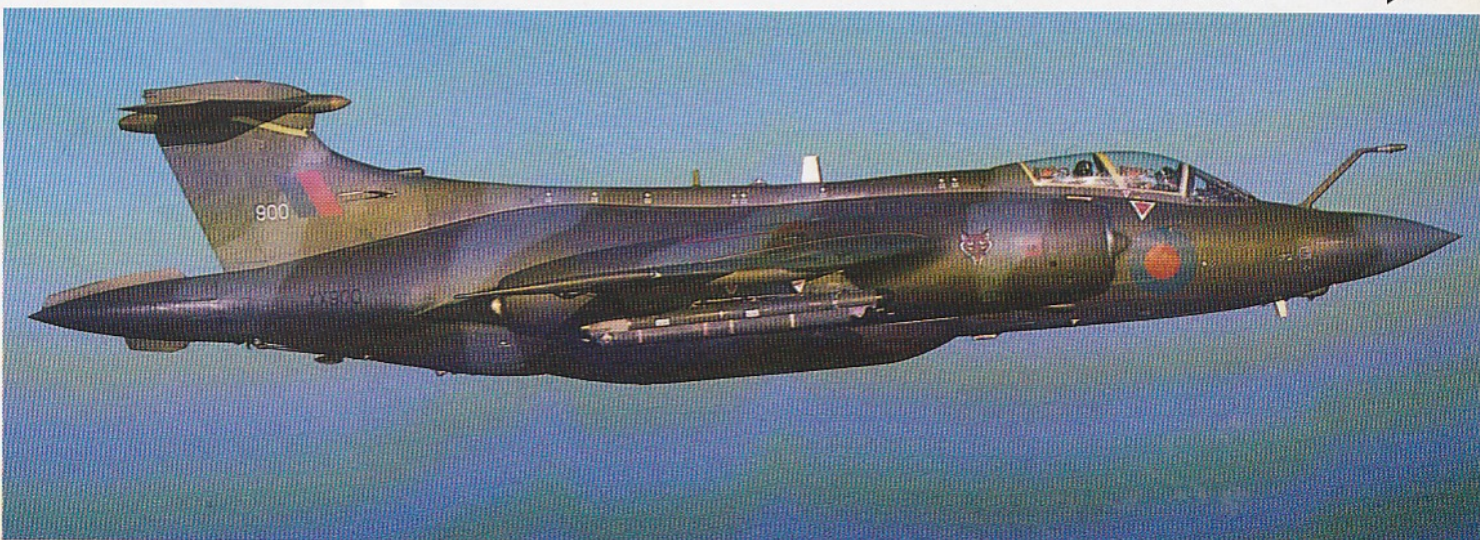
The Buccaneer S.2B has a useful hi-lo-hi radius of 750 miles (1,207km) and can carry

Below left: Currently flying with 208 Sqn is XW527 wearing 16 Sqn markings! (G Robson)

Below: Classic 1, 208 Sqn Buccaneer S.2B, XX900 still in 12 Sqn markings, flying over the North Sea. (David Oliver)

TRAVELLING AT 540KTS, 100ft above a North Sea whipped by a 35kt cross wind, with salt spray rapidly reducing visibility through the canopy — it's not everyone's idea of fun, but for RAF Buccaneer crews this is a routine maritime attack sortie.

