



## Military Operations in Libya

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On 17 March 2011 the UN Security Council adopted [resolution 1973](#) (2011), under Chapter VII of the UN Charter which authorises the use of force, including enforcement of a no-fly zone, enforcement of a UN arms embargo against Libya and to protect civilians and civilian areas targeted by the Qaddafi regime and its supporters.

The weekend of 19/20 March saw French, British and US military action begin under Operation *Odyssey Dawn*. By the end of March command of that operation was gradually transitioned to NATO. On 23 March NATO assumed command of operations to enforce the UN arms embargo. The transfer of command responsibility for the no-fly zone was agreed on 24 March; while the decision to transfer command and control for all military operations in Libya was taken on 27 March. NATO formally assumed command under Operation *Unified Protector* at 0600 hours on 31 March 2011.

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## 1 Legal Basis and Parameters of Action

On 17 March 2011 the UN Security Council adopted [resolution 1973](#) (2011), under Chapter VII of the UN Charter which authorises the use of force, including enforcement of a no-fly zone and to protect civilians and civilian areas targeted by the Qaddafi regime and its supporters.

With respect to military action that resolution specifically:

- Calls for an immediate ceasefire and a complete end to violence and all attacks against, and abuses of, civilians (paragraph 1).
- Authorises Member States, acting nationally or through regional organisations or arrangements, to take ***all necessary measures*** to protect civilians and civilian populated areas under threat of attack, including in Benghazi (paragraph 4).
- The resolution specifically ***excludes*** the establishment of a foreign occupation force of any form in any part of Libyan territory (paragraph 4).
- Calls for Members States of the League of Arab States to cooperate in the implementation of the measures outlined in paragraph 4 (paragraph 5).
- Authorises the establishment of a no-fly zone in Libyan airspace (paragraph 6). That flight ban will not, however, apply to flights that have as their sole purpose, humanitarian aid, the evacuation of foreign nationals, flights authorised for enforcing

the ban or “other purposes deemed necessary for the benefit of the Libyan people” (paragraph 7).

- Paragraph 8 authorises Member States to take all necessary measures to enforce compliance with the ban on flights imposed under paragraph 6.
- Calls on all Member States to provide assistance, including any necessary over flight approvals, for the purpose of implementing paragraphs 4, 6, 7 and 8.

That UNSCR was adopted by a vote of 10-0, with five abstentions: Brazil, China, Germany, India, and Russia.

Detail of the other provisions in that Resolution, and the debate over its adoption within the Security Council, is examined in greater detail in Library briefing, SN/IA/5911, [The Security Council's No-Fly Zone Resolution on Libya](#).

The arms embargo on Libya was originally adopted in [UN Security Council Resolution 1970](#) (February 2011) and redefined in UNSCR 1973.

## 2 Implementation of UNSCR 1973

The Prime Minister suggested in the House of Commons on 18 March 2011 that enforcing the resolution if Colonel Qaddafi fails to comply and agree to an immediate ceasefire would be an international operation. While refusing to be drawn on which Member states could participate or provide military assets, he did suggest that any operations could be led by the US, France, and the UK, with the support of Arab nations. Given the abstention of Germany in the UN Security Council vote and the opposition of Turkey to military intervention, it was initially uncertain whether NATO would play a formal role.

A meeting was held in Paris on 19 March 2011 to discuss military options and participation. It was attended by European and North American ministers, representatives of the EU, UN and Arab League, and ministers from Iraq, UAE, Jordan and Morocco. Saudi, Kuwaiti, Omani and Bahraini ministers did not attend.

### 2.1 Early Military Action - Operation Odyssey Dawn

The weekend of 19/20 March saw French, British and US military action begin under Operation *Odyssey Dawn*. The goal of these initial operations was to “prevent further attacks by regime forces on Libyan citizens and opposition groups, especially in and around Benghazi; and second to degrade the regime’s capability to resist the no-fly zone [being] implemented under the United Nations resolution”.<sup>1</sup>

A US Department of Defense spokesman described the US approach to operations:

Our mission now is to shape the battle space in such a way that our partners can take the lead in execution.<sup>2</sup>

Action to establish a no-fly zone started quickly, with about 20 French fighter jets going on the first sorties over Libya,<sup>3</sup> with the first priority being to weaken the Qaddafi regime’s air

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<sup>1</sup> US Department of Defense Briefing by Vice Adm. Gortney on Operation Odyssey Dawn, 19 March 2011

<sup>2</sup> US Department of Defense, “Mullen: Attacks Make No-Fly Zone Possible”, Press release, 20 March 2011

defences. To this end, 124 Tomahawk cruise missiles were launched against integrated air defence targets in the first few days, largely from American destroyers and submarines, but also one British Trafalgar-class submarine deployed in the Mediterranean.<sup>4</sup>

Some 24 coalition ships initially made up the joint naval task force, including vessels from Italy, US, Canada, UK, and France. The British ships HMS *Westminster* and HMS *Cumberland* formed part of the task force. The US provided command and control and logistics, and launched electronic attacks on Libyan defence systems. On 20 March, France announced that its aircraft carrier *Charles de Gaulle* was leaving the port of Toulon and heading for the waters off Libya;<sup>5</sup> while the Pentagon confirmed that Spain, Belgium, Denmark and Qatar had also joined the coalition.

After the deployment of Tomahawk missiles against air defence targets, the coalition turned to air-launched cruise missiles targeted on Libyan command and control facilities. The RAF deployed Storm Shadow cruise missiles from Tornado GR4s, flying from RAF Marham in Norfolk. The Tornados were refuelled in flight by VC10 and Tristar air-to-air tankers, E3D Sentry and Sentinel surveillance aircraft were also deployed. The MOD confirmed that RAF Typhoons were standing by, having been deployed from RAF Leuchars and RAF Coningsby, to an airbase at Gioia del Colle in southern Italy.

Attacks were also launched against military facilities and aircraft from an airfield at Ghardabiya, near Misrata and on Libyan government ground forces. A column of tanks and other forces that had been heading for the rebel stronghold of Benghazi was destroyed by French aircraft. Other attacks, such as on a building in Colonel Qaddafi's compound in Tripoli, said to be a military command centre, were reported. Despite the claimed success of actions to degrade Libyan air defence capabilities, heavy anti-aircraft fire continued to be reported in Tripoli.

