

Air combat training



Pod life

Six times a year, fast jets from all over NATO assemble at a little-known base in south-west Belgium for the most exhausting and exhilarating four weeks their crews are ever likely to experience outside of a war zone

Text & photos: Alan Harper

BASED SINCE 1989 AT Florennes AFB, which had been recently vacated by a USAF cruise missile wing, NATO's Tactical Leadership Programme is hosted by the Belgian air force and in the charge of a Belgian AF colonel. The Academic Branch is currently in the care of a Luftwaffe officer, and head of Flying Branch is RAF Wing Cdr Jon Hill, a II Sqn Gulf



War veteran in Tornados.

"This is a course for senior pilots," Hill explains. "Three years or 500 hours on type as a minimum, and experience as a two-ship or four-ship leader. The purpose of the course is to take them to the next stage, leading large groups of aircraft." The course lasts four weeks, and the aim is to run 15 combined air operations (COMAO) missions of varying types and complexity, from

A pair of USAF F-16s takes off from Florennes at the start of another TLP mission. Inset: a Spanish air force F-18. Note the AACMI pods on the rails.

tactical maritime support to combat search and rescue, during that time. The emphasis is on air-to-ground, including reconnaissance and defence-suppression aircraft; six to eight of a typical course group of 24 to 26 aircraft will be air defence types.

Generally the students are divided into their air defence and ground attack groups for the mission briefings, and brought together into one group for the debrief.

Germany and the UK are the majority 'shareholders' in the TLP, each putting 28 aircraft crews through the course in 2000, followed by the US and Italy with 16 each, the Netherlands (14), Belgium (8) and Denmark (4). Other NATO signatories are able to buy slots as they arise, and France, Canada and Spain all keep full-time TLP liaison officers at the base. France typically takes up 14 to 16 slots a year, in return for use of French airspace. ▷

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A mixed bag of types seen at the TLP course last July: Turkish F-16s, Italian F-104 Starfighters and British Harrier GR.7s.

The key to the exercise is the autonomous air combat manoeuvring instrumentation (AACMI) 'pods' attached to each aircraft. These GPS-based flight profile recorders are designed to fit on a Sidewinder rail and are cleared for use on most fast jets in the Western inventory. The TLP has had its AACMI pods since 2000, and they mark a technological leap for exercises like this, freeing them from cramped and expensive ranges such as BAE Systems' ACMI range in the North Sea.

Used for exercises like the RAF's annual air combat exercise NOMAD, based at Waddington, the North Sea range is 70 miles offshore – well away from noise complaints – but just 30 miles in

For all their comic-book rocket-ship looks, the venerable Starfighters



diameter. This is simply not big enough for a weapons system like an AMRAAM-armed F-15C, for example, according to USAF F-15 instructor Larry Spinetta: "You need a 50 by 80 nautical mile box, minimum, for a realistic two-vs-two," he contends. "More for a larger package." The BAE range relies on a series of 'ground stations' on five platforms in the North Sea to process telemetry data transmitted live from pods such as the Metric P4B, which fits on a Sidewinder or AMRAAM rail.

Being GPS-based, however, the AACMI pods, based on the Israeli EHUD system and manufactured in Germany, allow aircraft to operate independently of ground stations. After each mission the pods' data 'bricks' are removed and their 233MHz Pentium processors replay their flights via the ground station computers in the debriefing.