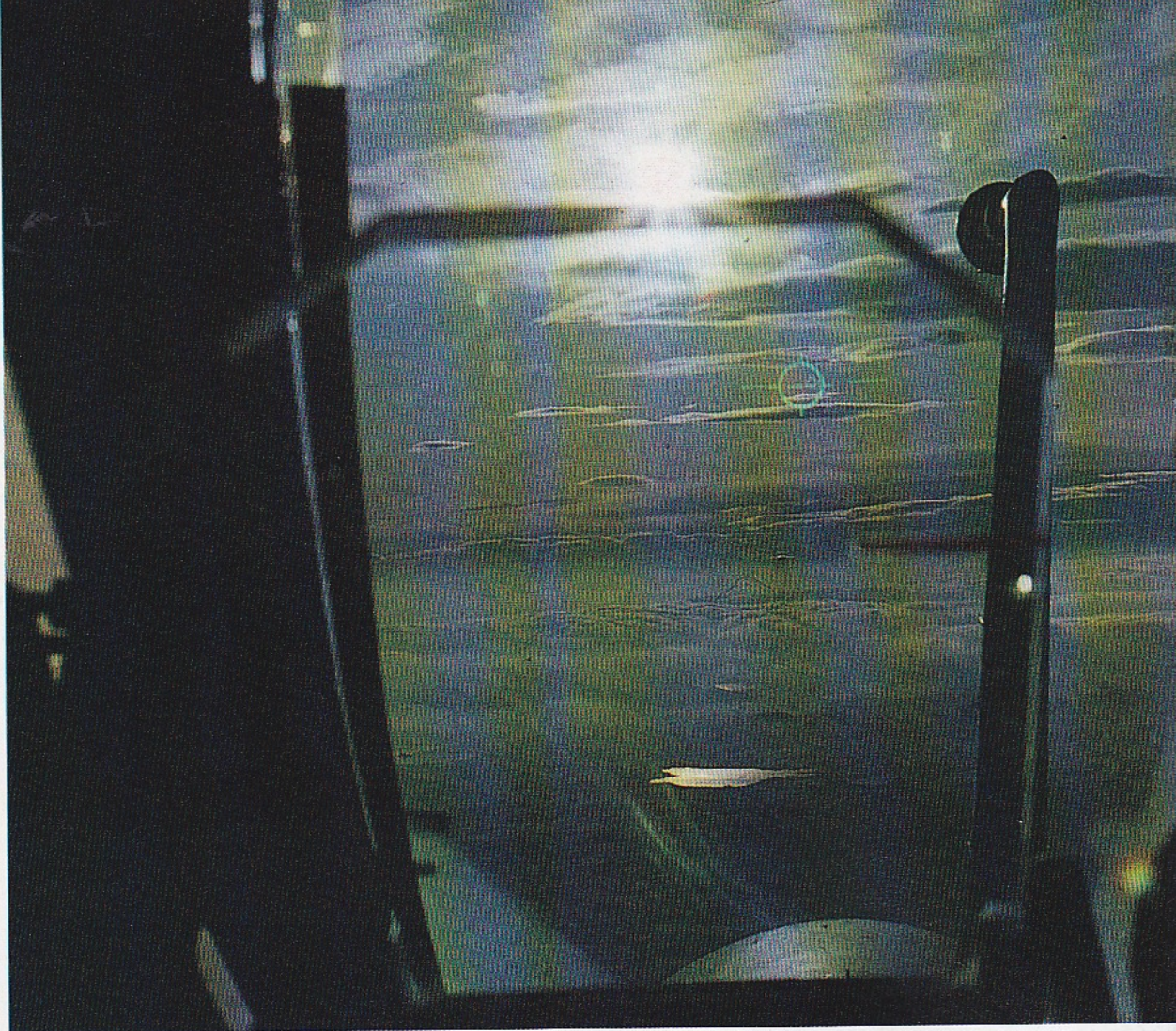
The Bucc was originally designed as a Royal Navy carrier-based attack aircraft, but for 20 years has filled an RAF gap caused by the cancellation of the TSR.2, its non-starting replacement the F-111K, and the availability of



Right: The view through the pilot's HUD showing the lead Buccaneer, below the green symbol, flying over a wintry cloud and landscape. (S/L Rick Phillips)

Centre: A low-level bomb run over Tain Range by a Pave Spike Bucc to drop 6.6lb (3kg) practice bombs from carriers on the port outer, and starboard inner pylons. (Andrew Brooks)

Below: Buccaneer XX895 descends to 100ft (30m) over the North Sea and accelerates to 540kts (1,000km/h) during a simulated Echo attack on a ship. The 'traffic lights' in the front cockpit indicate to the pilot if he is above, below, or at a set height. (David Oliver)



