

VAYU

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The Luftwaffe Exercises



Brilliant Arrow 2017

Exercise *Brilliant Arrow* 2017 (BRAW17), conducted from 11 to 24 September 2017 in northern Germany, was the Luftwaffe's largest exercise this year. The aim was to obtain NATO Response Force (NRF) certification for 2018 from the Joint Force Air Component Command, based in Kalkar in Germany. The NATO Response Force (NRF) is a highly ready and technologically advanced multinational force made up of land, air, maritime and Special Operations Forces components that the Alliance can deploy quickly, wherever needed. In addition to its operational role, the NRF provides a vehicle to demonstrate operational readiness and act as a "testbed" for Alliance transformation. It can be used in the implementation of NATO's Connected Forces Initiative (CFI) as a vehicle for greater cooperation in education and training, increased exercises and better use of technology.

Brilliant Arrow is designed to train NATO air forces who do not routinely train together to share their experience and skills in combined air operations. It prepares the participating units and HQ AIRCOM to assume standby from 2018, ready to react in defence of the NATO region and its interests.

Exercise activities were supported by AWACS aircraft flying out of the NATO Air Base in Geilenkirchen, Germany, an Airbus A-310 MRTT tanker aircraft taking off from Cologne with target simulation

aircraft and forces from Hohn, Nordholz and Nordhorn. Moreover, the 26th Surface-to-Air Missile Group in Husum and 3rd Tactical Air Command and Control Group in Holzendorf/Schönwalde with their deployable Control and reporting Centre provided key support to successful training during the exercise.

The aircraft flying in the exercise were:

Wittmund AB

- Luftwaffe from Wittmund AB with Taktischen Luftwaffengeschwader 71 'Richthofen', using four Eurofighter Typhoons
- Polish Air Force from the 31st Tactical Air Base Poznań-Krzesiny with 6 Squadron, a total of 72 persons, with 10 pilots and five F-16s
- Greek Air Force from Souda Bay AB with 340th Squadron of the 115 Combat Wing, a total of 42 persons, with 12 pilots and four F-16s
- Discovery Air Defence provided adversary air assets, with two A-4s as 'red air'

Laage AB

- Turkish Air Force with two F-16s



Discovery Air Defence provided A-4s as aggressors



Poland, Greece and Turkey (latter not pictured) sent their F-16s to the exercise

and air-to-ground missions. Briefings before and after the missions, with feedback to JFAC in Kalkar using encrypted videocalls were conducted, while JFAC Kalkar also monitored active flights to keep up with their progress during the exercise itself.

Polish Air Force Major ‘STOIWKY’ (identified only by callsign) said, “Any time you fly with a different nation, you learn something. We are here to support them (the German Air Force), but we also learn from them. We train more and more and more, because if the real thing happens, there is no more time to train!”

For the German Eurofighters flying from Norvenich AB, air-to-air refueling was involved, while the aircraft already operating from northern Germany (Wittmund and Laage) did not require refueling. To limit the noise affecting neighboring villages, the missions all took place over the North Sea, unless the wave height was above safety limits, in which case missions moved back above land.

Polish pilots have trained in large exercises like the NATO *Tiger Meet*, *Brilliant Arrow* and *Frisian Flag*. They have already received their NRF accreditation in May 2017 and will be available for NRF 2017 and 2018. Greek pilots were attending to gain NRF accreditation in 2018. The foreign participants and German squadrons participated to help JFAC Kalkar to obtain their NRF accreditation and they, in turn learn from every exercise.

Text and photos: Alex van Noije and by Joris van Boven

Hohn AB

- Two C-160 from Lufttransportgeschwader 63 (Air Transport Wing 63)

Norvenich AB

- German Air Force Taktischen Luftwaffengeschwader 31 ‘Boelcke,’ with four Eurofighters
- German Air Force Taktischen Luftwaffengeschwader 74 from Neuburg AB, with four Eurofighters

Cologne

- German Air Force Airbus A310 MRTT tanker

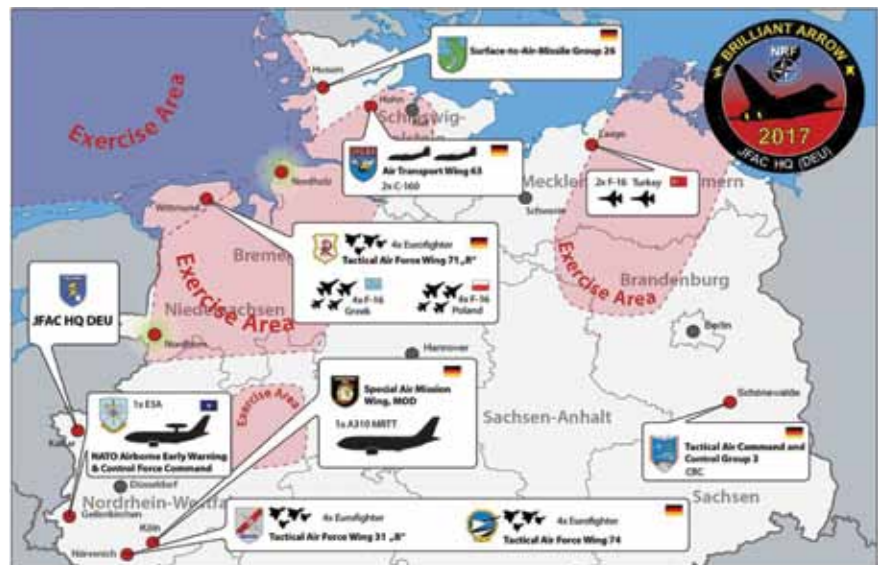
Geilenkirchen AB

- NATO E-3 AWACS

The exercise started a few days late owing to bad weather on the scheduled arrival date of 11 September. The foreign participants arrived the following day, with 22 fighters in total, flying from Wittmund, Norvenich and Laage on a daily basis. With support aircraft, that number reached 30 aircraft flying daily during the morning missions. Afternoon missions were smaller, with fewer aircraft airborne.

