

THE SWEDISH EXPERIENCE IN OPERATION UNIFIED PROTECTOR

OVERCOMING THE NON-NATO MEMBER CONUNDRUM



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Introduction

On April 2, 2011 Sweden deployed eight JAS 39 Gripen (The Griffin) fighters to participate in the NATO-led Operation Unified Protector (OUP) in Libya. This was the first Swedish international deployment of combat aircraft since the early 1960s, when Swedish J 29 "Tunnan" fighter-bombers supported UN operations in the former Belgian Congo.¹ The time span since the last international combat deployment of the Swedish Air Force is not the only remarkable aspect of the Swedish contribution to OUP. More interesting is the fact that Sweden, as a traditionally non-aligned country, chose to contribute to a NATO air campaign in Northern Africa with little hesitation or debate, and that it did so with bravour, making a substantial contribution to the operation.

The Swedish political process leading up to the deployment was handled at record pace. The formal request for a Swedish contribution to the operation in Libya was presented on March 29, 2011. The same day the Prime Minister presented a government bill to Parliament, which reached a decision on April 1 to contribute 8 JAS 39C Gripens and a C-130H Hercules for aerial refueling. It entailed a national caveat not to engage ground targets. The Swedish Air Force started deploying to Sigonella, Italy the day after the decision and flew its first mission on April 7 upon reaching Initial Operational Capability.

The Swedish mission was divided into two rotations. The first covered the period from April 1 to June 26, during which the unit had the formal task only to defend the No Fly Zone through Defensive Counter Air (DCA) operations and Tactical Air Reconnaissance (TAR). The second rotation covered the period between June 27 and October 24 and involved a mandate that covered TAR across the full spectrum of UN-mandated tasks – going beyond the NFZ by including the enforcement of the arms embargo and, most importantly, the protection of civilians. During the second rotation the Swedish unit conducted a third of all the tactical reconnaissance within the operation. While the Swedish contingent faced a number of serious challenges and difficulties described in the chapter, the operation as a whole has been described as a success from a

¹ From 1961 to 1963, Swedish Air Force J 29 fighters (nicknamed "Tunnan" or "Flying Barrel") flew reconnaissance and strike missions as part of the air component of the United Nations Operation in the Congo (ONUC), along with Ethiopian and Italian F-86 Sabres and Indian Canberra bombers.

Swedish perspective, and not only in terms of protecting civilians and removing Qaddafi from power, although the latter was from a Swedish perspective an uncomfortable addition to the aim after the Berlin Summit. It was also a "success" with respect to Sweden's relationships with NATO and the United States, as well as the tremendous boost in experience for the Swedish Air Force and the personnel involved in the operation, including more than 30 pilots.²

From an international perspective the Swedish contribution was initially seen as politically useful, but there was skepticism regarding its like military significance. This skepticism was nevertheless quickly transformed into praise after the reconnaissance missions and photos provided by the Gripens and the Swedish analysts proved highly useful. A RUSI report on the international intervention in Libya concluded that the Swedish contribution has been seen in a very positive light within the international coalition. The political benefits stemming from receiving the support of a traditionally non-aligned nation were expected, but the substantial contribution in an initial defensive air combat role, and then, much more so in a tactical reconnaissance role favorably surprised the coalition.³

The Gripen aircraft and the Swedish pilots and support staff proved outstanding in [the reconnaissance] role and outstripped other combat assets with the quality of its tactical ISR (intelligence, surveillance and reconnaissance). Moreover, despite participating in its very first NATO air operation, the expected interoperability and integration problems turned out to be remarkably limited.⁴

As a non-member of NATO, the Swedish perspective on the operation can provide a valuable source of lessons for future operations. How was the partner country received and integrated within the operational structure? How did the Swedish contribution perform and to what extent did it contribute to the international coalition? Understanding why the Swedish unit achieved such relative success, as well highlighting the main problems Sweden faced as a non-member, provides important lessons for future NATO

⁴ Ibid.

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² Interview with senior civil servant, Swedish Foreign Ministry, March 23, 2012.

³ Adrian Johnson and Saqeb Mueen (eds.), (2012), "Short War, Long Shadow: The Political and Military Legacies of the 2011 Libya Campaign", RUSI, *Whitehall Reports*, 1-12, http://www.rusi.org/publications/whitehallreports/ref:O4F631FBA20DF9/, p. 32.

operations involving broad international coalitions. As this chapter will describe, while the Swedish contribution to OUP as a non-member was in many ways a success for both NATO and Sweden, the operation also highlighted a number of important challenges that need to be addressed for improved operational effectiveness of broad coalitions in the future – not least the procedures for providing partner access to secure networks, and for fully integrating partner communication systems into NATO command and control systems.

THE SWEDISH DECISION TO PARTICIPATE IN THE INTERVENTION

While many countries, members and non-members of NATO alike, experienced substantial debate regarding a potential intervention in Libya, the Swedish decision to contribute was surprisingly uncontroversial. In fact, there was almost a collective euphoria regarding the prospects of intervening in Libya and toppling the regime of Muammar Qaddafi. The decision was approved by all parties in the Swedish Parliament except the Sweden Democrats, a right-wing populist party with an isolationist security policy. An exception to the euphoria was an op-ed in one of the biggest newspapers that stirred a debate within the political left and the peace movement by raising issues about the nature of the intervention, the potential consequences, and the appropriateness of Swedish participation.⁵ However, this debate remained very limited and public opinion surveys showed great support for an international intervention and Swedish participation.⁶ An example is the German Marshal Fund's yearly survey of *Transatlantic* trends between May and June 2011, which this year included a number of questions regarding the intervention in Libya. The survey highlighted that Sweden stood out in a number of ways – not least in the support for the intervention in Libya. Some 69 percent of Swedes approved of the military action in Libya by international forces — the highest percentage among all nations surveyed – and only 28 percent disapproved — the lowest in the survey. About 89 percent supported the Swedish government intervening to

⁵ Robert Egnell, "Är vi beredda på att ta ansvar för Libyens framtid?", [Are we ready to responsibility for the future of Sweden?], *Dagens Nyheter*, http://www.flamman.se/vanstern-oenig-om-libyenattacken

⁶ German Marshall Fund, "Transatlantic Trends 2011", http://www.gmfus.org/publications_/TT/TTS2011Toplines.pdf.

protect civilians, 79 percent answered that they would support the Swedish government in removing President Qaddafi, and 73 percent even supported the hypothetical idea of Sweden sending military advisors to assist the rebels who opposed President Qaddafi — again, in each case, the highest percentages for any country in the survey.⁷

This raises the following questions – why were Swedish policy makers, as well as the public in general, so keen on intervening in Libya, and why did the fact that it was an air campaign led by NATO not create more debate? Four important factors each played a role: first, the perception that this was a near perfect case of intervention based on pure humanitarian ideals and aims; second, the fact that there was strong UN backing through UNSCR 1973; third, a continuation of a policy of Swedish participation in most international operations since the turn of the Millennium; fourth, a strong and "militant" Swedish support for promotion of democracy and Human Rights internationally.

Regarding the first factor, public outrage and humanitarian concerns about the situation in Libya in general, and the fear of air attacks and cleansing in Benghazi in particular, cannot be overestimated. The impact of the media coverage was enormous, perhaps fuelled by the contrast between the Libyan situation and the successful democratic regime changes in Tunisia and Egypt.⁸ The Libyan uprising, somewhat naively, was interpreted in the light of the recent revolutions in Tunisia and Egypt as a completely benign and legitimate democratic and popular movement against a terrible dictator. A genuine humanitarian concern and a perceived need to protect civilians was therefore the primary basis for the Swedish support of the intervention.⁹ The perception of a genuinely humanitarian international intervention was perhaps also strengthened by the fact that the United States chose not to take the lead. The usual, almost intuitive Swedish popular suspicions regarding the only remaining superpower's intentions in international interventions were thereby left out of the equation.

⁷ Ibid.

⁸ http://www.svd.se/opinion/brannpunkt/nu-maste-omvarlden-ingripa_6925557.svd; http://www.svd.se/opinion/brannpunkt/omvarlden-bar-ett-stort-ansvar_6893931.svd: http://www.lakareutangranser.se/nyheter/2011/Maj/Sverige-och-EU-maste-ta-ansvar/; http://www.svenskakyrkan.se/default.aspx?id=754464.