The Pentagon confirmed on 20 March that the no-fly zone had effectively been put in place, which would be extended over a wider geographical area as operations progressed.<sup>6</sup> On the night of 21/22 March, RAF Typhoons performed their first ever combat mission when they went into action patrolling the no-fly zone.

In a Pentagon press briefing on 24 March officials confirmed that strikes had continued to be launched against Libyan command and control and air defence assets and ground forces along the coastline and near the cities of Tripoli, Misrata and Ajdabiya. A further 14 Tomahawk cruise missiles were also launched against targets ashore, including an air defence site near Sebha in the south and a scud missile garrison near Tripoli. Of all combat missions being flown in support of the no-fly zone, 75% were being executed, at that time, by coalition partner nations.<sup>7</sup> On the night of 24/25 March, British Tornado GR4s attacked Libyan armoured vehicles that were "threatening the civilian population of Ajdabiya." The

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<sup>3</sup> French Ministère de la Defense, "Libye : appareillage du porte-avions Charles de Gaulle", Press release, 20 March 2011

<sup>4</sup> US Department of Defense Briefing with Vice Adm. Gortney from the Pentagon on Libya Operation Odyssey Dawn, 20 March 2011

<sup>5</sup> French Ministère de la Defense, "Libye : appareillage du porte-avions Charles de Gaulle", Press release, 20 March 2011

<sup>6</sup> US Department of Defense Briefing with Vice Adm. Gortney from the Pentagon on Libya Operation Odyssey Dawn, 20 March 2011

<sup>7</sup> US Department of Defense News briefing with Vice Adm. Gortney from the Pentagon on Libya Operation Odyssey Dawn, 24 March 2011

aircraft launched a number of Brimstone guided missiles, which the MoD described as “high precision, low collateral damage”.<sup>8</sup>

The Pentagon confirmed that Norway had joined the coalition on 24 March; while the United Arab Emirates confirmed that it would provide 12 fast jets to the operation: six F-16s and six Mirages, on 25 March.<sup>9</sup>

Over the weekend of 26/27 March, the British Tornados continued their sorties over Libya, hitting a total of 22 tanks, armoured vehicles and artillery pieces around Ajdabiya and Misrata. British forces also destroyed underground bunkers providing ammunition to the Libyan Army. By 28 March, British pilots had made more than 120 sorties and flown for more than 250 hours.<sup>10</sup> During that period the US also confirmed that TLAM strikes against the military headquarters of the Libyan 32<sup>nd</sup> Brigade, considered to be one of the most loyal to Colonel Qaddafi, had also been undertaken.

A Pentagon situation update for **28 March** provided the following information on coalition sortie rates:<sup>11</sup>

	Partner Total	U.S. Total	Last 24 Hours
<b>Sorties</b>	<b>619</b>	<b>983</b>	<b>178</b>
<b>Strike Sorties</b>	<b>365</b>	<b>370</b>	<b>107</b>
<b>TLAM</b>	<b>7</b>	<b>192</b>	<b>6</b>

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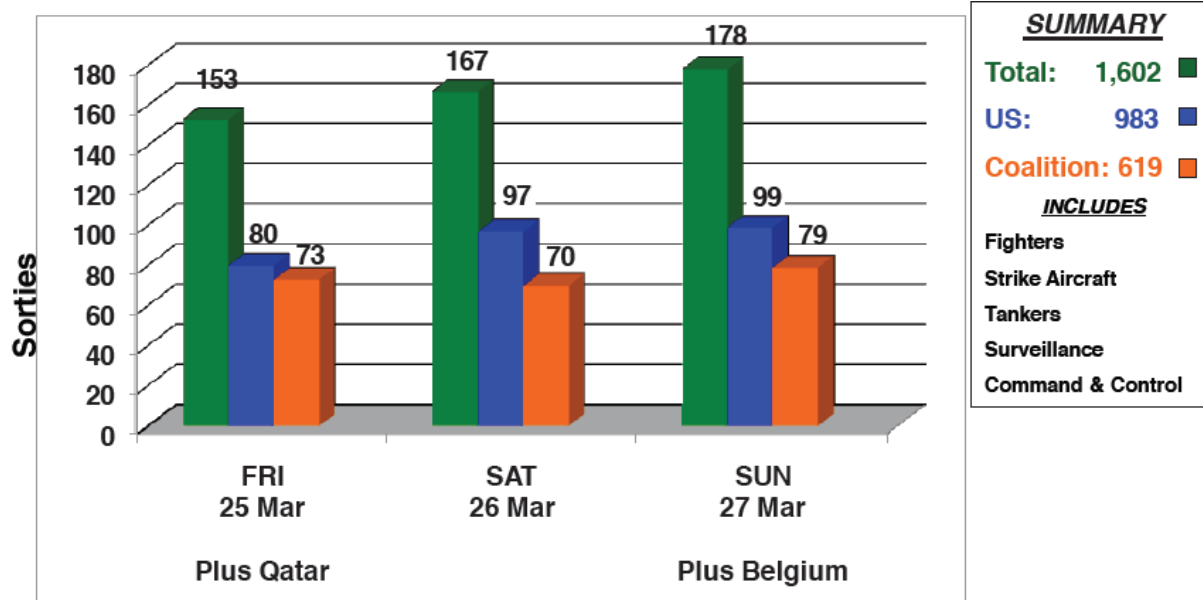
<sup>8</sup> Ministry of Defence, “[RAF Tornados attack Libyan armoured vehicles](#)”, Press release, 25 March 2011

