CAOC Finderup

1993 - 2013

-1-



INTRODUCTION

Since the middle of the twentieth century, coordinated air operations have been carried out over the northern part of Europe. Combined Air Operation Centre Finderup has played an important part. Since the end of WWII, NATO has focused on the area North of Norway and the Baltic Approaches. The centralized Air Command for the northern part of NATO was integrated in the Command Structure and the air defences kept a high alert against a possible WAPA aggression. An important Command Central was constructed in a very modern bunker on the moor of Finderup, outside Viborg in Denmark. After the end of the Cold War, NATO adjusted and so did the Air Command Structure. CAOC Finderup became one of the pivotal points in this structure, and its personnel became engaged in the new NATO security environment, from the bunker as well as from deployed sites.

This little book will tell the story of more than 20 years of international air operations conducted from CAOC Finderup. It is a tribute to the men and women who served there over time.

Enjoy the reading

HENRIK RØBOE DAM COMMANDER CAOCF Major General

Back to Tables of Contents

TABLE OF CONTENTS

CAOC Finderup 1993—2013

Published by: Flyvevåbnets Historiske Samling

© Copyright: Flyvevåbnets Historiske Samling 2013

Editor: Colonel Søren Falk-Portved

Layout: Bent Aalbæk-Nielsen

Print:: Forsvarets Trykkeri

ISBN: 978-87-92351-06-7



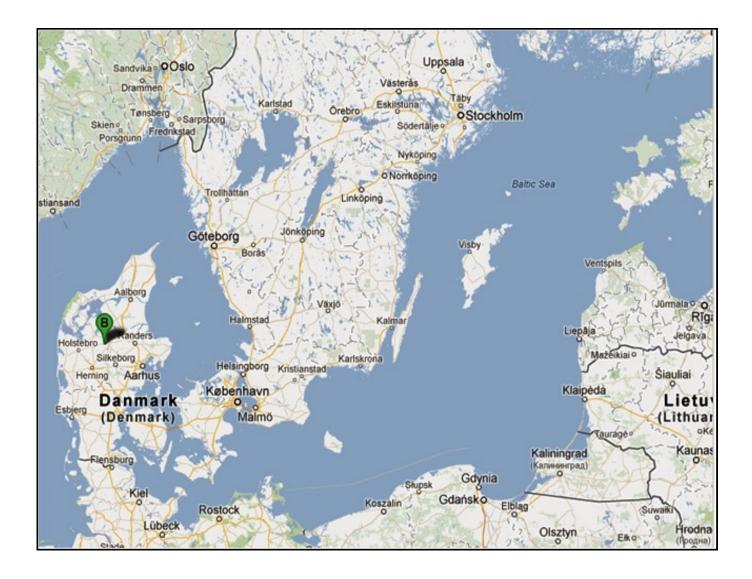
The insignia for Combined Air Operation Centre Finderup has, at its centre, the sword of Component Command Air Ramstein. Component Command Air Ramstein is the Headquarters responsible for all NATO air activities within the Northern Region. To the left and right of this protective sword are the nations: Iceland, United Kingdom, Denmark and Norway, within whose airspace all NATO air activities is the responsibility of CAOC Finderup – most important the air policing by NATO Quick Reaction Alert assets as indicated by the aircraft symbol. Three aircraft tracks merge into one to symbolize the amalgamation of former CAOC Finderup, CAOC Reitan (Norway) and CAOC High Wycombe (UK) into CAOC Finderup. The NATO crest on the top right indicate the three seas surrounding Denmark, the Host Nation from which CAOC Finderup operates.





Background

On the peninsula of Jutland, some 20 kilometres west of Viborg, lies a sparsely populated moor in the middle of the Kingdom of Denmark with just a few villages scattered around. One small village became world famous, when the Danish King, Erik the Fifth, was killed in the church barn of Finderup on 22nd November 1286. The village is still there. Today, the area around Finderup is a military training ground, and in 1969 was selected to house one of NATO's static military headquarters.



The Kingdom of Denmark, situated on the approaches of the Baltic Sea has, throughout time, been of strategic significance. In 1429 a toll was imposed on all shipping passing the narrow strait of Øresund. For many years the dues paid represented a major part of the King's revenues. However, under pressure from many major seafaring nations (England, Russia and the United States of America) the dues were revoked in 1857.

Back to Tables of Contents

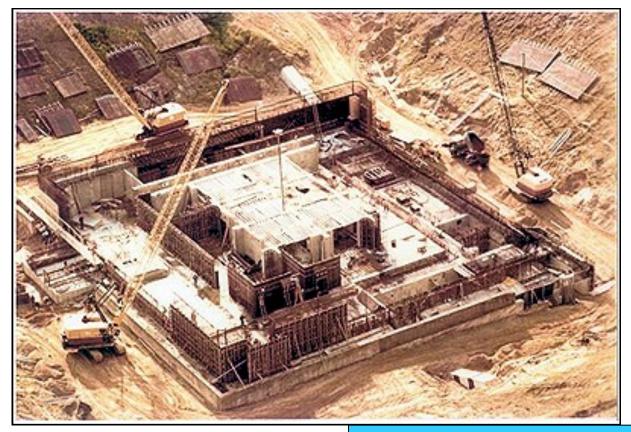
BALTAP

When NATO was formed in 1949, the importance of the Baltic Approaches was again evident. The Iron Curtain divided Europe just to the east and south of Denmark. Control of the strait was paramount to the NATO nations' strategic concept, and in 1961 the NATO command "Allied Forces Baltic Approaches" (BALTAP) was formed in Karup. The Baltic Sea had clearly become one of the front lines in the Cold War. BALTAP was placed at the third level of NATO command as a Principal Subordinate Command. BALTAP was given the joint responsibility for the territories of Denmark, Schleswig-Holstein and Hamburg in Germany north of the river Elbe, the entire Baltic Sea, the Danish Straits and part of the North Sea, plus the airspace above these areas.

During the Cold War there was special

emphasis on air defence and the daily surveillance of NATO airspace. The task included air policing with armed missions against violations of NATO airspace and national airspace. Air defence was and is a minute-to-minute task, whereas other tactical air operations during the period of the Cold War were primarily a matter of pre-planning and regular scheduled exercising of assigned air assets.

The peacetime headquarters for BALTAP was situated at Airbase Karup, south of Viborg. In crisis and war there was a need for a hardened facility nearby, for which the area to the north of the Airbase was selected. The military training ground around Finderup provided the ideal location. Planning for the construction started in 1969 and ground was broken in 1977.



Women's Peace Camp at Ravnstrup

In the early 1980s, protests against the NATO forces were growing in the peace movements around western Europe. In the mobile launching platform-mounted SS-20 missiles the European NATO members saw no less a threat than the strategic intercontinental missiles, and on 12th December 1979, NATO

to be based there. Inspired by the Greenham Common Women's Peace Camp and the ongoing constructions at Finderup, a Women's Peace Camp was established in July 1984 near Ravnstrup, on the outskirts of the building site.

The main purpose of the Women's Peace

took the so-called NATO Double-Track Decision. This decision intended the deployment of 572 equally mobile American middlerange missiles (Pershing II and **BGM-109** Tomahawk Gryphon Ground-Launched Cruise Missiles). Greenham Common Women's Peace Camp was a peace camp



Camp at Ravnstrup was to protest against the building of the NATO bunker. Secondly, the protest was directed against the nuclear arms and the male dominated military structure. However, the Peace Camp was also a reflection of the social trends at that time. A few women stayed permanently at the camp, several others stayed only

established to protest against nuclear weapons being sited at RAF Greenham Common in Berkshire, England.

The camp began in September 1981 after a abandoned in September 1985, several Welsh group, Women for Life on Earth, arrived studies were conducted to determine its socioat Greenham to protest against the decision of political impact, and how: "The Power of the British government to allow cruise missiles Disobedient Women" changed the world.

for shorter periods, when direct actions against the bunker building were conducted. After the Women's Peace Camp at Ravnstrup was

Bunker 7

After almost eight years of construction, the bunker was ready in 1985. It was handed over to NATO on the 19th November 1985 as "Bunker 7". Except for the small pavilions and a few antennas above ground, very little could be seen from the outside and it looked like just the antennas on top of Bunker 7, or through another small hill on the moor.