⁹ Swedish Government, "Svenskt deltagande i den internationella militära insatsen i Libyen", [Swedish participation in the international military operation in Libya], Prop. 2010/11:111, March 29, 2011, http://www.regeringen.se/sb/d/14427/a/164975

The second factor was the fact that UN Security Council Resolution 1973 backed the intervention. This is not only a policy requirement for Swedish participation in international operations; it also reflects a strong Swedish tradition of support for, and belief in, the United Nations. From the earliest days of the organization, Sweden has taken great pride in being an active member, as well as in contributing substantially to UN peacekeeping operations.¹⁰ The importance of UN peace operations has shifted, however, in favor of the European Union's (EU) crisis management activities, as well as, to a more limited extent, NATO. This trend is clear in official policy documents and is also reflected in the fact that substantial Swedish contributions beyond observers in UNled peace operations are rare today. Instead, the organizational framework of preference seems to be operations within the framework of the European Security and Defence Policy (ESDP).¹¹ Nevertheless, while other countries often have a rather cynical view of the UN and its role as the primary international guarantor of international peace and security, in Sweden, this is not the case. The belief in the appropriateness of the UN Security Council as the moral compass of international politics is still strong and seldom questioned (with the intervention in Kosovo as an important exception where the Swedish government supported the intervention despite the deadlock within the UN).¹²

The third factor is the view of a Swedish contribution in Libya as the continuation of a Swedish policy of active participation in international crisis management and peace operations. As Ann-Sofie Dahl highlights, "Sweden has participated in every single NATO operation since the end of the Cold War, and has been a regular 'blue-helmet' peacekeeper – and later, peace enforcer – under the UN flag since the very early days of that organization". Dahl accurately notes that not participating in a clear mission with a UN mandate, with NATO taking the lead of a strong coalition, would have been more

¹⁰ German Marshall Fund, "Transatlantic Trends 2011".

¹¹ Utrikesdepartementet, "Sveriges säkerhetspolitik", [Swedish security policy], http://www.regeringen.se/sb/d/10660

¹² See as an example, FN-Förbundet, "Inställningen till FN och internationella frågor bland gymnasieungdomar i Sverige", [Attitudes towards the UN and international questions among high school students in Sweden], http://www.fn.se/PageFiles/18620/Rapport%20ungdomar%20och%20FN.pdf.

¹³ Ann-Sofie Dahl, "Sweden and NATO: More than a Partner? Reflections Post-Libya," NATO Defence College Paper, June 2012, p. 8.

unusual and surprising. The only really unusual aspect of the Swedish participation in Libya was therefore that it was an air campaign.¹⁴

The fourth factor is more surprising given Sweden's traditional, yet now discarded, policy of neutrality. It seems that a long tradition of democracy and human rights promotion as part of Swedish development cooperation, on the one hand, and a strong belief in international crisis management and peace support operations, on the other, have together created a rather hawkish approach to intervention and democracy promotion. Sweden's first year in the transatlantic survey revealed that the country's public opinion stood out among other EU countries on a number of issues. Compared to other Europeans, the Swedes were more willing to maintain troops in Afghanistan, more supportive of the intervention in Libya, and more inclined to promote democracy in the Middle East and North Africa. A significant finding was that 83 percent of Swedes say that democracy should be promoted in conflict situations such as in North Africa and the Middle East, even if it leads to instability. The hawkish tendency is perhaps exaggerated by a lack of memory and understanding of the horrors of all armed conflicts — it has been almost 200 years since Sweden directly experienced war.

These factors help enhance our understanding of Swedish participation in this specific operation. But what does this mean for the future? Has the Swedish contribution to Operation Unified Protector changed the nature of the NATO debate in Sweden? Can Sweden, with or without membership, be counted on in future NATO operations?

Membership in NATO has long been a non-issue in Swedish politics. The traditional Swedish policy of non-alignment with the purpose of neutrality in case of war is a deeply embedded part of the Swedish self-image despite its having been discarded for almost two decades. ¹⁶ Because of Sweden's history of neutrality policy and non-alignment, the active promotion of NATO membership is politically risky, which also means that there is virtually no debate about this issue in Sweden. Has OUP changed the tone of the (non-)debate? The operation in Libya again clearly displayed the convergence

¹⁴ Ibid.

¹⁵ German Marshall Fund, "Transatlantic Trends 2011."

¹⁶ For a discussion regarding the popular perception of NATO, as well as the mental linkage between peace and neutrality, see Ann-Sofie Dahl, *Svenskarna och NATO*, [The Swedes and NATO], (Stockholm: Timbro, 1999).

of interests between Sweden and NATO allies in international crisis management. It also displayed the Swedish preference for operating under the NATO or EU banner — something that has changed dramatically since the era of Swedish UN peacekeeping. At the same time, OUP also displayed the mutual benefits of non-membership in operations. Sweden, by contributing as a partner country to the operation, received tremendous goodwill despite the national caveats. It is unlikely that the enthusiasm would have been as substantial if Sweden were a member of the Alliance. At the same time, from a NATO perspective the political legitimacy that Sweden, as a traditionally neutral country, could add to the operation would have been lost in case of Swedish membership. Thus, while the non-member status caused integration problems in the early weeks of the operation, it is probably fair to say that both Sweden and NATO benefited from Sweden's non-membership in the case of Libya. Moreover, OUP does little to influence the key question of whether membership is necessary to remain a credible international actor and to protect the territorial integrity of Sweden. It is therefore unlikely that the operation will change the nature of the Swedish debate regarding membership.

Given the policy of active international engagement through diplomacy and participation in international crisis management, and the preference for Swedish operations within the NATO and EU frameworks, Sweden is nevertheless highly likely to continue contributing to future NATO operations – as long as there is a UN mandate backing them. The question then is how to make this special partnership as mutually beneficial and effective as possible. Before discussing that further, let us take a closer look at the Swedish contribution to OUP.

THE SWEDISH CONTRIBUTION: "OPERATION KARAKAL"

As briefly noted in the introduction, the Swedish operation in Libya was divided into two rotations with different political mandates. The first covered the period from April 1 to June 26, during which the unit had the formal task only to defend the No Fly Zone through Defensive Counter Air (DCA) operations and Tactical Air Reconnaissance (TAR) using the politically mandated eight JAS 39C Gripens. Beyond the Gripens, the deployment also involved about 130 persons, a Tp 84 (C-130H) Hercules for air-to-air refueling, as well as a S102 Korpen (Gulfstream IV) – a signal intelligence plane only

under Swedish command, used for intelligence gathering and to update national databases. It should, however, be noted that only six DCA missions and 66 swing-role mission involving TAR and DCA were flown by the Swedish contingent early in the operation and that the vast majority of missions involved pure reconnaissance. This was also the type of mission that was most needed and appreciated within the coalition. The second rotation covered the period between June 27 and October 24 and involved a mandate that covered TAR across the full spectrum of UN-mandated tasks, not only supporting the NFZ, but also enforcement of the arms embargo and, most importantly, the mission to protect Libyan civilians. During this period the political mandate included only five Gripens instead of eight, but as the mandate said nothing of the number of missions that should be flown, the Swedish unit continued flying the same amount of mission over Libya, with an increased frequency of maintenance rotations of the aircraft.

In total, the Swedish operation included over 570 missions and about 1770 flight hours. In the reconnaissance role, about 2770 reconnaissance exploitations reports (RECCEEXREPs) were sent to higher command. As already noted, the main contribution of the Swedish unit – beyond the political support of the operation, was in TAR. At the height of operations during the summer, the Swedish contingent flew roughly 30 percent of all TAR missions within the operation. As Lt. Gen. Charles Bouchard has repeatedly expressed regarding the Swedish contribution: "The Gripens have a strategic importance for the operation. They have a spectacular capability." ¹⁷

Preparations and Initial Deployment

The decision to participate in Operation Unified Protector was made in the Swedish Parliament on April 1. On April 2, the Swedish Air Force started deploying to Sigonella Air Base in Sicily. After less than a week all eight Gripens and most of the support organization were in place, and the unit reached Initial Operational Capability (IOC). The speed of this process is remarkable in comparison with previous international deployments of Swedish troops.

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¹⁷ Lt Gen Bouchard cited in "Gripen: When logic is part of the equation", Available at http://www.saabgroup.com/Global/Documents%20and%20Images/About%20Saab/Events/Farnborough%202012/Gripen%20presentation%20Farnborough.pdf. Accessed July 19, 2012.

The most important reason why the Swedish Air force was able to deploy so quickly in support of OUP was that an Expeditionary Air Wing (EAW) was on standby within the EU Nordic Battle Group. The European Union constantly has two battle groups on standby and during the first half of 2011 the Swedish-led Nordic Battle Group 11 had this responsibility. The EAW was a completely self-sufficient unit that involved all the necessary command structures, logistics, ground staff, and mission support elements, including the all-important photo interpreters. ¹⁸ The unit also had a complete set of standing orders, standard operating procedures, and months of training behind them. Thus, when the political decision was made, the unit simply had to take off and apply the systems already in place. Only one important asset had to be added to the EAW upon deployment, and that was the Hercules C-130 for aerial refueling – an asset that proved essential given the challenging fuel situation at Sigonella Naval Air Station. In short, the coincidence that the EAW was on standby this particular spring meant that the Swedish Armed Forces had the perfect tool for immediate deployment upon request from the political leadership. The positive lessons and policy implications are selfevident.