<sup>9</sup> HC Deb 28 March c33

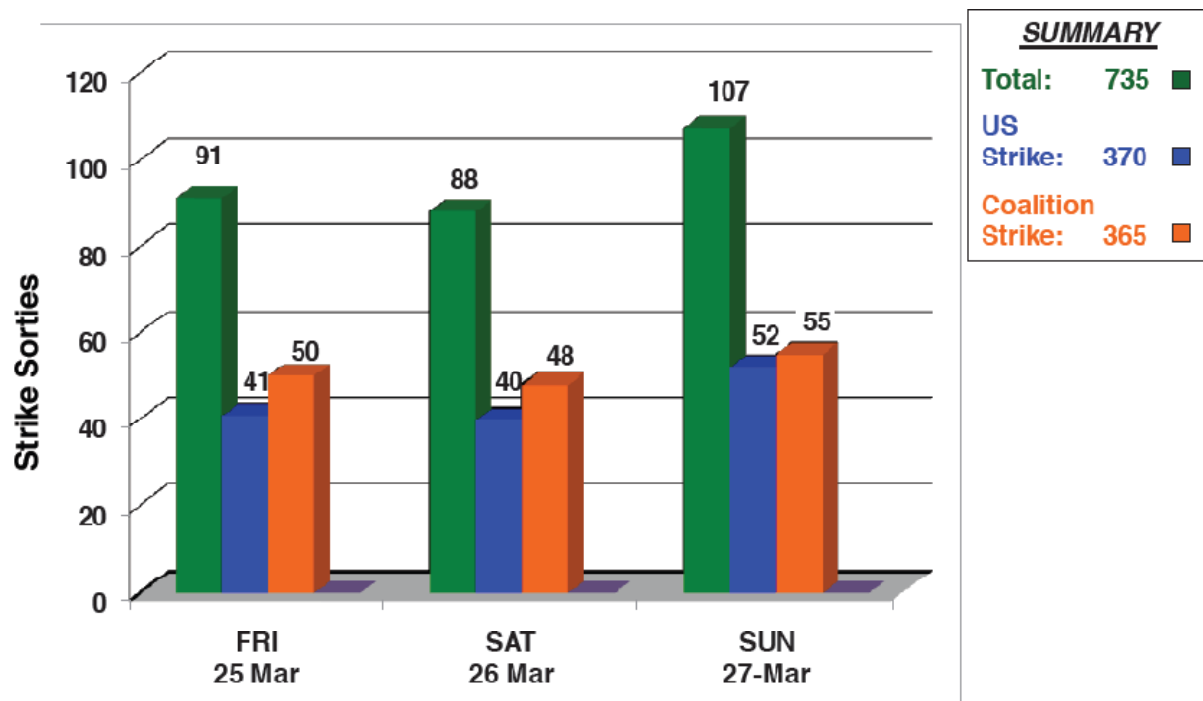
<sup>10</sup> HC Deb 28 March c33

<sup>11</sup> <http://www.defense.gov/news/d20110328slides1.pdf> and <http://www.defense.gov/news/d20110325slides.pdf>

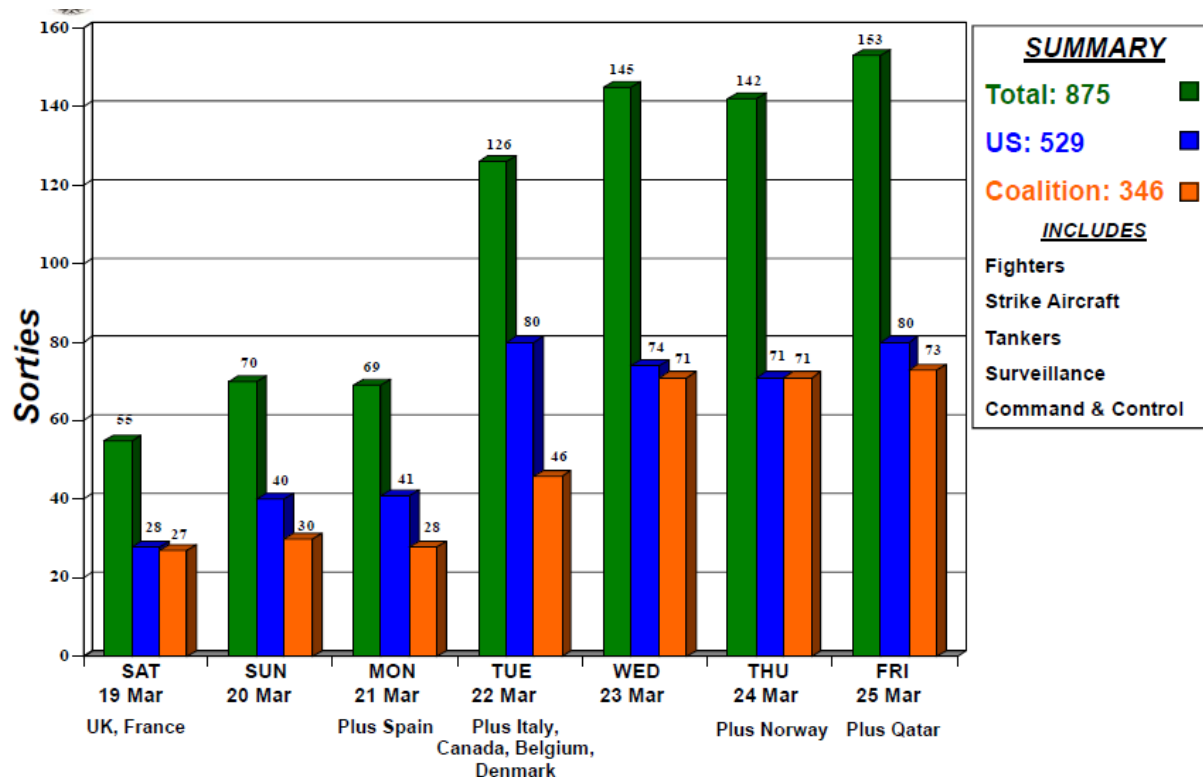
Breakdown of air operation sorties:



Breakdown of strike sorties:



Sortie rates in the first few days of military action were as follows:



Although the sortie rate between the US and coalition partner nation became more equitable over the period of operations, the Pentagon acknowledged that the US continued to provide nearly 80% of all air refuelling, almost 75% of aerial surveillance and 100% of all electronic warfare missions.<sup>12</sup> In addition to the launch of Tomahawk land-attack missiles (TLAM), the Pentagon also revealed that by 28 March a further 600 precision guided munitions had also been expended (455 from the US and 147 from the coalition).<sup>13</sup>

