

Kites have the last laugh



In the final part of his series on flight testing two Streak Shadows bought by the Indian Air Force to scare off kites which were bringing down its jets, and for its staff to fly for fun, Anthony Preston realizes that the birds were having the fun all along

ONE day it was decided to verify the Streak's ceiling.

Squadron Leader A and I took off and climbed through the murk, breaking through at 3300ft and making so sudden a transition from gloom to gleam that I imagined us leaving behind a wake of French onion soup, like the spume that follows a dolphin leaping.

We climbed south into wind, then at 8500ft, still climbing at a steady 600ft/min, changed to a reciprocal heading.

Zounds! Stretched the length of the northern horizon was a scene that brought tears of joy to my eyes. Compared to the murk below us, this bright, bold scape, sharp as steel, was at once registered as an

experience of a lifetime: "The Himalayas!" I gasped.

The Sqn Ldr was quiet for a bit. Then in a soft voice, he explained how it was pronounced with the accent on the first 'a', making it Him-ARE-lyas, which translated into "The Ice Home". Either way, what a sight it was. In among those sacred mountains there were Chinese and Indian border stations at 20,000ft. We climbed on up, mesmerized, in a dream.

At 10,000ft, still steadily climbing, we called it a day. Above that altitude, the Air Force decreed the use of oxygen which, for our purposes, made it irrelevant.

I spent the rest of that day in a daze, which may have explained the apparition. ▷

"THE PLEASURE AT BEING ABLE TO SWITCH OFF THE ENGINE AND GLIDE IS HARD TO DESCRIBE, BECAUSE WORDS ARE SIMPLY INADEQUATE"

Above The black kite – a magnificent bird, but a serious hazard to pilots (photo: Phillip Edwards)



▷ Walking back alone after the post-flight check, I looked up and saw a face looking down at me from high up on the massive runners for the hangar doors.

Was I hallucinating – delayed hypoxia, perhaps? No, it was very clearly my father looking down at me. Surely he was never that agile? Certainly he'd been in India during the war, and loved it. But he wasn't there any more. When he came home in 1945, invalided out of the RAF as a victim of polio, the disease had removed all jaw muscles from his face, leaving it skull-like. The resemblance between this intelligent-looking monkey and my father was uncanny. I needed to sit down.

On another occasion the Sqn Ldr and I explored the effectiveness of the Streak as a kite deterrent, climbing to altitude and seeking the nearest flock.

Early sketches from IAF HQ envisaged the Streaks with front canopy removed and the cockpit occupied by a Sikh brandishing a 12-bore shotgun. This was rejected on aerodynamic grounds. The unarmed aircraft proved a little ineffectual. As we slid smartly into the birds' chosen thermal it became apparent we presented no discouragement. If anything, to be judged by their joining in our orbits and smiling, we were welcomed. I think I may have heard at the time a quiet clearing of the throat over the intercom.

There was, I suppose, a tendency to see the incredible in what, after all, was a rather unbelievable situation. Take, for instance, the day of the children's Christmas party. Out on the beautifully tended lawn in front of the Officers' Mess, where acacias threw their intricate shadows and dense masses of bougainvillea surrounded the place in colour, a little gathering of infants and their brightly dressed mums and aayas watched an authentic Santa Claus in the blinding heat.

We flew over the incongruous scene at a couple of hundred feet. Not one little face looked up from the huddle around the man in red. His red shone out like a rose wrapped in petals, contrasted against the green of the lawn.

I puzzled about that lawn. The only mower I saw was an antique Ransomes, complete with huge grass collector, all in surprisingly good nick; except that where the engine should have been was a space that had clearly been a space for a very long time.

The same absence of engine was another area of the Streak's performance that the Air Force wanted to explore.

We measured the rate of descent with the engine stopped and compared it with engine at idle, which is a useful bit of information to have, as a true forced landing glide ratio will be with the engine off. There was no discernible difference, and we reckoned you could make 1.7nm in still air from 1000ft.

With Group Captain B, I did some dead-stick landings, aiming for the numbers. Seemingly frivolous exercises such as this do have positive training value. The opportunity to practise authentic simulations of a genuine forced landing situation could one day mean the difference between a recovered aeroplane and a bent one.

Best of all, though, the pleasure at being able to switch off the engine and glide is hard to describe, because words are simply inadequate.

After the continuous drone of the Rotax in the climb, the silence was uncanny.

With the engine out of sight behind and the only sound the whistle of the wind, as comforting as a summer breeze through boughs, this was how it must feel to be one of those kites, lazily searching under cumuli for rising air, or in among them, exploring the halls and caverns and corridors of the clouds.

Circling aloft, silent but for the sigh of the wings, looking across at the kites sharing the same patch of sky, it was hard to think of a conflict of interest. □

Above Streak in flight, and in a hangar at IAF Hindan with IAF markings. "They kept the CAA B conditions registration letters. Test pilot and mechanic appear to be leaving vicinity in some alarm. Perhaps someone had just suggested it be flown?" the author says. (photos: Indian Air Force)

EARLY SKETCHES FROM IAF HQ ENVISAGED THE STREAKS WITH FRONT CANOPY REMOVED AND THE COCKPIT OCCUPIED BY A SIKH BRANDISHING A 12-BORE SHOTGUN TO SCARE OFF THE BIRDS. THIS WAS REJECTED ON AERODYNAMIC GROUNDS*



Into clear air! (Ben Ashman)

The Shadow spec, Indian style

ALL 24 Streak SA-912 microlights were finally shipped to India. The aircraft specification varied little from the standard Streak kit as constructed by amateur builders in the UK. At a maximum weight of 408kg, the Streak, in its wide-bodied configuration, fell into the Small Light Aeroplane category, bringing a formerly Group A aeroplane into the hands of the microlight pilot.

The David Cook-designed aircraft changed only in detail, rather than design, after it first flew in 1983, a tribute to the unmatched performance and safety of the original.

Short take-off and landing, rapid rate of climb, manoeuvrability, unrestricted cockpit visibility, pilot comfort and an extraordinary tolerance to abuse made the Streak a favourite with those who were set on really enjoying their flying, operating out of small farm strips.

These attributes also endeared the design to flying training schools.

The non-standard equipment fitted to the IAF Streaks was:

- Oil cooling radiator under the engine, for operation in tropical environment
- Repeat compass in rear cockpit
- Long-range tank for temporary installation in the rear cockpit for ferrying flights
- Dual brake system
- Rear mag switches

The IAF Streaks were not fitted with carburettor heat. CFM Aircraft had found the Rotax 912 installed in the Streak to be resistant to the formation of carb ice even when being flown in conditions conducive to ice formation in the UK; this resistance was attributed to the proximity of the exhaust manifold to the induction system.

Dual brakes were available as a

standard option on CFM Shadows and Streaks. The non-standard system on the IAF Streaks had been developed to provide optimum rudder pedal and heel brake lever locations, given the fact that the fuel slipper tank obstructed the brake cable runs from behind the rear footwell.

The aircraft were all painted and doped in classic Shadow white with cockpit interiors in satin grey.

Instrumentation was standard VFR microlight fit with no gyro turn or direction indicators, or artificial horizon. Trim was by tumbler switch forward of the throttle and the IAF opted for the analogue trim position indicator, panel-mounted alongside the rear/front trim selector switch.

The Rotax 912 was fitted with a GSC ground-adjusted three-bladed wooden propeller to give an idle of 1600rpm and around 5600rpm on take-off.