The second factor was the political process in tandem with pre-deployment preparations at all levels. Without a quick political process in Sweden, as well as the reconnaissance and negotiations in Italy for a suitable base (discussed below), the speed of EAW readiness would have been in vain. Informal discussions regarding a Swedish contribution were ongoing from the start of international operations in Libya with a dialogue between the Ministry of Defense and the Armed Forces regarding the nature of a possible contribution. On March 23, this dialogue was formalized as a ministerial request and was sent to the Armed Forces asking about possible resources for contributions. The reply that eight Gripen fighter jets stood ready came the same day.¹⁹ It should be noted that the procedure of formal requests to individual members or partners, although common within UN operations, is unfamiliar to the NATO structure. This was nevertheless needed for the Swedish domestic debate and NATO therefore provided such a request specifically to Sweden, and to Sweden only. The request was obviously also

¹⁸ Interview with Lt. Col. Stefan Wilson, Contingent Commander FL01, March 7 and 20, 2012.

¹⁹ Swedish Government, "Svenskt deltagande i den internationella militära insatsen i Libyen".

drafted to suit the Swedish debate by not asking for what was really needed – strike fighters with air to ground capability.²⁰

The third factor was the fact that the Swedish Air Force had operated a C-130 over Libya for Non-Combatant Evacuation Operations and Humanitarian Relief Operations in February and March. This meant that the Air Tactical Command staff and organization at HQ had built up competence of the area of operations and was on high readiness – factors that proved highly useful during the quick pre-deployment phase in late March.²¹

The Foreign Minister nevertheless made it clear from the very beginning that a Swedish contribution would only be possible if NATO took full command of operations. NATO reached an agreement to do so on Sunday, March 27. The next day, Swedish media reported that an official NATO request for Swedish participation had arrived, although this was not confirmed officially until Tuesday, March 29.²² Nonetheless, on Monday the Swedish government met with the opposition in order to discuss the Swedish contribution. As highlighted above, there was broad consensus regarding the ambition to contribute with fighters at this stage and the main discussion point was the nature of the Swedish contribution and the specific national caveats.²³ On Tuesday morning, March 29, an agreement was reached and a government decision to participate was made before lunch. The same afternoon the Prime Minister presented a government bill to the Parliament. The Parliament also dealt with the issue in record time, leading to the April 1 decision.²⁴

The short time frame for deployment meant that the military pre-deployment planning and preparations had to take place in parallel with the political negotiations in Sweden. This was nevertheless a sensitive matter, as it risked giving the impression of an

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²⁰ Interview with Swedish civil servant, September 12, 2012.

²¹ "I backspegeln – hur flygvapnets Libyeninsats 2011 startade" [Looking back – how the air campaign in Libya 2011 started], *Flygvapenbloggen*, Available at http://blogg.forsvarsmakten.se/flygvapenbloggen/2012/03/26/i-backspegeln-%E2%80%93-hur-

flygvapnets-libyeninsats-2011-startade/, Accessed July 19, 2012.

²² http://svt.se/2.22584/1.2374883/nato har fragat sverige om jas-plan till libyen

²³ Interview with senior civil servant, Ministry of Foreign Affairs, March 23, 2012.

²⁴ Ibid

inevitable political decision. However, the strong support from all of the major political parties eased that tension.²⁵

One challenge of the planning process was that the formal procedure for including partnership countries in operations was not followed.²⁶ In the context of specific operations the North Atlantic Counci (NAC) is supposed to decide on the recognition of a non-NATO country as an operational partner, on the basis of Military Committee advice, after the successful completion of the following measures as required:

- a formal statement of intent by the country that it is prepared to offer a contribution in support of a NATO-led operation;
- provisional recognition by the NAC of the country as a potential operational partner;
- completion of proper security arrangements with the potential operational partner to allow the sharing of classified operational information;
- completion of participation and detailed financial arrangements with the potential operational partner;
- signature, if required, of a technical memorandum of understanding between the relevant military authorities of NATO and of the potential operational partner; and
- certification by NATO military headquarters (SHAPE) of the potential operational partner's contribution.²⁷

The urgency of the process of forming the coalition meant that these formal steps were replaced by ad hoc measures.²⁸ The problem for non-NATO- members is that they do not get access to meetings and information until a commitment to contribute is formally made. Thus, the status of Swedish officials and officers within the organization was constantly a problem, as they were not allowed to participate in OUP meetings and thereby had limited insight into operational planning and operations during the Swedish pre-deployment phase.²⁹ This was solved informally through bilateral meetings between the Delegation of Sweden to NATO and member states. However, it substantially

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²⁵ "Bred majoritet för Libyeninsats", [Broad majority for Libyan operation], *Svenska Dagbladet*, April 1, 2011, http://www.svd.se/nyheter/inrikes/bred-majoritet-for-libyeninsats_6057571.svd.

²⁶ Ambassador Veronika Wand Danielsson, interview with author, March 2012.

²⁷ NATO, "Political Military Framework for Partner Involvement in NATO-led Operations," http://www.nato.int/nato_static/assets/pdf/pdf_2011_04/20110415_110415-PMF.pdf

²⁸ Wand Danielsson interview with author.

²⁹ Ibid

increased the workload and time that had to be invested to gain access to information. A politically difficult, yet important, lesson is therefore the need for a way to provide access for the likely contributing partners before formal commitments are made.

While negotiations and deliberations were ongoing in Stockholm, the Armed Forces were tasked to conduct reconnaissance trips to Italy to find an appropriate base for the Swedish jets. As the Armed Forces did not have the mandate or the authority to negotiate directly with NATO, a representative from the Delegation of Sweden to NATO in Brussels also joined the trip to Italy. As a representative of the Swedish Government, this person could conduct the formal negotiations in Italy, which turned out to be very useful, as it substantively shortened the deployment time when the parliamentary decision was finally made.³⁰

A number of challenges were identified during the recce trip, some of which were rather pressing – not least the issue of dealing with the Italian concerns about Swedish Gripens deploying to Sigonella. Italy expressed some concerns about the Swedish contribution – especially regarding logistics issues related to the fact that the JAS 39 was a fighter no other contributing nation used.³¹ The recce team, supported by some arm-twisting by U.S. contacts, nevertheless successfully resolved most of these issues in time. It should nonetheless be noted that when the first planes took off from Sweden, they still did not have permission from the Italians to land at Sigonella. While the Swedish contingent was hoping for clearance to Sigonella at takeoff, the formal flight plan was to Sardinia. The planes flew via Hungary before they received the final positive decision from the Italians regarding Sigonella.³²

Another important lesson from the pre-deployment phase is therefore the importance of close contacts and *bilateral* discussions with a key ally. In this case, contacts with U.S. officials in both Brussels and at the Pentagon in Washington turned out to be absolutely central in the negotiations with Italy and in gaining access to

³⁰ Interview with officials at the Delegation of Sweden to NATO, March 5, 2012.

³¹ Interview with Lt. Col. Stefan Wilson, March 2012.

³² Interview with Ministry of Foreign Affairs official, February 25, 2012. Interview with Lt. Col. Tommy Petersson, July 17, 2012.

operational information before the formal commitment to contribute forces was made.³³ This relationship deepened during the operation and served as an important entry point for Sweden to NATO as a partnership country. In a similar vein, the deployment of liaison officers within the NATO command structure at an early stage proved to be of importance and also created the foundation for later successes during the operation. Finally, the support of diplomatic staff at the Delegation of Sweden to NATO in Brussels, as well as within the reconnaissance delegation to Italy, was instrumental in resolving concerns and building good relations with the US NATO delegation for access to the necessary command structures.³⁴

A Typical Gripen Mission During OUP

The JAS 39C Gripen is a Swedish-built, lightweight multi-role fighter, comparable in capabilities to advanced versions of the slightly larger F-16. It can perform a wide variety of counter-air missions, air interdiction and close air support, anti-shipping attacks, and strategic and tactical air reconnaissance. During OUP the Gripens were equipped with AMRAAM (Advanced Medium Range Air-to-Air Missile) and IRIS-T missiles for self-defense. On the centerline the Gripen carried a reconnaissance pod with an electro-optical sensor in the visual range that took 24 Megapixel slides in a mosaic pattern and could cover vast areas with high resolution. The imagery was stored on an 80 Gigabyte memory flash hard drive, that after landing was directly inserted into an analysis system. The pod was new to the Swedish Air Force, and the version used over Libya had never been used previously by Air Force pilots or maintenance crews. Many of the pods were delivered directly from the factory to Sigonella, requiring adjustments by technical support staff from SAAB that were deployed with the Swedish unit for that purpose during the operation. The Gripens also carried a LITENING 3 laser-designating targeting pod, with a high resolution IR-video camera. The imagery from this pod was used for in-flight information and also after landing in the production of the RECCEXREP.35

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³³ Interviews with officials at the Delegation of Sweden to NATO and the Embassy of Sweden in Washington DC, April 2012.

³⁴ Interview with officials at the Delegation of Sweden to NATO, March 5, 2012.

³⁵ Interview with Lt. Col. Hans Einerth, Cheif Operations, CO A 3/5 branch, FL 02, July 17, 2012.