In the accompanying press briefing DoD officials also stated:

Gadhafi has virtually no air defense left to him and a diminishing ability to command and sustain his forces on the ground. His air force cannot fly, his warships are staying in port, his ammunition stores are being destroyed, communication towers are being toppled, and his command bunkers are being rendered useless.<sup>14</sup>

They went on to state however that “they still have tactical, mobile surface-to-air missiles, which are still a threat”.<sup>15</sup>

Giving evidence to the Senate Armed Services Committee on 31 March 2011, the Chairman of the US Joint Chiefs of Staff, Admiral Mike Mullen suggested that Libyan military capability

<sup>12</sup> US Department of Defense News briefing with Vice Adm. Gortney from the pentagon on Libya Operation Odyssey Dawn, 28 March 2011

<sup>13</sup> ibid

<sup>14</sup> US Department of Defense, Briefing by Vice Adm. Gortney on Operation Odyssey Dawn, 25 March 2011

<sup>15</sup> ibid

had been degraded by as much as 25% as a result of Coalition operation; although he did go on to admit that Libyan forces still outnumbered the rebels by 10-1.<sup>16</sup>

## **2.2 Enforcement of the UN Arms Embargo**

In addition to the implementation of a no-fly zone and the protection of Libyan civilians, a core military task, initially defined by UNSCR 1970 and reiterated in UNSCR 1973, was the enforcement of the UN arms embargo against Libya. NATO had already announced on 9 March its intention to enhance its surveillance operation in the Central Mediterranean by increasing the operation of NATO AWACS aircraft, deployed in support of NATO's counter-terrorist operation *Active Endeavour*, to 24 hours a day. The following day NATO Defence Ministers also confirmed that it would increase the presence of NATO maritime assets in the region using ships from NATO's Standing Maritime Group and Standing Mine Countermeasures Group, in order to improve situational awareness and contribute to surveillance monitoring, including with regard to enforcing the UN arms embargo on Libya.

Following the adoption of UNSCR 1973, the US initially assumed command of the maritime embargo operation as part of Operation *Odyssey Dawn*. Command responsibility was subsequently transferred to NATO Joint Forces Command Naples (under Operation *Unified Protector*) on 23 March 2011.

## **2.3 Command and Control**

Initial coalition operations were conducted under the operational command of Gen Carter F Ham, Commander of US Africa Command. The tactical joint task force established to conduct operations was led by Admiral Samuel J Locklear aboard USS *Mount Whitney*, deployed in the Mediterranean.

At the outset a US Department of Defense spokesman said that the US would be handing over control shortly: "We anticipate the eventual transition of leadership to a coalition commander in the coming days."<sup>17</sup> However, it was not clear in the early stages of the operation whether NATO, or another individual country, would take over control of the operation from the US.

Continued Turkish and German doubts about the military intervention, and French reluctance to hand control to NATO command complicated the discussions however. The French and German representatives were reported to have walked out after criticism of their countries' positions from the NATO Secretary General. France was said to be concerned that NATO leadership would reduce support in the Muslim world for the operation, given the organisation's association with the Afghanistan campaign. It was agreed that NATO would nevertheless supply logistical, intelligence and other support.<sup>18</sup>

Negotiations on command and control continued during the week of 21 March, with the US government anxious to hand over control of military operations. As outlined above, NATO Member States agreed that the Alliance would assume command of maritime operations to enforce the UN arms embargo on Libya, on 23 March 2011.

NATO leaders also agreed to the transition of command responsibility for enforcing the Libyan no-fly zone on 24 March while any ground attacks, for the time being, would continue

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<sup>16</sup> "US shouldn't arm Libyan rebels", *Navy Times*, 31 March 2011

<sup>17</sup> US Department of Defense, Briefing by Vice Adm. Gortney on Operation Odyssey Dawn, 19 March 2011

<sup>18</sup> "NATO set to decide whether to join coalition military action against Libya", AP, 20 March 2011



to be a coalition responsibility under the command of the US.<sup>19</sup> The compromise was reportedly reached to allay Turkish concerns within NATO about the possibility of ground attacks causing civilian casualties. NATO subsequently assumed command of the no-fly zone on 25 March as part of *Operation Unified Protector*.

Despite the opposition of some of NATO's Member States, following further discussions NATO leaders agreed on 27 March 2011 that the Alliance would assume command responsibility for all military operations in support of UNSCR 1973. In a Statement to the House on 28 March the Prime Minister stated:

NATO is already co-ordinating the arms embargo, the maritime operation and the no-fly zone. Now it will take on command and control of all military operations, including those to protect the civilian population. Canadian Lieutenant-General Charles Bouchard has been appointed as the NATO commander of the joint taskforce for the operation.<sup>20</sup>

An MoD spokesman earlier explained the command and control of the British part of *Operation Odyssey Dawn*:

AFRICOM is the supported combatant command, and the UK has liaison officers and staff embedded at every level. This includes having staff based on the US command ship USS Mount Whitney in the Mediterranean sea, where the US Joint Task Force Commander is located.

The UK's deployed assets and personnel fall under the operational command of the Chief of Joint Operations, Air Marshal Sir Stuart Peach, who commands the Permanent Joint Headquarters, in Northwood.

On the air side, the UK's Joint Force Air Component Headquarters is controlling the UK's contribution to the air operation in conjunction with the coalition. Air Vice-Marshal Greg Bagwell is the UK's Joint Force Air Component Commander; he is based with his staff at Ramstein with AFRICOM's Air Component HQ.

