

Opération Harmattan

"Total 54" ready to receive



Patrick Roegies & Marco Dijkshoorn

SEM 44 of 17F is being refuelled by 'Total 54', a French Air Force C-135FR of Groupe de Ravitaillement en Vol 02.091, based at Istres-le-Tubé. The Super Etendard was participating in Operation Harmattan missions near Misrata, Libya. (Over the Med, 12 June 2011, all photos made over the Mediterranean by authors on 12 June 2011, unless stated otherwise)

Since the adoption by the United Nations Security Council of Resolutions 1970 and 1973 on 17 March 2011, the French armed forces have been forerunners of the operations in support of the sanctions against Libya and its regime led by Colonel Muammar al-Qadhafi. To report upon the French participation to support in controlling the settled No-Fly Zone above Libya, Patrick Roegies and Marco Dijkshoorn joined an aerial refuelling mission from Istres-le-Tubé, giving them a unique perspective of the role that France plays in the Operation Unified Protector (OUP) operations.

OUP followed after the popular uprising which began in Benghazi on 17 February 2011 and which led to heavy counter-attacks by the pro-Qadhafi regime, killing many civilians in the process. Resolution 1973 authorised the NATO member states to take "all necessary measures" to protect civilians against attacks by forces of Colonel Qadhafi in Libya.

What started off as a US-led coalition under the name of Oper-

ation Odyssey Dawn, continued under NATO command from 31 March onwards, thereby releasing US Africa Command from its commanding powers and transferring it to NATO HQ. NATO Headquarters, North Atlantic Council is the main body under which OUP is controlled with Supreme Headquarters Allied Powers Europe as its subordinate and actual controlling body. The current Deputy Commander Joint Force Command or Operational Commander of OUP is Canadian Lieutenant General Charles Bouchard. Under his command, the Allied Air Command located in Izmir (Turkey) and Allied Maritime Command in Naples (Italy) coordinate the operations over Libya. The first missions under NATO command were by French Air Force aircraft operating out of Solenzara. Two patrols of Rafale fighters and Mirage 2000D fighter-bombers, supported by Mirage F-1CRs reconnaissance aircraft, conducted air-interdiction sorties around Sirte and Misrata. Later in the day, French Mirage 2000-5 fighters conducted air interdiction sorties from Souda Air Base, Crete.

French participation

As soon as Saturday 19 March, French president Nicolas Sarkozy, ordered the Chief of Staff to launch Opération Harmattan, the name of the French participation in OUP derived from hot dry winds that blow over the Sahara desert, mostly between November and March. French Rafale aircraft were the first among the coalition to conduct reconnaissance missions and eventually attack pro-Qadhafi forces. The aircraft were by then still operating out of their French home-base of St. Dizier but that was soon to change and Solenzara Air Base on the French island of Corsica was chosen as one of the first Forward Operating Bases for the French campaign. The French Navy quickly deployed their Charles de Gaulle aircraft carrier to the Mediterranean, enabling Rafale M and Super Etendards Modernisé to strike deep into Libyan territory.



The platform of Istres where GRV02.091 tankers are waiting for their mission.



This EC03.003 Mirage 2000D is about to be loaded with two Raytheon GBU-22 Paveway III which is essentially a 500 lb MK 82 bomb with a Paveway III guidance kit. (652/133-XN, Souda, May 2011, Stephan de Bruijn)

By the time of writing, the French armed forces commit an average of fifteen reconnaissance and combat aircraft per day. Besides that, the Stratotankers of GRV02.091 fly daily missions to enable refuelling of coalition forces around the clock. E-3F AWACS aircraft perform Air Early Warning capabilities while the French Navy E-2C Hawkeyes are used as a Command and Control platform. Maritime Patrol is being performed by a two Atlantique 2 aircraft operating out of Sigonella. French aircraft have the capacity to carry out all the air missions conducted by the coalition forces such as Air Interdiction, Ground Strikes, Command and Control, Reconnaissance and logistics as well as Intelligence, Surveillance & Reconnaissance (ISR).

Order of Battle:

The French have a tri-service participation in Libya, making it the only nation that deploys Army, Navy and Air Force assets in the battle in Libya. The mix of aircraft and units changes slightly from time to time depending on needs but by the time of writing the participation divided by service is (in bold the hosting air base):

Armée de l'Air - Air Force:

By far the biggest chunk of the operational assets are provided by the AdLA. Initially the fighters operated out of their home

bases but were soon relocated to more convenient locations, closer to the operational theatre. The long-range aircraft are however, operating from the French mainland.