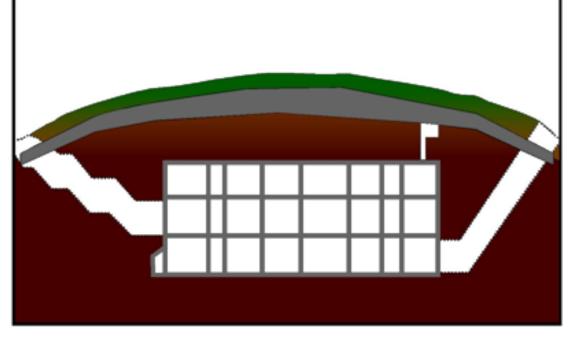
Bunker 7 comprises three decks. Air conditioning, power plant and water facilities as well as a cafeteria occupy the bottom deck; air operations are controlled from the middle deck, and communications systems and other offices take up the top deck. A 95-step staircase gives you access to the middle deck through a number of gates and turns. A service entrance with a lift gives access to the bottom deck. On top of it all is a number of protective layers designed to withstand most known weapon types.

At the time that Bunker 7 was handed over to NATO in 1985, it was the most modern and secure facility in the whole of NATO. Subma-

air circulation purged CO2, generators provided electrical power, and food storage facilities and dormitories provided basic comforts.

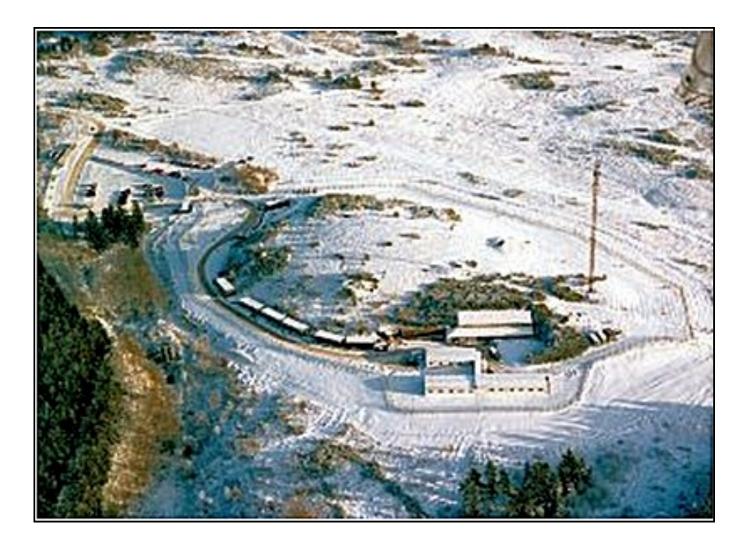
Communications flowed either via means of the many kilometres of wiring. The wiring and fibre-optic cables were brought into Bunker 7 through the underside by a sophisticated entry point. The Bunker systems were also secured against any threat from electromagnetic pulse. Wiring was led from the bunker via a sandfilled tunnel and connected at distance to various junction points. NATO CIS Services Agency (NCSA) had a small detachment on site and was responsible for maintaining all communications systems. With new technology and increasing need for high speed communications, Bunker 7 became a critical communications node for NATO and Denmark, servicing the major part of official communications from Danish authorities to the

rine-like, it was built to accommodate some 400 personnel for more than a month, without resupply from the outside world. Water was provided from two wells,



world. Data and telecommunications to the Maritime operations and international operations in Afghanistan and elsewhere went through Bunker 7.

The daily support, protection and maintenance of Bunker 7 were the responsibility of the Joint Host Nation Support Group, a Danish military unit. Safety and accountability of personnel working inside the bunker were, of course, vital. The guards, therefore, were also trained as firemen, and in the event of fire and/or smoke in the bunker, were equipped to evacuate personnel. In addition, the Joint Host Nation Support Group was responsible for managing the administrative needs of NATO personnel according to international agreements such as the NATO Status Of Forces Agreement (NATO SOFA).





NATO Air Operations

An Integrated NATO Air Defence System was the NATO response to the Russian development of long range bombers in the 1950s. The need to maintain a credible deterrence when early warning and intercept times were massively reduced led to the development of an improved air defence system.

In December 1955, the NATO Military Committee agreed to develop a system based systems, radar installations, and Surface-to-Air missile (SAM) units, as well as interceptor fighters. Although some nations have caveats on their forces, these limitations are overcome by "double-hatting" each involved nation's NATO air commander with a national obligation.

The fusion of the air defence structure gave BALTAP a special organisation. Commander Tactical Air Command Denmark (TACDEN)

on four Air Defence Regions (ADRs) coordinated by the Supreme Allied Commander Europe (SACEUR). Starting from 1956, early warning coverage was extended



would, at a certain point, hand over his forces to Commander Air BALTAP, but remain as a national commander; whereas, his Chief of Staff would become

across Western Europe using eighteen radar stations. This part of the system was completed by 1962. Linked to existing national radar sites, the coordinated system was called the NATO Air Defence Ground Environment (NADGE). By 1972, NADGE consisted of 84 radar stations and associated Control and Reporting Centres (CRC).

From 1960, NATO countries agreed to place all their air defence forces under the command of SACEUR in the event of war. These forces included command and control the alternate Director Operations at AIRBALTAP, thus alternating for Deputy Commander AIRBALTAP running round-theclock operations during exercises and in a real situation. In such a situation, most of the Danish personnel would relocate from TACDEN at Karup to Bunker 7 to conduct the same air defence and operations tasks, but now in a NATO environment. TACDEN air operations moved permanently to Bunker 7 on 1st November 1989.

Back to Tables of Contents

NATO AEW Force

. During the 1980's the overall capability of the system was significantly improved by introducing an Airborne Early Warning (AEW) system. AEW / Ground Environment



Post-Cold War

original NADGE systems giving the possibility to integrate the AWACS (the E-3 Sentry built by Boeing) information into its visual displays. Over time, the capability of the NATO AEW Force has proved its worth and

Integration Segment (AGEIS) upgraded the

remains a critical asset in any air operation.

The political situation for NATO changed dramatically from 1989 following the fall of the Berlin Wall, the dissolution of the Warsaw Pact approved the concept for Air Operations and and the Soviet Union, and the reunification of Germany. For the nations, the Alliance, and for names. Two regional Air Commands were BALTAP, nothing was guite as before. The original goal of the Alliance had been achieved: to prevent the dangerous confrontation of the Cold War leading to armed Germany, the Netherlands, Norway, Poland, conflict and to end it peacefully. BALTAP's command structure was rationalized and much Peacetime Establishment. reduced in the period 1993 – 1994. A new command – the Interim Combined Air Operation Centre No.1 (ICAOC 1) - was activated and became BALTAP's subordinate Air agency. NATO established ten ICAOCs in all. For the Northern region, air operations were centralized by subordinating directly to COMAIRCENT at Ramstein. Danish air operations became fully integrated in ICAOC 1, with due respect to the national caveats. The Commander or Director of Operations had

to be a Dane.

In 2000, the NATO Military Committee the "Interim" was removed from the CAOCs' established: Ramstein in Germany, and Izmir in Turkey. Each had five CAOCs under their command. CAOC 1 had personnel from the United Kingdom, and Denmark filling the

Concurrently in 2000, a new NATO command structure was implemented. Throughout the 1990s the European security environment had changed in an unpredictable way. In 1991, NATO agreed on a new strategic concept based on developments in Central and East Europe, and for nations aspiring to NATO membership "Partnership for Peace" was introduced, which became a huge success for the East European countries.

Back to Tables of Contents

Operation Allied Force and Kosovo Force (KFOR)

In 1993, NATO was empowered to enforce a weapons' embargo against the former Yugoslavia and later to enforce a no-fly zone over Bosnia. By 1998, the developing situation had led



command structure the number of static headquarters was reduced from 63 to 20. A new concept of NATO Reaction Forces was introduced, and the NATO air capabilities north of the Alps were brought under the

to the build-up of a potent air capability, Operation ALLIED FORCE, consisting of approximately 400 fighters. The NATO Air Campaign against the Serbs in Kosovo began 24th March 1999. Later that year, KFOR Land forces were deployed, which helped put an end to ethnic cleansing in Kosovo.

