

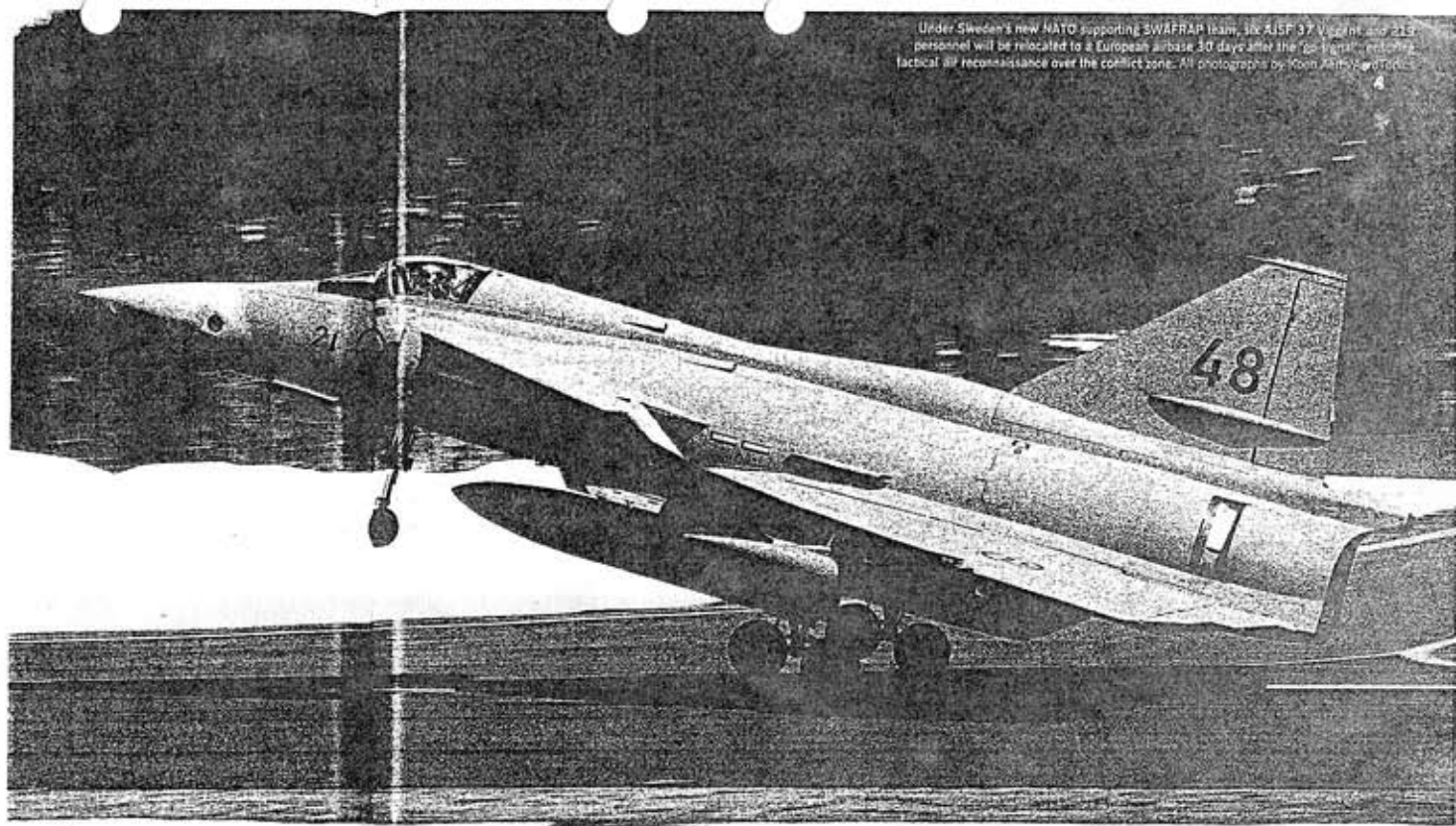
# LAPLAND'S LONELY WOLVES

Equipped with the simply stunning recce-equipped AJSF 37 Viggen, Sweden's new Rapid Reaction unit is now ready to deploy in support of NATO's Peace Support Operations at a moment's notice.