All missions were tasked by CAOC 5 (Combined Air Operations Centre) in Poggio Renatico, Italy. CAOC 5 was responsible for the tactical level of the air campaign during OUP. A number of Swedish liaison and staff officers worked at CAOC 5 during the operation and they proved absolutely essential for the correct tasking of the Swedish unit. Beyond the everyday tasks of any staff officers in different functions at CAOC 5, the Swedish personnel in the staff therefore also had two main tasks in relation to the Swedish unit: First, they carried out the Red Card Holder work – an asset all contributing nations had in order to coordinate the targeting and tasking processes with the specific national mandates and caveats. Second, they supported the staff in making sure that the tasking suited the specific capabilities of the unit – thereby helping to optimize the effectiveness of the missions.³⁶

The tasking was formulated in an ATO (Air Tasking Order) that was issued to the unit at least 12 hours prior takeoff. In the ATO the unit found all mission details such as details of the recce targets, time on targets, air-to-air refueling areas and assets, airspace corridors, and communications (frequencies and crypto keys). Since the ATOs covered all air missions in the operation it also provided the pilots with a good general picture of the situation in their airspace.³⁷

When the ATO reached the Swedish unit and was extracted from the NATO Secret network (initially via the Danish unit and later on via a terminal provided by the Italian base at Sigonella), the intelligence and planning officers made an initial analysis and started the mission planning by entering the intended route and targets in the planning system. Four hours before takeoff the detailed planning continued, now with pilots and all other relevant personnel involved. Two hours prior to takeoff the two-ship leader held a mission brief, in which all details and contingency plans of the missions were covered. The pilots entered the cockpit 30 minutes prior to takeoff and initiated the start-up procedures and system checks on the aircraft.³⁸

The missions always consisted of two Gripens; one aircraft was the main reconnaissance asset and also the flight lead, and the other was the supporting aircraft

³⁶ Interview with Lt. Col. Hans Einerth, Chief Operations, CO A 3/5 branch, FL 02, July 17, 2012.

³⁷ Ibid.

³⁸ Ibid

with the primary tasks of providing situational awareness and searching for potential threats. After takeoff the two-ship flew along a predefined route along special corridors. They passed Malta, and thereafter contacted an E-3 AWACS (U.S., NATO or French) on their way to their first air-to-air refueling (AAR). The AWACS were responsible for informing the crew of threats and friendly air traffic, coordinating refueling, and also forwarding in-flight reports and any new targets (dynamic targets) to the crew. The AAR took place in a predefined area beyond the Libyan coastline. Near the end of OUP it was possible to refuel over Libya itself, and this was required to provide imagery of targets further south in Libya. The Gripens initially used the Swedish C-130 Hercules for refueling, but later also refueled from U.S., French, and Canadian tankers as well. After refueling, the aircraft flew to their reconnaissance targets, which were overflown several times to get imagery from different sensors and angles. A lot of consideration was required when collecting imagery, such as if vertical or oblique angles were to be used, and the direction of the target in relation to the sun and clouds. On some missions several AARs were needed to be able to cover all of the recce targets.³⁹

The missions were flown at altitudes over 20,000 feet to stay well above ground-based air defense threats, such as anti-aircraft guns, small-arms fire, and manportable IR-guided missiles. This behavior required air superiority, something that was obviously achieved early in the conflict. Even so, the Swedish Gripens detected a number of more advanced missile systems with their electronic warfare suites and the radar warning receivers. Normally a flight covered ten targets during a mission. Limitations on the number of targets included aircraft endurance and available memory capacity. The most important limitation, however, was the time it took to analyze the imagery back at Sigonella Air Base on Sicily. After the Gripens had collected imagery from all the tasked targets they often remained in the air waiting for so called "dynamic targeting" — additional, time-sensitive reconnaissance targets.⁴⁰

Upon mission completion the aircraft returned to Sigonella. After landing, the memory units from the sensors were rushed to the image analysis systems and the analysis personnel immediately started to go through the immense amount of data.

³⁹ Ibid.

⁴⁰ Ibid.

Beyond looking at the tasked information, for example locations of military materiel, they also marked locations of schools and mosques to further support the targeting processes. The information was labeled and marked in the photos, as well as described in text. Together this was compiled to a Reconnaissance Exploitations Report (RECCEEXREP) that was sent to the CAOC within two hours from landing. At CAOC 5 the intelligence personnel made further assessments based on the imagery, and would sometimes follow up with inquiries to the Swedish unit for further information on specific details.⁴¹

From Skepticism to Appreciation

The arrival of the Swedish contingent at Sigonella and its relatively good placement in the hangars raised some eyebrows. It was at that stage unclear what the Swedes could and would do, why they were participating, and what types of missions they would fly. 42 The JAS 39 Gripen was unfamiliar to many, and cynical questions were raised as to whether the Swedish contribution would be of any substance or if it was to be little more than a sales pitch for SAAB – to get the jets "combat proven." The skeptical reception was not helped by the Swedish initial political caveats, or by two of the early challenges discussed below – the incompatibility of jet fuel and the lack of access to NATO Mission Secret Network (henceforth NATO Secrets). The prospects for a useful Swedish contribution seemed limited. However, the negative tune started changing to a positive one only three weeks after the first deployment, as the fuel and communication challenges were being solved and as the Swedish contingent started producing highquality reconnaissance images and reports.⁴⁴ This section analyzes what the Swedish contingent did and how it was received within the campaign as a whole. What did the Swedish contingent do to change the narrative from skeptical to highly favorable? The section emphasizes three factors without attempting to rank their relative importance –

⁴¹ Ibid.; Interview with Lt. Col. Tommy Petersson, Chief Operations, CO A 3/5 branch, FL 02, July 20, 2012.

⁴² Interview with Lt. Col. Stefan Wilson March 2012: Interview with officials at the Delegation of Sweden to NATO, May 2012.

⁴³ In 2011, marketing competition between the manufacturers of the Gripen, the Typhoon, and the Rafale was (and still is) intense as they vied for advantage in major fighter acquisition competitions in India, Brazil, Switzerland, and several other countries.

⁴⁴ Interview with Lt. Col. Stefan Wilson, March 7 and 20, 2012.

the quality and speed of intelligence reports, the reliability and flexibility of the Swedish contribution, and the likeability of the unit as a neighbor and co-operating partner.

First, as soon as the Swedish planes started flying it became obvious that they were capable of making a substantial contribution to the operation. The quality of their reconnaissance photos was good, and the speed and quality of analysis were excellent. An absolutely central aspect in intelligence gathering in general and tactical recce missions in particular is the duration from initial observation to the delivery of analyzed data and reports to the higher level of command. The longer the process takes, the less relevant the information is likely to be. At the same time, the quality and accuracy of analysis can never be compromised, which makes the process a bit of a balancing act. The time from landing to delivered reports in the Swedish case most often was two hours, and the quality of both photos and analysis was surprisingly good from the coalition's point of view.⁴⁵ In July and August, Sweden provided about a third of tactical reconnaissance within the coalition. As NATO continued to ask for more, the Swedish Air Force nevertheless worryingly reached maximum capacity. While there were more jets and pilots available in Sweden, there was a lack of additional capacity to analyze the reconnaissance photos, which limited the possible scale of the Swedish contribution in Libya. 46 It should, however, be noted that this was partly due to national priorities, as some interpreters were used nationally, and as a Swedish UAV with interpreters was to be sent to Afghanistan around the same time.⁴⁷

Second, not only was the Swedish contingent very reliable in terms of following orders and solving mission tasks, it also gained respect by displaying great flexibility – both mentally and technically. The Swedish contingent's culture of mission command meant that it took a lot of initiative and dared to comment on and adjust ATOs and flight schedules from higher command when it was believed that this would improve operations.⁴⁸ For example, while photographing oil cisterns outside Tripoli, the Swedish analysts discovered that a number of them had floating lids. If photographed at a

⁴⁵ Interview with Lt. Col. Stefan Wilson, March 7, 2012; Interview with US DoD official, June 2012.

^{46 &}quot;För få fototolkar begränsar insats", *Svenska Dagbladet*, August 15, 2011; Interview with Col. Fredrik Bergman, Contingent Commanders FL02, April 4, 2012.

⁴⁷ Interview with Lt. Col. Tommy Petersson, July 17, 2012.