It was evident, that NATO had to adapt to the new situation. During Operation ALLIED FORCE, CAOC 1 in Finderup deployed

personnel to support the air operations over Kosovo. Offensive air operations became a priority and valuable lessons were identified. NATO forces had to become more mobile and in the new



command of AIRNORTH Headquarters at Ramstein.

For BALTAP, the new command structure meant a transition of the organisation into a new command: Joint Headquarters NORTHEAST (JHQ NORTHEAST), with no specific geographic area, but the military expertise for the Baltic Sea and a focus on the continued Partnership for Peace programme. JHQ NORTHEAST remained at Karup Airbase

> and played an important role in training and deploying forces to KFOR but, ultimately, the HQ was closed in 2002. Thereafter, CAOC 1 remained the only resident in Bunker 7.

Back to Tables of Contents

9/11

On 11th September 2001 four domestic airliners were hijacked over the east cost of the United States and used as missiles against United States with the NATO AEW Force: the targets in New York and Washington. The World Trade Centre in New York took a cataclysmic hit and there were more casualties than the Japanese attack on Pearl Harbour in 1941. In Washington, the Pentagon was hit, and the fourth plane crashed in a field due to the heroic intervention of its passengers. The terrorists' action that day changed the world and air operations forever. The loss of communication from any civil airliner was

"Renegade" and became a very serious matter. NATO immediately supported the US air defences had been designed to look outwards, not inwards. The hunt for terrorists, and Osama bin Laden in particular, began on 7th October 2001 with the US bombing of terrorist safe havens in Afghanistan and the Coalition of the willing joining together to support Operation ENDURING FREEDOM. Close Air Support (CAS) missions were used extensively to support ground operations, and the scale of logistics support required placed a

given the identification code



heavy burden on air transport.

Back to Tables of Contents

The International Security Assistance Force (ISAF).

ISAF was initially tasked with securing Kabul and surrounding areas from the Taliban, Al Qaeda and factional warlords, so as to allow for the establishment of the Afghan Transitional Administration headed by Hamid Karzai. In



October 2003, the UN Security Council authorized the expansion of the ISAF mission throughout Afghanistan, and ISAF subsequently expanded the mission in four main stages over the whole of the country. Since 2006, ISAF has been involved in more intensive combat operations

New Challenges

The wind of change continued to blow in 2003. CAOC 5 at Poggio Renatico in Italy for the On 12th June 2003, NATO's Defence ministers decided to streamline the NATO command structure, make it more flexible and efficient, and better suited to the new challenges of the Alliance. The ten CAOCs should be reduced to Commander CAOC 1 became a full time job four, plus two deployable CAOCs. In the Northern Region, CAOC 1 at Finderup and CAOC 4 at Kalkar (now Uedem), Germany, remained. Kalkar became responsible for the Northern Region's deployable CAOC, and

Southern Region's one. For CAOC 1 Finderup, work started to integrate CAOC 3 at Reitan and CAOC 9 at High Wycombe into the operational organisation at Finderup. (previously a double-hatted position for Commander TACDEN) and the national caveats for the involved nations (UK, Norway and Denmark) dictated a multi-national manning

Iceland Air Policing

Without an air force of its own, Iceland was left Icelandic airspace on several occasions. without means to patrol its airspace when the United States Air Force (USAF) ceased deploying fighter units to Keflavik Air Base in September 2006, and the U.S. Iceland Defence Force was withdrawn. Following the US withdrawal, Russian aircraft entered

During the Riga Summit in November 2006, Prime Minister Geir Haarde requested that Iceland's NATO allies assume responsibility for protecting Iceland's airspace. The North Atlantic Council agreed to this request at its July 2007 meeting. Other NATO member



that the air policing operation would target Russian aircraft, stating that "It is going to be a general patrolling exercise. We consider Russia to be our friends, by the way".

CAOC 1 Finderup was the NATO command responsible for controlling the air policing over Iceland. It constituted a routine deployment schedule by volunteer NATO nations,

states that lack the ability to patrol their own airspace have similar arrangements in place. In March 2008 Prime Minister Haarde denied which filled a welcome gap as the Russians resumed conducting Long Range Aviation activities under Putin.

Consolidation

Throughout the period 2005 – 2010, NATO continued to work on how to face its new challenges. The major challenges included, et al: enlargement; a more cost effective NATO organisation, including command structure, the challenges were primarily a change from agencies and the International Staff in Bruxelles; the US changing its security focus from the North Atlantic to the Pacific and demanding higher European engagement in NATO; the threat from tactical ballistic missiles, cyber-war, terrorism; and global use of commons media (sea, space and cyber). Therefore, in 2009, the NATO Secretary General called together an international Group of Experts (GoE) chaired by former U.S. Secretary of State Madeleine Albright. The NATO Secretary General tasked the Group with drafting a new concept of the Alliance that the geographic footprint decided. The number

would provide "a sound transatlantic consensus on NATO's roles and missions and on its strategy to deal with security challenges...." For NATO Air interests, the defensive air operations to offensive, cyber war, space, terrorism, and Ballistic Missile Defence.

At the NATO Summit in Lisbon on 20th November 2010 a new strategic concept was yet again agreed upon. At the same time, work began on implementing an Anti-Tactical Ballistic Missiles (ATBM) missile system and a reduction of NATO structures. The command structure should be reduced to 8500 posts. At a later meeting with Defence Ministers in June 2011, the command structure was agreed and

of CAOCs was reduced to two, plus one deployable. The CAOCs would be transferred to the NATO Command Structure while the existing organisation, under a Memorandum of CAOC Uedem and was expected to cease Understanding between the participating nations, would be closed. Under the new

structure, the new CAOCs would be Torrejon in Spain and Uedem in Germany. CAOC Finderup would transfer its responsibilities to operations on 30th June 2013.

outset, the US declared that it would not lead

NATO commander for it. In accordance with

US policy towards NATO, European nations

the operation, although they provided the

Libya

Shortly after the Lisbon Summit, real world events underlined the importance of the decisions taken. On 19th March 2011 a Coalition of willing employed Air Power to prevent Libya's dictator Gadaffi from carrying out a massacre of those uprising against his



Regnatico in Italy. From Day One, CAOC Finderup supported with personnel, and presented a strong presence throughout the Operation, which ended on 31st October 2011. **Operation UNIFIED** PROTECTOR marked a change in NATO operations. From the

regime. Operation "ODYSSEY DAWN" was conducted from the Air Operations Centre at Ramstein, and based on UN resolution 1970 and 1973. On 23rd March 2011, NATO established Operation UNIFIED