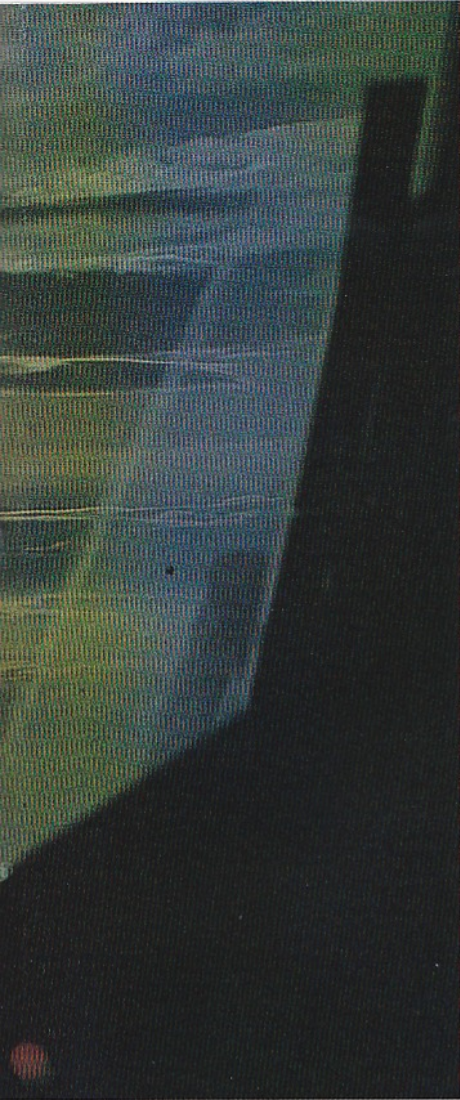
a maximum 16,000lb (7,260kg) weapon load comprising conventional bombs, Paveway II laser-guided bombs (LGBs), or Sea Eagle anti-shiping missiles, plus AIM-9 Sidewinders.

The predominant weapon used in its maritime role remains the BAe Sea Eagle which replaced the medium-range TV-guided Martel AJ 168 air-to-surface missiles. This weapon had a range of between 12 and 30 miles (19-48km).

The Sea Eagle, which entered service in 1985, is similar in size to the Martel but is radar-guided with over twice the range.

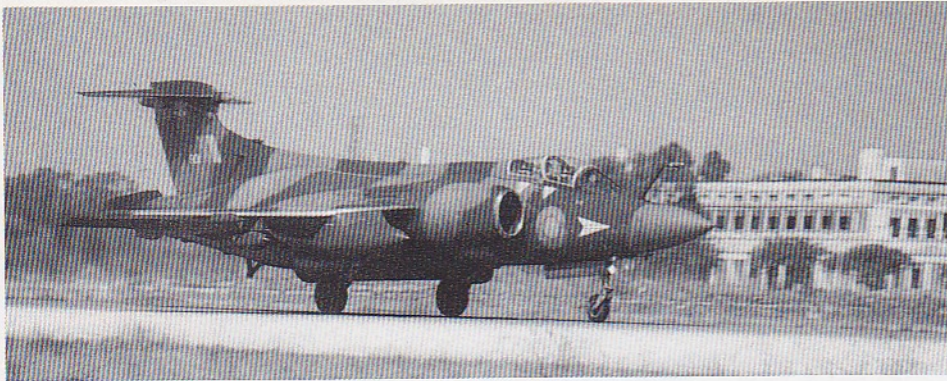
The Buccaneer can also carry the AS 37, an anti-radar missile (ARM) version of Martel.

By the end of the 1980s, remaining Buccaneers had been subject to a £40 million upgrade programme which included updating its Ferranti Blue Parrot radar for over-water



Above: A Buccaneer S.2B outside of its HAS at RAF Lossiemouth showing the varied weapons it carries including Martel ARM, Sea Eagle, Paveway II LGB, and AIM-9L Sidewinder. (Duncan Cubitt)

Left: XX900 over the Moray Firth on long finals for RAF Lossiemouth, with landing gear down and airbrakes open. (S/L Rick Phillips)



Above: 208 Sqn Buccaneer XX901, wearing slipper tanks, seen at Luqa in Malta en route to Egypt in September 1993. (Charles Stafrace)

missions with Sea Eagle, installing the FIN 1064 inertial navigation system and Sky Guardian 200 radar warning/ESM suite.

These upgrades were designed to take the Buccaneer into the 21st century, but this was not to be.

However, 208 Sqn continues to undertake its full operational training commitment in the week leading up to its disbandment, supporting NATO exercises in Holland and Gibraltar, and a Joint Maritime Course (JMC) in Scotland.

AFM recently had the opportunity to join a typical training sortie which involved both over land and over sea flying.

The 1hr 45min sortie for a pair of Buccs, one Pave Spike aircraft and one bomber, comprised a Sea Eagle attack profile, a Pave Spike attack on a bridge, and an LGB toss and bunt profile, plus a low-level practice bomb drop on the Tain range. (See box below)

The sortie made use of XX900, an ex-12 Sqn aircraft with Pave Spike, and '901, the bomber

— they carried 19,000lb (2,405 gal) and 16,000lb (2,025 gal) of fuel respectively and were given the entirely appropriate callsigns *Classic 1* and *2*.