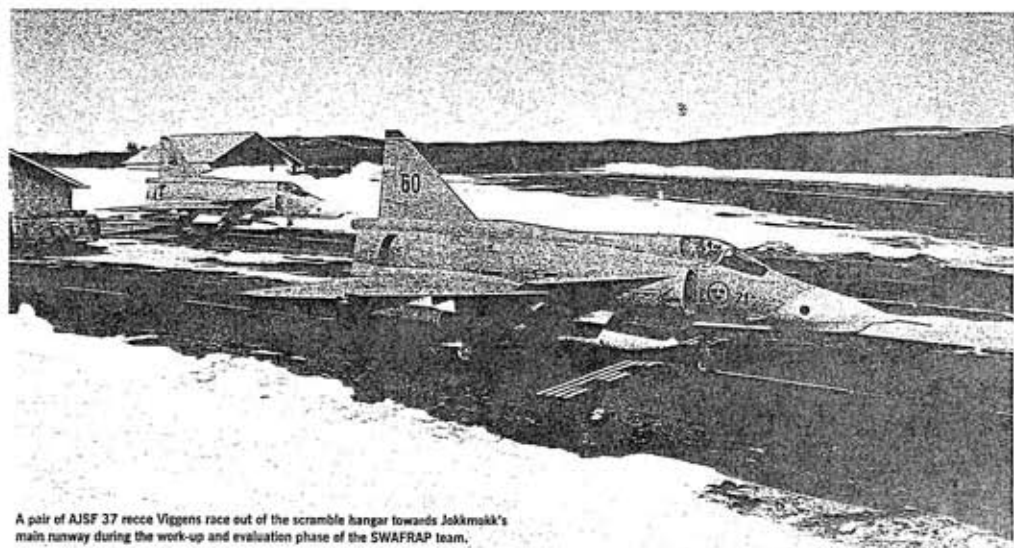
KOEN AERTS/AERO TOPICS and DOMINIEK NOUWEN visited the snow-covered airbase of Jokkmokk in deepest Lapland to see the *Flygvapnet* train for this important new role



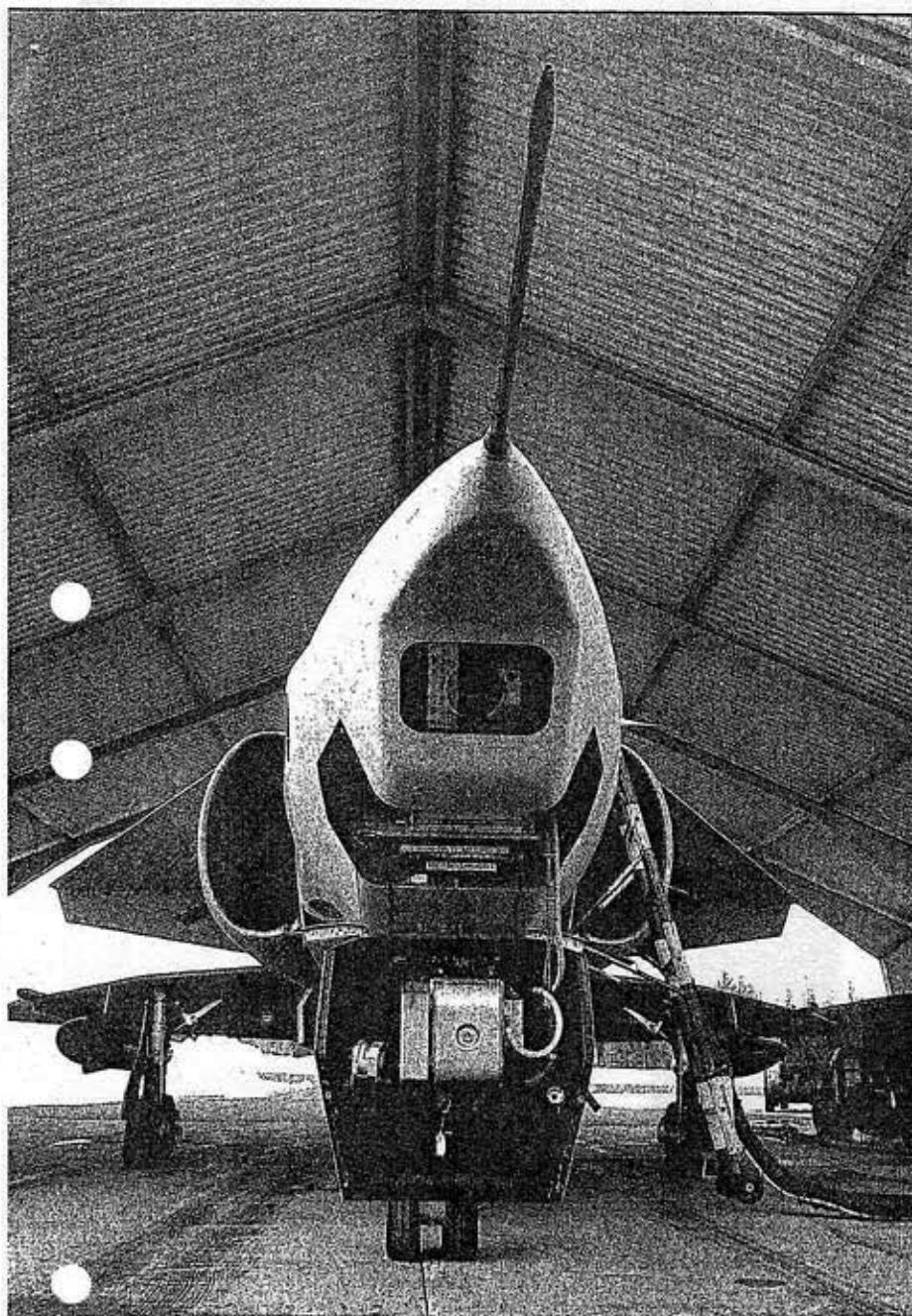
All 'Wolf Eye' SWAFRAP AJSF 37 pilots have recently received intensive CSAR training and new flight jackets, as seen here, which are more adapted to the international operations.



