

DUTCH POLICE NEEDED NEW HELICOPTERS

When the Dutch police force acquired new helicopters in its inventory of the flying police unit Korps Landelijke Politie Diensten or KLPD the ability to act against the criminal world was quite enlarged and objectives and focus were more and more shifted to this. Efficiency of the means and making good choices in operating them become of increasing importance.

WISH FULFILLED, COVERING THE WHOLE COUNTRY

To stay on alert for a public day is such a question. In what way are the helicopters effective issued to such an event when nothing happened during the same circumstances in previous years? Thread-analyses on short terms are of use to indicate whether a one hour alert, a half hour alert or presence on location is needed. This is called in Dutch language a Grootschalig Bijzonder Optreden (GBO) or major special operation.

A well-known event in the Netherlands is the birthday of the queen which requires the input of helicopters every year, and there are other events of such category, on the other hand you could question it if helicopters are necessary for patrolling above for example open air rock-concerts or Dutch Tourist Trophy motor races as a standard option. Police helicopters are requested for so many other things and playing in some of those cases a major role for example like keeping an eye on special transports (nuclear waste) or intercepting drug transports.

Nevertheless things could always change dramatically in short times when information of approaching difficulties out of the criminal world or disaster is approaching shortly. The KLPD is stationed at Schiphol international airport in Amsterdam with a big hangar and operates two Agusta Westland AW-139's, six Eurocopter EC-135's and three Cessna C-182's but these could be detached to other airports in the country operating as a forward base or at the location where a helicopter is required. Flying movements are many times below 1500 feet in uncontrolled airspace. People could react with complains easily but the police tries to inform people with twitter at [twitteraccount@depolitieheli](https://twitter.com/depolitieheli) to earn goodwill and it works. So far some 43.000 people out of the society are connected with this as 'followers'

KEY-ROLE FOR COMMUNICATION

Communication is essential for success as the KLPD is very aware about this. After successfully introducing the C2000 system for radio communication attempts were taken to create a video network system by mounting receivers on high poles. A large part of the Netherlands is already under control of this system. Information can be shared with helicopters and the central coordinating unit or in Dutch language 'centrale meldkamer' in Driebergen. Information can change the outcome of an action dramatically.

As a good example the following story of an armed man lying in the grass while police on the ground was searching for him and flashlights were beaming over him a police helicopter with infrared camera warned the colleagues at the ground about the exact position of this man very near to their feet. The helicopters are mounted with video cameras infra-red cameras and night-vision cameras with illumination multiply system. When it would be possible for someone on the run to know what is possible to follow his movements it would surely scare him very much.

'HIGH IMPACT CRIMES'

Today the focus is more and more set on counteract 'high impact crimes' such as robbery of money, jewellery or arms with the use of explosives or incoming cars to cash points. This is what the minister asked for when granting the new acquisition of helicopters but is also what the society expects. Chasing cars with criminals on the run could lead to cross border actions including those in the air until the command can be shifted to the police force of that other country. Such operations were sometimes necessary and were always tolerated but later on those were officially ratified in the Schengen agreement. Pilots are receiving a course to learn how to handle in such circumstances.

To apply ears and eyes in the air to help the police on the ground in catching criminals will always be a main part of the work and this is the same when there is a situation of someone is vanished. One of the abilities of the features such as infra-red camera's is to detect body warmth in a cooler area.

PATROLLING OVER SEAS

The KLPD is quite a flying unit with the availability of 33 pilots. This is quite necessary because depending the mission flying hours can easily culminate. The EC-135 is a well known flying asset in the Netherlands but the AW-139 is still very new and so it is a grateful subject to zoom in. The ultra modern helicopter is big for a police helicopter and suitable for more options than surveillance only and so the police was asked by the coast guard to join a club of helicopter users guarding the sea.

At this moment the temporary disability of the Royal Netherlands Navy to supply SAR helicopters is creating a gap and so the input of 250 flying hours by the KLPD was very welcomed. This concerns surveillance on fishery laws, illegal immigration, custom activities but also Search & Rescue activities, although the latter task is a non-dedicated task while not being equipped with a hoist. Although nobody can be hoisted inside the helicopter, a life-buoy can be thrown outside to provide initial assistance. Keeping up in the area and directing life-boats to the position of the casualty is in such a moment vital.

Crews are successful and on such flights, usually enduring 3 hours, special crewmembers with experience of watching the seas (custom, water-police) are added to the flight crew. Normally two persons are acting in this function called Tactical Flight Officer (TFO) and are tasked as observer-operator. AW-139 captain Leo remembered a situation when one of the TFO's discovered a cruise pattern of a ship which was typically unusual but should easily not have been recognized by unskilled personnel. It concerned a large Rigid Inflatable Boat (RIB) cruising from south to north in the North-Sea. After inspection the boat was recognized with a group of people making a journey from Italy to the north of Norway.

AW-139

Leo is much satisfied about his AW-139 which is in his opinion a typical offshore design. Thanks to the vibration absorption system on the rotor the vibrations are minimized which enables the pilots to fly with high speed during long timeframes without becoming quickly tired. Flying in a multi-crew concept (two pilots) is standard procedure. The cockpit is equipped with a glass-cockpit and customized with four big Honeywell DU-1080 active matrix liquid crystal displays with advanced graphics and cursor control devices which ensure comfortable cockpit management. Also a moving map is installed which is regularly updated by topographic services. Leo explains that the most remarkable effort of this helicopter is the fact that it reaches full speed easily with maximum load. This illustrates the power of the two Pratt & Whitney Canada PT6C-67C turbine engines which are under Full Automatic Digital Engine Control (FADEC). Cruise speed is just slightly under maximum speed thanks to the engines overpower. When one of the engines should fail, you easily manage to continue the flight on just one

engine. This situation of one engine failure was with the Bolkow Bo-105, the AW-139's predecessor more or less a matter of controlled landing. The four-axis Automatic Flight Control System (AFCS) provides excellent flight characteristics.

SPECIAL OPERATIONS

To learn how to operate the AW-139 effectively some visits were undertaken to the Bristow Company in Den Helder who is deploying the AW-139 in the offshore field. Also lessons were learned with the Irish Army Air Corps who uses the AW-139 in military operations. At this moment low pressure tires are available for the military variant which enables the helicopter to land in more swampy areas. This was not the case during the acquisition of the helicopters for the KLPD.

A retrofit is offered to the KLPD by the manufacturer which will almost for sure be accepted. If necessary, the two AW-139 helicopters can perform operations with the Dienst Special Interventie (DSI) which is the highest level of force in the police and a matter of national security like anti-terrorism actions could ask for this requirement. In this concept commandoes can be put into a target zone with fast roping. Normally the daily actions are not of this level and concerns surveillance tasks. Keeping an eye from out of the air and the ability to apply presence in several forms makes a thought of comfort with the civilian population.

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