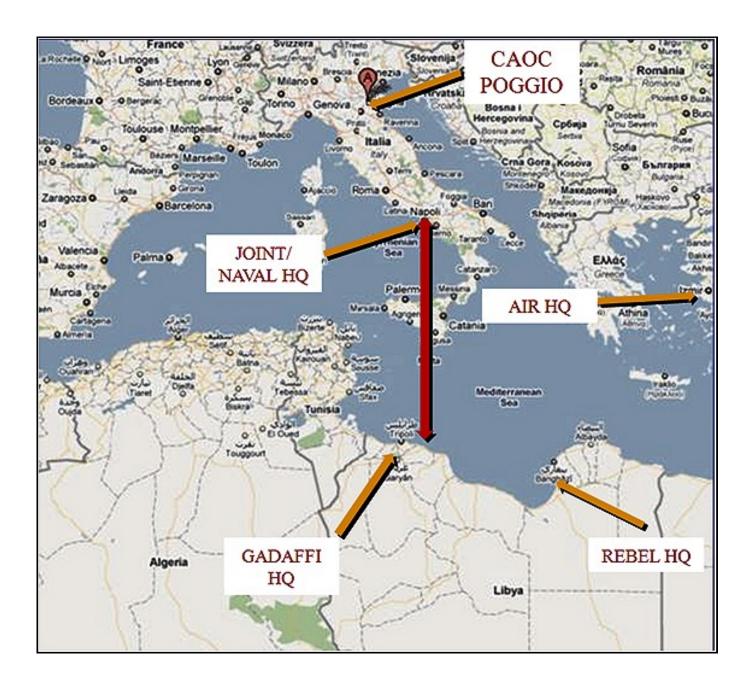
PROTECTOR, the scale of which gradually expanded during the following weeks by integrating increasingly more elements of the multi-national military intervention. Command of the operation was moved from Ramstein to CAOC Poggio



were compelled to take on a larger burden than normal for the Operation; however, without the support of US enablers (air-to-air refuelling tankers and reconnaissance capabilities) and other specialist capabilities, the Operation would have faced major difficulties. Lessons

campaign over Afghanistan were learned yet again, and the planned reduction of NATO's air structure had to be revisited. As a result, a minor adjustment in the number of posts and a The end of an era. greater priority on support of offensive air

identified during Kosovo and the continuing air operations is in the making. However, CAOC Finderup's fate remains sealed: closure is due on 30th June 2013, and Bunker 7 will be abandoned at the end of September 2013.



Back to Tables of Contents

The Threat

In the period that air operations have been carried out from Bunker 7, the threat has changed significantly, from the Cold War scenarios to the multi aspect threat facing the Alliance today. Over time, the NATO air commanders have changed their priorities and adjusted the organization accordingly. Developments in technology, economic capability, doctrine and training have played a major role in developing the means to counter the different threat. The threat facing

COMAIRBALTAP during the Cold War was somewhat different from the threat COM CAOC Finderup is facing today. Once transition to the new NATO Command Structure is completed, CAOC Uedem will have an enormous area of responsibility (all of the NATO territory north of the Alps) and combined with the increasing volume of air traffic, that all could pose an unpredictable threat; the task is challenging.

The Cold War

After the Cold War ended, and the EastWAPA was through the straits of DenmeGerman archives were opened, it was possibleThe Danish island of Bornholm was anto evaluate if the western perception of threatadvanced observation point to NATO, afrom the Warsaw Pact was justified. Formerearly warning radar there gave a goodWarsaw Pact (WAPA) members, now NATOto the NATO air defence. After World Wmembers, and the Partnership-for-Peacethe Island was liberated/occupied by thprogramme, added to the picture.Russians. Shortly thereafter, the Russian

NATO Northern Region was of great importance to the WAPA and still is to Russia today. In the far north, Norway has a direct border with Russia and their large and important military complex on the Kola WAPA was through the straits of Denmark. The Danish island of Bornholm was an advanced observation point to NATO, and the early warning radar there gave a good picture to the NATO air defence. After World War II, the Island was liberated/occupied by the Russians. Shortly thereafter, the Russians gave it back to Denmark; one of only a few territories that they abandoned. Because of that, Denmark self-imposed restrictions for NATO Forces' presence on the island – not even a US military band could visit – and the

Peninsula. The Russian Navy must secure access to the Atlantic through the waters north of Norway, which can be considered as a chokepoint. Another chokepoint for the



defence was reliant on a light Danish tank battalion and Home Guard.

In the Baltic area, NATO (BALTAP) assumed that WAPA would launch a preemptive strike to secure the straits of Denmark. The main thrust of the attack would be from Lübeck, north of the river Elbe towards the Jutland peninsula. The islands were the



radar on the Faeroe Islands was critical before the NATO Airborne Early Warning aircraft was introduced.

The WAPA flight paths were closely followed during the

target for an amphibious attack, primarily conducted by Polish forces. To prevent reinforcement and the use of NATO air power (primarily German Naval Air Arm) against the amphibious landings, the land attack through Schleswig Holstein and the southern part of Jutland, had to be speedy and in advance of the landings. NATO's preplanned operation "Hurricane" was developed to annihilate the WAPA amphibious force by air power before it reached the shores of the Danish isles. NATO planning assumptions turned out to be very accurate, however, it was a surprise to discover that the WAPA considered nuclear weapons as a form of heavy artillery and planned to use them very early in the attack.

The transatlantic link is vital to NATO, as it was during World War II. The WAPA was very aware of that fact, as the Russians are today. To prevent the WAPA Northern Fleet from disrupting the traffic over the Atlantic, NATO kept an close eye on the seas of northern Norway, in the strait between Greenland and Iceland (Danmarks Strædet), and the Faeroe Gap between the Iceland and Norway. US forces had fighters and maritime patrol aircraft on Keflavik, Iceland, and the early warning

Cold War. The supersonic flights by MIG25 were watched closely as they flew north on the border between East Germany and Poland. At times the MIG25s were tracked by the NATO NIKE HERKULES surface to air missile system and the MIGs shortened their mission by turning over Poland. The intelligence gathering flights around Bornholm and the Femern belt were frequent, and numerous test flights and exercises in the eastern Baltic Sea were watched by several nations' reconnaissance flights. Russian Long Range Aviation flew long missions from the Kola Peninsula deep down into the Atlantic and North Sea. Border violations were rare, the respect for the balance of power prevailed.

Today, it is the assessment that WAPA during the Cold War had an advantage in land forces, a small numeric advantage in aircraft, balanced and outweighed by the more advanced NATO aircraft and their flexible use, and NATO had an advantage in Navy surface vessels. NATO superiority in the air forces was one of the reasons why the WAPA foresaw an early use of nuclear weapons, before they had been used by NATO.

Post Cold War

Michael Gorbachev became General Secretary of the Communist Party of the Soviet Union in 1985. He was determined to vastly improve the poor Russian economy and therefore he introduced two major reforms: "Perestroika" and "Glasnost" ("openness and restructuring"). Furthermore he had to reduce the defense spending to finance the reform in the Russian industry and infrastructure. On that account he negotiated a large number of arms reductions with the United States. However, in March 1983, a new initiative was launched by American President Reagan: The Strategic Defence Initiative. This initiative was intended to protect the Americans against ballistic missiles, and thus undermined the balance of power and started a new expensive Force" to an "Expeditionary Air Force". arms race. Massive financial support was given to research of new weapon technologies in the US; a new form of arms race that the Russians could not afford. The weakening of Russia's economic and military power, and the mixed signals from "Perestroika" and "Glasnost", led to political confusion among the Russian allies in the WAPA, especially in East Germany. Hungary opened its borders for exit to Austria in September – October 1989, and it started an exodus of East Germans. They travelled in their heavily loaded, small oil burning East European cars - "Trabies" through Hungary and Austria, towards their relatives in West Germany. Shortly after, in November 1989, the Berlin Wall was reduced to rubble, tumbled over by happy

demonstrators. By 1991 the WAPA was history and Russia started to assemble the remaining pieces. The Cold War was over.

The World and NATO was taken more or less by surprise by the sudden removal of the well known threat against Western Europe. The new risks facing NATO was instability within Europe and what role NATO should fill in the new world order. Partnership-for-Peace was a well received initiative that paved the way for a new security environment for the Eastern European nations. NATO slowly found its feet in the conflict in former Yugoslavia and the transformation from static defence to expeditionary activity started. Most of NATO Air Forces had to transfer from a "Garrison Air

The terrorists attack on 11 September 2001 changed yet again the perception of risks facing the civilized World. NATO had to adapt and defend the Alliance beyond the territories of its member states. The threat from terrorist attack by air or other means, rogue states developing weapons of mass destruction, and the threat against the "Global Commons" (Cyberspace, Space and the sea line of communications) is real. Today, NATO is addressing them all, most significantly in anti-piracy operations at the Horn of Africa and in the stabilization of Afghanistan.

