

Fly fishing

Built for killing subs, RAF Nimrods are also equipped for long-range SAR work. If you're a long way offshore, they might be the only chance you have

TEXT & PHOTOS
ALAN HARPER

The sea is so big, and your head is so small. After a day patrolling the Irish Sea in an RAF Nimrod maritime reconnaissance aircraft, the best advice I can offer anyone contemplating falling overboard is simple: don't. It was a clear day with a brisk westerly breeze lifting whitecaps from the swell, and although we could see in all directions for miles around we had a tough time spotting our 'casualty', a 4ft float that had been dropped into the water for us off Anglesey the night before by a helicopter.

As an exercise it was quite realistic, in that we knew only roughly where to start looking. True, we were helped by the fact that this wooden float was equipped with a 245.1MHz training personal locator beacon (PLB), transmitting its distress signal straight to a receiver aboard the Nimrod. But while the new 406MHz Epirbs with their built-in GPS receivers provide a pretty accurate position (and a 94% false-alarm rate), the much more common 121.5 types, and these training PLBs, can only bring you within about ten miles. After that it's down to the skill and persistence of the search team.

The Nimrod, a dedicated maritime anti-submarine and reconnaissance aircraft based on the old Comet airliner, carries a crew of 12 shoehorned in along with several tons of electronics: four radar operators, two on acoustics (hunting subs with the help of various electronic buoys that can be dropped), two navigators (one so they know where they are, the other a tactical navigator who co-ordinates searches and tracking), and three on the flight deck – pilot, co-pilot and engineer.

There seemed to be no shortage of either skill or persistence in our particular 206 Squadron aircraft as the pilot, Jez Batt, stuck it over on its ear at 60° of bank and hauled 2g in the turns, while the remaining crew stayed glued to the Searchwater radar terminals or pressed their heads against the windows and tried not to spill their tea.

Yes, tea. This airliner-sized aeroplane has an airliner-sized galley towards the back, with an oven and a hob. Tea is distributed with more enthusiasm than accuracy from an enormous aluminium pot engraved '206 Squadron' and the oven can be used to heat up a variety of



Bright and early, the pilot checks over the aircraft before the start of another patrol.



Jez Batt and co-pilot Lee Hunter do their thing at 200ft. Below: aircraft captain Steve Strutt.





ready meals that induce a nostalgia for student life. Curry is the most popular choice. There are also doughnuts: lots of them. And biscuits. Patrols can last eight hours or more.

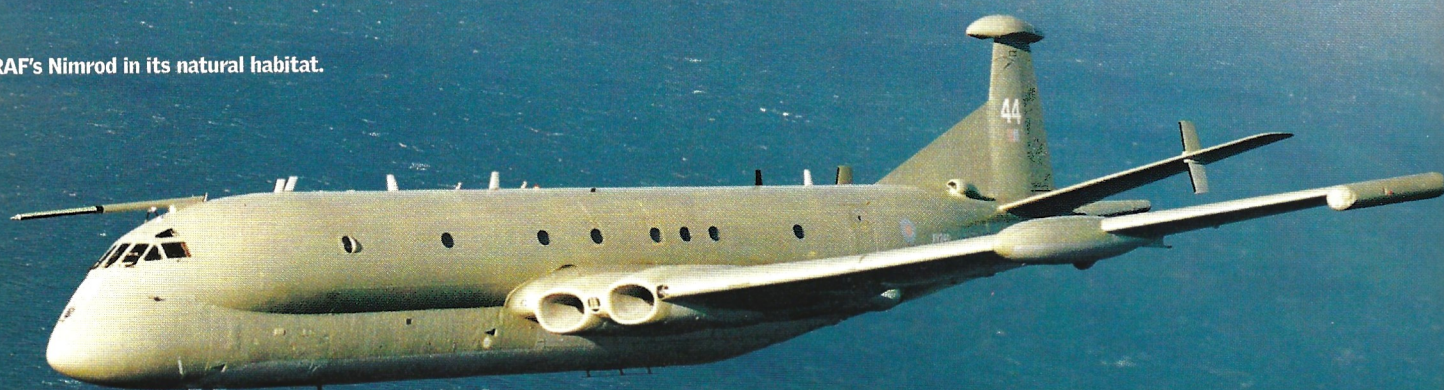
To find such versatile catering aboard a jet the size of an airliner is pretty unusual, especially if it is accompanied by violent air combat manoeuvring at an altitude of just 200ft. If your EasyJet captain tried this on take-off from Palma in his Boeing 737 you'd be convinced the wingtips were going to hit the sea and you'd start screaming. Obviously that's not an appropriate response in a military aircraft, so to avoid earning the crew's lasting contempt as a big girl's blouse I kept my own counsel and tried to pretend that I did this sort of thing

all the time. But if you're prone to airsickness and trying to keep track of a complex plot on a radar screen while the pilot does his Red Arrows thing and the chap next to you is wolfing down a prawn balti, you're going to need a waterproof keyboard.