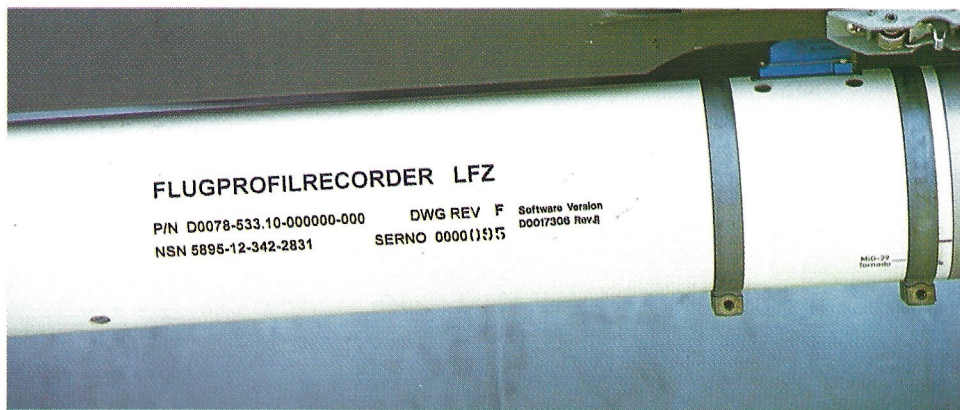
It can be a steep learning curve. "The course is about leadership," says Flt Lt Graeme Bagnall, a Tornado GR.4A recce and strike pilot with the RAF's II (AC) Sqn at Marham. "Everyone gets to lead. There's three days in the classroom at the start and then you're straight into flying missions. And they get harder as the course goes on."

By the time Flt Lt Bagnall's



chance came the course was well into its second fortnight, and the scenarios dreamt up by the TLP staff were reaching new heights of complexity. "We were a well-gelled group by then. It was definitely the highlight of the course for me: leading a package of 30-plus jets."

Understanding the capabilities or otherwise of one's allies is also important for aircrew who today are increasingly likely to be operating as part of a larger NATO force. For Capt Robert McMurry of the USAF's 493 FS at Lakenheath, this was one of the best aspects of the course. "TLP is especially useful for recognising what our NATO allies bring to the fight," he asserts, before adding sardonically: "that and being able to fly low-level



underline an important lesson: never underestimate your enemy



throughout most of Europe."

'Boomer' McMurry found himself at Florennes just three months after flying missions over Kosovo in Operation Allied Force. "We were one of the most experienced groups ever to go through the course, and it showed," he says. "We were a tight-knit and highly trained cadre of NATO pilots."

But perhaps because of their level of experience, students on McMurry's course also had criticism to offer, particularly of the debriefs, where in spite of the technology a good deal of human interpretation is required to gain a full understanding of exactly what went on the air. "The instructors did their best to reconstruct the missions," says McMurry, "but they didn't fly in them, so getting an effective reconstruction and debrief was often like pulling teeth."

"If I were asked for a recommendation it would be to

allow the students to reconstruct the mission and conduct the debrief."

If the TLP is an chance to gauge the capabilities of your NATO allies, it's also a chance to test your hardware against theirs. Ageing types like the Tornado, memorably dubbed "flying parts" by a 493 FS F-15C pilot from Lakenheath, are given full rein to display their shortcomings. "I don't mean to do it down, but the bottom line is that we are the poorer jet," admitted one GR.4A front-seater. "It's noticeable when you're up against newer generation jets, like the F-15E and the F-18s. But we fly it well."

The second fortnight sees new threats brought in as additional air defence types arrive to augment the air defence aircraft already on the flightline: typically, French AF Mirage 2000-5s, whose abilities usually make quite an impression on the 'mud movers'. "Their new Mica missile seems to be pretty good," observed a Tornado pilot

Clockwise from far left: German navy Tornado; Canadian CF-18s; an F-15E from Lakenheath; and a French Mirage 2000-5. Top: close-up of the pod that makes it all possible, mounted on a Harrier rail.

ruefully. The Italians may also send some F-104s and the Canadians some CF-18s.

For all their comic-book rocket-ship looks, which lend a certain Thunderbirds quality to the flightline, the venerable Starfighters do occasionally get the opportunity to underline an important lesson: never underestimate your enemy. "Most of these guys fly better equipped aircraft than us," says Lt Col Vincenzo Sicuso of the 37th Stormo. "They are very experienced and well trained, very aggressive and very motivated. But even if the Starfighter is outdated we try to keep our training and our thinking up to speed."

"And sometimes," he adds, "when situational awareness decreases rapidly, they need to manage their radar and avionics correctly and keep on exploiting their machine to the full - otherwise even a Starfighter can shoot them down!" **JETS**