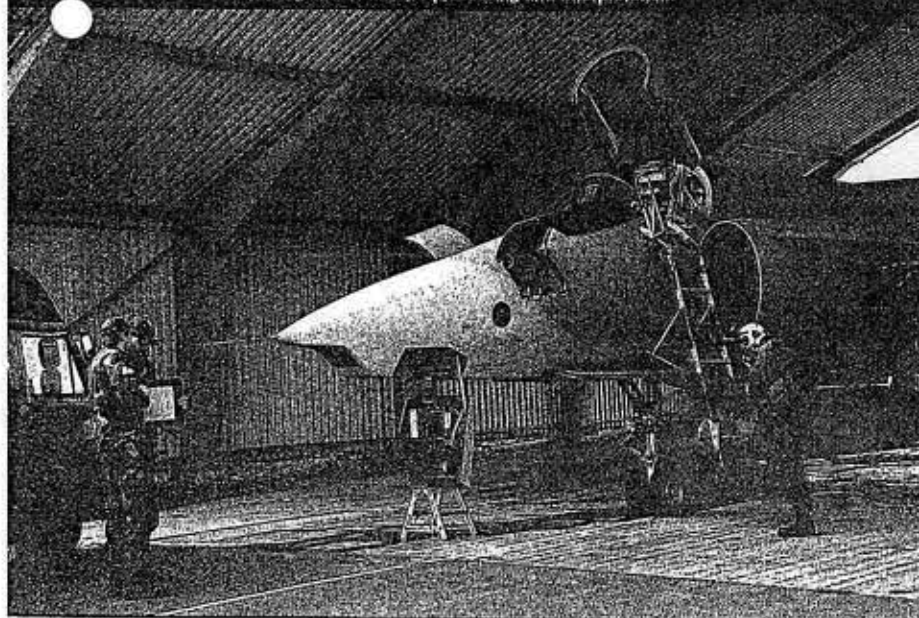
Under Sweden's new NATO supporting SWAFRAP team, the AJSF 37 Viggen and 213 personnel will be relocated to a European airbase 30 days after the 'cease-fire' protocol tactical air reconnaissance over the conflict zone. All photographs by Koen Aerts/Aero Topics.



A pair of AJSF 37 recce Viggen race out of the scramble hangar towards Jokkmokk's main runway during the work-up and evaluation phase of the SWAFRAP team.



After the mission, technicians of the *Sensor Grupp* collect the film and bring it to the Reconnaissance Intelligence Centre for processing and interpretation.



