

DEFENCE HELICOPTER COMMAND ON THE MOVE !

DHC ON THE MOVE, UPDATE 2012

The Defence Helicopter Command (DHC) of the Royal Netherlands Air Force (RNLAf) or Koninklijke Luchtmacht (Klu) saw life on 04-07-2008 under command of Air Commodore Theo Ten Haaf. The aim was to create a central, good organized and efficient working helicopter army within the air force which is capable to face all operational and logistic challenges for national needs and deployments abroad. An interview with Lt. Kolonel. Carlo van Tartwijk, Chief of Operations (H-OPS) of the DHC leads to an interesting view on the composition of the DHC.

CREATING DHC

Since DHC was founded at 4th July 2008 under command of Commodore Theo ten Haaf things changed. Gilze Rijen Air Base became the main location for DHC with the naval airfield at De Kooy acting as a satellite. The air force base of Soesterberg faced disclosure and the 298 & 300 helicopter squadrons with Chinook and Cougar helicopters and four remaining Alouette III in the VIP role moved to the main location Gilze Rijen to join the Apaches of 301 Squadron. Initially the AH-64D operated in 301 & 302 squadrons which were later combined in 301 'Redskin' squadron. Some Apaches were put on reserve but with the long term contribution to ISAF in Afghanistan the call upon the type was increasing and resulted in a re-appearing in service of the reserves. The implications for Gilze Rijen were a change of daily operations including more types which required other skills of the ground personnel and flight control personnel in the tower.

However the number of squadrons suggests a substantial increasing of helicopter movements in fact it was not that dramatic while many helicopters were deployed to Afghanistan. The Chinooks and Cougars were on rotation deployed to Kandahar Air Field (KAF) and the Apaches to Tarin Kowt (TK) in Uruzgan. Personnel of the different squadrons learned to work with each other in difficult circumstances. They built a close relationship and you may say by knowing each other so well the moving of the squadrons and merging it in one organisation benefit from that. The good atmosphere among the personnel and the professionalism makes Lt. Kol. van Tartwijk very proud, while announcing that his personnel faced at that time missions in one of the most dangerous war zones in the world combined with creating a new structure of the helicopter command at the home front. Not an easy task, but they managed.

COORDINATION OF MISSIONS

The squadrons historically based on different locations cooperated already for a long time and not only in Afghanistan. Now the situation changed into getting along with each other from the same place which makes planning very efficient. The pilots benefit also from the continuous ability to act with the size and flight pattern of the

other types and thereby improve their awareness. In case of sharing helicopters to a commitment, 'the shop is open' but not always every call can be answered with 'full blown' helicopters. Difference exists for planned flight activities and immediate needs. When land- and sea tasked helicopter units previous organised as the Tactische Helikopter Groep- Klu (THG-Klu) and the Maritime Helicopter Groep (MARHELI) merged into the DHC it was a new aspect to familiarize with both land- and sea operations. Naval units incorporating DHC were 860 Squadron and 7 Squadron, both equipped with SH-14D Lynx. DHC took the full responsibility to respond immediately on any Search & Rescue call to the military authorities. Dutch Lynx helicopters of No.7 Squadron however relinquished their SAR duties on July 1, 2011 leaving No 860 squadron embarking frigates the only active Lynx squadron. Six out of seven remain and one was written off after a forced landing on the coast of Libya during hostile actions. SAR duties had to be reorganised while the NH-90 was still not available at that time.

After 35 years of service the Lynx however will be phased out in September 2012, leaving a temporary gap in ASW. Two NH-90's recently went on exercise from Culdrose in Sout-West England testing the secure Link-11 datalink communication. It is scheduled for the first NH-90's to embark the frigates of the navy in January 2013. A civilian contracted SA-365N Dauphin II by Mod operating from Europort heliport provides interim night-time SAR-coverage until sufficient numbers of the NH-90 are in operational service and will be helped by the three Klu AB-412Sp from 303 Squadron Leeuwarden Air base while SAR surveillance was within the Coast Guard extended with other units such as Police AW-139 helicopters and Coast Guard D0-228 -212 airplanes. When the capacity is at full level and when necessary a 300 Squadron Cougar will add the SAR force and therefore some Cougar crews have been trained with hoisting during 2011. Further calls with immediate character above land and water can be the call for assistance to fires in the forest or evacuation flights by floods or other civilian related tasks such as anti- terrorist actions. This requires helicopter power in reserve.