The military air activity from Russia was drastically reduced in the period of post-Cold War uncertainties and restructuring. The Russian economy has recently regained some of its former strength, and the current leadership in Moscow is determined to state in every area that Russia has status as a superpower. In the last few years, long range aviation and intelligence flights have been

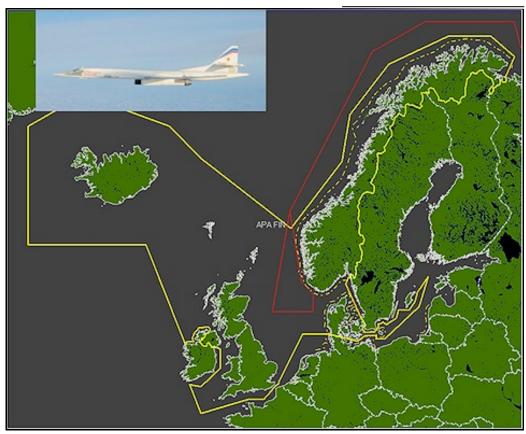
resumed in the Atlantic, North Sea and the Baltic Sea, almost to the level of the Cold War era. This remains a development to be watched by the new CAOC structure in NATO.

Daily Operations

The primary task for CAOC Finderup is to conduct 24/7 Air policing in Our Air Policing Area based on agreements between nations and NATO. The NATO Integrated Air Defence System (NATINADS) concept is the basis, where resources are allocated by the nations to NATO in peace time. In case of crisis and war time, the CAOC has an inherent task to be yesterdays operations, intelligence update, prepared to step up our manning and capabilities to either run a CAOC at full Crisis Establishment (CE) or to deploy and execute Air Operations under the Air Component at

Ramstein as the main augmentees for the Combat Operations Division and Master Air Operations Plan Production team under the Joint Force Air Component (JFAC) concept.

The 24 hour cycle of air operations follows a pattern establish during the Second World War. Morning briefing, including weather, status of forces and the execution and planning for the daily Air Task Order (ATO). In some cases a horizon of 72 hours is mandatory. However, the key to Air Power is



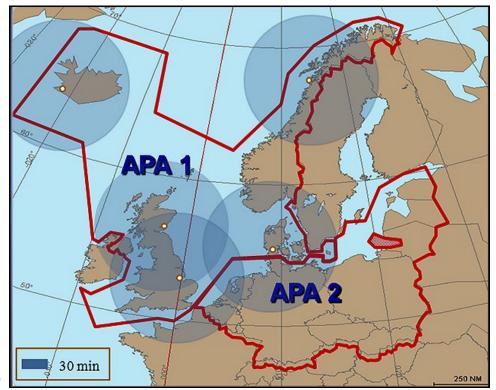
flexibility, and room is always left for the unexpected.

During the period up to the "post cold war" COMAIR-BALTAP had the function as dedicated war time headquarter for TACDEN. Consequently the "Air Detachment" had a close link to TACDEN and

hosted many Danish Air exercises as well as supporting Danish and German Naval exercises, no matter whether they were driven by national or NATO exercise requirements.

When COMAIRBALTAP and the Danish AP unit (Sector **Operations Center** Vedbæk) were transformed into Interim (I)

CAOC 1 (out of 10) under command and control of COMAIRCENT (Ramstein) in 1993 the Peace-time Establishment manning was 66 airmen. The Air Policing Area covered all of keep up proficiency in CAOC primary output the Danish Flight Information Region (FIR) with an exception in the Baltic Sea, where an extension east of Bornholm catered for an early intercept of any threats from the east. Again during this period the CAOC served many Danish as well as NATO interests. Most likely the CAOC had one of its more quiet moments, since the threat from WAPA had vanished and the Russian Air Force was transformed to maintain its air activities in a normal pattern due to the economic crisis in Russia. Besides the continuous Air Policing, the focus was therefore on supporting NATO and national training requirements, which among others included numerous NATO Air meets and daily tasking of all Danish tasked missions. During this period (I)CAOC 1 also tried to extend the support to TACDEN and



itself by implementing an ATO encompassing the full tasking of all Danish training and tasked missions. The purpose was clear, to ATO production. However, the offer to the Danish Air bases and TACDEN was not fully supported, and the Danish daily ATO project was put aside.

It was a huge success, when (I)CAOC 1 survived the NATO transformation in 2002 and became CAOC 1 out of 4 remaining CAOCs. Consequently CAOC 1 was allocated a new extended Air Police Area (APA1) covering Denmark, Norway, UK and Iceland. However, the transformation process dragged out for many years and it was not until March 2008 that CAOC 1 initially took over CAOC 3 AOR (Norway) and later the same year that Transfer of Authority (TOA) of the UK area (CAOC 9) was completed. The new Peace Time Establishment for CAOC 1 was 125 airmen and women, and it was clearly one of

the best times in CAOCF existence, with numerous new personnel coming into the CAOC. The new APA gave CAOC 1 a whole new challenge, which required extensive leadin training primarily for A3 with regards to daily AP. But the Command Group was also challenged with new dialogues with UK and Norwegian National Headquarters on their caveats for employment of QRA and command relationships on their CRCs and radars. The result of these dialogues was recorded in local Letters of Agreements (LOA), which became an essential tool for executing our daily AP functions. In general, the amalgamation went on very smoothly, thanks to the presence of very competent personnel from the nations, who were dedicated to serve both national as well as NATO interests.

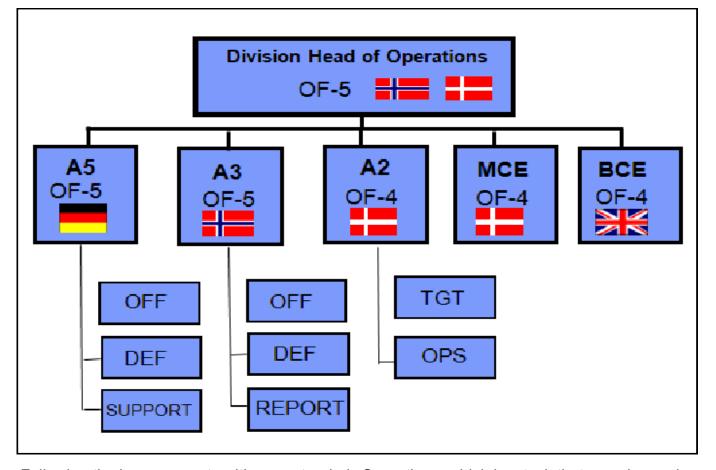
With the amalgamation, the daily AP went through a revival process. Denmark had for many years announced that the threat from the East was no longer a priority. However, Norway, with its border right next to Russia, gave the increasing Russian air activity a higher priority, and insisted on a consistent and very firm execution of the daily AP tasks. This concern and national interest was of course backed up with very detailed intelligence support from Norwegian resources. Thereby our daily AP became intelligence driven, which clearly spurred the morale and ethos of operations. Another very positive task that followed the amalgamation with CAOC3 was the adoption of the process of conducting a daily ATO on AP. Even though it was not a big ATO, it followed the principles

of planning an ATO and became well accepted as an excellent training tool for A5 to maintain proficiency and for the Command Group to be involved in the AP by attending a daily ATO release brief, which included an intelligence estimate for the APA.

In parallel to these improvements on the daily AP against non-NATO aircraft entering our APA, the threat from possible renegade aircraft became a growing concern, which in reality superseded the traditional threat from the East. Reaction time was of the essence, and therefore the processes of handling renegade aircraft became a frequent training pattern; such scenarios became a permanent part of all major exercises. In reality, the final handling of threats from renegade aircraft was a national responsibility. The CAOC's main task was to handle the initial part of such a scenario in the best possible manner by either having our QRA on highest possible alert or if the situation dictated so, airborne on course towards the possible renegade aircraft and from there to be prepared to facilitate a seamless TOA of NATO QRA to National Authorities. Any civilian aircraft having loss of communications automatically raised suspicion on the possibility of having a renegade situation in progress. Since COMLOSS was a common event, alertness was always high on the OPS floor. Luckily enough, we have not yet experienced any genuine renegade situations in APA1.

The NATO Command Structure with 4 CAOCs, initially under COMAIRCENT and later Air Component (AC) Ramstein, gave birth to our final name as CAOC Finderup with a PE receive 1 augmentatee from Turkey in 2010, of 125. As mentioned, the Final Peace Time Establishment was never approved. France and Greece therefore never filled their bids for manning in CAOC Finderup, but we did

making us a 7 nation MOU CAOC. The highest number of personnel counted on our PE at any time was 94, out of which 64 were engaged within the Operations Division.



