DUTCH
SAFETY BOARD

Summary

Exercising safely, lessons from the Ossendrecht shooting incident

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The Hague, June 2017

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Dutch Safety Board

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NB: The full report is published in the Dutch language. If there is a difference in interpretation between the Dutch report and English summary, the Dutch text will prevail.

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CONSIDERATION AND RECOMMENDATIONS

It is in the nature of the military profession that personnel are sometimes exposed to major risks, which can literally involve life and death. These risks are evident during operational deployment, but are also present during exercises. After all, in order to be able to perform the activities during operational deployment, with the desired results, and as safely as possible, exercises are conducted under realistic conditions.

The Dutch Safety Board recognises the need to exercise as realistically as possible in order to be prepared for deployment. To that extend however, the risks for all participants in both deployment and exercise must be identified in advance, and the correct precautions must be taken so that participants' safety can be guaranteed as much as possible. To exercise safely, participants must be able to make mistakes without these mistakes leading to fatal consequences.

During a live firing exercise in Ossendrecht, despite the fact that all sorts of safety procedures existed on paper, one participant was deadly wounded. The Safety Board's investigation into the accident has shown that various safety barriers did not function. This resulted in an exercise situation in which an exercise, which was not conducted flawlessly, had a fatal outcome. The shortcomings were present within the procedures and regulations for the exercise location, the qualifications of the instructors, the development of the counterterrorism training programme, and the choice to use a high risk shooting house for a complex exercise.

The Commando Corps (*Korps Commandotroepen*) is a small close-knit unit within which a strong group cohesion exists and where a solution-oriented approach is part of every day life. A high degree of autonomy and responsibility is given to subordinate units. This is very important during operational deployment, since these units are often deployed independently without direct supervision by senior management during missions at the highest end of the combat spectrum. Because of the nature of the activities, the high degree of autonomy and the solution driven approach demand that senior management of the defence organisation takes responsibility for ensuring that the tasks can be performed as safely as possible. Senior management must thereby intervene when the safe execution of the tasks cannot be guaranteed. This relates to both operational tasks during deployment and the preparation for these tasks in the form of exercises.

It follows from the investigation into the shooting incident in Ossendrecht that, despite the many regulations that are in place to guarantee safe working, multiple safety-critical barriers failed or did not function properly. The Safety Board notes that the link between the regulations and the safety philosophy behind them was missing in the run-up to the fatal incident in Ossendrecht. This manifested itself in - amongst other things - a lack of urgency about creating an environment in which exercises can be carried out safely, such as allowing gaps in safety-critical regulations, failing to act on reports about shortcomings, and the fact that at the time of writing the construction of the Army's own shooting

house has not yet started, despite the fact that the need for this shooting house had already been established internally in 2007. The Defence emphasis remained on the exercises going ahead and the timely training of personnel, without thinking about the consequences of this accumulation of shortcomings. The Safety Board acknowledges that the Ministry of Defence has undergone major reorganisations in recent years, which have made demands on the organisation. However, this cannot serve as an excuse to settle for less when it comes to the safety of the personnel.

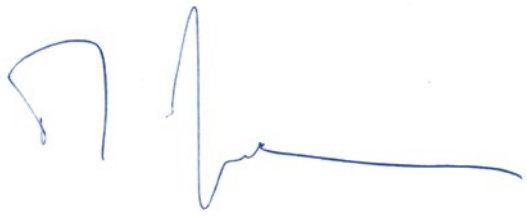
Recommondations

The Safety Board is of the opinion that Ministry of Defence senior management at multiple levels failed to manage the safety of its own personnel in a professional way, despite the existence of a safety management system.

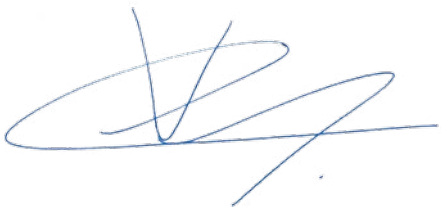
The Safety Board is concerned about the degree to which the incident in Ossendrecht is symptomatic of the existing safety culture within parts of the defence organisation, and makes the following recommendations:

To the Minister of Defence:

- Urgently action the construction of the Army's own shooting house in accordance with the requirements identified in 2007 and subject to the necessary safety requirements, within which dynamic firing exercises can be carried out safely;
- Take urgent steps to remove the gaps in safety-critical regulations and the shortcomings in the implementation of these regulations, as identified in this investigation;
- Examine the extent to which the failure of multiple safety-critical barriers in the shooting incident in question is indicative of the safety culture within the broader Ministry of Defence. Thereby pay specific attention to the extent to which safety awareness is safeguarded at all levels within the Ministry of Defence.



T.H.J. Joustra
Chairman, Dutch Safety Board



C.A.J.F. Verheij
Secretary Director

SUMMARY

On 22 March 2016 the Royal Dutch Army's Commando Corps (*Korps Commando-troepen* - KCT) was exercising on a 360° firing range at the Police Academy in Ossendrecht. The 360° firing range is a 'shooting house' in which combat firing exercises take place. It simulates a building with various rooms within which targets are set up. The shooting house is part of the Police Academy training complex, and was rented by the KCT because of the lack of its own facilities.