REQUESTS FOR HELICOPTERS

Since the deployments to Task Force Uruzgan (TFA) were seized in August 2010 more space for operations in the Netherlands seems to be a reasonable prospect. However the outcome was otherwise when a crisis appearing in Western Europe and affected also the means of the Dutch government leading to inevitable defence cuts. The tour on duty to Afghanistan asked a lot of the military in both manpower and equipment. Requiring a main focus and issued to all personnel everybody was trained to stay over there in short intervals of 11-12 weeks in a process of five parts including home-duty, work-up period, specific training period, deployment and a post-deployment period for relief. Cougars and Chinooks were on rotation to the Air Task Force (ATF) at Kandahar Air Field (KAF) mostly in numbers of four Cougars or Three Chinooks. Also some five Apaches operated from Camp Holland in Tarin Kowt. No one could at that time have recognized the circumstance that the cougar force would be cut in less than half after homecoming. It also took quite some flexibility to change the focus of men and women of DHC to change focus to other ops. This can be training exercises to keep up skills, or transport-medevac-logistic operations for civil

authorities or disaster relief (including fire-fighting). The need for helicopter assistance has to be looked at closely before requests can be approved. Normally calls are accepted by the Onderdeels Coordinatie Centrum (OCC) which is doing the 'current ops'. Requests for a helicopter longer than two months ahead which are called 'future ops' are the kind of planned flights which the OCC transfer to the Sectie Operationele Helikopter Planning (SOHP). The SOHP has a good view on the 'calendar of capacity'. In other words; who is where and what is he doing? When the request is on short terms (< 2 months) but still planned the department of Operatie Bureau Oefen & Inzet Voorbereiding is handling this. Calls for Search and Rescue helicopters are accepted and distributed by the Coast Guard Centre and requests on immediate call can be upon OCC.

CHANGE IN APPROACH

Since 2003 the doctrine for the helicopter force changed. Lt. Kol. van Tartwijk stated that during a big exercise in Poland with an Air Manoeuvre Brigade including a combination of a tactical helicopter unit from the THG-Klu and the 11th luchtmobiele brigade of the Royal Netherlands Air Force were evaluated by an independent foreign evaluator with a positive outcome for efficiency. The focus during the Afghanistan period was mainly on counter insurgency operations which shifted the cold war low level flying to medium altitude operations to stay out of reach of Kalashnikovs. Medium altitude means different conditions and on the other hand more and more warfare techniques of today are conducted during nightly hours. These techniques are largely introduced by the ability of using night vision goggles capable cockpits. After completion of Afghanistan ops the experience of the crews was never as large and the challenge is now to keep up with this experiences. Lt. Kol. van Tartwijk mentioned a post-Afghanistan period would require a new doctrine. The Klu should also be prepared to fight in conflicts with more danger in air warfare and major conflicts asking a different input in a wider scale.

Several older weapon instructors still have the knowledge of this and after the ISAF Period the DHC focus on that with a re-evaluation at Gilze Rijen itself. A special squadron named 299 OT & E Squadron reviews the working methods by TACTESS which means Tactiek, Evaluatie, Standaardisatie en Simulatie and takes a close look at exercises in the field before deployment. They make conclusions about how effective are the operations and how effective it was planned. During 2011 political demands for a decrease of defence budget caused the sudden out phasing of the Cougar to a minimal of three examples but was shortly afterwards recognized as a hastily decision leaving an operational gap and it was decided to retain eight examples and putting nine up for sale. One Cougar was painted with a new low-chromate semi-gloss paint with less exposure in several environments including infra-red exposure. After evaluation eventually all remaining Cougars will receive this new paint during maintenance en losing the camouflaged outfit. Also the Chinooks are up for this new paint.

