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### AIR-FIREFIGHTERS WELL PREPARED

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*More and more it is important to cooperate for several independent units in larger operations these days. This goes for military operations, but on medium scale also for for instance firefighting. Not only in the own country but internationally as well. The Dutch are well developed by fighting fires at large scale and now an international cooperation has started with neighbourland Belgium to train them and to develop their skills and techniques as well.*

#### AIR FIREFIGHTERS WELL PREPARED

Large forest- dunes- and heath fires can occur suddenly out of nowhere, especially in the summer time. Not only forrestfire comes up in Greece and Spain but also in most other countries you have to be prepared. In The Netherlands there were heavy fires to be fought in the past and some major disasters are known in the flatland. Within that framework, some helicopters of the DHC (Defense Helicopter Command from Gilze-Rijen AFB) mostly also supported by one or more Chinook helicopters depending on the possibilities such as missions, maintainance, missions abroad and so on. The support request for fire-fight helicopters joined the Air Force in through the procedures of Security Area's, communications of the DHC (Defense helicopter Command). Interpretation of it depends on opportunities and gradation of a fire or emergency. Another exercise was held in the neighbourhood of Brasschaat Airfield in Belgium with Fire-fighting- and Police units where the Dutch were leading.

#### GRAVITY COMMITMENT

Firefighters and authorities shall determine what support is considered appropriate, in general, the use of two helicopters feasible and sufficient for a reasonably substantial fire. Three Cougars still continued after their official farewell in May 2011 still as extinguishing helicopter operations, (also due to the delay in delivering the NH-90) also including for fire fighting DHC can deliver for a reasonably substantial fire. Three Cougars still continued after their official farewell in May 2011 still as extinguishing helicopter operations, (also due to the delay in delivering the NH-90) also including for fire fighting DHC can deliver 'big brother' Chinook. RNLAf decides how many and which helicopters will be used, depending on availability which is determined by being in helicopter maintenance and / or use in foreign missions such as Afghanistan or recently now Mali.

#### WATERDROPS

A Cougar (also equipped with inflatable floats) takes 2,500 liters per 'drop'. A large water bag under the heli (Bambi Bucket) can be filled in most waters, rivers, channels, whatever in seconds. However, the Chinook carries a small 10.000 liters with it per drop! The Chinook however is less movable compared to the Cougar which can arrange a drop more per unit and move more 'agile' in the scenario. At one extreme so-called 'Grip-4' situation (Coordinated Regional Incident abatement Procedure, scale 1 to 4) four Chinooks and two Cougars can be used by the Air Force. The higher the (national) press (residential) and risk the greater the effort and thus fighting the fire.

#### HELICOPTERS CONTRA FIRE

The Commander of the MAOT teams (Mobile Air Operation Team) explains that the MAOT teams are the forward eyes and ears on the ground for the helicopter pilots. This goes for many situations, such as when transporting heavy equipment, measuring ice thickness or if a helicopter can land on ice, or, as here, the sideline as firefighters where the team also operates as Pbot (Pilot Bucket Operation Team). The MAOT have the specific task in the field to determine the strategy for fire fighting together

with the fire and safety regions for the turning of the wind for example, suddenly a whole new scenario can arise with its specific dangers. For this purpose special laptops are available with animated icons which show the exact positions of the MAOT personnel, fire trucks can be specified, and also the firing line can be followed on the map view. The MAOT's are in direct contact with the fire-fighting helicopters and provide information where needed, such as how a 'drop' fell, it can be a 'bad drop' and with information from the ground the pilots can adjust their tactics to a good drop. Note that the pilot does not see the result of the drop behind him.

