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## **AIRFORCE HELICOPTERS ON NAVAL LPD VESSEL**

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### **COUGAR AND NH-90 AGAINST PIRATES**

When the Lynx took leave on September 11th 2012 from the Dutch Navy base 'Den Helder' and from its Landing Platform Dock (LPD) the 'Hr.Ms. Rotterdam', we knew that the NH-90 was introduced in the Dutch Defense Forces, but the final stage for fulfilling the operational tasks however as by the Lynx had not realized yet. Debit for this situation is no doubt partly the delayed deliveries, as in most 'NH-90' countries is the case. In the background an interim solution was designed already.

### **OCEAN SHIELD**

Some countries were asked to participate in operation 'Ocean Shield' to protect major shipping routes in the North-West Indian ocean around the cape of Africa. An unusual situation existed where the Dutch placed two Airforce Cougar helicopters and their crews on a Navy carrier. Looking at the fact that the Cougars first had become victims of significant defense cuts, this was a remarkable development and comeback for 7 of them, quite a change! Part of the Cougar fleet was ever made suitable for operations from the sea and had been modified by fitting floats on the front and side with an eye toward any possible amphibious operations using these helicopters. Nobody could have ever foreseen that the Cougars would fulfill a typical maritime role. A role that consists mainly of observation and surveillance flights and the deposition of soldiers or marines by means of fastroping. Additionally, Medevac / Casevac tasks are performed, and the helicopter detachment can provide Search and Rescue capacity if needed. End of December the Hr.Ms. Rotterdam and the submarine 'Bruinvis' returned in the harbour of Den Helder with a wealth of experiences for the Cougar crews.

### **COUGAR DEPLOYED MARITIME**

Partly the Air Force crew had to prepare and exercise themselves in the art of observing the upper sea-surface, although there had been preparation, it still is a matter of doing it very often. In the recent successful actions there were three arrests of pirates, in two actions the Cougars were involved. A total of 19 pirates were captured, and assistance was given to the crew of the M.S. Orna, who was held hostage for a period of two years! A boarding team was lowered on the M.S.Orna out of the helicopter by means of fast-roping to check the physical conditions of the crew and to give some further assistance. The Cougar is quite larger than the Lynx and proved its value by its larger range and thus longer time to fly. On the Hr.Ms. Rotterdam (LPD) they also were able to get some new experiences with the larger helicopters on board prior to the coming NH-90 in time. Depending on the character of the missions medical personnel joined the crew or even a sniper team if suspected necessary. The Cougar has two pilots, no tactical operator (Tacco) but it is well armed with a gunner and a loadmaster each with their own machinegun which makes the helicopter very valuable in the anti-pirate actions. Observing the water-surface is done with limited resources and in particular the trained eye as with the SAR crews is very valuable. The Dutch Cougars are expected to remain in service for missions up to 2017. By then the NH-90 fleet is expected to be on full operational strength and tasks can be accepted in full.

### **AN EVEN MORE COMPETENT NH-90**

By the time the NH-90 will be available in the Nato Frigate Helicopter (NFH) configuration

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many more things will be within the possibilities. In addition to above mentioned tasks one can think of such as Search and Rescue, anti-submarine and anti-surface vessel actions. In a new mission to the Somalian waters the Dutch Hr.Ms. De Ruyter will be hosting an NH-90 helicopter this year, a first operational action abroad. (Seven present NH-90 in Den Helder are supplied now with initial operational capability (IOC) and an eight is delivered in Februari in full operational capability (FOC). The one on board of 'De Ruyter' is an IOC version, but it will be sufficient for the tasks in the mission area. It's equipped with a 360° radar with multiple track while scan and image enhancing ISAR-Inverse Synthetic Aperture Radar, in the nose an infra-red rotating camera is mounted. Information can be shared on the spot by data-link with other units. Surveillance and detection ability is many times better than the Cougar. The NH-90 will also be in action for purely intelligence, patrol and reconnaissance flights, and armed confrontation will not be the assignment in first order.

Though the door-gunner will have the possibility to use it in emergency, as with the Cougar for self defense. The NH-90 crew exists of a pilot, a tactical coordinator, and a sensor-operator who is also able of using the arms. Cougar as well as NH-90 have a much larger range compared to the Lynx (500 km) Cougar (900 km) and NH-90 with extended tanks 1600 km. The Lynx could carry 8 persons, but Cougar and NH-90 can handle 14 persons. On the 'The Ruyter Mission' an enhanced boarding element of the Corps Marines will join who will be in action against the pirates. This mission will certainly bring a lot of valuable information for other coming missions.