## TRICKS OF THE TRADE

The aerial aspect of the Jokkmokk deployment was limited to four daily sorties of two aircraft to deliver the photo section 'wet film' for processing and analysis. In fact, to adapt their recce task to the new PSO standards, Swedish pilots had already trained with No 41 Squadron at RAF Coltishall to benefit from its knowledge and expertise as recce specialists. Coltishall's Jaguar unit was indeed a good choice as a teacher, since the squadron can count on a wide range of front line experience during the last decade. While in 1991 the Jaguars took part in Operation 'Desert Storm' with tactical reconnaissance and bombing sorties, the unit deployed one year later to Incirlik, Turkey, during Operation 'Warden', patrolling the skies over Northern Iraq. Between 1993 and 1995, No 41 Squadron participated in Operation 'Deny Flight', policing the skies above the Bosnian conflict. Finally, in 1996, Coltishall's Jaguars became a NATO Rapid Reaction unit. Clearly, the SWAFRAP AJS 37 team could benefit from experience to be gained from No 41 Squadron and to learn about NATO regulations and routines in PSOs.

In November 1999 exercise 'Lone Wolf' — named after the *Urban Röd* squadron — brought five recce Jaguars and 80 personnel from No 41 Squadron from the cold of Norfolk to the freezing cold of Luleå. Due to bad weather conditions however, only a few missions were flown during 'Lone Wolf', restricting the learning process to theoretical aspects. Because of positive results nevertheless, in May 2001 Exercise 'Lone Wolf II' saw a Swedish contingent of four recce Viggens and two two-seaters, loaned from F4/Östersund, touch down at Coltishall (remember THAT deployment! — Ed) to continue their information exchange on reconnaissance techniques and working practices.

Working as an air reconnaissance team in a PSO means flying at an altitude of 3km to 8km over the conflict zone. Since the Swedish pilots were trained mainly on low-level recce runs over target areas, they lacked the experience to counter an anti-air threat when flying at medium/high level. In December 1999 AJSF 37 pilots relocated to Nörvenich airbase, in the southern German city of Cologne, to train at the MAEWF (Multinational Aircrew Electronic Warfare Tactics Facility), which counts four radar sites in south-west Germany and another three in adjacent north-east France. In this 18,000sq-km training area, mock-up SA-6 and SA-8 air defence sites simulate radar lock-ons and 'smokey' SAMs. The latter emit smoke to give the pilot a visual contact with the launch location and the chance to hone evasive manoeuvres accordingly. For these missions,



F7/Satenas (Sweden's sole C-130 base), while the Air Force recruited from all four Viggen wings for the AJSF 37 unit.

Some 1,800 application forms were sent in for the 295 posts. Since F21.1 Division — 'Urban Röd' is Sweden's sole tactical air reconnaissance squadron, all of its pilots signed up for the SWAFRAP AJSF 37 team. Consequently, the new team's nickname of 'Wolf Eye' was derived from the F21.1 Div's 'Akktu Stakki' (Lonesome Wolf) badge. Furthermore three 'new' recce pilots signed up, coming from F10/Angelholm, F17/Ronneby and Luleå's second squadron F21.2 Div — 'Urban Blå'. Those pilots coming from non-recce squadrons received a three-month conversion course to operate the modified version of this potent fighter and SWAFRAP was declared operational as of 1 January this year, although some vacancies remained to be filled.

Interestingly, an 'open contract' binds the personnel to attend the exercises held within Sweden, but once the decision is taken to deploy abroad for a peace-keeping intervention, the candidates can participate in the mission on a voluntary basis.

### LAPLAND DEPLOYMENT

Jokkmokk airbase was the setting for the first deployment of the SWAFRAP AJS 37 team.

Located at the arctic polar circle and some 150km west of Luleå, this

reserve base hosts one of F21's Viggen squadrons for a 'war scenario' exercise on a yearly basis. Hidden in the scarcely populated forests of Lapland — with just three inhabitants per square kilometre — this base consists of a 6,709ft (2,044m)-long main runway and three shorter secondary airstrips, all interconnected by an intricate network of taxi tracks. Apart from some open scramble hangars no further infrastructure is available, which made this location ideal to evaluate SWAFRAP's readiness.