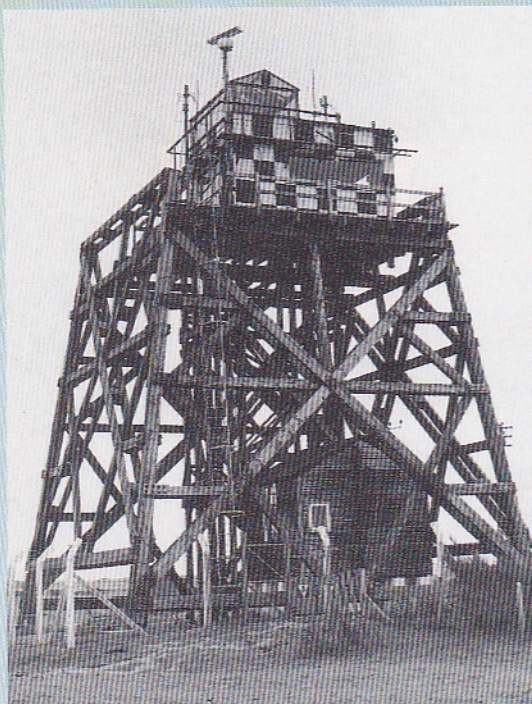
In the event, AFM's aircraft XX901 went u/s when its oxygen system froze in the -8°C temperature, to be replaced by XX895, a veteran of five *Desert Storm* missions when it carried the names *Jaws/Lynn/Glennfiddich* on its dramatic nose-art.

The pilot of '895 was S/L Rick Philips, who had not only flown with all the RAF Buccaneer squadrons, 12, 15, 16, 208, 216, and 237 OCU, but flown the type from the last of the Royal Navy's 'big' carriers with 809 Naval Air Sqn.

After take-off from a snow-covered Lossiemouth, the formation headed west passing Inverness to the south, before turning north at Loch Ness. During this phase of the flight, '895's back-seater transferred 3,350lb (425 gal) of fuel from the weapons bay tank to the main fuel tanks.

The Buccaneers then descended over Dornoch Firth to fly low level along Loch Shin at 480kts (889km/h) 14 minutes after take-off.

Right: RAF Tain's original World War Two watchtower was demolished last year.



Wrath Bombardment Range. The latter includes the Garvie Island target where live bombs are dropped by NATO aircraft and which saw much of the pre-Gulf War bombing practice.

Small though it may be in personnel terms, the RAF Tain range plays an important role in helping train pilots and crews on weapon delivery accuracy. Every year the airfield sees 36,000 approaches flown by aircraft, including Tornado, Jaguar, Buccaneer, A-10, Harrier, F-111, Hawk, F-16, and many more. Since the arrival of the first Tornado squadrons late last year the Tain targets have been busier than ever.

Seldom visited because of the obvious risk to the public, the range nevertheless has an excellent safety record, and despite constant pressure from some local groups about low-flying noise nuisance, is a facility which has been in near constant use since the mid-1930s. Having outlived its first control tower and now equipped with a modern replacement, it is set to continue providing NATO with a vital training facility.

Right: The new £700,000 range control tower at RAF Tain became operational late in 1993. (Photos via Author)

Losing a landmark

A FAMILIAR LINK with generations of RAF pilots and navigators disappeared from the Scottish landscape last year when RAF Tain's unique timber control tower was demolished after 50 years.

The small station's role as one of NATO's busiest live firing ranges hinged on the 'watchtower' for scoring and control. However, the arrival of a £700,000 ultra-modern replacement more than two years ago made the 60ft (18m) high wooden structure redundant. On May 12, 1993 a demolition team achieved what hundreds of thousands of tons of bombs, rockets, and cannon shells had failed to do and brought the tower crashing to the ground.

The old tower began life more than 50 years ago as a giant radio mast — its site had been converted from a prewar live firing range to an operational bomber base during World War Two. After the war RAF Tain was closed to flying and the area reverted to its firing range role. The radio mast was cut down to a 40ft (12m) 'stump' to act as a platform for a two-storey observation hut. Since then, staff have used the structure — the only one of its kind in Britain — to score the bombing, rocketing, and strafing effectiveness of NATO aircraft on the sprawling 2,000 acre site overlooking the entrance to the Dornoch Firth.