On the maritime side, Rear Admiral Ian Corder, Commander Operations, is controlling the UK's contribution to maritime operations in conjunction with the coalition. He is based at Northwood.<sup>21</sup>

## **2.4 NATO Command – Operation *Unified Protector***

NATO formally assumed sole command of all military operations in the Libyan area of operations at 0600 hours on 31 March 2011. Operation *Unified Protector*, is commanded by Allied Joint Force Command Naples and falls under the overall purview of the Supreme Allied Commander Europe, Admiral Stavridis (see appendix two for command and control flow chart). *Unified Protector* has now evolved to contain the three main military objectives:

- **To enforce the UN arms embargo** – Eighteen NATO warships from 8 NATO countries are now operating in international waters in support of the operation.<sup>22</sup> Their main task is to monitor ships and aircraft heading towards Libyan territory and they have the right to stop and search any vessel suspected of carrying prohibited cargo. As a last resort the Task Force is empowered to use force. Patrol aircraft and fighter

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<sup>19</sup> NATO, "[NATO Secretary General's statement on Libya no-fly zone](#)", Press conference, 24 March 2011

<sup>20</sup> HC Deb 28 March c33

<sup>21</sup> Ministry of Defence, "Libya update", Press release, 20 March 2011

<sup>22</sup> Belgium, Canada, Greece, Italy, Netherlands, Spain, Turkey and the UK

jets are also deployed in the area of operations to provide long-range surveillance and intercept any flights suspected of carrying weapons into Libya. NATO vessels will not enter Libyan territorial waters. If weapons or mercenaries are found, the vessel and its crew will be escorted to a secure port where international and national authorities will take charge. Suspected aircraft will be intercepted and escorted to an airport designated by NATO. The Alliance is working closely with the International Maritime Organisation to ensure that the flow of legitimate commercial and private shipping to Libya continues unimpeded.<sup>23</sup>

- **To enforce the no-fly zone** - As part of the operation naval vessels and surveillance aircraft will provide real-time monitoring and coordination of air activity over Libyan airspace. They are also responsible for detecting any aircraft that enters the no-fly zone without prior authorisation. NATO fighter aircraft are available to intercept any aircraft which violates the no-fly zone and engage with it, if it presents a threat. NATO has made clear that in enforcing the zone, force will only be used as a last resort. NATO fighters also have the right of self defence against attacks from the air or ground.<sup>24</sup>
- **To protect civilians and civilian centres** – NATO will conduct reconnaissance, surveillance and information gathering operations to identify those forces which present a threat to civilians and civilian-populated areas. Acting on this information, NATO air and naval forces can engage targets either on the ground or in the air. Targets are determined by NATO's operational Commanders and to date, targets struck include tanks, armoured personnel carriers, air-defence systems and artillery around and approaching key civilian areas such as Misrata and Brega.<sup>25</sup>

Both the US and NATO have made it clear that providing direct close air support to the Libyan rebels is not part of the coalition's mandate and that NATO has no intention of establishing an occupying force in Libya.<sup>26</sup>

The North Atlantic Council, meeting alongside its coalition partners, will provide executive political direction to NATO operations. In a briefing to the media on 31 March, Admiral Giampaolo di Paola, Chairman of the NATO Military Committee, stated:

NATO's mission includes not only armed forces of NATO countries but also contributions from partners. We consider regional support as fundamental, in line with the principles and core tasks highlighted in NATO's new Strategic Concept [...]

I want to be clear. The focus of our mission is to protect the civilian population. We know that this is a challenging endeavour and the situation on the ground is complex. We are also aware that there is no purely military solution to the crisis.

NATO is not engaged in Libya to decide the future of the Libyan people. That is up to Libyans themselves. We are helping enforce the will of the International Community to protect them from attacks so that they can start shaping and deciding their future...<sup>27</sup>

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<sup>23</sup> [Operation Unified Protector: NATO arms embargo against Libya Fact Sheet](#)

<sup>24</sup> [Operation Unified Protector: NATO no-fly zone over Libya Fact Sheet](#)

<sup>25</sup> [Operation Unified Protector: Protection of civilians and civilian-populated areas Fact Sheet](#)

<sup>26</sup> See US Department of Defense News briefing with Vice Adm. Gortney from the Pentagon on Libya Operation Odyssey Dawn, 28 March 2011; "NATO will not arm Libyan opposition, Rasmussen says", *Trend News Agency*, 31 March 2011; and *NATO and Libya: Key Facts and Figures* available at: [http://www.nato.int/cps/en/natolive/topics\\_71641.htm](http://www.nato.int/cps/en/natolive/topics_71641.htm)

<sup>27</sup> NATO Press Briefing, 31 March 2011

On the issue of decision making within the Alliance on the launching attacks against the Libyan regime, a senior official in the US administration also stated during a press conference that:

NATO has agreed to take on the mission of protecting civilians and that mission will be executed in the – by the commanders, in the best way they judge possible [...]

And we – all 28 allies, every single one, agreed that that should be the case. And if it is judged by the commanders that there's a need to bomb forces of the Libyan regime, then the forces of the Libyan regime will be bombed, and no one is going to be able or in a position to challenge that. That is a military judgement to be made by the military authorities, and we, as an alliance, agreed today to give the supreme allied commander of Europe that authority.<sup>28</sup>

Between the assumption of NATO command on 31 March and the end of 17 April 2011:

- A total of 2,271 air sorties and 1,110 strike sorties had been conducted. Air sorties average around 145 per day; while strike sorties have totalled between 40 and 60 per day.
- A total of 384 vessels have been hailed by NATO Task Force vessels implementing the arms embargo, 10 vessels have been boarded and three diversions have taken place.<sup>29</sup>

An archive of daily activities by NATO military assets, including a summary of key targets and engagements, is available at: [NATO and Libya: Operational Media Update Archive](#).

### 3 Summary of Military Assets Deployed

The following countries committed military assets to **Operation Odyssey Dawn** and the initial enforcement of the UN arms embargo:

- **United States** - Amphibious ships USS *Ponce* and USS *Kearsarge*; Arleigh Burke-class guided missile destroyers USS *Stout* and USS *Barry*; submarines USS *Providence*, USS *Scranton* and USS *Florida*;<sup>30</sup> F-15 and F-16 fast jet aircraft; Global Hawk UAV; Joint Surveillance Target Attack radar System; AWACS aircraft; EA-18 Growler tactical jammer; P-3 maritime patrol aircraft and A-10 and AC-130 aircraft. Three B-2 stealth bombers were also reported to have flown missions in Libya from their base in the US.
- **UK (Operation Ellamy)** – Frigates HMS *Cumberland*, HMS *Westminster* (including a detachment of Royal Marines); the Trafalgar-class submarine HMS *Triumph*; ISTAR assets including the Nimrod R1,<sup>31</sup> Sentry E3-D AWACS aircraft, and Sentinel Airborne stand-off radar aircraft; Tristar and VC10 transport/tanker aircraft; Tornado

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<sup>28</sup> US Department of State, *Background briefing on the North Atlantic Council's meeting on Libya*, 27 March 2011

<sup>29</sup> NATO, *Operational Media Update*, 18 April 2011

<sup>30</sup> The USS *Enterprise* carrier strike group was also deployed in the Gulf of Aden in support of maritime security operations and Operation *Enduring Freedom*. Many analysts had suggested that it could be re-positioned to the Mediterranean if necessary.