⁴⁸ Interview with Col. Fredrik Bergman, Contingent Commanders FL02, April 4, 2012.

particular angle the shade could easily be analyzed to calculate the level of consumption and refilling of these cisterns. The Swedish commander therefore requested to change the flight schedules in order to photograph these cistern at the same time each day to make for the best possible comparative analysis. Small instances like this, which not only showed a capability of seeing new possibilities within existing orders as well as in finding relevant targets of intelligence, but also initiative in questioning the ATOs was highly appreciated at higher levels of command. The Swedish unit not only fulfilled its tasks with precision, it also came back with some extra value added because of this initiative.⁴⁹

Moreover, the technical systems that the Gripen was carrying allowed for greater flexibility in operations than most coalition partners. For example, the recce pod and the Gripen allowed for the possibility of taking off with pre-planned and programmed recce targets like all other contingents, but also had the capability to receive new targets while on the mission. This meant that after initial task accomplishment, the Swedish jets could wait in stand-by position after air-to-air refueling in order to either execute time-sensitive follow-up missions or to cover recce tasks that other contingents had failed to complete. As these types of tasks often came at very short notice, having the opportunity to task them to jets already in the air over the Mediterranean Sea substantially increased the speed and efficiency of tactical recce during OUP.⁵⁰

Third, the Swedish contingent proved to be a pleasant cooperating partner and neighbor at Sigonella. While this may seem trivial in the midst of combat, this factor often makes some of the most important impressions on commanding officers and other contingents. The Swedish work ethic, and the carefulness in keeping the hangar clean, returning rental vehicles in time, and participating in social events and ceremonies, contributed to an improving narrative of the Swedish contribution, as well as excellent working relationships with the base commander and the neighboring units on the base.⁵¹ The same useful working relationship was reportedly the case with the smaller Swedish

⁴⁹ Interview with Lt. Col. Stefan Wilson, March 7, 2012.

⁵⁰ Interview with Col. Fredrik Bergman, April 4, 2012.

⁵¹ Ibid.

satellites that worked with CAOC 5 in Poggio Renatico and the OUP headquarters (CJTF) at JFC in Naples.

An indicator of the increasing appreciation of the Swedish contribution was the refueling priority list. The Swedish contingent was initially almost at the bottom of this priority list, which naturally had those contingents conducting the bombing at the top, followed by Qatar and UAE. Sweden belonged to a third-tier group, which meant that the Swedish contingent could not fly at maximum capacity.⁵² Between April 18 and 20, just as the unit reached Full Operational Capability, the Swedish contingent commander nevertheless visited Joint Forces Command in Naples and presented the early work of the Swedish contingent. The message was that if the Swedes could be placed higher on the refueling priority list, they could deliver more of the same. This visit, along with the ever-improving reputation, quickly had an impact, and the Swedish contingent rose in the priority list.⁵³

Swedish NATO Interoperability and Operational Integration

Another important reason for the relative success of the Swedish contribution to OUP was the unit's interoperability with NATO. Apart from the already mentioned initial challenges of access to classified computers and crypto keys – issues discussed further below – the Swedish unit was well integrated from the very beginning. In fact, the compatibility of the Swedish contingent was exceptionally good, given that this was the first Swedish Air Force contribution with combat aircraft to a NATO operation, and the first international Swedish Air Force operation with fighters since operations the Congo in the early 1960s. This section seeks to illustrate a long and successful process towards integration and interoperability with NATO despite Sweden's avoidance of membership in the alliance.

The process of increasing compatibility with NATO has taken place over many years. Sweden has cooperated with NATO in the framework of the Partnership for Peace (PfP) since 1994, and work to make the Swedish Air Force interoperable with NATO began as early as 1996. Since then, technical and methodological interoperability has

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⁵² Interview with Lt. Col. Stefan Wilson, March 7, 2012.

⁵³ Ibid.

steadily improved, and today the Swedish Air Force has procedures, call signs, and technology that make it interoperable with NATO units. Over the years, the Swedish Air Force has also participated in numerous international air exercises, such as Red Flag and Cold Response, and has also trained Swedish pilots in NATO countries. Moreover, while this was the first Swedish fighter contribution to a NATO operation, the Swedish Air Force had already been involved in ISAF (the International Security Assistance Force in Afghanistan) with transport aircraft and helicopters. Operating within a NATO Air Campaign framework was therefore far from unfamiliar. Moreover, the Swedish armed forces' experience of participating in the NATO-led operations in Kosovo and Afghanistan also provided the larger Swedish bureaucracy with invaluable lessons – from the tactical command level to the Swedish Government Offices, and not least the Delegation of Sweden to NATO in Brussels.

As noted above, large parts of the Swedish unit were also part of the EAW that was on standby as part of EU Nordic Battle Group 11. This meant that the unit was unusually well prepared for international operations within an EU framework, making the step of plugging into NATO systems very small. In essence, experience from NATO exercises, having standby units for international operations, in combination with the extensive past efforts to make technology, methodology and language interoperable with NATO, meant that compatibility (beyond NATO Secrets) was not really an issue during the operation in Libya. One of the first Swedish pilots who entered Libyan air space has said: "I had to pinch my arm to remember that this was for real and not an exercise" – something that highlighted that the integration process and preparations for NATO interoperability had been successful.⁵⁵ In an analysis of operations in Libya, Adrian Johnson and Saqeb Mueen also note that "Sweden's longstanding collaboration with NATO as a Partner for Peace made co-operation relatively seamless, and may mean that Sweden will participate more readily in future operations." ⁵⁶

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⁵⁴ Interview with Col. Fredrik Bergman, April 4, 2012: Interview with Lt. Col. Stefan Wilson, March 7, 2012

⁵⁵ Interview with Lt. Col. Hans Einerth, July 18, 2012.

Adrian Johnson and Saqeb Mueen (eds.), "Short War, Long Shadow: The Political and Military Legacies of the 2011 Libya Campaign," RUSI, *Whitehall Reports*, 2012, pp. 1-12, http://www.rusi.org/publications/whitehallreports/ref:04F631FBA20DF9/, p. 32.

This is not to say that there were no serious challenges to be overcome. One of the main challenges was to integrate the tactical data exchange network, Link 16, on the Gripens. While the political challenges took time to resolve, the technical challenges were quickly and successfully overcome in cooperation with the Danish contingent, also based at Sigonella. The Swedish Air Force Team Members and the Danish Military were later awarded *Aviation Week* Laureate Awards in the category of IT/Electronics "for successfully and quickly integrating Link 16 on the Saab JAS-39 Gripen in support of NATO operations over Libya."⁵⁷

In terms of operational integration from a Swedish perspective, the Delegation of Sweden to NATO has highlighted that the involvement of partnership countries exceeded expectations as soon as the operation was underway. The vast majority of meetings in Brussels were held in OUP-format – meaning that troop contributions rather than alliance membership determined access. All information (open and classified) was also shared amongst all OUP partners from the very beginning.⁵⁸ To further facilitate Swedish integration, one Swedish officer was based at SHAPE and three at Joint Forces Command (JFC) in Naples. At JFC, the Swedish officers were given complete insight in the operations as long as the Swedish contribution could deliver useful missions and analysis of high quality. The liaison officer wrote almost daily reports on what was going on in order to provide the Swedish unit with increased understanding of the thinking and priorities of the staff in Naples. The most important contribution from an operational perspective nevertheless came from the two liaison and six staff officers working at CAOC 5. This was the place from which the air campaign was led and, as highlighted above, and apart from performing the regular staff duties, the Swedish officers were also heavily involved in the tasking process to the Swedish contingent – not least during the period of strict national caveats.⁵⁹ Both the Swedish NATO delegation in Brussels, and the contingent commanders have highlighted the importance of having Swedish staff officers at the important command levels during OUP.60

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^{57 &}quot;Congratulations to the Aviation Week Laureate Award Winners," http://www.aviationweek.com/events/archive/2012/lau/index.htm

⁵⁸ Interview with officials at the Delegation of Sweden to NATO, May 20, 2012.

⁵⁹ Interview with Lt. Col. Tommy Petersson, July 17, 2012.

⁶⁰ Interview with Lt. Col. Stefan Wilson, March 7, 2012.

While information sharing and operational integration of partnership countries were good in general, there was also an extra level of insight and access based on the immediate quality and importance of the Swedish contribution. While the Swedes were providing the most sought-after recce operations, they were also given access to the meetings of the "inner-circle" (UK, U.S., France), and to deliberations of "two eyes" and "five eyes" – the Anglophone communities of either the U.K. and U.S., or of the UK, U.S., Canada, Australia, and New Zealand. On the opposite end of the scale, during the period of fuel challenges, non-access to NATO Secrets and extreme interpretations of Swedish national caveats kept the Swedish contingent out of the loop at all levels of command. Liaison officers were not allowed to attend meetings in the inner circle, and access to relevant documents and briefings was limited until the caveats were lifted. 62

CHALLENGES TO THE SWEDISH CONTRIBUTION

While the overall assessment of Swedish operations in OUP is generally very positive, the contingent also faced a number of more or less serious challenges that provide important lessons and recommendations for improvement in future operations – both from Swedish and NATO perspectives. This section focuses on three challenges: First, getting access to NATO Secrets and Link 16; Second, the challenge of finding compatible jet fuel for the Gripens; Third, the Swedish political mistakes and national caveats. The first two are challenges stemming largely from Sweden not being a NATO member, while the final one is an internal Swedish problem. It should be noted that most of the challenges can be described as start-up problems that were successfully resolved after a number of weeks of operations. This does not, however, take away from the importance of learning lessons from them for future operations.