Following the improvements with our extended APA in 2008, the Air Component at Ramstein introduced a new concept for Air Command and Control; the Joint Force Air Component (JFAC) concept, which builds on having one Air Operations Centre embedded under the Air (MAOP) team as part of the Ramstein JFAC Component umbrella versus having the planning and execution of Air Operations delegated and executed by several CAOCs. The JFAC concept resulted in the northern CAOCs (Uedem and Finderup) having a much closer cooperation with our higher headquarter. Furthermore, it made much better use of our scarce manning for Crisis

Operations, which is a task that goes beyond our Daily AP. As time went by, CAOCs Uedem and Finderup took full ownership of providing manning for the Combat Operations Division (COD) and the Master Air Operations Planning organization. The annual training cycle included 2 JFAC exercises every year, and from 2008 CAOC Finderup became used to spending much time on the German autobahn travelling to and from Ramstein in buses or vehicles for up to 14 hours to save cost on our travel budget.

The close relationship with CAOC Uedem

Operation Unitied Protector February-October 2011

and exercise scenarios for our individual CAOC training. Exercising with the Air Component and CAOC Uedem further helped CAOC Finderup get an insight into operational areas, where we did not have either the expertise or the manning to cater for all subject areas. All in all it increased our knowledge on Air Power and enhanced our interoperability and supported the aim of developing trained airmen and women, ready to "plug and play" into a JFAC structure, if and when we were to be called for a Crisis Response Operation. That happened when "Operation Unified Protector (OUP)" was launched to protect civilians in Libya. Despite the command and control of the air operation being under the control of AC Izmir and CAOC Poggio-Renatico, CAOC Finderup provided essential augmentation to CAOC Poggio-Renatico from the very beginning of the operation. This contribution was our seal of proof, for dedicated training and preparation for combat operations, and from many nations it was acknowledged that CAOC Finderup "punched above our weight" during OUP.

OUP showed that CAOC Finderup had made a huge step forward from being primarily a defensive oriented "Air Detachment" under COMAIR BALTAP to a diverse CAOC

further led to adopting similar training conceptsrepresenting Offensive, Defensive, Air Supportand exercise scenarios for our individualand Missions Analysis capabilities as well asCAOC training. Exercising with the Airsubstantial expertise within Intelligence,Component and CAOC Uedem further helpedSurveillance and Reconnaissance (ISR)CAOC Finderup get an insight into operationaloperations. With OUP, many lessons wereareas, where we did not have either thelearned with regard to the improvement ofexpertise or the manning to cater for alloperational procedures as well as the need forsubject areas. All in all it increased ourNATO Air headquarters to train moreknowledge on Air Power and enhanced oureffectively for Crisis Response Operations.interoperability and supported the aim ofCAOC Finderup came out on top of thedeveloping trained airmen and women, readyoperation and took a natural interest in takingto "plug and play" into a JFAC structure, if andforward as many experiences as possible intowhen we were to be called for a Crisisthe JFAC structure under AC Ramstein.

In the summer of 2012, AC Ramstein promulgated a concept for the augmentation and supplementation of the new single JFAC (AC Ramstein). The concept addressed the need for standardization within CAOC training in order to fill posts within Combat Operations Division and the MAOP team and the need to identify a Lead CAOC to facilitate this task as well as keeping track on manning available for collective training, exercises and eventually Crisis Operations. Since all the future CAOCs (Uedem, Poggio and Torrejon) are fully engaged in their transition and especially build up of the new Air Policing sector, CAOC Finderup - despite our destiny as closing entity - was honoured to be appointed as the first Lead AOC for 2nd half 2012 and 1st half 2013.

	2012	2013		2014	2015	2016
				(NRF)		
Lead D-AOC	CAOC		Callerative		CAOC	CAOC
	Finderup		Collective	Torrejon	Uedem	
1 st Supporting	CAOC		DACCC Lead		CAOC	DACCC
D-AOC	Uedem			Uedem		
2 nd Supporting	SR			DACCC	CAOC	
D-AOC	CAOCs					Torrejon

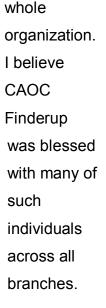
Consequently, CAOC Finderup used all of its operational knowledge to update the manning and procedures for Combat OPS Div and MAOP under the JFAC- a task which is still in progress, but most definitely makes CAOC Finderup a relevant CAOC until its closure. The completion of the Lead AOC task will take place in June 2013, when a small team will travel to Ramstein for the last time for exercise RAMSTEIN AMBITION 13 to mentor CAOC Poggio and their new team as the "incoming" Lead AOC.

had 2 inspections, both passed with a "well satisfactory" in all areas.

One can wonder how we achieved all of these good results. First of all, through solid teamwork and secondly through constructive cooperation with our sister CAOCs, most of all Uedem and similarly, AC Ramstein. Another observation is that a few individuals with exactly the right expertise and a positive approach to share their wisdom with other airmen can have a substantial impact on the

To complete the overview of daily Operations at CAOC Finderup, it must be said that we received TACEVAL inspection teams on numerous occasions. In 2012 we even

One out of many CAOCF airmen, who went to CFAC HQ at CAOC Poggio Renatico during OUP. Col Skov went as DH COD in Oct 2011, here presented with his two COD Staff





Back to Tables of Contents

CAOC Finderup Exercises

As soon as the Interim CAOC1 became Fully *Operationally Capable* (FOC) in 1994, the unit commenced a vigorous training and exercise schedule. The members of the CAOC were trained individually and as a team, participating in different kinds of exercises. Generally, there are three types of exercise:Live Exercises (LIVEX); Command Post Exercises (CPX); and Computer Assisted Exercises (CAX).

LIVEXs involved the participation of real weapon systems and aircraft.

In CPX. procedural processes are tested and normal means of communication are used for the training of procedures and internal cooperation.



was aimed at training the entire CAOC in specific parts of the CAOC tasks. The small scale exercises, e.g. Exercise Northern Cloud, which could be planned and made ready for execution within a few hours, were conducted as often as required and sometimes several times a week in order to maintain personnel's currency.

The larger scale exercises, such as

Exercise Northern Wind, required many months of planning and involved staff from all branches and would normally be conducted once per year, but could, in preparation for a major exercise e.g. Exercise Bold Ambition, be conducted as many times as 4 times within

Live weapon systems don't participate.

Developments in computer technology enabled CAX, which have gradually taken over coordination with other units, including from CPXs and to a certain extent also LIVEX, due to the high cost of LIVEX. These exercises were of varying scales and complexity.

The CAOC would plan and execute a number of internal exercises e.g. Exercise Northern Cloud in order to train or qualify individuals in their specific roles. Another exercise was Exercise Northern Wind, which one year.

Other exercises were designed to train the subordinate units, sister CAOCs and higher command e.g. Allied Air Component Command (AACC) Ramstein.

The Bold Aspect exercises were aimed at training the CAOC and the Control and Reporting Centres (CRC) within the NATO Integrated Air Defence Ground Environment (NATINADGE) in collective defence.

in the Southern Region under AACC Izmir command and CAOCs and CRCs in the Northern Region under AACC Ramstein command being trained in their static location. Later, the exercise developed into more of a Peace Support Operation/Crisis Responds Operations (PSO/CRO) scenario as was common for most exercises during the late 90's.

The Bold Ambition type of exercises were CPX/CAX exercises led by AACC Ramstein, where the Northern Region CAOCs in turn would be exercised in all of their tasks. These exercises were very comprehensive and complex, requiring a large staff conducting planning over many months prior to execution. This exercise was later developed into an AACC Ramstein exercise, where members of the CAOCs would man the Air Operation Centre (AOC) at AACC Ramstein. These exercises are named Combined/Joint exercises, which means that multiple nations and also land and/or naval component forces participate.