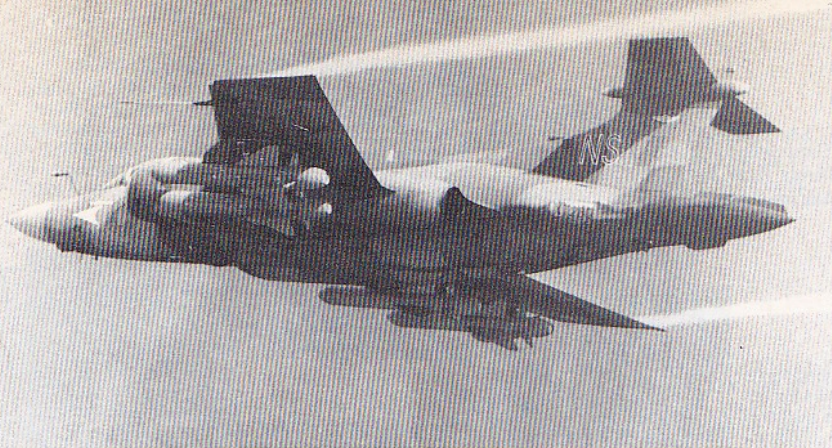
Only 25nm (46km) from RAF Kinloss, the range is well known to Royal Navy and air force aircrews. Today, although no high explosives are dropped on the site, Tain accepts regular deliveries of inert free-fall bombs up to 1,000lb (454kg), inert clusters of rockets and ball ammunition.

"The only explosives which reach the ground are small charges in the practice bombs which make a puff of smoke to help us 'spot' the accuracy," said F/L Martins.

He has an RAF personnel staff of eight and a civilian staff of 15 to help run the range's facilities and maintain a high level of safety. Although bomb strikes are still scored visually the range also utilises electronic recording devices for strafing runs. The CO's responsibility extends beyond RAF Tain to the Rosehearty sea range near Fraserburgh and the Royal Navy's Cape