Access to NATO Secrets and Link 16 – the Non-Member Conundrum

Upon deployment it became clear that the Swedish communication systems, despite years of efforts to make them interoperable, could not be fully integrated into the NATO command and control systems. There were two separate challenges: First, and most

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⁶¹ Interview with officials at the Delegation of Sweden to NATO in Brussels, May 20, 2012.

⁶² Ibid

importantly, Sweden as a partnership country did not have access to NATO Secrets at the onset of operations, and the process of obtaining a license initially proved difficult. Second, despite having made the JAS 39C compatible with Link 16 shortly before the operations in Libya, a crypto key had to be obtained, and the bureaucratic process to do so proved almost insurmountable.

The first challenge meant that the Swedish contingent did not have a tool for receiving orders or submitting RECCEEXREPs. While this was temporarily solved by receiving orders via the neighboring Danish contingent and by sending images and recce reports physically on disc to CAOC 5, it meant that Full Operational Capability was delayed one week. Despite the fact that this certainly was not the first time Sweden or other non-members contributed to NATO operations – KFOR and ISAF being the most obvious examples – this challenge was dealt with very slowly until after the Swedish arrival at Sigonella. At that stage intense work to solve the issue was launched at all levels within the Swedish contingent, as well as among liaison officers in different commands, and last but not least within the Delegation of Sweden to NATO.⁶³

Gaining access to classified NATO information and communication networks, including the necessary license or crypto key, is obviously not an automatic process for non-members. It was therefore quickly identified that formal NATO approval was necessary for access to secure networks. Not least using data link 16 required a number of formal tasks from the Swedish side, as well as decisions by the NATO Military Committee (MC). NATO expects a coordinated expression of information exchange needs from the contributing country. Based on this request, the appropriate systems and networks for access are identified. When the operational need is confirmed, a request goes to the MC, where the international military staff prepares a recommendation for decision by the MC. After intense work by both Sweden and the United States, it nevertheless became clear that NATO was not going to proactively work Sweden into the security networks and provide the relevant approvals. A number of bureaucratic roadblocks were in the way. First, there was a need for the Joint Task Force of OUP to define an operational requirement for each nation. Second, several individual requests for each partner nation created a prolonged process for Sweden in particular – other

63 Interview with Lt. Col. Stefan Wilson, March 7 and 20, 2012.

nations were politically more important to deal with. Third, there were a number of different requirements from different Command Control Authorities involved.⁶⁴ Further complicating matters was the fact that NATO had to deal simultaneously with the requests from Sweden and, the politically even more important partners, UAE and Qatar. The Swedish Ambassador to NATO has highlighted the many occasions she was told that, "if if it was only Sweden there would be no problem".⁶⁵

Final approval from MC did not come until May 30, at which point the Swedish communication systems could finally be fully integrated with NATO C2 systems. The process involved two time periods of different challenges. The first period, from April 2 until April 28 involved the challenges of trying to figure out exactly what NATO needed and where to process it. The second period, from April 28 to May 30 involved the challenge of getting the requirements through the NATO and OUP bureaucracies. Getting a license for access to NATO Secrets was nevertheless not the only problem. A number of the Air Force's communication and information systems for interoperability with NATO are provided by the United States. Due to the nature of the agreements between the two countries, to take these systems abroad requires formal U.S. authorization. Moreover, using crypto keys provided by other actors also requires authorization. These issues were nevertheless very quickly dealt with prior to the deployment by the Swedish Armed Forces and the Delegation of Sweden to NATO in relation to U.S. European Command (USEUCOM), as well as through the contacts of the Air Force attaché at the Embassy of Sweden in Washington. The second final process and the Delegation of Sweden to NATO in relation to U.S. European Command (USEUCOM), as well as through the contacts of the Air Force attaché at the Embassy of Sweden in Washington.

From a Swedish perspective three lessons were identified while navigating the formal procedures of the NATO bureaucracy. First, to identify useful points of contact at all appropriate levels of command in order to quickly navigate the formal processes. Second, to be prepared to present the formal expression of need immediately when the chance presents itself. This nevertheless means that Sweden must also have a clear picture of what is necessary, helpful, and nice to have in operations, and a quick standing

⁶⁴ Matthew P. Hill, "Operation Unified Protector", Unclassified EUCOM briefing, November 2, 2011.

⁶⁵ Veronika Wand-Danielsson, private correspondence with the author, September 10, 2012.

⁶⁶ Hill, "Operation Unified Protector".

⁶⁷ Interviews with officials at the Delegation of Sweden to NATO, and the Embassy of Sweden in Washington, DC, April 15, 2012.

procedure for preparing the formal requests. Third, to quickly identify and establish good relations with a sponsor nation in NATO. To navigate these testing waters of the NATO bureaucracy, as well as to influence and speed up the processes, the support of a powerful "sponsor nation" within NATO is essential. In this case the Swedish NATO delegation received support from the U.S. delegation to NATO and USEUCOM in Brussels, as well as from the Pentagon in Washington. This relationship continued throughout the operation with nearly daily contacts between the US and Swedish delegations during OUP.68

There are two ways of interpreting the fact that it took 58 days to integrate the Sweden contingent fully with the operational C2 system. On the one hand, it can be seen as completely unacceptable that a substantial contributor to the operation had to face such bureaucratic resistance and delay. Clearly the alliance was not prepared for the inclusion of partnership countries and the full integration of their communication systems. At the same time, Sweden had not prepared itself for the eventuality of having to go through these motions. On the other hand, these challenges were in the end resolved and the force-contributing partnership countries were integrated in the operations in an unprecedented manner.

Nonetheless, not providing early access to NATO Secrets for substantial troop contributors was a failure on the part of NATO, and the Alliance has also been critical of its own handling of this case.⁶⁹ Clearly, the processes for including non-members on classified networks will be essential in future operations. One possibility is changing the NATO policies by reducing the bureaucracy of the formal processes. Another possibility is having standing agreements between close partners and NATO that would take effect when contributing troops to operations.

Lack of Compatible Fuel

The second challenge that the Swedish contingent faced upon deployment was the lack of compatible fuel for the JAS 39 Gripen. Sigonella is a naval air station, which means that the jet fuel normally provided (JP-5) has a slightly lower flash point for increased

69 See Matthew P. Hill, "Operation Unified Protector", Unclassified EUCOM briefing, November 2, 2011.

⁶⁸ Interview with officials at the Delegation of Sweden to NATO, April 15, 2012.

security on aircraft carriers. This also means that the fuel has lower conductivity and viscosity, which makes it incompatible with the Gripen, which normally runs on JP-8 fuel. The problem with JP-5 for the Gripen is that it has lower electrical conductivity, and therefore is more prone to build up static electricity. This problem was discovered when the Swedish maintenance crews tested the fuel during the pre-deployment phase. The sensitivity to static electricity is not due to the engine, but to the fuel system. Since the Gripen is a small and compact aircraft, the fuel lines have been constructed thinner, which is compensated for by a higher fuel pressure and flow – something that increases the sensitivity to static electricity.⁷⁰

The problem was known but underestimated within the Swedish HQ a few days before the deployment to Sigonella Naval Air Station. It was assumed that commercial jet fuel (JET-A1) could be bought and transported from the nearby civilian Catania Airport. JET-A1 fuel is essentially the same as JP-8, but without some military additives. The solution to get fuel from Catania Airport nevertheless faced two challenges. First, there were no fuel trucks available on Sicily at this time. Second, JET-A1 is similar to JP-8 but not identical. The Gripen can fly shorter periods on this fuel, but it requires additives for extended use, which improves lubrication and thereby decreases the risk of oxidation. This, in turn, decreases inspection and maintenance intervals on the Gripen. The problem of finding compatible fuel forced all actors involved to display great flexibility and resourcefulness.⁷¹ The Swedish contingent was forced to fill up the Swedish C-130 at other bases so that the Gripens could later be refueled in the air. The permanent solution in the end involved a convoy of fuel trucks traveling from Sweden through Europe arranged during the Easter break. The Swedish fuel trucks not only provided the correct fuel and the all-important fuel transport capability from Catania Airport, they also carried pumps and a system that could automatically provide the appropriate additives to the JET-A1 fuel. The convoy nevertheless required military

⁷⁰ Interviews with Lt. Col. Hans Einerth, July 18, 2012; Lt. Col. Wilson, March 25, 2012.

⁷¹ Interview with Major General Anders Silwer, Then commander of the Swedish Air Tactical Command, May 12, 2012.

escort and thereby provided not only logistical challenges, but also diplomatic ones, as military transports abroad require formal authorizations from each state they transit.⁷²

While the fuel situation limited the extent of early missions flown, the issue was in the end resolved to an acceptable extent by the time access to NATO Secrets was accomplished. Thus, the Swedish contingent reported FOC to NATO on April 21. Given the challenges described above, as well as the fact that this was the first Swedish contribution of fighter jets to a NATO air campaign, arriving at FOC in Sicily only 20 days after the parliamentary decision to contribute Swedish jets should be seen as quite an accomplishment.