EFFICIENCY

Some new ideas were developed by experiences with a better interaction in the

environment, or maybe we should say what the environment requires from the helicopter. It became standard to operate with a Mobile Air Operations Team (MAOT) in a wide variety of operations. The MAOT for example knows how to handle a helicopter in areas where there is no specific know how with people on the ground such as responds on forest fires with bambi buckets. The MAOT can let the helicopter coming in and going out in a safe way, checks if the landing spot is safe and suitable and can give general directions to people in the surrounding. The MAOT is able to load the helicopter and in some conditions the machinegun is manned by the MAOT. De MAOT can also assist in a Downed Aviation Recovery Team (DART) team which consists also of technicians, pilots and security people and is tasked to recover a helicopter on the ground with failure or damage in hostile environment. New in this concept is an inflatable cover to shield the helicopter which can be quickly unfolded. The Klu does have some experiences with the DART concept obtained in Afghanistan. For combat readiness in extreme environment the DHC is going to Frosinone in Italy for mountain training and to Norway (Rygge) and Spain (Zaragoza) to train in 'Snow Blaze' and 'Sand Blaze' exercises. Both environments share the difficulty that during a landing suddenly the awareness of the pilot can be very much minimized by little particles which is called a 'white out' or a 'brown out'.

This moment can easily turn into a crisis and in the worst case a crash of the helicopter. The pilots must know how to handle in these situations instinctively and therefore some training in this environment is an absolute need. Another problem of the desert area is 'heat stress', not really for the Apaches, they have air conditioning but more or less for the transports. The Chinooks are flying with open doors in the back to have some relief. In cooperation with the technical innovation institute TNO a solution is expected by introduction of a jacket with cold cell packs for cooling but this is still in experimental phase. DHC gives much attention on the training of pilot in joint operations and drills with joint forces are regularly scheduled. The cooperation with forward air controllers (FACS) in the field is remarkably good and the combination Apache and FACS was famous in Afghanistan. Within DHC was a unique flight created when an Apache was dedicated to air show activities and besides the Boeing Company the DHC is the only unit in the world to perform stunt flying with the Apache. This type of flying is very demanding and requires a two person flying method.

TRAINING COURSES

Normally a pilot is trained on one helicopter type. Only in few occasions DHC invests in a pilot to acquire more type ratings. After initial flying training on the PC-7 with the 131 EMVO Squadron at Woensdrecht the cadet is for initial helicopter flying courses going to the United States. In a streaming process the cadets are trained in the Army Aviation Centre at Fort Rucker, Alabama on the TH-67 Creek in the Initial Entry Rotary Wing (IERW) course first followed by a conversion on the Apache or Chinook. For initial mission qualification on the Apache the pilot moves to Hood Army Airfield in Fort Hood, Texas. The Klu has eight apaches detached at Fort Hood in the Netherlands Apache Training Detachment (NATD) which operates along US Army Apaches in the huge facilities over there. The mission qualification training for the Chinook is at Gilze Rijen itself which is also the case for Theatre Qualification

Training for Apaches. Cougar, Lynx and NH-90 pilots will continue after the TH-67 Creek with a course on the Sikorsky UH-60 Blackhawk which is a comparable helicopter and conversion and mission qualification are also at Gilze Rijen or the Kooy. In future the Lynx will be replaced by the NH-90 helicopter. The Klu ordered 20 examples which will all come into service with the DHC. The 12 naval versions (NATO Frigate Helicopter = NFH) will be located at De Kooy and 8 tactical transport versions for land operations (TNFH = Tactical NATO Frigate Helicopter) will be based at Gilze Rijen. The two versions will be quite easy to convert in the other version when needs shifts. The first NH-90 was delivered in 2009 and a second one in 2010 first in OT&E phase, with transition during 2009-2013 and fully operational strength scheduled for 2014 but things seems to take more time. The first seven examples are NFH's in Meaningfull Operations Capable (MOC) versions and can only act in transport, SAR, liaison and medevac actions and will need a retrofit during maintenance with special equipment for the full spectrum of Full Operational Capability (FOC). After introduction and test completion of all NH-90's the eight TFNH's will be introduced and completed before a scheduled CH-47D Chinook upgrade will start. Delay seems somehow depending on the start of a second company course and differences in requirements after design. First the 7 Squadron Lynx crews are in line for conversion, followed by 860 Squadron Lynx crews and later on the AB-412 crews.