Throughout its existence, CAOC1 has supported National Exercises, in regards to the production of Air Tasking Orders (ATO) and Airspace Coordination Orders (ACO). An example is DANEX, which is a Danish Live Naval exercise with participation from other neighbouring countries and live flying as part of the scenario. The air assets would primarily act as Opposing Force (OPFOR, later renamed Situational Forces - SITFOR).

It was a requirement that the NATO

This exercise involved CAOCs and CRCs both Integrated Air Defence maintained efficiency at a high state of readiness. This was verified by Tactical Evaluation (TACEVAL) Teams from SHAPE (Supreme Headquarter Allied Powers Europe). These teams would turn up without warning and conduct an exercise using live flying assets planned in a way that would test the unit's ability to conduct operations and tasks as expected.

> In the timeframe from the fall of the Berlin Wall to present time, the exercises developed more and more from typical Cold War scenarios to Peace Support Operation/Crisis Responds Operations (PSO/CRO), which fundamentally changed the CAOC role from operating out of its static location in a wartime environment to being deployed into an unfamiliar geographical and geostrategic setting. This was a huge challenge, which the CAOC performed with flying colours, best illustrated by the Libyan operation in April 2011. Four days into the conflict, CAOCF personnel arrived at its sister CAOC in Poggio Renatico, Italy, to support the UN-sanctioned NATO operation. The Operation, called "Unified Protector", was tasked with protecting the civilian population in Libya from atrocities committed by Colonel Kaddafi's forces. CAOCF supported the operation with personnel from the very start until the operation was terminated 31 Oct 2011. This was a good example of the CAOC's state of readiness, commitment and professionalism the result of its continual training.

Following the experience gained during Operation Unified Protector (OUP), it was

recognised that NATO lacked significant expertise in the engagement of Time Sensitive Targets by Air. For this reason, a comprehensive training package was developed by CAOCF's A7 Training and Exercises Branch to rectifythis shortcoming. Standard operating procedures were refined and training was conducted on the targeting software tool 'FAST' which facilitates the rapid planning of dynamic targets. This pioneering training is now being rolled-out across NATO and represents one of the final legacies of CAOCF to the new NATO Command Structure.

Similarly, whilst OUP was ongoing, NATO offered to Uedem, so that the experience of Air entities had little capacity to continue major complex exercise planning can be perpetual Air exercises due to the diversion of personnel within the new NATO Command Structure.

to support the operation from CAOC Poggio-Renatico. Fortuitously, however, CAOCF has just completed its major annual exercise (Ramstein Apex Finderup) prior to the beginning of OUP. With a skeleton staff remaining in CAOCF A7, it was possible to build on this initial successful exercise and to prepare a similar exercise to be conducted in January 2012. CAOCF ws the only CAOC which has been able to conduct such a complex exercise in the period from mid-2011 to mid-2012. With the transition of Air policing capability to CAOCUedem in 2013, the experience gained by CAOCFinderup will be offered to Uedem, so that the experience of complex exercise planning can be perpetuated

Social Activities in CAOC Finderup

NATO Blue Shield Club (NBSC) has its roots back in 1963 when it was established as a social club for NCOs and Airmen assigned to Headquarters BALTAP. The objective was as follows: "To promote friendship, goodwill and understanding among its members and to conduct



the Club. Individual members will have no proprietary interest in the Club, but will derive benefit exclusively through participation in or patronage of the activities for which the Club is established". NBSC was one of two mess halls in the BALTAP headquarters, the other one being the NATO Officers

such recreational and social activities which are in the judgement of the Club Committee right and proper in furthering the objectives of Club (NOC). These two clubs co-existed until May 2004 when it was decided that the two clubs should join as one. This was decided at



a General Assembly on 23 June 2004. At the same time the Headquarters in Karup, now called Joint Headquarters Northeast, was closing. The NBSC activities were taken over by the new CAOC and moved to Finderup, initially as a mess hall at a reduced scale. The first Bar-officer was a Polish officer called A. Bargiel or "elephant" as he called himself. The bar activities however, soon died out and the NBSC turned in to a club that arranged Social, Morale and Welfare activities. These activities are still conducted in the spirit of the old objectives from 1963. The activities are supported with funds from the common Morale been: 2005-2006: Erik L. Hviid, 2007: Ole and Welfare budget.

The activities are arranged and supported

on a volunteer basis by the NBSC committee and consist of activities ranging from weekly BBQ's in the summer season to family trips to Fun Parks or concerts. One of the main events for NBSC is the traditional Christmas Lunch which gathers club members and other employees from OC Finderup.

The chairman of NBSC has by tradition been a Danish officer whilst the rest of the committee has been a broad representation from each of the three units in OC Finderup and the nations in CAOC Finderup. The chairmen of NBSC in the CAOC era have Würtz, 2008-2009: Jannik Skov, 2010-2013 Kim H.H. Jensen.

Britannia House

Some time prior to 1976, some members of the UK Element started an unofficial community activity known as the "Pub". This was run with the help of the German NATO occupants of Nyvej 13, Viborg, using their basement and a dilapidated old coffee mill at the rear of the house, known as the "Depot". This property was owned by the family of a former wholesale coffee merchant "Peter Larsen" whose firm is still in Viborg. The old coffee mill was originally his storehouse and plant for grinding coffee for sale in shops in the



town. When the time came for the occupants to return to Germany, the UK Element faced the prosepct of having no suitable premises in which to continue this activity.

An application was made to RAF Support Command for a Community Centre for the UK NATO personnel, to be financed from Public Funds. Approval was obtained and the Property Service Agency (PSA) at Hannover was given the task of arranging the hire of was subsequently hired in 1978 on an initial three year lease with a renewal option.

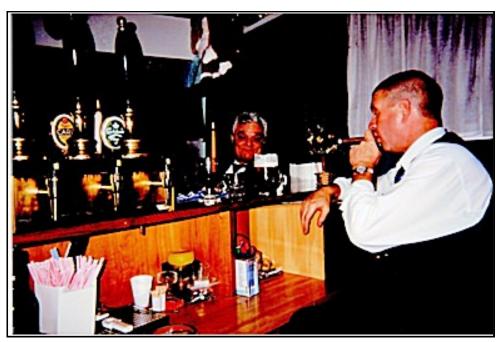
House" and the opening ceremony was performed by Group Captain R.H.J. HENCE RAF, the Senior British Officer, on 11 November 1978. The library was transferred from the Headquareters at Karup to Britannia House and other activities such as Wives' Coffee Mornings, NCOs' Pub

Nights and all-ranks Sunday Lunchtime Bar was started up. A colour TV set was obtained in 1979 with the aid of a grant from the Nuffield Trust, and a coin-operated telephone was installed in 1980 at Public expense.

A survey of the "Depot" was carried out by PSA in 1979. They recommended a modernisation programme which included renovation, complete electrical rewiring, refurbishing of central heating and panelling of suitable premises. Nyvej 13 was available, and walls. An application for this work to be carried out at Public expense was supported by RAF Support Command, but was unsuccessful

At that time the house was fairly run down and lacking in amenities. The "Depot" was, to all intents and purposes, derelict. The landlord redecorated the house, but was not prepared to do any more than make the "Depot" wind and weather proof.

The house was officially name "Britannia



because of the Government's imposition of strict cash limits in 1980. On receipt of this information the Management Committee decided on a "Do-it-Yourself" modernisation programme of the ground floor for use as an activities room. With the aid of grants from all three Services' Central Funds, some local fund raising, the generous donation of radiators by a member, a lot of specialised help from friendly local tradesmen at rock-bottom rates, and a great deal of hard work by the members, opened for business with Group Captain G.M. the project was completed inside six months at HITCHINGS RAF the Senior British Officer one tenth of the cost of the original PSA plan. It included a kitchen, a cinema projection room with cloakroom, a bar, new guttering, complete Tyler CB (late REME), Senior British Officer, rewiring, renewal of the central heating system, a false ceiling, plastering and painting throughout. To round off the project, some additional furniture and soft furnishings were obtained from MQ support at Hohne.