The *Rekogniseringsstyrka*, a team that performs the pre-deployment analysis of the location, had previously visited Jokkmokk airbase in order to contemplate what material was needed to ensure safe operations. Everything was brought in, from a field kitchen and medical unit to a mobile control tower and specialised trucks to clean the snow-covered runway and adjacent taxi tracks, while lodging for the personnel was provided at a camping site near the small village of Jokkmokk. The goal of the exercise was to see the ground personnel at work and to build experience and establish operations to a routine level. Sweden's shift from neutral defence to active participation in

international PSOs also meant

abandoning its

old *Flygbasbataljon*

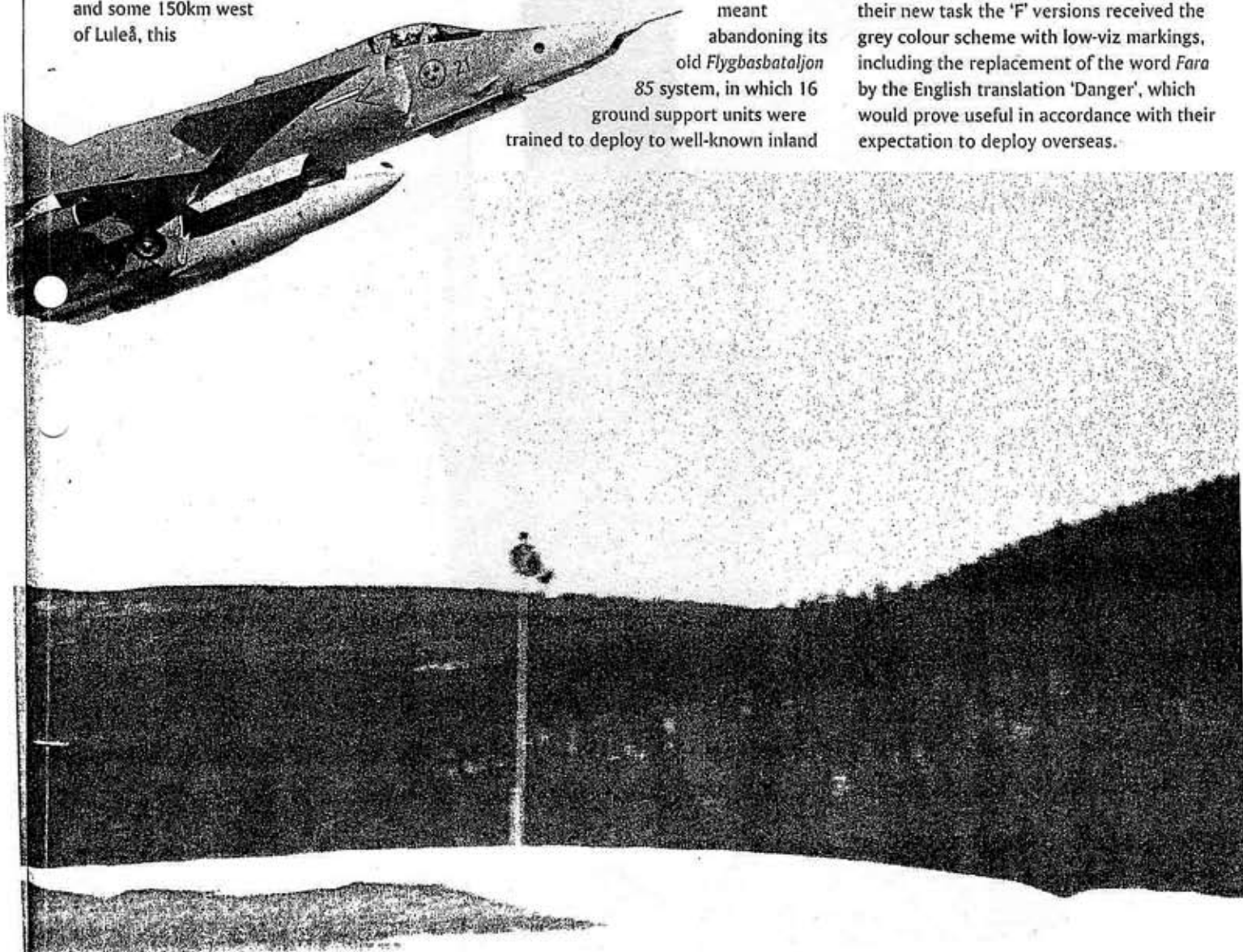
85 system, in which 16

ground support units were

trained to deploy to well-known inland

locations. Eight units in the new *Flygbasbataljon 04* structure will now ensure the successful relocation of a SWAFRAP unit to a foreign country and co-operate with other country's air forces in an international scenario.