- **Solenzara** (Corsica): four Rafale B and four Rafale B of Saint Dizier based EC01.007 *Provence* and EC01.091 *Gascogne*, respectively. Six Mirage F1CR of Mont-de-Marsan based ER02.033 *Savoie*.
- **Souda** (Crete): five Mirage 2000-5F of Dijon based GC01.002 *Cigognes* and two of Abu Dhabi based EC03.030 *Lorraine*, six Mirage 2000D of all three Nancy-Ochey based units EC01.003 *Navarre*, EC02.003 *Champagne* and EC03.003 *Ardennes* and six Mirage 2000N of Luxeuil-St. Sauveur based EC02.004 *La Fayette*.
- **Avord**: Four E-3F AWACS aircraft of EDCA 01.036 and EDCA 02.036 are based at and operated from Avord.
- **Istres-le-Tubé** based GRV02.091 *Bretagne* provides aerial refuelling with a number of C-135FR and KC-135R Stratotankers ;
- **Metz-Frescaty** based EEA00.054 provides its two C-160G ELINT/SIGINT '*Gabriel*' TransAlls.
- Cazaux based EH01.067 *Pyrénées* provides SAR and CSAR capabilities from the **Charles de Gaulle** with their EC725R2 Caracal and SA330B Puma helicopters.

Aviation Légère de l'Armée de Terre - Army:

The army is providing Close Air Support with a number of attack helicopters. They are operated from Mistral class Amphibious Assault Helicopter Carrier *Tonnerre* (L9014). French attack helicopters conducted their first strikes in Libya overnight on 3-4 June when Tigre and armed Gazelles were used to strike ground targets. More than twenty targets were prosecuted that night, of which a number was targeted by British Apache attack helicopters. NATO does not have ground forces deployed, in compliance with Security Council Resolutions that forbid any foreign occupation force in Libya (although Special Forces are known to be operating alongside the rebel forces). The following helicopter assets are known to have been deployed:

- Pau based 5 Régiment d'Hélicoptères de Combat (RHC) has a number of Tigre HAP and SA342M Gazelle helicopters in theatre.
- Phalsbourg based 1 RHC operates with a number of SA341/3422 Gazelle and SA330B Puma helicopters.



On 15 July 2011, the Mirage 2000-5F were repatriated to France, without a mention in the press of their replacement. During OUP they flew Air Interdiction missions alongside the Qatar Emiri Air Force Mirage 2000-5EDA/DDAs that can be seen in the back of the picture. (Souda, May 2011, Stephan de Bruijn)



Despite operating for Opération Harmattan, the tankers of GRV02.091 also receive aircraft of their NATO allies as shown here. Eurofighter Typhoons are flying joint sorties with Tornado GR4s that support them in laser targeting for the Enhanced Paveway II Dual Mode Laser Guided Bomb Lot 1 (UK) carried by Typhoon FGR4 ZJ925/QO-R of 11sq (3sq mks), although GPS-guide has been preferred in many cases.

Aéronautique Navale - Navy:

Most of the Navy assets are located at French Navy aircraft carrier *Charles de Gaulle* (R91). The Battle Group comprising of the Charles de Gaulle and its supporting frigates are combined as Task Force 473. The following assets are carried by the CDG:

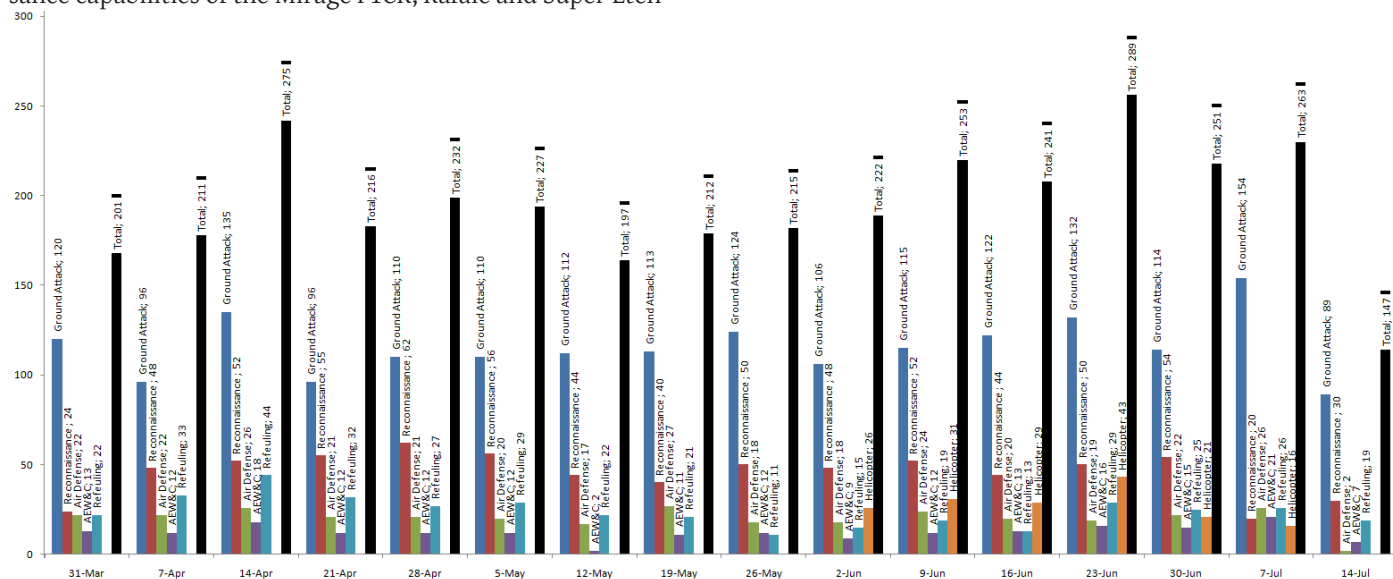
- Landivisiau based 12F provides ten Rafale M.
- The six Super Etendard Modernisé (SEM) aboard the Charles de Gaulle are provided by 17F from Landivisiau.
- For Command and Control as well as AEW&C purposes, Lann-Bihoué based 4F has two E-2C Hawkeye aircraft in theatre.
- Two SA365F1 Dauphin and two SE3160 Alouette 3 helicopters provide SAR and utility capabilities and are also used for liaison duties. All are provided by Hyères based 35F.