DAVID MORGAN



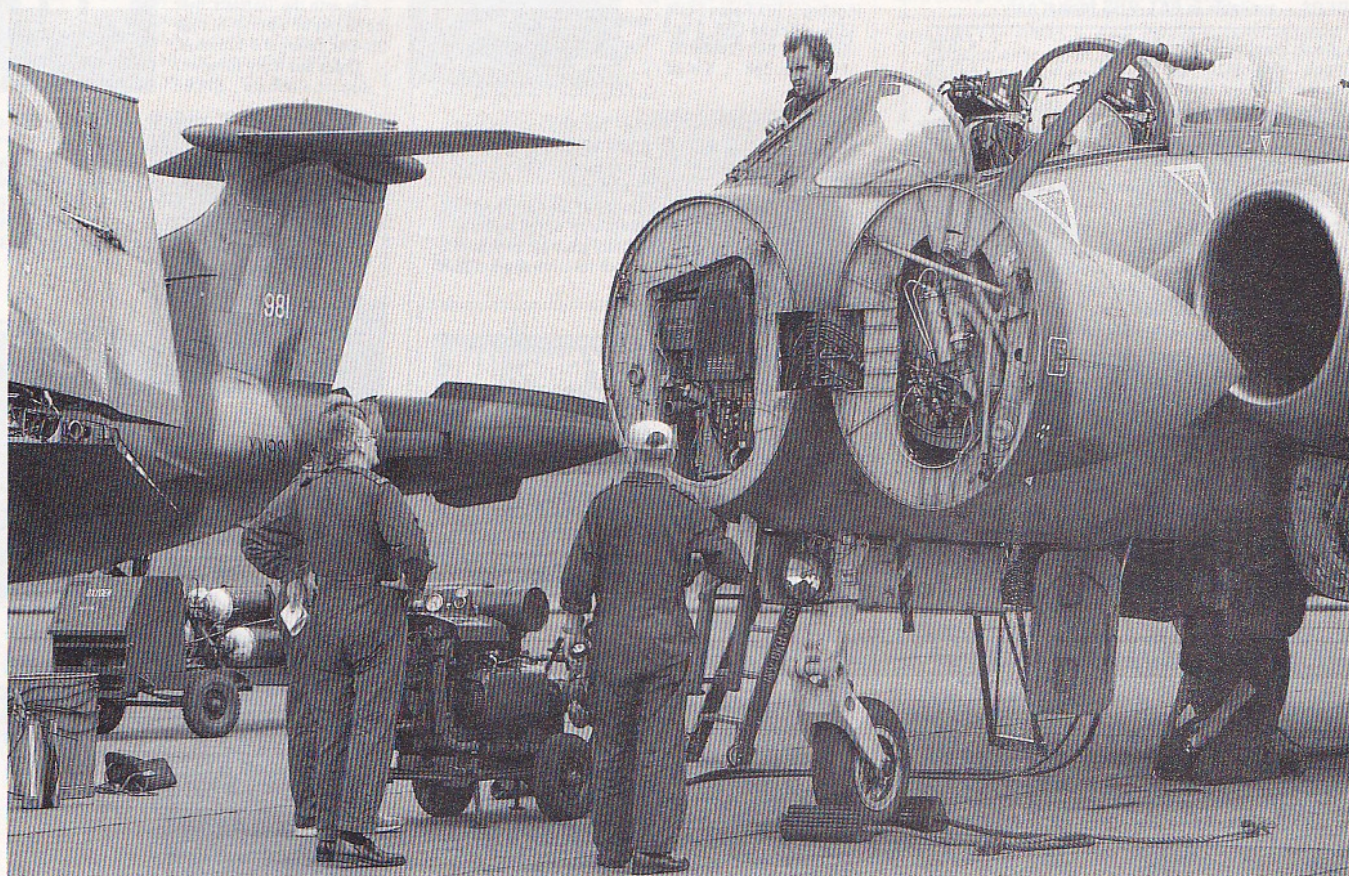


The bombing aircraft turns 180 degrees outwards after dropping the LGBs. During the high-speed low-level runs to the targets, salt spray covered the canopies and the pilots had every reason to be thankful that the Buccaneer was equipped with a heavy duty windscreen wiper. The Tornado is not!

The *Classic* formation reversed its track to head back to the Scottish coast which was crossed at its northern-most tip, the Pentland Firth lighthouse, heading for Tain Range.

The first pass over the range was a

Left: *Wingtip vortices appear as 208 Sqn Buccaneer XT280, carrying four Sea Eagle anti-ship missiles, pulls 'g' over the North Sea. '280 is now in storage at RAF Lossiemouth.* (BAe)



The first target was a small bridge spanning the Kyle of Tongue some 25 miles (40km) north of Loch Shin which was designated by *Classic 1's* *Pave Spike*.

The formation then climbed to cross Scotland's north coast near Dounreay to take up a heading of 03, skirting the west coast of the Orkneys — they looked more like Alaska in the pale winter sunlight.

The lead aircraft was searching for a target, any ship on its track, or failing that a small island. Both aircraft carried out an *Echo* attack profile using *Sea Eagle* launched at 45nm (83km) from the target. In wartime this would be carried out by six *Buccaneers* carrying 24 *Sea Eagles* vectored to the target by a *Nimrod* or *NATO P-3*.

Having received target vectors, the formation would maintain radio silence as it split in two, *Blue* and *Gold* elements which would accelerate to 540kts (1,000km/h) and descent to 100ft (30.5m) to press home their attack from different angles with height separation over the target.

After the simulated *Echo* attack, *Classic 1*



Above: *The Buccaneer's Ferranti Blue Parrot radar exposed. The folding nose cone shows its Fleet Air Arm ancestry.* (Steve Fletcher)

Left: *One of three remaining two-seat Hunters at RAF Lossiemouth used for Buccaneer pilot continuation training. Hunter T.8B XE995, wearing the 208 Sqn chevron behind the cockpit, will retire with the Buccaneers.* (David Oliver)

designated another target ship for '895 which would drop LGBs in a *Delta* attack profile. Initially the *Delta* target is approached in the same way as in the *Sea Eagle* attack, the formation splitting before running towards the target with the *Pave Spike* aircraft trailing the bomber. When the navigator has acquired the target on his TV screen by using the hand controller, the *Pave Spike* aircraft turns, usually to the right as the pod is carried under the port wing.

simulated LGB attack, using a four second 'toss' into the radar 'basket' or cone, with a 30° pull up and over the shoulder recovery. It was followed by a low-level drop of 6.6lb (3kg) inert practice bombs.

This was a typical training sortie which gave an interesting insight into the varied type flying that the *Bucc*, and its crews had been experiencing for almost a quarter of a century. The versatile and capable *Buccaneer* will indeed be a hard act to follow.

AFM