BRAW17 missions were planned at Joint Force Air Component Command

in Kalkar, from where the taskings were sent to the participating airbases and units. These orders were interpreted into action by the pilots, with various scenarios sent out from JFAC Kalkar, such as entering an enemy country to perform air operations (Offensive Air) or defending own territory (Defensive Air), including both air-to-air



Geographic extent of the exercise

In Commemoration



Operation Market Garden

73rd anniversary of the famous 'Operation Market Garden' was commemorated in Europe with a demonstration carried out by airborne troops from several countries. Alex van Noije and Joris van Boven report from this annual event.

From 11 to 16 September 2017, the international parachuting exercise *Falcon Leap* took place for the third time, this also being the 25th anniversary of the 11th Airmobile Brigade of the Dutch Army. Military personnel from eight different countries trained together by jumping with each other's equipment. The exercise, which encourages collaboration between the various allies, is linked to the memory and commemoration of Operation *Market Garden*, conducted during the Second World War. Operation *Market Garden* was an allied offensive against the Germans in the Netherlands in September 1944, perhaps the most important such in the Netherlands during the Second World War. *Market Garden* was largely

unsuccessful, because the last bridge at Arnhem could not be captured. The result of this failure was the 'Hunger Winter' for the northern part of the Netherlands. Operation *Market Garden* consisted of two major sub-operations. The first operation was to drop a large number of airborne troops behind German lines and was called *Market*. The second operation was a ground offensive from Belgium to the Netherlands under the name *Garden*. British, Polish and American airborne troops were to occupy the important bridges across some major Dutch rivers. The ground troops could quickly move from Belgium towards the IJsselmeer in the Netherlands. Operation *Market Garden* was seen as a failure by the Allied Army Staff, with the most

crucial bridge at Arnhem not captured. During this major airborne operation, many paratroopers were killed, and are commemorated at the annual Market Garden Memorial.

The official historic anniversary of Operation *Market Garden* started in Brabant in Son and Breugel. On Sunday, 17 September 1944, 4,500 paratroopers landed in the fields west of Son and Breugel in a timeframe of 45 minutes. In addition, there were 53 Waco gliders towed by the Douglas C-47 Skytrains. The Paulushoef farm was chosen as marker for the drop zone, name of this farm was written in big white letters on the roof. People from nearby farms helped the Allies in every way possible after their landing.



Paratroopers board aircraft

Now, on 15 September 2017, to commemorate the opening action of *Market Garden*, a group of paratroopers were dropped over Son and Breugel. The paratroopers, from the Round Canopy Parachuting Team (RCPT), landed in the area surrounding the Brouwerskampweg and Sonniuswijk. The RCPT team has members from 26 different countries and operate in the manner of Operation *Market Garden* in 1944, with authentic uniforms and jumping from a C-47 Dakota, to commemorate those who fought for Europe's freedom.

The next day, the RCPT continued to Veghel to conduct a jump there. At 6 pm, they jumped in the Kruigenstraat. The Ham en Havel area was the scene of fierce fighting on 22 September 1944. That battle entered history books as 'Black Friday.' Finally, on 17 September 2017,

around 3.30 pm, there was also a jump on De Horstjens in Eerde. That landing took place on a field of drop zone A, which had not been used since the 3rd Battalion of the 501st Parachute Infantry Regiment landed there in September 1944.

In addition to the RCPT team, which traditionally makes parachute jumps during commemoration activities, there are also international military teams deployed then, facilitated during the commemorations by the Royal Netherlands Air Force. The two highlights were the public events on 13 September, at the Houtdorperveld at Ermelo and the commemoration jump on 16 September, at the Ginkelse Heide at Ede near Arnhem. On both days, between 0800h and 1400h more than 800 paratroopers landed in the designated areas.

All aircraft that dropped parachutists operated from Eindhoven Air Base, with the Royal Netherlands Air Force providing a C-130 Hercules for the commemoration. The German Luftwaffe flew in with two Transall C-160 aircraft, the Polish Air Force provided a C295 transport and the US Air Force flew one C-130 from the United States to Eindhoven. In the past, the Belgian Air Force and the British RAF also flew during the commemorations, but not this time.

The paratroopers participating in exercise *Falcon Leap* were from eight different countries: Belgium, Canada, Germany, France, Great Britain, The Netherlands, Poland and the United States. During the exercise, the troops were completely mixed, and therefore able to operate together and use each other's equipment and aircraft. This type of training ensures that the troops are widely deployable and that they are not dependent on their own equipment and aircraft during expeditionary operations. The large and complex final scenario of the exercise was a series of commemorative jumps during the Market Garden Memorial. In some cases, the paratroopers boarded their aircraft with engines running on the apron, adding to the serious training element of the exercise, even though the jump was purely commemorative. Training internationally in addition to conducting the commemoration events, allows both the Royal Netherlands Air Force and the Netherlands Army to effectively execute the exercise objectives of *Falcon Leap* as well as commemorate *Market Garden*.



Luftwaffe Transall C-160 taxiing out