

Quo vadis, Switzerland?

As the Swiss Air Force's trusted F/A-18C/D Hornets get older, planners are busy thinking about their replacement, as Peter M Gunti reports.

*The Swiss Air Force's 30 remaining F/A-18s will reach the limit of their service lives around 2027. Switzerland purchased 26 F/A-18Cs and eight F/A-18Ds, delivered between January 1996 and December 1999. One F/A-18C and three F/A-18Ds have been lost in service.
All photos Peter M Gunti*

In a recent discussion, Lockheed Martin's sales representative for Switzerland was asked about the differences in the nation's evaluation procedures for new fighters. "It is more or less the same as in other countries," he replied, "but here, we have to convince the people too." And he's right. It is a unique feature of Swiss democracy that every government decision can be overturned by the people. An opposition group needs to collect 50,000 signatures within 100 days to hold a referendum and the whole issue has, by law, to be decided by the majority of the voters. This was last felt painfully in 2014 when a deal to replace part of the obsolescent F-5E/F fleet with Saab Gripen was rejected by a clear majority of voters. The reasons for this typical defence austerity are diverse. This neutral country has not seen a foreign invasion attempt since 1798. Many citizens question the necessity for expensive weapon systems.

Those who voted against the Gripen deal did not, however, eliminate the need for modern air defences. They merely postponed the decision, making the requirement more urgent. The Hornets, although outfitted with special titanium bulkheads, will reach their 5,000-hour limit by 2027 after a service life of 30 years. By 2025 the dwindling force of F-5Es will have stopped flying. To maintain mission capability beyond that date, the small air force has until late 2020 to evaluate currently marketed aircraft types. A procurement plan for parliament needs to be finalised by 2022 and the first new fighters delivered in 2025.

The deal is significant by Swiss standards. At a cost of 6bn Swiss Francs (roughly £5bn) the air force wants the ability to have four fighters airborne constantly for a four-week duration. A maintenance autonomy of six months is crucial and participation of Swiss industry is important. Ground attack will reappear as a secondary role, having been abandoned entirely more than 30 years ago, while reconnaissance will again be a mission requirement. Three air bases will require the necessary infrastructure for operations: Emmen, Payerne and Meiringen. In its scale and scope, this is the most ambitious evaluation programme the country has ever conducted.



Left: The Zigermeet 2019 airshow at Mollis on August 16-17 was used by Airbus and Dassault to impress a wider audience with their respective products. This French Rafale pilot has his own idea of the best choice for Switzerland. **Right:** Boeing is pitching the Super Hornet to Switzerland in its latest Block III production version. Two-seater F/A-18F 169653 and single-seater F/A-18E 169654 (seen here) arrived in Switzerland accompanied by a KDC-10 tanker from Omega Air Refueling.

It began with market studies last year when the government ruled out products of Russian or Chinese origin. Five manufacturers – Airbus, Boeing, Dassault, Lockheed Martin and Saab – were invited to submit proposals. Product audits were held at the factories and Swiss test pilots flew simulator missions. European air forces were approached for experience data and a catalogue of 2,000 questions was sent to the selected companies. A team of 70 people will analyse this flood of data for some time.

In spring, all five contenders were invited to send their products to Switzerland to conduct identical programmes of verification flights. These consisted of two sorties for technical verification of data, five precisely specified tactical missions and a ‘free’ mission, in which companies were given the chance to showcase their product’s forte.

In the political arena, there is a distinct fear of ending up on the end of an umbilical cord attached to one of the world’s biggest arms manufacturers whose support



Above: A Eurofighter of the Luftwaffe’s Taktisches Luftwaffengeschwader 71 ‘Richthofen’ at Wittmund demonstrates the type’s capabilities in mountainous terrain during Zigermeet. The previous flight evaluation made use of a pair of Royal Air Force Typhoons – a single-seat FGR4 and a two-seat T3. **Below:** An F-35A takes off without afterburner in consideration of the Swiss noise-measuring protocol. The USAF jets were provided by the 34th Fighter Squadron at Hill Air Force Base, Utah. Four of the ‘Rude Rams’ fighters arrived in Payerne after a transatlantic flight on May 31 – serials 13-5077, 13-5079, 13-5081 and 13-5083.

becomes more expensive as the demand for it grows. The sales brochure for the French Rafale addresses these concerns head-on: full technology transfer, access to software, technical autonomy and Swiss participation in future upgrades are credible arguments, at least on paper.

Saab’s contender, the Gripen E, was withdrawn shortly before its scheduled visit to Switzerland. There are currently three prototypes of the latest JAS 39E fully engaged in testing and development work. Full mission capability for ground-attack and reconnaissance missions will not be attained before 2020 and 2022 respectively. This means that this capable and cost-effective machine is out of the race for now. Saab and armasuisse, the agency conducting the evaluation, blamed each other for poor communication in the lead-up to the flight trials.

Final contenders

The flight programme in Switzerland therefore concluded with the Typhoon, Super Hornet, Rafale and F-35 remaining. A host of data was collected. Particular scrutiny was placed on four subsystems: radar

performance over challenging alpine terrain, electro-optical sensor capabilities, electronic warfare installations and data link capacity. Each type was flown on the steep 16° approach to Meiringen. Special care was given to providing identical conditions for all companies, but the results remain strictly secret for the time being. Only the noise-measuring data is scheduled to be released later this year, as there is considerable concern among the population around the bases.

However complex this evaluation may be, there can be no doubt that crunch time is approaching. The government should make its Planungsentscheid (planning decision) in autumn or early winter next year, giving a task force the official go-ahead to work out a detailed proposal. If a referendum result fails to overturn that decision, the winning type will be announced soon after. This sequence should prevent a public debate on the selection of the aircraft type, but if it comes down to a referendum again, it will be up to every adult citizen of this small country to decide the future of a proud air force with long-standing traditions. **AFM**