Apart from the Charles de Gaulle, the French Navy is present with a number of ships that are capable of carrying helicopters. At Sigonella, Sicily, two Atlantique 2 are operated in the Maritime Surveillance and SIGINT roles.

Typical missions

Ground attack missions are being conducted by Rafale, Mirage 2000D, Mirage 2000N-K2 in conjunction with the reconnaissance capabilities of the Mirage F1CR, Rafale and Super Eten-

standard Modernisé. Air Defence sorties are performed by the Mirage 2000-5s operating out of the Greek island of Crete from Souda Air Base. Most of their missions they are flying with the Mirage 2000-5EDAs from the Qatar Emiri Air Force that are also operating out of Souda. The air interdiction missions are introduced to neutralize aircraft that infringe the No-Fly Zone that is imposed since the United Nations Security Council Resolution 1973 was accepted. The Command and Control and AEW missions are flown by E-2C Hawkeye aircraft operating from the Charles de Gaulle and E-3F AWACS operating from their home base Avord. Refuelling missions are being conducted by C-135FR and KC-135R aircraft operating out of Istres-le-Tubé. It takes them about two hours to get into theatre and an average mission takes just over eight hours. During their mission they are being directed to several flying patterns that they have to follow, enabling them to join up with thirsty receivers. These receivers need to be compliant to the available refuelling systems on the aircraft. When for example the refuelling boom goes defunct, only hose-drogue capable aircraft can be refuelled (as was the case during the mission we were able to join). The tanker aircraft present in theatre and the receivers are directed by a C&C platform that is operational at that time, for example a



Statistics of Opération Harmattan, show the French participation in the overall Operation Unified Protector. During several periods shown above, the French input to the battle against Qadhafi was over 25% of the overall input by all NATO forces.

French Navy E-2C Hawkeye. The missions with the Army helicopters of the Groupe Aéromobile (GAM) are often conducted during night-hours, supported by the NVG-capabilities of the aircraft and crews involved. The Maritime Surveillance role are controlling possible breaches of the arms embargoes that have been imposed on the pro-Qadhafi forces.

Statistics

When looking at the number and types of sorties flown by the French OUP participation, you see that the emphasis is clearly on Ground Attack missions. Over 1.800 missions were flown since the beginning of the campaign. The second most important mission seems to be the one for the Mirage F-1CR and the Rafale F3, fitted with the AREOS Reco NG pod. More than 700 reconnaissance missions were conducted up to date of writing. The third most important is aerial refuelling, with a stunning 400 mission on the clock. Not surprisingly, the air interdiction missions were not as numerous as the Ground Attack missions, the Libyan Air Force has been decimated in the first days of the campaign. Last but not least some 200 Air Early Warning & Control missions were flown.

The future

The Qadhafi regime does not seem to be planning to surrender and it certainly looks like he is going to fight the battle to the bitter end. Behind the scenes, political solutions are being sought and a UN peace envoy for Libya is urging the parties involved to increase their focus on working toward a political solution. Meanwhile the NATO forces involved have all greatly suffered from budget cuts that were imposed over the last decade and according to US Defence Secretary Leon Panetta, some NATO allies operating in Libya could soon see their forces beyond the limit of their capabilities. Despite the depletion of the resources available to the NATO forces, NATO and its partners agreed to extend the mission for another 90 days starting 27 June 2011. From a political point of view this



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war seems far from over, the question remains how long the coalition partners are able to fully participate in the campaign. France for one has not expressed any sign of backing out of the battle for Libyan freedom. Seen during the flight on 12 June 2011 were:

472/93-CC	C-135FR	GRV02.091	<i>Total 54</i>
640/112-NV	Mirage F1CR	ER02.033	
661/112-NK	Mirage F1CR	ER02.033	
ZG709/120	Tornado GR4A	14sq	
ZJ925/QO-R	Typhoon FGR4	11sq	3sq mks
44	Super Etendard	17F	
19	Super Etendard	17F	

Recommended reading:

David Cenciotti Weblog (<https://cencio4.wordpress.com>), giving a detailed, day-by-day analysis of OUP. We like to take the opportunity to thank the Etat-major des armées for granting the opportunity and the personnel of GRV02.091 for the look into their professional world.



The first receivers of the 12 June mission of Total 54 were a pair of ER02.033 Mirage F1CR which are together with the Rafales, responsible for reconnaissance missions over Libya. One of them was 640/112-NV.