FUTURE OF DHC

To shape DHC is a process were we are in the middle of it is the opinion of Lt. Kolonel van Tartwijk. There will be other challenges ahead such as the implementation of the NH-90. The second location on De Kooy remains active for naval aviation and SAR flights. A third location at Deelen acts as a reserve field with fuel supply facilities but is also used for exercises for night flying and training missions with external load. If necessary the field can be upgraded to a higher operational level. Next to the introduction of the NH-90 several major upgrades are planned for the Apache, and Chinook. Also six new CH-47F Chinooks will be acquired from 2012 onwards including three directly to Gilze Rijen and three first at the Joint Netherlands Training Detachment (JNTD) at Fort Hood, Texas. The 11 CH-47D (out of 13, with two losses in Afghanistan by 'brown out') will be later on converted to the same standard by Service Life Extension Programme (SLEP). Lt. Kolonel van Tartwijk says with some twinkling in his eyes that the pilots will feel euphoric with the possibilities of the new or modernised helicopters.

The new Chinooks can land almost 'hands off' in brown out conditions, just by instruments in the new ACMS-6 Cockpit while at this moment it is hard working in these conditions. Terma's CHASE (Chinook Aircraft Survivability Equipment) will provide self protection to the Klu Chinook fleet. Midlife updates for the Cougar are cancelled. Pilots will meet a helmet mounted sight & display as new feature on the NH-90. Other new features will be improved defence systems against rockets such as the Defensive Infra Red Countermeasures (DIRCM) working on new principles. A laser beam invisible to the eyes blinds the heat seeking head of the infra-red guided rocket. The Apaches are operating with Apache Modular Aircraft Survivability Equipment (AMASE) from Terma also working with laser beams. It is not sure if

AMASE can cooperate with DIRCM or not. Probably the Apache will also be equipped with DIRCM instead. The Apaches are currently fitted with the Modernised Target Acquisition and Designation Sight (MTADS) and also other equipment will be modernised to latest standards of Block II upgrade from 2013-2016 while Block III upgrade is studied for far future. A limited number of Apaches are opted for storage. The Dutch navy will operate two LPD's when the NH-90 will come in service. Seven out of the originally batch of 17 cougars are fitted with flotation bags and utilized for actions above the sea which could be a deployment on a LPD. Exercises with two Cougars on the LPD Hr. Ms. Rotterdam have been conducted south of England and in Cold Response 2012 in Norway. Recently the Rotterdam equipped with two Cougars went to 'the horn of Africa' to patrol in a counter piracy task within NATO's operation Ocean Shield along the coast of Somalia. When the Lynx will be retired and replaced by the NH-90, the three SAR AB-412SP from Leeuwarden will lose their SAR function. Probably they can replace the current four blue Alouette III 's in the VIP role however such a decision has not been made yet. To fill in the gap because of delay of the NH-90 several Lynx helicopters received a service life extension from 7000 to 8000 flying hours. DHC introduced a system of 'ready flights' to ensure deployment at short notice for all sort of requests, humanitarian, national or under UN-flag with an aim to reach 180 flying hours for all aircrews from 2014 onwards. Lt. Kolonel van Tartwijk very much likes to work in the DHC command with dedicated people and good equipment we have a good reputation within NATO, the whole of Europe and everywhere you can find us.

[Kees Otten, Wim Das & Koos Heemskerk](#)

CURRENT STRUCTURE DHC (AUGUST 2012)

298 Squadron	Gilze Rijen	11x CH-47D
		3x CH-47F on order
JNTD	Fort Hood	3x CH-47F on order (temporary?)
299 Squadron	Gilze Rijen	Tactess, helicopters from other sqns.
300 Squadron	Gilze Rijen	8x AS 532U2 Cougar Mk.2
		4x Sa-316B Alouette III
301 Squadron	Gilze Rijen	21x AH-64D Apache
303 Squadron	Leeuwarden	3x AB-412Sp
NATD	Fort Hood	8x AH-64D Apache
860 Squadron	De Kooy	6x SH-14D Lynx, deployed on Frigates
7 Squadron	De Kooy	- training + OT&E NH-90
930 Squadron	Gilze Rijen	- Maintenance
931 Squadron	Gilze Rijen	- Support
932 Squadron	Gilze Rijen	- Logistic
990 Squadron	De Kooy	- Maintenance & Logistic
991 Squadron	De Kooy	- Support
On order:	De Kooy	12x NH-90 NFH version
	Gilze Rijen	8x NH-90 TNFH version