The National Caveats and the Failures of Swedish Politics

That the Swedish contingent was not authorized to strike ground targets in Libya was hardly surprising given the fact that this was the first time in 48 years that Swedish fighter jets were unleashed internationally. There was plenty of political nervousness in Stockholm regarding the potential impact of civilian casualties being caused by Swedish bombs. Thus, while Sweden supported the campaign in full, the political risks of engaging grounds targets were comfortably left to "others". The caveat was nevertheless well understood within the coalition, which meant that it did not have any negative consequences in terms of the credibility of the Swedish contribution.⁷³ Moreover, the most important Swedish contribution was initially perceived to be the political legitimacy that Swedish participation provided for the operation.⁷⁴ Beyond that ground target caveat, however, a number of unnecessary and strategically foolish caveats and limitations were placed on the Swedish contingent that could have been avoided. Two decisions stand out in this regard: First, beyond the bombing caveat the Swedish Parliament initially decided that the only section of UNSCR 1973 that was to be implemented by the Swedish contingent was the task to create and uphold the No Fly Zone (NFZ). Second, political horse-trading meant that three Gripens were withdrawn

⁷² Interviews with Lt. Col. Wilson, March 7, 2012 and Maj. Gen. Anders Silwer May 12, 2012.

⁷³ NATO Secretary General Anders Fogh Rasmussen stressed while visiting Sweden on the day of the Parliamentary decision that the Swedish caveats did not represent a problem for NATO, in "Bred majoritet för Libyeninsats", *Svenska Dagbladet*, April 1, 2011.

⁷⁴ Interview with U.S. Department of Defense official, May 2012; Interview with Embassy of Sweden official, April 2012.

from the mission halfway through – thereby sending an unfortunate signal to OUP commanders and NATO HQ at a sensitive point in time for the operation.

As highlighted previously in the volume, UNSCR 1973 included three main operational tasks: establishment of a NFZ, enforcement of the arms embargo, and protection of Libyan civilians. Limiting the Swedish contribution to the NFZ made little sense and created great difficulties at the tactical level. In terms of tactical air doctrine, the NFZ is an aim of tactical operations rather than a task, and it was entirely unclear which tasks the Swedish contingent had the mandate to perform to achieve that aim. Creating and upholding a NFZ involves attacking ground targets such as air defense systems and command and control centers. Yet this was not allowed for the Swedish unit, and the first two weeks of the operation were therefore spent trying to understand what were legally and politically acceptable activities within the given political mandate. That the Commander of the Swedish Air Tactical Command, Major General Anders Silwer, as well as a legal counsel supported the unit at Sigonella in order to make this interpretation is an indication of both the perceived difficulty and importance of this interpretation.⁷⁵

Initially, a relatively liberal interpretation was made. However, a combination of factors described below led to a much stricter interpretation after two weeks of sorties. It was then decided that the NFZ caveat meant that the Swedish contingent was essentially only allowed to conduct defensive counter-air operations and Tactical Air Reconnaissance (TAR) against the NFZ. The Swedish contingent could therefore not gather intelligence regarding civilians in danger or breaches of the weapons embargo. Libyan air capabilities were essentially destroyed by the time of Swedish deployment, and although a few relevant targets of reconnaissance related to the No Fly Zone still existed during the early weeks, these also quickly disappeared. The Swedish contribution thereby became increasingly useless and the caveats unsustainable. Moreover, the caveats did not come without a cost, as NATO reacted by throwing out diplomats and

75 Interview with Maj. Gen. Anders Silwer May 2012.

Swedish liaison officers from restricted meetings at all levels of command, and most importantly at JFC in Naples.⁷⁶

A Swedish parliamentary delegation visited the Swedish unit at Sigonella base in late May and were reportedly shocked to hear that despite Sweden justifying the mission in humanitarian terms in general, and the protection of civilians in particular, the Swedish jets could not conduct reconnaissance with the purpose of leading to more effective airstrikes against threats to civilians, or even to help save civilian lives by identifying unsuitable targets. Recce sorties essentially had to ignore blatant threats to civilians, and were officially not allowed to photograph them or report them.⁷⁷ Following the parliamentary visit the mandate was first informally reinterpreted within a few days, and then completely rewritten in the June 26 parliamentary decision to extend the Swedish mission by 90 days. All caveats beyond the prohibition on attacking ground targets were lifted at that point.

Why was the mandate of the Swedish unit so limited in the first parliamentary decision and why was it interpreted the way it was – thereby severely limiting the capability to contribute to the operation during April and May? The section below seeks to explain the caveats by describing the impact of the nature of civil-military relations in Sweden, as well as by looking at the specific political context in which the main decisions regarding the Swedish contribution were made.

As described above, the political process leading up to the parliamentary decision was very quick. Interestingly, the week before the decision was made a draft government bill was produced with no caveats at all. However, after deliberations between the Government and the main opposition parties, an agreement was reached that the Swedish jets would not engage ground targets. That agreement was reached on Tuesday morning, March 29. The Government offices then had less than an hour to rewrite the proposition that had to be presented to Parliament the same day in order to avoid unnecessary delays in the formal political procedures of the Parliament. During that hour, the unfortunate redrafting solution was to include the no-ground-attacks caveat by focusing Swedish operations on the NFZ. This has been described as a decision of pure convenience in the

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⁷⁶ Interviews with Lt. Col Stefan Wilson, February 23, 2012; with senior civil servant at the Swedish Foreign Ministry, April 2012; with the Swedish Representation to Brussels, May 2012.

⁷⁷ Interview with Lt. Col Stefan Wilson, February 23, 2012.

drafting process as it was not anticipated that it would have a large impact on operations in the field.⁷⁸ A blog post by Foreign Minister Carl Bildt written the same day also provides some interesting clues:

The well informed are likely to recall that our efforts in the air campaign at that time [the Congo in the 1960s] - with the J29 Flying Barrel - focused on attacks against ground targets. These efforts also became important for the UN mission in its entirety. Now, our efforts will involve the maintenance of air surveillance and - I hope - different forms of reconnaissance and intelligence efforts. Especially the latter have very clearly been requested, and here too I think that political support is very broad. 79

The blog post can be interpreted as containing a kernel of disappointment about that fact that, for political reasons, the Swedish contingent would not be able to engage ground targets. The Foreign Minister also made clear that it was the Swedish reconnaissance and intelligence capabilities that were requested by NATO. Bildt was right in the interpretation that there was broad political support for reconnaissance and intelligence gathering at this stage, as the main opposition party was clearly on board for the full range of reconnaissance tasks.⁸⁰ In fact, there was a political consensus regarding the appropriate nature of the Swedish contribution (involving the full range of reconnaissance and intelligence gathering) but the mandate was still limited to the NFZ as a matter of bureaucratic convenience. This indicates that the political leadership neither understood the tactical and legal challenges the wording of the mandate would entail for the Swedish contingent, nor the limited utility the Swedish contingent would provide for the operations as a whole with the mandate given. This lack of understanding was due to an all-too-common failure of communications in the civil-military interface.

A recurrent theme in Swedish contributions to international operations is the gap between the political leadership and the armed forces. The Swedish constitution demands a peculiar separation of the government ministries from the agencies that implement policy.⁸¹ While this theoretically ensures unpoliticized implementation of government directives, it also has some serious negative consequences for political

⁷⁸ Interview with senior civil servant at the Swedish Foreign Ministry, April 2012.

⁷⁹ http://carlbildt.wordpress.com/2011/03/29/8446/ (author's translation)

⁸⁰ Interview with Urban Ahlin, Social Democratic Party, May 5, 2012.

⁸¹ Swedish Government, "Så styrs statliga myndigheter [How state authorities are run]," http://www.regeringen.se/sb/d/2462.

control and leadership of military operations. On the one hand, it means that the military leadership is detached from the political process and therefore has remarkably limited *Fingerspitzengefühl* in understanding and implementing political wishes. On the other hand, and perhaps even more seriously, it means that the Departments of Defense and Foreign Affairs' understanding of the military instrument, and the consequent capability to control and direct them, is equally limited.⁸² Thus, political deliberations and decisions are often made with little understanding of the general utility of force or the more specific military capabilities available to implement political ambitions. While this is clearly not a problem that is limited to the Swedish system, it has led to a number of recent strategic blunders related to Swedish contributions to international operations.⁸³

The limited arena for civil-military interaction also means that there are very few individuals within the Swedish system who are capable of engaging in strategic thinking.⁸⁴ The very foundation of strategy is how to translate political aims into suitable operation in order to achieve those aims. This is inherently difficult, however, and requires a deep understanding of the military instrument, as well as of political processes and interests. The Swedish bureaucracy simply does not produce individuals with the required breadth and depth of understanding, and the institutional setup also limits the possibility and frequency of meetings between representatives from the military and political fields.⁸⁵

While the mandate provided by the Swedish Parliament was problematic, an even bigger problem was nevertheless the interpretation of that mandate. Why was an interpretation made that rendered the Swedish contribution almost useless during a number of weeks in April and May?