Some five AJSF 37 recce Viggens relocated to Jokkmokk, coming from Luleå airbase, where they were loaned from the F21.1 Div — *Urban Röd*. These aircraft, of which 27 were built as SF 37 (*Spaning-Foto*, or reconnaissance-photo), originate from the first batch of 180 Viggens delivered to the *Flygvapnet* between 1971 and 1979. As detailed last month, some 115 first generation Viggens were to be upgraded to a multi-role standard by the AJS 37 programme from 1993 onwards. However, financial restrictions saw only 98 aircraft being upgraded and the idea of a single multi-role standard abandoned. The result of the downscaled programme, concluded in 1997, was 25 AJS 37s (ex-SH 37) receiving ground attack capability, a similar number of AJSF 37s (ex-SF 37) with additional fighter capability and 48 AJS 37s (ex-AJ 37) with extra equipment for radar surveillance. While the latter type has recently been withdrawn from use, the surviving 11 AJSF 37 and nine AJS 37 Viggens are pooled within *Urban Röd*. For their new task the 'F' versions received the grey colour scheme with low-viz markings, including the replacement of the word *Fara* by the English translation 'Danger', which would prove useful in accordance with their expectation to deploy overseas.



For centuries, Sweden has been synonymous with the political and military fence of neutrality. However, this path turned a new direction on 21 June 2000, when the Swedish government decided it would contribute in future NATO-led Peace Support Operations (PSO) with its powerful and largely indigenous *Försvarsmakten* or Armed Forces, consisting of Army, Navy and Air Force components.

Because of its policy of armed neutrality, adopted in 1815, Sweden could not, and still cannot, become a fully paid-up member of NATO. Nevertheless, the country has consistently shown itself to be an enthusiastic member of the United Nations, assigning Swedish ground troops to many UN peace-keeping missions over recent years.

With the dissolving of the Soviet Republic, the internationalisation of Sweden's defence was catalysed with the nation's joining of the Partnership for Peace organisation in May 1994. In this respect the Swedish AF participated in numerous international exercises ('Cooperative Jaguar', 'Cooperative Bear', 'Baltops', 'Cooperative Chance') to train its personnel on peacekeeping, humanitarian and disaster relief operations in strong coalition with other nations.

The summer 2000 signature for NATO-supporting political change will now see Swedish military aircraft operating in Kosovo-like conflict zones for the first time. Although this reminds many on the 'homefront' of the spectacular Saab J29 Tunnan detachment to Congo in the 1960s, the new task that falls to

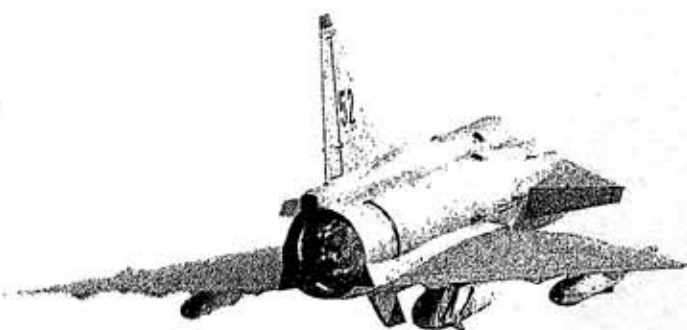
the *Försvarsmakten* is markedly different. Whereas the Congo detachment had a peace-enforcement task, today the Swedish government only allows participation in missions with a peace-keeping character in a low-threat environment.

## JOIN US


At the end of August 2000, the *Flygvapnet* (Air Force) started a recruitment campaign to contract personnel that would be willing to undertake a potential six-month deployment abroad at short notice. Two *Snabbinsatsförbanden* or Rapid Reaction units were to be formed, which could be called to action on a 30-day readiness basis.

One part of this new SWAFRAP (Swedish Air Force RAPid reaction) team consists of four C-130s (*Tp84* in Swedish service) and is basically referred to as the SWAFRAP C-130 unit. The Swedish Hercules fleet, like most other European military transport units, has already built up a considerable knowledge and expertise in using its transport workhorse in humanitarian missions. For the second unit, the Swedish AF maintains six of its AJSF37 reconnaissance-equipped Viggen on alert for a SWAFRAP Viggen deployment, tasked with tactical air reconnaissance.