<sup>31</sup> On 14 March the Secretary of State confirmed that the military had been tasked with assessing whether there could be a temporary extension in service of the Nimrod R1 signals intelligence aircraft, which is due out of service in 2011.

GR4 and Typhoon aircraft.<sup>32</sup> Following suggestions that there are a shortage of RAF pilots for the Libya mission the MOD issued a statement outlining:

No trained front line pilots are being made redundant and we have enough aircraft and people to carry out all the operational tasks placed on us. There is no shortage of pilots and we are able to cover the Falkland Islands, UK air defence, Afghanistan, training requirements and operations in Libya with sufficiently trained Typhoon and Tornado pilots.<sup>33</sup>

- **Canada (Operation *Mobile*)** – Frigate HMCS *Charlottetown*, six CF-18 fighter aircraft, air-to-air refuelling aircraft and maritime patrol aircraft.<sup>34</sup>
- **France (Operation *Harmattan*)** – carrier strike group led by aircraft carrier *Charles de Gaulle* with 26 aircraft aboard (16 fast jets); two destroyers *Forbin* and *Jean Bart*; approximately 20 Rafale and Mirage fast jet aircraft, six C-135 tanker aircraft and an AWACS aircraft.<sup>35</sup>
- **Italy** – aircraft carrier *Giuseppe Garibaldi* with combat aircraft aboard; eight fast jet aircraft; one frigate, and offshore patrol vessel and a logistical support ship.
- **Norway** – Six F-16 fast jet aircraft.
- **Denmark** – Six F-16 fast jet aircraft and one transport aircraft.
- **Qatar** – Four Mirage fast jet aircraft and two C-17 transport aircraft.
- **Spain** – Four F-18 fast jet aircraft; refuelling and surveillance aircraft; one submarine and one frigate.
- **Netherlands** – six F-16 fast jets, one minesweeper and refuelling aircraft.
- **Greece** – one frigate, a search and rescue helicopter and one surveillance aircraft.
- **United Arab Emirates** – 12 fast jet aircraft and one C-17 transport aircraft.
- **Belgium** – Six F-16 aircraft and one navy minesweeper.

Turkey also deployed a number of warships in support of the UN arms embargo but ruled out taking part in combat operations.

Bases in the south of France, Greece, seven in southern Italy and the island of Sicily, RAF Marham in Norfolk and the French and Italian aircraft carriers in the Mediterranean have been the main bases for coalition aircraft. The principal base for the RAF is at Gioia del Colle, in the Puglia region of southern Italy. British support assets such as the E3-D Sentry, VC10 and Sentinel aircraft have been based at RAF Akrotiri in Cyprus.

As a result of the transition of command the number of US assets in the area of operation is expected to fall. On 28 March, for example, the Pentagon confirmed that the submarine USS

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<sup>32</sup> Further information on Operation *Ellamy* is available at: <http://www.mod.uk/DefenceInternet/DefenceNews/InDepth/LibyaOperationEllamy.htm>

<sup>33</sup> Ministry of Defence, *Defence in the Media*, 29 March 2011



















<sup>34</sup> Further information on Operation *Mobile* is available at: <http://www.comfec-cefcom.forces.gc.ca/pa-ap/ops/mobile/index-eng.asp>

<sup>35</sup> More information is available at: <http://www.defense.gouv.fr/english/portail-defense>

*Providence* had already left the theatre of operation. American forces are, however, expected to continue to provide support following the transition of command. In particular the US will continue to provide enabling assets such as logistics, airlift and tanker support, electronic support aircraft, search and rescue, and ISR (intelligence, surveillance and reconnaissance) capabilities.<sup>36</sup> Although US fast jet aircraft were not expected to participate in coalition airstrikes against Libyan targets after 4 April,<sup>37</sup> the Pentagon has suggested that some interdiction strike capabilities would be retained in theatre should they be needed by the coalition.<sup>38</sup>

As of 31 March 2011 the following NATO nations were committing military assets to NATO-led **Operation Unified Protector**.<sup>39</sup> It should be noted that not all assets were being used to launch attacks on Libyan ground forces.

**Operation Contributing Nations (as of 31 March)**

							
	Belgium	6	0		Netherlands	7	1
	Bulgaria	0	1		Norway	6	0
	Canada	11	1		Romania	0	1
	Denmark	4	0		Spain	6	2
	France	33	1		Turkey	7	6
	Greece	2	1		United Kingdom	17	2
	Italy	16	4		United States	90	1
<b>Total</b>						<b>205</b>	<b>21</b>

Note on numbers: Figures are calculated by the Force Flow tracking system at SHAPE HQ and count all assets under the Command and Control of the Operational Commander. Numbers of assets should be taken as indicative.

As outlined above, Qatar and the United Arab Emirates also deployed fighter jets and a small number of transport aircraft to help enforce the no-fly zone.

Sweden also joined the coalition after the Swedish parliament approved the deployment of up to eight fast jet Gripen aircraft, and a C-130 transport aircraft to help enforce the no-fly zone, on 1 April 2011. Those aircraft will not, however, take part in any strikes on Libyan ground forces. The first Swedish aircraft arrived in theatre on 2 April.

<sup>36</sup> "Gates outlines US role as NATO takes Libya mission", *American Forces Press Service*, 31 March 2011

<sup>37</sup> US participation has been scheduled to end on 2 April but was extended for 48 hours following a request from NATO.