Three factors contributed to this: First, the political climate changed. The political deliberation process before the Swedish decision to contribute to OUP was very quick and emotive. However, many politicians did not understand what the air campaign over Libya would actually involve. As this became clear, enthusiasm declined. In mid-May,

⁸² Robert Egnell and Claes Nilsson, "Svensk Civil-militär samverkan för internationella insatser: Från löftesrika koncept till konkret handling," [Swedish civil-military cooperation in international operations: From concept to action], *KKrVA Handlingar och tidsskrift*, No 1, 2011.

⁸³ Ibid

⁸⁴ Interview with senior military officer, May 15, 2012.

⁸⁵ Ibid.

the operation was also increasingly seen as problematic. It did not quickly deliver the anticipated results as the civil war on the ground dragged on with civilians as targets. It also became increasingly clear that some of the leading contributing countries to OUP sought to instigate regime change by targeting Qaddafi and members of his family from the air. Another contributing factor to the belated political skepticism was the Swedish armed forces' response to growing criticism of not making a substantial contribution in Libya beyond political flag-waving. On the Air Force blog and when testifying before Parliament, the armed forces made it very clear that the contribution was substantial by showing reconnaissance images from the Swedish jets. These involved graphic evidence of destroyed targets that had the unintended effect of making the anti-militaristic members of the political opposition very nervous about the Gripens over Libya. Most importantly, however, the main opposition party (and the biggest party in Sweden), the Social Democrats, had elected a new party chairman the weekend before the Parliamentary decision to participate. He reversed the party position during April by stating: "The mandate has a time limit. I find it hard to imagine an extension [beyond the initial 90 days]". 86 While this was not taken very seriously at the time, it fuelled the political nervousness about Sweden's contribution in Libya and thereby also had an impact on the interpretations of the mandate.

Second, the actual "order" regarding the limited interpretation of the mandate came from the Swedish Defense Ministry. The armed forces received a very clear instruction from the Undersecretary of State for Defense that the "agreement with the opposition is extremely important", and that no transgressions could be allowed.⁸⁷

Third, the armed forces, and especially the Air Force, were very pleased that the long-standing political ban on fighter jets in international operations had finally been lifted with the decision to contribute in Libya. Therefore, they exercised great caution in the interpretation of the mandate in order to make sure that the political leadership would not have to regret the decision.⁸⁸

⁸⁶ Håkan Juholt cited in "Oenighet om svensk Libyen-insats," [Disagreement about the Swedish operation in Libya], *Svenska Dagbladet*, April 29, 2012, http://www.svd.se/nyheter/inrikes/oenighet-om-svensk-libyen-insats 6125889.svd.

⁸⁷ Interview with Maj. Gen. Anders Silwer, May 14, 2012.

⁸⁸ Interview with the Delegation of Sweden to NATO in Brussels, May 14, 2012.

These three factors meant that the NFZ caveat that was initially a mere bureaucratic convenience hardened into a very real and harsh interpretation of the mandate. The Swedish contingent was thereby hindered from playing the role it could have until the mandate was changed in June 2011. The initial mandate was unnecessary and based on misunderstandings. It was then followed by an unfortunate interpretation that did not reflect the intentions of the policy-makers – all due to political infighting and poor communication within the civil-military interface.

The political bickering continued during the debate regarding the extension of the Swedish contribution. The chairman of the Social Democrats had by that time invested much prestige in the position that the mandate of the Swedish jets should not be extended. Instead of the jets he suggested a naval contribution and a boarding force in order to save face. The political compromise that resulted from the negotiations involved withdrawing three Gripens while offering a boarding force. The boarding force, while it was indeed on the list of requested assets in the initial Combined Joint Statement of Requirement (CJSOR), was really unwanted at this stage of the operation – especially when it was being offered without a ship. This was well known within the Swedish administration, but in a complete bureaucratic circus Sweden was still obligated to offer a force no one wanted, and NATO was forced to politely decline the kind offer to allow Swedish politicians to save face.⁸⁹

CONCLUSIONS AND RECOMMENDATIONS

Given that it was the first foreign deployment of Swedish combat aircraft in nearly 50 years, the operation can from a Swedish perspective be described as nothing short of a major success – in political and diplomatic terms, as well as, for the military, as an acknowledgment of well-functioning training and technical systems. The operations in Libya also provided a useful opportunity to develop and refine these systems. While the list of positive lessons could certainly be made longer than the one below, it is nevertheless more useful for the purpose of this chapter to focus on those aspects that were more problematic and that can be improved for future operations. Opportunities for

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improvement exist not only within the Swedish armed forces, but also in the relationship between NATO and Sweden as a partnership country.

First, in relation to NATO, there are a number of positive lessons from the operations in Libya. Swedish soldiers and officers, as well as their technical systems, not only displayed great competence in international comparison but also an advantageous compatibility and interoperability with NATO forces. The Swedish military displayed that it has useful air capabilities that, if allowed, have the potential to be quickly integrated into NATO structures. It can, therefore, be counted on in the future not only to provide political legitimacy, but also substantial operational capabilities and effects. Other positive aspects include the increased openness towards troop-contributing partnership countries. From a Swedish perspective this was highly appreciated, and the hope is that it will serve as a new benchmark for future NATO operations. Finally, the invitation of liaison officers and staff at all relevant levels of command was not only highly appreciated but also considered essential for the operational integration and effectiveness of the partnership country contributions.

On the negative side, the non-member conundrum of not having access to information, planning, and negotiations before the formal commitment of forces is a challenge that makes the pre-deployment planning difficult for partnership countries. The formal process for the inclusion of partners in operations is clearly too cumbersome for cases such as this, and there is a need for a new framework with greater flexibility and shorter time frames. Moreover, access to NATO mission secret networks proved highly problematic for partnership countries at the onset of operations. The alliance's procedures were truly cumbersome to navigate in order to complete requests for such access, and the alliance also proved to be overly bureaucratic when dealing with the Swedish request. This meant that Full Operational Capability was delayed, as was the full C2 integration of the Swedish jets. Given that coalition operations involving contributors beyond the NATO members is the norm rather than the exception in the contemporary context, policies and procedures to fully integrate troop contributors must be further improved in order to maximize operational efficacy. There are several ways to improve the processes as displayed in Libya. The most radical way would be to create standing agreements between common contributors and NATO that take effect as soon as

a formal commitment is made. A less radical way of improving the procedures within the existing framework is to train more realistically by going through these formal processes in international exercises. This would provide the necessary knowledge of the formal processes among partners, as well as the necessary experience within NATO to deal with the requests. Whether NATO reforms its policies for including partner countries or not, the partners must always have a very good understanding of the formal processes required for access to NATO secrets, as well as standard operating procedures for these processes. This is particularly important in air campaigns that often require faster processes than traditional stability operations involving ground forces.

Looking at the Swedish conduct of operations, another positive set of conclusions can be drawn. First and foremost, for the Swedish Air Force the operation displayed that its systems work. The quality of images and analysis, as well as the competence and flexibility of the technical and human systems, meant that the initial international skepticism towards the Swedish contribution was transformed into great appreciation. Worryingly, however, the armed forces worked at maximum capacity for air reconnaissance during OUP. While many more missions can be flown and pictures taken, the limiting factor is the number of deployable photo interpreters within the air force. Nonetheless, at the political and military strategic levels, the quality of the Swedish contribution created plenty of bilateral goodwill for Sweden – particularly within NATO and in the United States. This is something to carefully nurture for the future.

On the negative side, the political strategic level again made unnecessary mistakes that limited the potential positive impact of the Swedish contribution. This was partly based on misunderstandings due to a general problem with a defunct civil-military interface within the Swedish system that led to poor strategic thinking. It was partly based on more situation-specific political bickering, which was allowed to influence operational decisions too much. These are very familiar problems from past operations, and it seems that serious reforms of the civil-military interface are necessary to overcome the deficiencies.

With Operation Atalanta in the Gulf of Aden, and Operation Unified Protector in Libya, Sweden has taken two important steps as a credible contributor to international peace operations by moving out of its comfort zone as it deployed naval and air capabilities. OUP in Libya was clearly a continuation of Swedish ambitions to play a substantial role in international crisis management, and it is therefore unlikely that it was the last time Sweden will operate under the NATO banner. There are therefore good reasons for Sweden and NATO to continue making the procedures for partnership contributions to NATO operations as efficient and frictionless as possible. While OUP was in many ways a substantial improvement in terms of information sharing and operational integration of partner countries compared to KFOR and ISAF, there are still a number of issues that can be improved. Part of this involves learning from past operations and changing the policies of the organization. Other parts are best developed as lessons from realistic exercises that force the organization to go through all the formal motions of partnership contributions. If this seems too cumbersome to introduce in exercises, it is probably a good sign that the procedures and policies need to be changed before the next international contingency arises.

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