Although two working groups were set up at *F7/Satenas* and *F21/Luleå* to work out the details of the project, candidates were selected from all the *Flygvapnet's* Wings. In the event, most of the Hercules unit personnel were signed up from



The AJSF 37s are planned to be the last operational Viggen in Swedish inventory. They will be withdrawn from use at the end of 2003, when the recce-podded Gripens will inherit the SWAFRAP task.



Another pair of Viggen takes to the air for a mission over Lapland. With the formation of the Hercules and Viggen-equipped SWAFRAP, the Swedish AF will find itself operating in an entirely new role in hostile environments for the first time.



Right, top to bottom:

The AJSF 37 is standard-equipped with two Ska31 cameras with vertical 600mm lenses for high-altitude operations, three Ska24C cameras with 120mm oblique lenses, one Ska24C camera with 57mm vertical lens to provide reference pictures for high-altitude operations, and a single Vka702 IR camera.

The AJSF 37 Viggen cockpit

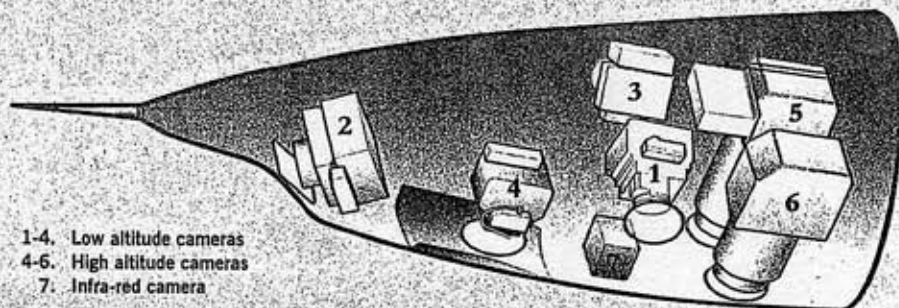
The splinter camouflage of the 11 surviving AJSF 37 fleet was replaced by a low-viz air defence grey scheme, with the addition of English 'Danger' titles.

the recce Viggens were equipped with the U-22/A jammer pod and the KB chaff and flare dispenser, which together with a pair of AIM-9 missiles, forms the standard SWAFRAP self-protection configuration.