<sup>38</sup> US Department of Defense, Briefing by Vice Adm. Gortney on Operation Odyssey Dawn, 24 March 2011

<sup>39</sup> *NATO and Libya: Key Facts and Figures*, 31 March 2011

As of 5 April 2011, NATO provided the following information on contributing nations, albeit in slightly less detail:<sup>40</sup>

#### Operation Contributing Nations (as of 5 April)

	Belgium		Qatar
	Bulgaria		Romania
	Canada		Spain
	Denmark		Sweden
	France		Turkey
	Greece		United Arab Emirates
	Italy		United Kingdom
	Netherlands		United States
	Norway		NATO AWACS

		
Total	195	18

The British frigate HMS *Cumberland* returned from the Libyan area of operation on 18 April, handing over its operational tasks to HMS *Liverpool*. On 4 April the Prime Minister also announced the deployment of four additional Tornado GR4 aircraft for the Libya operation, taking the total number of British fighter aircraft in the operation to 22 (10 Typhoons and 12 Tornados).<sup>41</sup>

Following a meeting of NATO Foreign Ministers on 14-15 April 2011, the Alliance issued a statement reaffirming its commitment to military action in Libya in support of UNSCR 1973:

We will continue to adapt our military actions to achieve maximum effect in discharging our mandate to protect civilians and civilian-populated areas. To this end, we are committed to provide all necessary resources and maximum operational flexibility within our mandate. A high operational tempo against legitimate targets will be maintained and we will exert this pressure as long as necessary and until the following objectives are achieved:

All attacks and threats of attack against civilians and civilian-populated areas have ended;

The regime has verifiably withdrawn to bases all military forces, including snipers, mercenaries and other para-military forces, including from all populated areas they have forcibly entered, occupied or besieged throughout all of Libya, including Ajdabiyah, Brega, Jadu, al Jebel al Gharbiyah, Kikla, Misrata, Nalut, Raslanuf, Yefrin, Zawiyah, Zintan and Zuara;

The regime must permit immediate, full, safe and unhindered humanitarian access to all the people in Libya in need of assistance.

<sup>40</sup> Operation Unified Protector: Key Facts and Figures, 5 April 2011

<sup>41</sup> <http://www.number10.gov.uk/news/latest-news/2011/04/62904-62904>



We remain committed to the full implementation of UNSC Resolutions 1970 and 1973. In carrying out our mission, we reaffirm our support to the sovereignty, independence, territorial integrity and national unity of Libya. We reiterate our strong support for the development of a transparent political solution as the only way to bring an end to the crisis and build lasting peace in Libya and a better future for the Libyan people.<sup>42</sup>

Amid criticisms that NATO should be doing more to protect civilians on the ground, some NATO nations, led by UK and France, have called on the rest of the NATO Member States members to fulfil the force generation requirements of this operation, specifically in relation to the provision of fighter aircraft for strike sorties. At present only six of the Alliance's 28 Member States are providing aircraft for air strikes on Libyan ground forces. Calls have also been made for the US to re-engage its fighter aircraft in ground strikes after they withdrew to a supporting role at the beginning of April.

On 15 April US President Barack Obama, French President Nicholas Sarkozy and British Prime Minister David Cameron, issued a joint letter on the situation in Libya which backed continued military action. That letter also stated:

Our duty and our mandate under UN Security Council Resolution 1973 is to protect civilians, and we are doing that. It is not to remove Gaddafi by force. But it is impossible to imagine a future for Libya with Gaddafi in power.<sup>43</sup>

A number of commentators, including several British MPs, have suggested that the article amounted to a call for regime change, and therefore represented a substantially different military operation than the one for which MPs voted in Parliament on 21 March. On that basis, calls for Parliament to be recalled from Easter recess were aired. Others rejected this argument, however, suggesting that the article does not represent a change in policy. Richard Ottaway, Chairman of the Foreign Affairs Committee, was reported to have told the BBC that the article by the three leaders "doesn't actually take things any further" and that "This is a humanitarian mission and it is protection of the civilian population which is top of the order book and, I think, has not altered. We should only be recalling Parliament if there is a change in policy".<sup>44</sup>

On 19 April the British Government also announced that a group of British military liaison officers would be deployed in an advisory capacity to the opposition stronghold of Benghazi, to supplement the British diplomatic team already based there. Those officers will provide training to the National Transitional Council on "how to improve their military organisational structures, communications and logistics, including how best to distribute humanitarian aid and deliver medical assistance". Those military personnel will not "be involved in training or arming the opposition's fighting forces. Nor will they be involved in the planning or execution of the NTC's military operations or in the provision of any other form of operational military advice." On that basis, the deployment of the military advisory team is not considered by the Government to contravene the terms of the UN Security Council resolution which expressly forbids the deployment of an occupation force in Libya.<sup>45</sup>

The NATO area of operation is depicted in Appendix One.

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<sup>42</sup> NATO, [Statement on Libya](#), 14 April 2011

<sup>43</sup> The full text of that article is available at: <http://www.ibtimes.com/articles/134765/20110415/libya-obama-uk-nato-cameron.htm>

<sup>44</sup> "Libya: recall parliament over mission, urges Tory MPs", *BBC News Online*, 15 April 2011

<sup>45</sup> FCO Press release: <http://www.fco.gov.uk/en/news/latest-news/?view=News&id=582334882>

## 4 Libyan Military Assets

At the start of military operations a number of analysts suggested that the Libyan air force posed little risk to coalition forces enforcing a no-fly zone, consisting mainly of ageing Soviet-era MiG and Sukhoi fast jet aircraft, a small number of Mirage F1s and 35 attack helicopters. Many of those aircraft are thought to be non-operational or currently in store.<sup>46</sup> Indeed, US Commander of the Joint Task Force, Admiral Locklear, suggested “when we began this, my estimation of his [Qaddafi] air force was not in – generally in good repair, compared to most – what you would consider most world standards for air forces. He had a lot of equipment that was aged. Much of it was sitting, parked on the runways and could not be used”. He went on to note, however, that “he was, however, effectively employing a tactical air force, a helicopter force, of – I would say on the order of several dozen rather than in large numbers”.<sup>47</sup>

The main threat was thought to derive mainly from the vast quantities of surface-to-air missiles (SAM) and mobile anti-aircraft artillery currently in the Libyan military inventory that could be used to down allied aircraft flying below 15,000ft. The IISS *Military Balance 2011* estimates that the Libyan army possesses in excess of 420 SAM and in excess of 490 artillery pieces.

