
COLD BLAZE EXERCISE IN NORWAY

COLD BLAZE KEEPS CREWS CURRENT

White out is a circumstance helicopter crews have to deal with when operating in snow area's. Last February the Royal Netherlands Air Force exercised the white-out program in Norway in the surroundings of Rygge Air Force base. Landing in the snow is a requirement in the compilation of techniques which crews should master. Surprisingly the Dutch crews were visited by Air commodore Theo ten Haaf commander of the Dutch Defense Helicopter Command (DHC) who personally liked to keep up with his men and watching their progress in the field under severe winter conditions. Ten Haaf has a strong belief in his soldiers and equipment. In his opinion, there has never been such a high level of experience before which was gained in the Afghanistan period. Only this stays not forever but asks practice and dedication all the time.

KEEPING UP 'CURRENCY'

Ten Haaf notes that he will never send crews out on a mission without a sufficient training period resembling the activities in this mission. Certain techniques have to remain current. These includes landings in sand and dust ('hot blaze'), practice under the threat of war ('tac blaze'), flying in mountainous area and last but not least arctic conditions ('cold blaze'). The scoop of these techniques is typically focused on probable missions encountering these environments while serving National or NATO's interests within or outside Europe.

In both hot and cold blaze the critical aspect is the landing, where the vortex downstream, caused by the downwind of the rotor blades swirls up sand and dust or snow which can result easily in a total removed sight from out of the cockpit. In the so-called brown-out (sand and dust) and white-out (snow) conditions the visual orientation in the approach is in such a dramatically way limited that it inflicts your awareness heavily. A crash can be inevitable when you are not aware how to handle. Just only a strict procedure how to approach and pure knowledge how your helicopter reacts are needed to successfully practice the white out aspect, and all other depends off course on airmanship. Everybody in the helicopter including observers will concern on the recovery of focus.

The two Chinooks on location in Norway enabled six crews to maintain or obtain currency on this matter. So far currency for one crew implicated five missions of 1.5 hours each in both day- and night flights. To enable this mission pattern a lot of things more came up. In the wake of the crews all non-flying personnel trains at their specific tasks. The technical staff for instance faces a much more intensive task under arctic conditions. This is also the case for the Mobile Air Operations Team (MAOT). The latter is a more or less indispensable group within the complete scene as they look for a suitable and safe landing zone and marks it for approach.

TEAMWORK

The work of the MAOT team is of great importance. When possible, routes on the ground are explored by car to search for a suitable and safe spot to land. Ensuring enough space around the helicopter with no obstacles in the surrounding is the main goal of the MAOT team. To land on a frozen and snowy lake implicates that ice core drilling is essential with the aim to find enough centimeters of ice layer to hold the weight of the helicopter and so avoiding a break through the ice. In cases a MAOT team is not available, the crew must rely on the view and experience of the loadmaster who explores the terrain visually. Theo ten Haaf explains that he must absolutely rely on the competence of the MAOT or loadmasters, if the crew decides to park the Chinook on a small ridge, such as happened several times in Afghanistan. In the moment of the approaches everything must fit precisely which is mainly a matter of teamwork!

RESOURCEFULNESS IS A QUALITY

Previous Cold Blaze exercises brought experience to the Royal Netherlands Air Force but new approaches are searched and some resourcefulness can ease practical matters. The Chinooks are stalled in an unheated hangar but smart thinking resulted in an adapter from heaters, normally warming tents, to the helicopter by connection through a window and applying warmth inside the cabin. In case of extreme cold the oil for the flight-controls has to be pumped around and the electronics have to be warmed up in advance. This way you can get a saving in start-up time of 1.5 hours. If possible the pre-flight check is already finished the night before by the technical staff. Effectively a number of shutters are pulled open and the most essential elements are checked which is called 'preppen'. The loadmasters do their own task-round, they check the entire helicopter together with the chief-in-line which is followed up by handing over the machine to the crew. For every involved person counts that their input can be viewed in the best way. They can show what they are worth. To be part of a good team is a valuable experience. A mission abroad is for them the real stuff. Once more this was proved when a damaged antenna came over from The Netherlands. This antenna had to be mounted by the technical crew before the helicopter could be released.

A CLOUD OF SNOW

After so much preparations the moment has appeared to exercise the snow landing. This is what it is all about. Now what is at stake, the implementation of a 'snow blaze'. The MAOT has gone ahead to find and create a landing zone. If the weather is not cooperating and the sight is bad, they will form a so-called 'huddle' by lying next to each other to give the pilot some reference. This 'huddle' must be situated at a carefully chosen spot leaving enough space just side wards of the huddle to land safely. By clear weather the MAOT uses red smoke-pods, to create a striking red line in the snow. The pilot is much experienced in the landing routine, and flies off certain parameters in the approach. His concern will only be the snow cloud.

A kind of gate is formed indicated by the instruments and flying in this gate with just a little bit of forward speed the pilot tries to get ahead on the inevitable cloud of snow as long as possible before the sight is completely taken away by the snow. If you

follow this procedure well, you know that basically you can land well without risks. The Chinook with its tandem rotor has quite other characteristics than a helicopter with one main rotor, and also the skis mounted under the fuselage creates another kind of landing characteristic. The MAOT in this connection searches for places with much snow. As long as you can look through the clouds of snow you still don't have the maximum effect of the kind of training you want to do. Gaining experience in fading out of reference is essential. Practicing in snow however is much easier than sand and dust which lasts longer in the air and also snow is far less burdensome for the engines. Every opportunity offered has to be used to upgrade the experience level of the crew which is also the case for others in the team.

A well trained MAOT makes it so much easier for the pilot and is therefore very valuable. Concerning his job is not only to move on a track by car but can also be to fly along and being dropped in an area with a possible landing zone to guide the helicopter later on to his spot. Once more it is clear that exercising is teamwork, and success is connected with the right team spirit. In the RNLA exercise weeks all ingredients you could expect showed up including some adversity, extreme cold, extra effort, creativity, humor and above that a maximum bet so everyone could look back to a successful snow blaze exercise.

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