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Aerospace & Defence Review



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Frisian Flag 2018

The Leeuwarden Air Base in the Netherlands (ICAO code EHLW), hosted the annual *Frisian Flag* 2018 exercise, was held from 9 to 20 April 2018. Over these two weeks, participants executed a mix of air-to-air, air-to-ground and air-war exercises. A realistic international cooperation was one of the major aims of this exercise since many international operations were conducted by multinational taskforces, with different aircraft types, following different tactics, doctrines and training-levels, with different command-chains and different air-refueling procedures and certifications.

Each day, two missions were flown with 40-50 aircraft and missions became increasingly complicated as the exercise progressed. All participating countries played the role as mission-commander for mission and all countries also brought in their tactics, doctrines and lessons learned from previous exercises and real-war experiences.

As there were two missions per day, preparations for the morning-missions started on the day before and ended with a mass-briefing early in the morning and similarly, afternoon missions were conducted. There were flown offensive and defensive air-to-air missions and offensive and defensive air-to-ground missions twice a day with some 40-50 aircraft airborne each mission. Since air-to-air refueling was the part of the exercise, the planners and mission-commanders kept a close eye on that and made sure it was done timely, though it was not really needed since target area was close to Leeuwarden Airbase.





The Dutch No.322 TACTESS (Tactical Training Evaluation and Standardisation) Squadron organises the *Frisian Flag* exercises (and its predecessors)

and has so over the past 20 years. The main task of 322 TACTESS Squadron is to standardise Dutch operational F-16 tactics and doctrines. Some years back, it

was 323 TACTESS Squadron that used to organise *Frisian Flag* exercises but later on, it was 322 TACTESS Squadron that took the baton to convert the future Dutch F-35 JSF aircraft, which is expected in the Netherlands sometime in 2019.

***Frisian Flag* lessons (compared with *Red Flag*)**

Most of the foreign participants were very pleased by *Frisian Flag* exercise which they found relatively low-cost as compared to the *Red Flag* exercise in the US. Almost all the nations across the globe participated in *Frisian Flag* exercise with all national and international doctrines mixed into the 20 missions.

RED-AIR

In the 2018 edition of *Frisian Flag*, there were dedicated RED-AIR aircraft with civil A-4s based at Wittmund AB and Polish MiG-29s based at Leeuwarden AB. With this dedicated RED-AIR assets available in the exercise, BLUE-AIR pilots experienced virtually-real adversaries with non-standard tactics and aircraft.

*Text and photos:
Joris van Boven and Alex van Noye*



European Air Refuelling Training (EART) 2018



Dutch Air Force McDonnell Douglas KDC-10

When the European Air Transport Command was established in 2004, it could hardly be foreseen that such cooperation between countries would arise. Still, when it comes to air-to-air refueling, European countries have joined forces by training together during the annual EART. Owing to the changing conditions in the world, it is necessary to have a well-functioning and modern tanker fleet. The 'hotspots' in the world are increasingly diverse

and further away compared with the recent past, making a strategic tanker fleet an important factor for mission success. During the EART, all aspects of refueling are trained for and lessons which have been learned during this exercise, have made politicians in Europe agree to join forces when it comes to air-to-air refueling with strategic tankers. With the help of the European Defence Agency, a study was started which finally led to the purchase of a joint European Airbus A330MRTT tanker fleet in the near future.

The Importance of EART

Lieutenant-Colonel Chris van Dijk is current commander of No. 334 Squadron, who executed the EART (European Air Refueling Training) in 2018, who informed that this year's EART exercise, which was held in parallel to the exercise *Frisian Flag* at Leeuwarden Air Base, was again scheduled at Eindhoven Air Base. The entire EART exercise was dedicated to tanker operations and international cooperation between NATO partners. Of the participating



French Air Force Rafale

tankers, the French and American KC-135 had already left for home base and only the Dutch KDC-10 and the German Airbus A310MRTT flew daily missions to support the exercise *Frisian Flag* and EART. Both tankers from France and the United States were withdrawn, because there was unrest in the Middle East and especially in Syria.

Goals and Achievements of EART

It is well known that the European units have a shortage of tankers and EART was created to optimally use the existing fleet

crews were briefed daily on the operators that they would receive. Crews were also instructed on how they would operate and with how many tankers they would fly into the cell. During this EART, it was the second time that the tankers were connected to the Link 16 system on which movements could be analysed in detail later. With the remaining two tankers on 12 April, the Dutch KDC-10 refueled eight Dutch F-16s; the German A310 refueled four German Eurofighters and three French Rafales. All refueling missions were flown in the Shell track.

Future Tanker Fleet

In 2016, the Netherlands and Luxembourg were the first countries to sign the intention statement (Memoria of understanding, MOU) to purchase these aircraft. These countries later also signed for the purchase of two aircraft with an option for another six aircraft. In 2017, Germany and Norway also signed for this project. With these two partners on board, the number of aircraft to be purchased was already at seven. On 14 February 2018, Belgium also contracted for and the number of aircraft has increased to eight.

Text and photos: Joris van Boven and Alex van Noye



A German Eurofighter being refueled

of tankers. In exercises such as *Frisian Flag*, the emphasis is often on the fighter crews and not on that of the tankers but during EART, it was the other way around where the crew of the tankers were also extensively trained alongside the fighter crew. One of the main goals of the EART was to receive different 'receivers' and not just their own fighter types.

On Tanker Mission with the KDC-10 and A310 during EART2018

During exercise *Frisian Flag*, tankers were flown in two designated areas. Just above the coast of Texel, above the North Sea, was the Shell Track located and just off the coast of Denmark, was located the Esso Track. During the training, the



Dramatic shot of the F-16s!