A number of analysts have also continued to express concern over Libya’s remaining chemical weapons stockpile. Under a WMD agreement reached with the US in 2003, Libya agreed to abandon its chemical weapons programme and accede to the *Chemical Weapons Convention*. In 2004 it declared its stockpile of chemical agents and facilities to the Organisation for the Prohibition of Chemical Weapons (OPCW) and embarked on a programme to destroy existing stockpiles. In 2010 the OPCW reported that Libya was moving towards full compliance with the Convention but noted that it had until May 2011 to get rid of any remaining assets. Over the last few weeks concerns have been expressed among US officials over the location of remaining assets, and the security of those stockpiles. Other analysts have questioned, however, the ability of Libyan forces to launch a chemical weapon attack and suggested that Libya’s residual stocks of mustard gas could be badly degraded and therefore unusable.<sup>48</sup>

## 5 Further Library Reading

- Library Standard Note SN/IA/5902, [Turmoil in the Middle East](#), 28 March 2011
- Library Standard Note SN/IA/5911, [The Security Council’s No-Fly Zone Resolution on Libya](#)
- Library Standard Note, SN/IA/5908, [In brief: Parliamentary Approval for Deploying the Armed Forces](#)
- Library Standard Note SN/IA/5904, [No Fly Zone over Libya: Suggested Reading](#)
- Library Standard Note SN/IA/5916, [Interpretation of Security Council Resolution 1973 on Libya](#)

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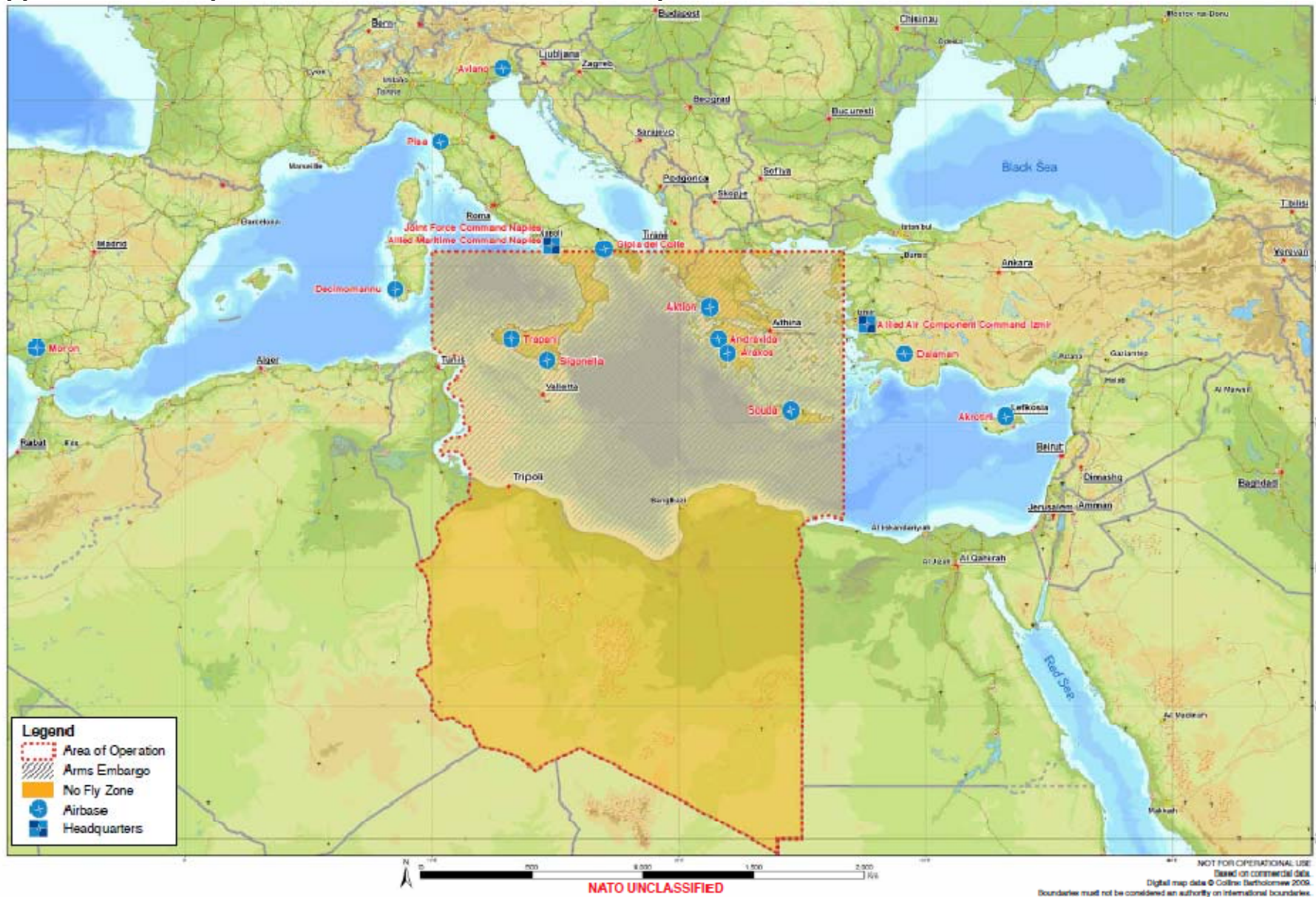
<sup>46</sup> IISS, *Military Balance 2011*

<sup>47</sup> US Department of Defense News Briefing with Adm. Locklear, 22 March 2011

<sup>48</sup> “Questions remain on Libyan mustard agent stockpile”, *Global Security Newswire*, 3 March 2011



## Appendix One – Operation *Unified Protector*: Area of Operations



## Appendix Two – Command and Control of Operation Unified Protector