The building was named "The Old Coffee Mill" and was officially opened on 10 October 1980. Various regular activities such as the Cinema (films had previously been shown in individuals' homes), the Childrens' Playgroup and the Wives' Keep Fit Class were soon instituted. Various additions were made over

the next eight years including a video recorder, a cash box, a large rowing boat, three windsurfers and a range of glasses and crockery available to Members.

The building never fully met the needs of the UK Community, however, and therefore a new building in Overlund was planned and authorised in February 1988 by HM Treasury and MOD UK. Work commenced in Summer 1988. On 18 November 1988 the new bar present.

On 18 January 1989 Major General C. HQ AFNORTH, officially opened what had become known as Britannia House MK II, as 'Britannia House'. Since opening, the purpose built house has offered a wider range of facilities to Members including a comprehensive kitchen, washing machine and dance floor. For the first time there is the capability to organise dinner nights and lunches in the Community Centre, which greatly extends the scope of activity. The Playgroup moved to the building in early 1989.

"OKTOBER FEST" and other activities

The international presence in CAOC Finderup gave grounds for many different celebrations. The Germans invited annually to the bier festival in October and the Italians showed the local community, how food can be cocked with of the normally closed areas.

"passion". "Activity Days" for friends and family were frequent and once a year the gates of Operations Centre Finderup were opened for all, to give the locals a great, informative tour

Back to Tables of Contents

To make a better understanding of the different nations' customs and culture, CAOC Finderup arranged the "Day of the Nations". Food, wine and local artifacts were presented for the families. The countries are presented with pride and great creativity.







EPILOGUE by the editor

Combined Air Operation Centre Finderup and Bunker 7 have been the working environment for many colleagues from NATO nations. Over the past two years I have come to know some of these fine professionals. Although the decision for the closure of CAOC Finderup was taken in June 2011, all the personnel in the CAOC Finderup kept up the spirit, pride and professionalism until the deactivation in July 2013. New tasks in relation to the international NATO mission were resolved and the transition to CAOC Uedem was planned and executed in a professional manner.

It is with all those professionals in mind this book has been made. I thank all the contributors, and the inspiration given in the process. The present story about CAOC Finderup is a snapshot and like all history, it is a living one and perhaps some time in the future the full story might be written.

SØREN FALK-PORTVED DIRECTOR SUPPORT CAOC FINDERUP

Literature:

"Safeguarding Security in the Baltic Approaches 1962 – 2002", published by Joint Headquarter North East

"Ved Forenede Kræfter", publicished by the Danish Defence Command 2000

"Fra Asta til Skylight og Gotham 1951 – 2007", published by Flyvevåbnets Historiske Samling

Betænkning nr. 1188, Beretning fra Forsvarskommissionen af 1988

"Ulydiges Kvinders Magt – Kvindefredslejren ved Ravnstrup som Politis Proces", Aalborg Universitetsforlag 1989

34

Back to Tables of Contents

COMMANDERS ICAOC Finderup and CAOC Finderup



Major General O. Fogh 1 OCT 1993 - 31 JAN 1994



Major General L. Tophøj 1 FEB 1994 - 30 SEP 1997



Major General K.E. Rosgaard 1 OCT 1997 - 30 JUN 2000



Major General L. Simonsen 1 JUL 2000 - 31 JUL 2005



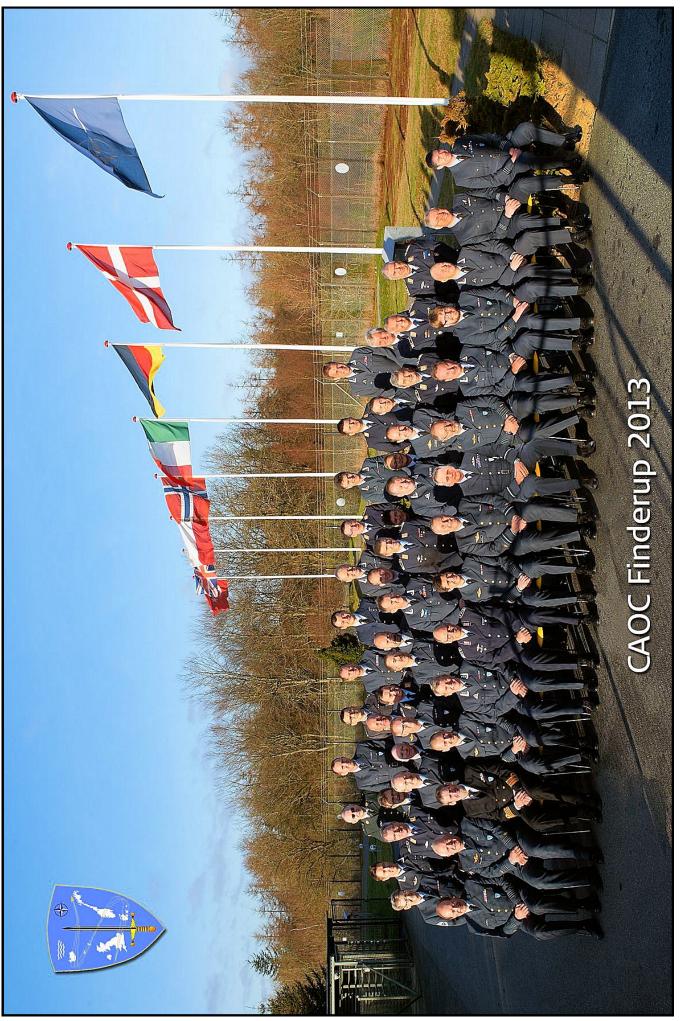
Major General S.Ø. Nielsen 1 AUG 2005 - 31 DEC 2007 06 MAJ 2009 - 31 OCT 2012



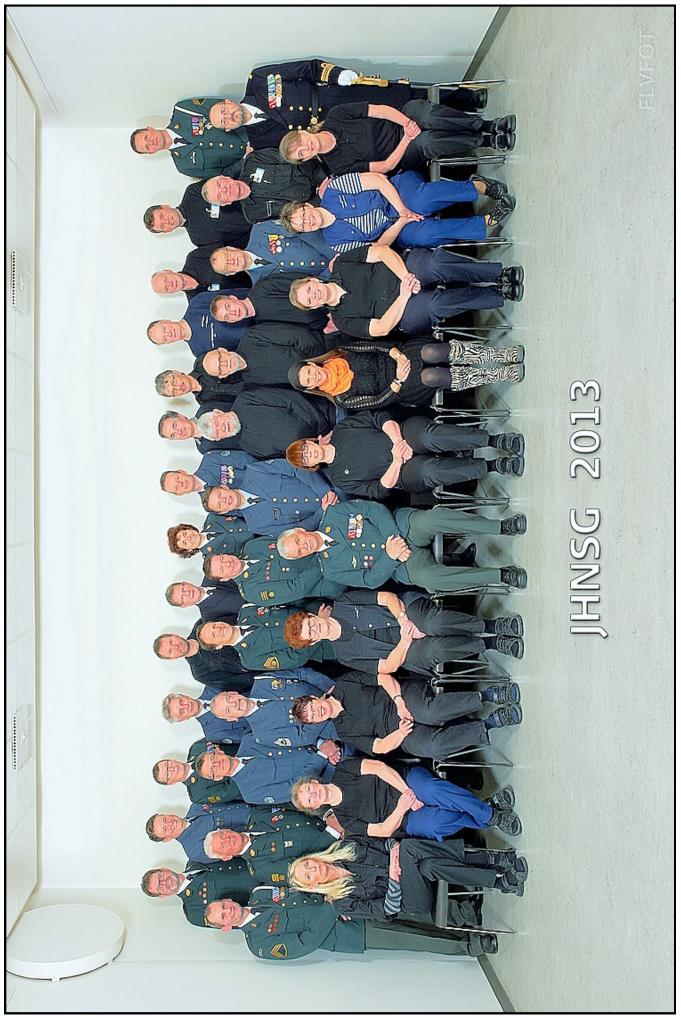
Major General H.R. Dam 1 JAN 2008 - 05 MAJ 2009 1 NOV 2012 - 30 JUN 2013













Back to Tables of Contents