All the participants in the exercise, both trainees and instructors, were experienced KCT personnel. During the exercise, which forms part of the KCT's counterterrorism training (CT training), the trainees used live ammunition.

At the start of the exercise, the first three trainees entered the first training room. The fourth trainee remained in the corridor a little longer. The trainee instructor was behind the fourth trainee alongside the non-bulletproof wall in the corridor. He could not see the first trainees or the training rooms. Nor was he visible to the trainees in the training room, and was only occasionally partly visible to the instructor who was on a platform above the training rooms. Shortly after entering the first training room, the first trainee entered the second training room and multiple shots were fired at the first target in that room. The trainee instructor was still in the corridor behind the target at that time, for reasons which were not uncovered during the investigation, and was hit several times. He died of his injuries at the scene.

The trainee instructor was supervising the exercise as part of his own training as a CT instructor. Although he was still in training, he received no direct supervision in leading the exercise in the shooting house on the day of the accident. A second CT instructor was located on a cross-shaped concrete structure above the training rooms, primarily in order to safeguard the safety of the execution, and also to record a video of the exercise on a tablet for later evaluation. Due to the combination of tasks and the restricted visibility of what was taking place in the exercise rooms below him, the second CT instructor did not notice that the trainee CT instructor was in the path of the shot when it was aimed at the target. A third instructor, also designated as firing range commander, was elsewhere in the building and therefore had no direct visibility of the exercise being performed. None of the CT instructors involved have the requisite qualifications to lead these combat firing exercises in the shooting house in the roles assigned to them.

The Ministry of Defence has regulations relating to the construction and use of firing ranges. These regulations are set at departmental level, but contain gaps with regard to the construction and use of unusual firing ranges such as shooting houses. This had already been noted in 2014 in an investigation by the Ministry of Defence following a shooting incident on Aruba. The gaps in the regulations still exist. Nonetheless, shooting houses are still used both at home and abroad.

The regulations stipulate - amongst other things - that firing ranges may not be used before they have been inspected by the expert body within the Ministry of Defence: the Military Commission for Hazardous Materials (*Militaire Commissie Gevaarlijke Stoffen* - MCGS). The shooting house in Ossendrecht had not been inspected by the MCGS prior to the incident. In January 2017 a memorandum from the MCGS to the KCT Commanding Officer as a result of the inspection of another firing facility stated that the shoot house in Ossendrecht is not suitable for firing live ammunition if the internal walls are in place, since these are unable to stop bullets and restrict visibility of where people are located elsewhere in the firing range.

There is no syllabus for the CT training at the KCT. The teaching material available does not clearly describe the objectives, how the exercises should be structured and taught, what risks should be taken into account and what areas of attention are thereby important. It was found during the investigation that teaching material for the course to become a CT instructor was not present or available. Although the KCT has relevant expertise with regard to the content of the training courses to be provided, training courses should be developed in collaboration with training experts with expertise in this area. A lack of capacity in this area within the Ministry of Defence meant that the CT training was designed by the KCT's own instructors, without input from these experts.

Despite the fact that the instructors assessed the risks to the best of their knowledge, the prescribed safety analysis by a safety expert was also omitted. The lack of proper instruction resources and qualified instruction personnel was reported within the chain of command, but this did not lead to any change in the situation. The focus remained on providing training courses and supplying trained personnel.

Despite the shortcomings in the syllabus and the instruction capabilities and despite the gaps in the firing policy with regard to unusual firing ranges, the relevant training courses at the KCT continued unchanged and undiminished. This resulted in a trainee instructor being asked to lead a firing exercise in the shooting house without personal supervision during the execution, for which he was not yet qualified, for which no adequate safety analysis had been carried out and for which no firing range commander was present, on a firing range that had not been inspected and - if this had happened - would have been failed for the use in question by the expert with inspection powers.

The *train-as-you-fight philosophy* means that Ministry of Defence personnel run greater risks during training and exercises than in other professions. It is precisely because of this that the duty of care for the health and safety of the personnel must be given a high priority within the Ministry of Defence. This investigation makes clear that the cumulative effect of the failure of multiple safety barriers created a situation in which there was virtually no margin for error by trainees or (trainee) instructors. This created a situation in which an exercise, which was not performed flawlessly, could have a fatal outcome.

CONCLUSIONS

General
The KCT performed a live firing exercise on 22 March 2016 as part of the CT training, whereby a fatal accident occurred. The exercise took place in a 360° shooting house at the Police Academy in Ossendrecht. All the trainees and inspectors were experienced KCT personnel. The failure of a number of safety-critical barriers meant that there was little margin for error for participants in the exercise.