## **INTERACTION NAVY AND AIRFORCE PERSONELL**

In a number of aspects the participation in 'Ocean Shield' contained in fact two exceptional 'understandings'. First because the Lynx helicopter had been phased-out, and the NH-90 was not yet a 100% operational for this kind of actions. In addition, it suddenly was no longer a Naval action, but also Airforce personell of the 300 Sqn. of the Defense Helicopter Command (DHC) was on board. DHC also supports United Nations and NATO operations abroad. This way a complete new cooperation arose which was asked from these two completely different disciplines. This unique situation delivers the necessary questions, on which the Commander of 300 Sqn. DHC, Lt.Col. Groothuis provided his vision. he explained that the Lynx pilots had much experience on their discipline, but for the Airforce it was quite a new experience. In spite of the limited space in the hangar, they managed quite well to operate on deck. Occasionally it gave quite a challenge to tune the use of common areas, as well as on the helicopterplatform with fellow users like the Scan Eagle detachment (Army drone unit) and the boat-group. For all of them it was quite a new experience. On the other hand these people were trained sufficient in advance and they could handle their tasks well. But still... as airforce personell you just have to get yourself quickly a pair of sea-legs, and certainly there is a difference between Navy and Airforce. Marine Staff knows quite a strict separation of ranks, where the Airforce often interacts general relatively more free culture. Differences in operations also include that the Airforce is used to work more in uninterrupted periods (Bosnia, Iraq, Afghanistan) without having the chance of extensive entertainment facilities such as harbourvisits of the Navy where they occasionally after some weeks can find some entertainment. Looking back there was a very good integration with the ship and it's crew and afterwards the experiences were very positive.

## **CREATIVE SOLUTIONS**

Unexpected situations sometimes ask for creative solutions, on their turn sometimes with an international twist. One of the helicopters suffered a defect oilcooler of which there was no sparepart. It would at least take two weeks before a harbour could be visited where the sparepart could be received. To speed up this process, the oilcooler was flown in to the Seychelles, where it was transferred to a Danish detachment overthere. The Danish flew with

the cooler on board in their patrol aircraft next to the Hr.Ms.Rotterdam and dropped the sparepart on a parachute. Four hours later the helicopter was fully operational again. Another detail is that the ship is bobbing on the waves, and the Lynx helicopters were secured on deck immediately after touchdown with a kind of harpoon in a grid on deck direct beneath the helicopter. The Cougar has not been modified for this, and had to be secured after landing with lashings, a kind of straps. Also parking was a slightly different story than the Lynx. Cougar is concierably larger and still to fit two Cougars in the hangar the rotorblades had to be folded manually, a process of twenty minutes. Due to the ever thought possible situation of amphibious operations a part of the Cougar fleet was equipped with foldable rotorblades.

## **OPERATIONAL IN PRACTICE**

Lt.Col. Groothuis colors the image of the operational side a little more. Two Cougars were on board. A number of missions were flown by single Cougar, and other missions required a simultaneoud use. The deployment of the Cougars was of self-supporting character, but sometimes it was more efficient to fly to harbours in the direct neighbourhood for some materials, and in some cases the Cougars could land ashore. This could be for a reason of picking up persons such as VIP transfer (Seychelles, Mombasa) or for a 'compassionate leave' (Djibouti) in case someone on board has to go directly home because of serious illness or death of a family member at home. In the theater (Somalian coast) landing with Cougars was not allowed. Looking at maintenance there was a tight routine regarding corrosion by salt water. After every last flight of the day the helicopters got an anti/corrosion treatment, theywere completely rinsed with fresh water and additional items were inspected. The whole mission did not yield any major defects or problems.

## **COMPETENTIONS AND MISSIONS**

Asked about the compenencies Lt.Col. Groothuis explained: Over sea there is another competence needed in observation than overland. Within DHC of the Royal Airforce there are two squadrons with much experience in operating over sea and with ships. These colleagues were consulted and they shared their expertise with us. The specific part in observation during the mission was one of self-learning, obviously in alingment with the specific needs of the ship for this mission. Also in regular contact with naval staff we exchanged information and listened very carefully to them and this way experiences were shared. From all performed flights nearly 80% concerned reconnaissance along the coast. In four months over some 18.000 pictures were made and analysed of environment, how and where pirates reside and work. The photographic material not only provided data on the coastline and surroundings, but also accurate information about how the pirates work, information that can be used to have a better picture in anticipating for future missions. Actions like on the M.S.Orna are not quite without danger. Pirates are unpredictable and often unscrupulous. Last september 2012 Orna took the headlines when a crewmember was killed in cold blood by a pirate as a tactic to get his demanded ransom paid faster.

Januari 20 this year another mission departed from Den Helder for operation 'Atlanta'. The Airdefence and Command Frigate HMS De Ruyter heads to the waters of Somalia, leaving their family and beloved behind for a couple of months in order to secure safety to a busy shipping route, and to protect the (merchant) ships against hostile pirate attacks, taking hostages and murdering people by pirates.

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