

## **DHC – DEFENSE HELICOPTER COMMAND**

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### **DHC on the move**

The Defence Helicopter Command (DHC) of the Royal Netherlands Air Force (RNLAf) or Koninklijke Luchtmacht (Klu) saw life after a major reorganisation 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. Pilot & Vliegtuig spoke with Lt. Kolonel. Carlo van Tartwijk who is Chief of Operations (H-OPS) of the DHC to find out the status of DHC today.

### **Creating DHC**

Since DHC was founded things changed. Gilze-Rijen Air Base is 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 the Chinook and Cougar and four remaining Alouette III helicopters in the VIP role moved to the main location on Gilze-Rijen to join the Apaches of 301 Squadron. Initially the AH-64D operated in 301 & 302 squadrons which were later combined in 301 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 the flight control personnel in the tower. However the number of squadrons suggests a substantial increasing of helicopter movements in fact it was no that dramatic while many helicopters were deployed to Afghanistan.

The Chinooks and Cougars are 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 and he points the fact that his personnel face a mission 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 manage!

### **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 constant ability to act with the size and flight pattern of the other

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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 Maritieme Helikopter Groep (MARHELI) merged into the DHC it was a new aspect to familiarize with both land- and sea operations. DHC has the full responsibility to respond immediately on any Search & Rescue call to the military authorities. 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. As long as the deployment to Task Force Uruzgan (TFA) is ongoing the needs for helicopters at the home area have to be looked 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 were? and what is he doing? Helicopters on deployment are daily reported about the operation ability to the OCC. The tour on duty to ISAF in Uruzgan is short and frequently. Everybody is going and the sequence is approximately once a year for 11-12 weeks. Because all personnel is trained well on the job over there, short stays and short intervals are within the ability of the Klu and the most suitable choice for all. The normal procedure incorporates five different parts including home-duty, a work-up period, period of training, a deployment and a post deployment period for relief. No one is going to Afghanistan without fully training status. Currently the Air Task Force (ATF) at Kandahar Air Field (KAF) has three Dutch CH-47D Chinooks at the base and five AH-64D Apaches are on location at Camp Holland in Tarin Kowt. When the request is on short terms (< 2 months) but still planned the department of Operatie Bureau Oefen & Inzet Voorbereiding is handling this and for immediate assistance special SAR units at De Kooy and Leeuwarden are stand by for 24 hours 7 days a week.

### **Change in approach**

Since 2003 the doctrine for the helicopter force changed. 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 11<sup>th</sup> luchtmobiele brigade the including Dutch Force were evaluated by an independent foreign evaluator with a positive outcome for efficiency. Ltn. Kol. van Tartwijk told us that at that time we were positive evaluated but times have changed. Today we have our focus on Afghanistan mainly on counter insurgency operations and our training and working methods are complying with that. During the cold war we were very much trained in low level flying but the operations of today shifted to medium level 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. At this moment one Cougar helicopter is painted in a new overall grey colour which occurred to be a better camouflage in today's operations. When tests are finished and the paint gets approval other

helicopters will be painted in grey too during maintenance. Another point Lt. Kol. van Tartwijk mentioned is the commitment to ISAF caused a special focus on training but when the contribution is coming to an end the task for DHC will change too. 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 will certainly focus on that. Re-evaluation will surely happen on 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.

## Efficiency

Some new ideas were developed directed by experiences to let the helicopter interact better in the environment, or better what the environment requires from the helicopter. It became standard to operate with a Mobile Air Operations Team (MAOT) especially on missions in cooperation with civil counterparts. 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. The 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 is famous in Afghanistan.

## 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 and Lynx 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. 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 first is expected to come in service in 2011 and fully operational strength is scheduled for 2014. It somehow also depends on the start of a second company course. 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.

## Future

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 introduction 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, Cougar and Chinook. Also six new CH-47F Chinooks will be acquired in 2010 and the 11 CH-47D 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.

The Cougars will receive a mid-life update also scheduled in 2012-2014 for life extension and avionics update. 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 target acquisition designation unit of the Apache is also scheduled for a new update or replacement and also other equipment will be modernised to latest standards. The Dutch navy will operate two LPD's when the NH-90 will come in service. Seven out of the 17 cougars are fitted with flotation bags and utilized for actions above the sea which could be a deployment on a LPD. When the lynx is withdrawn from use and replaced by the NH-90, the three AB-412SP based at Leeuwarden for SAR duties 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. 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. A preview learns that the DHC will reach an amount of 2.500 personnel and at least 83 helicopters by 2014.

#### DHC Overview:

298 Squadron	Gilze-Rijen	11x CH-47D 6x CH-47F on order
299 Squadron	Gilze-Rijen	Tactess, helicopters from other squadrons
300 Squadron	Gilze-Rijen	17x AS 532U2 Cougar Mk.2 4x Sa-316B Alouette III
301 Squadron	Gilze-Rijen	21x AH-64D Apache
NATD	Fort Hood	8x AH-64D Apache
860 Squadron	De Kooy	SH-14D Lynx , deployed on Frigates
7 Squadron + OT&E	De Kooy	SH-14D Lynx, SAR & training 21x 17 still active with 7 & 860 Squadron
On order:	De Kooy Gilze-Rijen	12x NH-90 NFH version 8x NH-90 TNFH version