Up front Jez was having a whale of a time. This is what he'd joined up for – or possibly not, but if they weren't going to give him his own Harrier then this was definitely the next best thing. In the cabin the aircraft captain, air electronics officer Steve Strutt, directed the search, conferring with the 'tac nav' – tactical navigator Colin Gillan – upon whose huge central tactical system (CTS) screen the search was being tracked. Heading instructions keyed in



The RAF's Nimrod in its natural habitat.



BAE Systems Nimrod MR.2 (RAF)

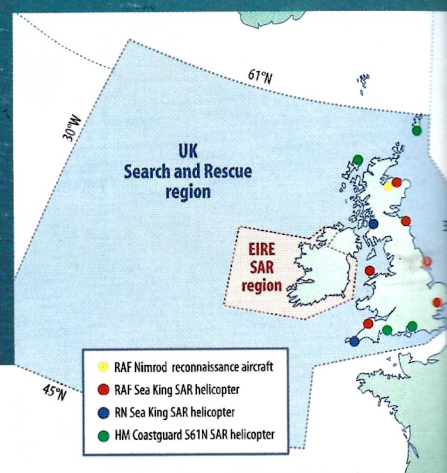
LOA	126ft 9in (38.63m)
Wingspan	114ft 10in (35.00m)
Engines	4 × Rolls-Royce Spey turbofans, 12,140lb (54kN) static thrust
Max take-off weight	80 tons
Transit speed	400 knots
Endurance/radius	9 hours
Crew	13
Readiness	60min, 24h/day

Westland Sea King Mk3/3A (RAF), Mk5/6 (RN)

72ft 8in (22.15m)
62ft 0in (18.90m) rotor diameter
2 × Rolls-Royce Gnome turboshafts, 1,660hp (1,238kW)
9.7 tons
109 knots
280nm (RAF), 250nm (RN)
5
15min, 0800-2200; 45min 2200-0800

Sikorsky S.61N (HM Coastguard)

72ft 8in (22.15m)
62ft 0in (18.90m) rotor diameter
2 × General Electric T58-GE-10 turboshafts, 1,400hp (1,044kW)
9.5 tons
118 knots
150nm
4
15min, 0730-2130; 45min, 2130-0730



by the tac nav appear up forward as a cursor on the pilot's compass.

As the PLB transmits its signal outwards rather than straight up, you lose it if you fly directly overhead. This is the 'cone of silence' the Nimrod crew were looking for, which sounds a bit *Star Wars* but basically means watching for the needles on the receiver to flick as the signal is interrupted, marking that position on the CTS screen, and then flying a cloverleaf search pattern to narrow the search area down, gain confirmed visual contact with the casualty, and finally mark the exact spot with a carefully aimed 'Difar' sonobuoy dropped out of the back of the aeroplane.

And as it went, with a loud metallic clang that could be heard throughout

The SAR exercise was laid on – at your expense, dear reader – exclusively for *MBY*. The rest of the flight was dedicated to practising more warlike tasks like submarine hunting

the cabin, there was an almost audible sigh of relief from the crew. All that remained was to call RAF Valley to say they could come and rescue their float, break out the curry and doughnuts, and get on with the rest of the day.

That's how it goes if there's a beacon for the aircraft to home in on. If there isn't, and the crew are trying to find a liferaft or simply a head bobbing above the waves atop a lifejacket, the search takes place higher up, usually at around 500ft, and the search pattern will be either a 'creeping line ahead' or an expanding box search. If this is your situation, your chances of being spotted are immeasurably improved if you've got some flares to set off.

The SAR exercise was laid on – at your expense, dear reader – exclusively for *MBY*. The rest of the flight was dedicated to practising more warlike tasks like submarine hunting and warship surveillance. But your tax money is being spent wisely. Our Nimrod may have been older than most of its crew, but it packs a world-class electronics suite and is about to be upgraded yet again with the rest of the Nimrod fleet to MRA.4 standard. Although the crew possibly eat more doughnuts than is strictly good for them, they know what they're doing. And if you insist on falling overboard a long way offshore, they're about your only chance. **MBY**

ARCC

While HM Coastguard has its 18 Maritime Rescue Co-Ordination Centres and sub-Centres dotted around the coast, the RAF operates the sole aviation equivalent, the Aeronautical Rescue Co-ordination Centre at Kinloss, where the Nimrods are also based.

Ice Station Kilo, as it is dubbed, is not the most popular posting among RAF crews. Twenty-five miles east of Inverness on the Moray Firth, it is surrounded by spectacular Highland scenery and not a lot else, but it is here that all searches involving aircraft in the UK Search and Rescue Region are managed.

The RAF's Nimrod may be the original salvation of many a distressed mariner, and it can drop liferafts and canisters of supplies to casualties, but after that all it can do is direct ships, lifeboats or helicopters to your position.

The most familiar 'air assets' sent to the aid of people like us are of course the Sea King helicopters of the RAF and Royal Navy and their close cousins, the S.61Ns of HM Coastguard. But with the limited range and endurance of the helicopters, half of the UK Search and Rescue region's one million square miles can only be reached by Nimrod.