Direct cause
At the start of the exercise, the first three trainees entered the first training room. The fourth trainee remained in the corridor a little longer. The trainee instructor was behind the fourth trainee alongside the non-bulletproof wall in the corridor. He could not see the trainees or the training rooms. He was thereby not visible to the trainees in the training room, and was only occasionally partly visible to the instructor on the catwalk. Shortly after entering the first training room, the first trainee entered the second training room and multiple shots were fired at the first target in that room. The trainee instructor was still in the corridor behind the target at that time, for reasons which were not uncovered during the investigation, and was hit several times. He died of his injuries at the scene.

Structural safety shortcomings

Inadequate regulations
The Safety Board is of the opinion that the care for safety during live firing exercises by the Ministry of Defence shows structural and cumulative shortcomings. These start at policy level at the Central Staff of the Ministry of Defence, where the relevant regulations show significant gaps.

The State Secretary of Defence's *Regulations for the design and use of firing facilities* are designed to restrict the risks associated with the construction and use of firing facilities at the Ministry of Defence as much as possible. The most recent review of the regulations dates from January 2010. Despite the high risk activities in combat firing exercises, the regulations provides no further details concerning the design and use of CQB firing ranges. As far back as 2014, the Ministry of Defence acknowledged - in an investigation resulting from a shooting incident on Aruba - that its own regulations with regard to CQB exercises were inadequate. Although the regulations have still not been elaborated in this regard, such exercises are still carried out. Use is thereby made of shooting houses both at home and abroad.

Limited compliance with regulations
Whilst the Central Staff formulates policy for the Ministry of Defence, the commanding officers of the units of the armed forces ensure that the Central Staff's policies implemented. However, it was found that the policy that does exist is being insufficiently

followed. The Safety Board finds that instructors and firing range commanders from the KCT were deployed for the CT training without the mandatory qualifications to lead combat firing exercises, and that functions had to be combined which were virtually impossible to combine in practice. It was also found that a Police Academy shooting house was used whilst this firing range had not been inspected by the MCGS, being the expert body, contrary to the regulations. An internal memorandum from MCGS to the KCT Commanding Officer in January 2017 indicated that the shooting house in Ossendrecht was not suitable for firing live ammunition in combat training exercises.

Shortcomings in exercises and training
The Safety Board also found that there was only limited teaching material for the CT training. The material does not clearly describe what the objectives are, how the exercises should be structured and taught, what risks should be taken into account, and what areas of attention are thereby important. There was no teaching material whatsoever for the training as CT instructor. Although very experienced in the subject to be taught, the KCT has insufficient capacity for adequately designing training courses. Because the training courses were arranged without input from training experts within the KCT, there was no independent assessment. Insufficient attention was thereby paid to performing a safety analysis. As a result, there was no clear picture of the risks for participants in the training. The Ministry of Defence Safety Management System stipulates that commanding officers of the defence units are responsible for an up-to-date safety analysis that is appropriate for the activities and working conditions of the employees. In the event of changes in the operations or whenever it is deemed necessary, the commanding officer of a unit should initiate a possible modification of the safety analysis. A safety analysis is all the more important if the nature of the activities contains inherent safety risks, as in the case of the firing exercise.

Loyalty versus responsibility
Against this background, the Safety Board finds that there is a need to improve both the formulation of policy and the designing of the CT training course, and compliance with the regulations relating to safety. The Safety Board previously wrote that the regulations at the Ministry of Defence partly resulted from investigations into previous - sometimes fatal - incidents. In an organisation which operates in a high-risk environment and where regulations and procedures sometimes provide the only safeguard for employees' safety, it is important that gaps in the regulations are mended and that the rules - which have been designed and implemented in order to enhance safety - are followed.

The Safety Board recognises that the shortcomings in the training and implementation of policy may be attributable to the fact that the Ministry of Defence is an organisation which has undergone major reorganisations in recent years. High demands are made of employees' loyalty. The KCT's strong esprit de corps, aimed at achieving results under difficult conditions, and the pressure to continue to perform have resulted at the KCT in the fact that safety risks were accepted - consciously or otherwise - during exercises and insufficient attention was paid to critical safety barriers.

Despite the shortcomings in the syllabus and the instruction capabilities and despite the aforementioned gaps in the firing policy with regard to unusual firing ranges, the relevant training courses at the KCT continued unchanged and undiminished, and none of the

levels of the defence organisation intervened. The production that was delivered was apparently accepted without sufficient consideration for individuals' personal responsibility for controlling safety risks as effectively as is reasonably possible.

Loss of safety barriers
The above led to a trainee instructor being asked to lead a live firing exercise independently for the first time and without supervision during the exercise by one of the instructors present, for which he was not yet qualified, for which a complete safety analysis has not been carried out and for which no firing range commander was present in the dock, on a firing range that had not been inspected and which would almost certainly have been failed for the use in question by the expert with inspection powers.

The cumulative effect of the failure of multiple safety barriers created a situation in which there was virtually no margin for error by trainees or instructors. As a result, an exercise that was not performed flawlessly could have a fatal outcome.

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