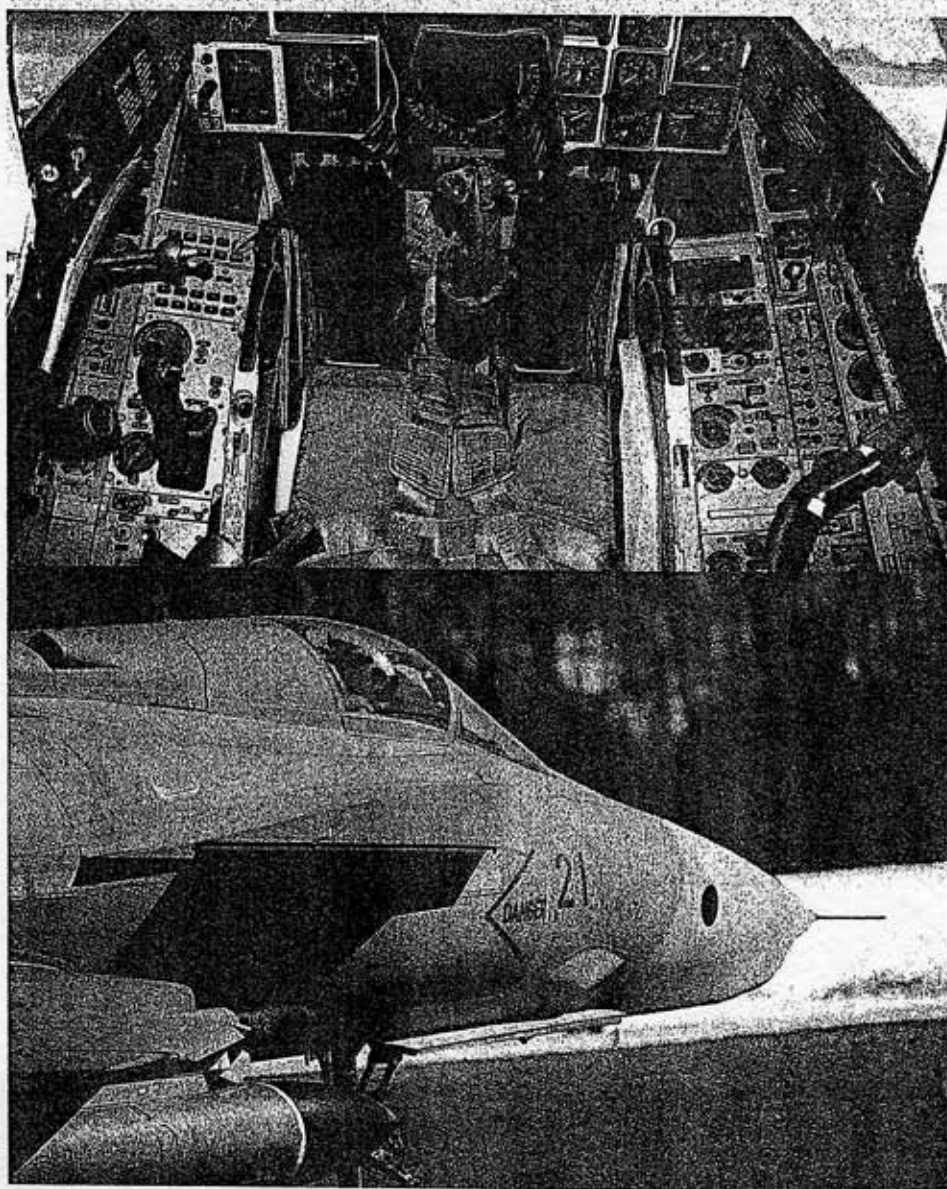
Continuing the steep learning curve, six Swedish photo interpreters (PIs) from the photo section unit were sent to the UK for a 2-week conversion course to gain familiarisation with NATO reporting. On their return from the UK these persons became the instructors for newcomers in the interpretation job. Two Balkan-experienced Dutch PIs, coming from Volkel AB's F-16-operating 306 Squadron, assisted the Swedish instructors to work out a PI training course. Up to this point Swedish photo analysis differed considerably from NATO doctrine. In its previous defensive strategy, the Swedish tactical recce unit operated only within their own airspace and the objectives were laid out by domestic guidelines. This had downsized Sweden's standard recce report per objective to one page — a NATO report on the same subject requires so many parameters that each objective is described in more than four pages.

During the Jokkmokk exercise, the Dutch assistants acted as observers to make an evaluation of the PIs. Undeveloped spare films were brought in so that in the case of adverse weather affecting flying operations, the photo section could still train on location.

With the goal of having an entire mission report ready within 60min after touchdown, the team worked towards the ultimate in co-ordination. The results were impressive: While Intel set out the objectives, the PIs determined when and how these sites should best be overflowed to make a good analysis possible. Flight Ops finally planned the mission within these parameters, provided that the location of surrounding air defence sites allowed such a recce run. After a mission, with the Viggen reporting finals to land, one of the *Sensor Grupp's* two camera buses sped towards the flight line to retrieve the film rolls from the aircraft's nose section, replacing them with new cartridges. The used film was then rushed back to the mobile reconnaissance intelligence centre, where it was processed in the lab container and then



- 1-4. Low altitude cameras
- 4-6. High altitude cameras
7. Infra-red camera



transferred to the *Tolk Grupp* to allow five PIs to start analysing the frames. Exactly one hour after touchdown Intel received a full report of the mission's objectives.

#### VALUED ASSET

Although recent decisions in the *Riksdagen* (Swedish government) have drastically reduced the defence budget, which has led to the imminent closure of the airbases of Angelholm and Uppsala, plans for the new SWAFRAP team have not been affected. This new unit gives the *Flygvapnet* a new *raison d'être*, which has seemingly proved to be highly acceptable to the Swedish taxpayer.

Although the Viggen fleet is rapidly being withdrawn from use with the introduction of the JAS 39 Gripen, the AJSF 37 version will remain in service until the delivery of a new reconnaissance pod for the Gripen, scheduled for the end of 2003. As of 2004 the swing-role JAS 39 will be assigned to the SWAFRAP team, changing the task from peace keeping to peace enforcement. Such is the confidence in its own ability and that of the lessons learnt from its mentors, the *Flygvapnet* now sees itself ready to deploy to the NATO frontline and carry out its new duties to the full — any time and any place.