The fire department determines by wind and existing barriers how the fire can be stopped best because often the main goal is not to extinguish the fire but stopping the primary fire line. The removal of heat, oxygen or material can stop expanding a fire, such as example a sandy road. The MAOT translates the ground tactical plan of the fire via radio contact to the pilots flying, so that the helicopters do not end up in the smoke (sight, soot and ash in the engines). New courses are also developed for unexpected scenarios. Thus trained there is a procedure in case completely enclosed by the fire, MAOT and / or fire brigade personnel who got caught in a chanceless situation, should sit down in their vehicles and remain there, so extinguishing helicopters do set up a water defense / security line 'shower curtain' around the vehicle(s). A wall of water this way is successfully placed around the 'detainees' until the fire passed them, a procedure that is exercised and proven.

## **WATERSUPPLY**

To know where the water can be found a nationwide network is mapped ranging from clay pits, ponds, fire pits, reservoirs, ditches, watercourses, rivers, canals, recreation pools etc. The Netherlands are wetlands ! Thus, in the exercise water was extracted from the 'Ijsselmeer' (lake) and the 'Heerder Beach', a recreational lake in the neighbourhood of the fire location. You don't think of it at first place, but the Army can blow a plastic reservoir and fill it with water, or even make a well in the ground with explosives, although 'the drug should not be worse than the disease'. Usually getting the water is no problem, although account must be taken of the presence and departure route, specially when it's coming from a recreation environment. When in an emergency, a bucket must be emptied or even disconnected, you can not accept the dangers for tourists bading in the sun on their towels, so they will have to be evacuated temporarily. The evaluation of exercise of this kind mostly show that the different teams work well together and are well prepared. Learning moments – even small ones - can only improve the quality again.

## **DETAILS EXERCISE**

In principle, the helicopter crews are well trained for the 'Medevac' operations. These are actions in which the description 'Medical Evacuation' may provide more clarity. But when running a fire-fight, there is not a special team for it on board, the helicopters are not equipped with a hoist, there is no possibility of a rescuer going down- down, or (whether or not injured) to hoist a person up to bring him in safety. In principle it could be, and the hoist has been mounted sometimes by foreign missions but it is not basically fitted as standard. The helicopters are limited therefore entirely to water transport. In the crisis area at all times an (emergency) landing can be made if circumstances demand it. Such an action will not be specifically coordinated through a traffic-controller, for example the AOCS in New Milligen in The Netherlands. (AOCS is Air Operations Control Station)

Often there are also 'support centers' where facilities may be available here and there. Or by a heath / forest fire in a specific region military personnel can play a major role but basically these locations are standard non-ex, or they fall outside exercise. The whole 'inside an exercise' is what is called 'component-dependent'. Each component can provide and receive information, but what is important for one unit may not be interesting for the other, so not all information necessarily has to be shared with all units. Much of the 'land-communication' does not- and does not have to reach the pilots. An example of this for instance is the communication between a fire-truck crew and a field-operator who guides the truck through the uneven terrain where holes can occur where definitely do not want to get stuck. Thus, all such procedures are regulated and scheduled within the network. However would a fire-truck be stuck in the flames, they can communicate instantly with control, and a firefight helicopter can distinguish the flames around the truck, while the men 'hide' in the truck. This procedure was also tested in The Netherlands, and can save the lives of firemen and equipment. The evaluation of the exercise showed that the different teams work well together and are well prepared. Learning moments - however small -

can improve the quality alone again. A fine example of military-civilian cooperation. Air Force in peacetime directly in the service of the citizen.

## **BELGIUM COMMITS ITSELF**

November 19 was the first joint (natural) exercise held in Antwerp nature reserve 'Noorderkempen' where some Dutch fire-fighting helicopters thus gave support to the Belgian Heli-Team Fire, a fire helicopter of the Belgian police and several Belgian fire brigade units. Main objectives were to test the Dutch and Belgian procedures, exchange of messages and testing of operational communication. It was the first time that the Dutch fire helicopters were practicing in Belgium after signing the 'Memorandum of Understanding' on implementation of bucket operations (FBO) on March 4, 2015. A memorandum signed by the Minister of Security and Justice and Home Affairs of Belgium, the Dutch Minister of Defence and the Minister of security and Justice in the Netherlands. Responsibilities are now defined in Advance, and the efforts of the Dutch helicopters now can be realized much faster. □



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