DUTCH
SAFETY BOARD

Investigations

Within the Aviation sector, the Dutch Safety Board is required by law to investigate occurrences involving aircraft on or above Dutch territory. In addition, the Board has a statutory duty to investigate occurrences involving Dutch aircraft over open sea. Its investigations are conducted in accordance with the Safety Board Kingdom Act and Regulation (EU) no. 996/2010 of the European Parliament and of the Council of 20 October 2010 on the investigation and prevention of accidents and incidents in civil aviation.If a description of the events is enough to learn lessons, the Board does not conduct any further investigation.

The Board's activities are mainly aimed at preventing occurrences in future or limiting their consequences. If any structural safety shortcomings are revealed, the Board may formulate recommendations to remove these. The Board's investigations explicitly exclude any culpability or liability aspects.

Quarterly Aviation Report

October - December 2017

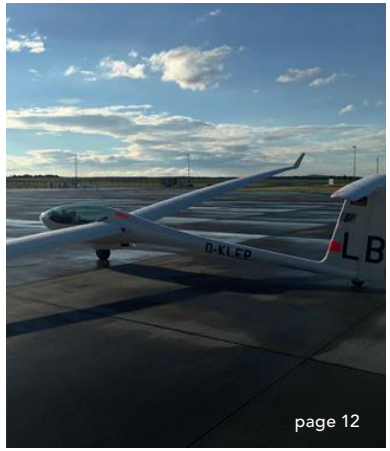
In the past quarter, the Dutch Safety Board initiated investigations into five occurrences of a varying nature. These occurrences caused no injuries. One of the occurrences concerned the runway excursion of a Boeing 747 cargo aeroplane during take-off from Maastricht Aachen Airport.
This report describes the outcomes of the limited investigations into the other four occurrences. In addition, it contains the outcomes of the investigations into two occurrences that took place during the third quarter of 2017. One of these occurrences concerned an accident with a hot air balloon that resulted in the injury of four passengers.

The present report contains a new section entitled 'Military aviation'. This section covers occurrences involving military aircraft under investigation by the Dutch Safety Board's Defence sector. The past quarter saw one occurrence of this category: an Apache helicopter hit the lightning rod cables of a high-tension line near Zoelmond in November 2017. This occurrence led to a large number of households in the area losing power for a few hours. There were no injuries. The helicopter sustained substantial damage.

Tjibbe Joustra,
Chairman, Dutch Safety Board

page 2


page 3


page 12

Occurrences into which an investigation has been initiated

Runway excursion, Boeing 747-400F, Maastricht Aachen Airport,
11 November 2017

The Boeing 747-400F cargo aeroplane, with four people on board, departed from Maastricht Aachen Airport on a flight to King Abdulaziz International Airport in Saudi Arabia around 22.30 hours. After the aeroplane had been lined up at the beginning of runway 21, the captain selected full power for take-off. Shortly after this, the aeroplane pulled to the right. The crew aborted the take-off with a speed of about 45 knots, but was unable to keep the aeroplane on the runway. The aeroplane ended up in the grass to the right of the runway. The persons on board the aeroplane were not injured. The Boeing 747-400F sustained damage to the fuselage.

Classification: *Accident*
Reference: *2017118*

The Boeing 747-400F after the runway excursion.

Military aviation

Lighting rod cabels of high-tension line hit during a night flying exercise, AH-64 Apache, near Zoelmond, 13 November 2017

An Apache helicopter of the Royal Netherlands Air Force Command hit the lightning rod cables of a high-tension line around 19.00 hours. The accident occurred in a low-level flying zone that had temporarily been designated as a military training area. The flight was executed as part of a military flying exercise. For a large number of households in the surroundings, the collision with the high-tension line resulted in a power outage which lasted for a couple of hours. Nobody was hurt in the accident. The helicopter was substantially damaged and was transported over land to Gilze-Rijen Air Base the next day, for further investigation.

The Apache helicopter after the occurrence.

Classification: *Accident*
Reference: *2017120*

Occurrences abroad with Dutch involvement into which an investigation was initiated by foreign authorities

Collision with mountainous terrain, Aeroprakt A22 L80, EC-GU4, near Binissalem (Spain), 8 October 2017

The single-engine ultralight aircraft took off from Binissalem (Mallorca) airport in the morning for a local private flight. The pilot was the only person on board. Around 09.30 hours, when the plane was flying over the Sierra de Tramuntana, situated to the northwest of the airport, it hit mountainous terrain and caught fire. The Dutch pilot was killed in the accident. The aircraft was completely burnt out.

The Spanish Civil Aviation Accident and Incident Investigation Commission (CIAIAC) has initiated an investigation into this occurrence. The Dutch Safety Board is providing assistance.

Classification: *Accident*
Reference: *2017106*

Archive photo of an Aeroprakt A-22L. (Photo: S.M. González)

Published reports

Loss of control during air race, Autogyro MTOSport, A6-GY0, Palm Jumeirah (United Arab Emirates), 9 December 2015

At approximately 14.23 hours, a MTOSport gyrocopter, flown by a Dutch citizen pilot participating in an air race held as part of the Fédération Aéronautique Internationale (FAI) 2015 World Air Games (WAG) in Dubai, suffered loss of control and impacted the sea upon passing the final race course pylon. The pilot was submerged in the water for a period of approximately ten minutes before being rescued in an unconscious condition by search and rescue divers. The pilot did not regain consciousness and succumbed to his injuries ten days after the accident. The air race was cancelled after the accident.

The Air Accident Investigation Sector of the United Arab Emirates (UAE) determined that the most probable cause of the accident was due to the pilot losing control of the aircraft as he attempted a high speed unbalanced left hand turn and became distracted, at the same time, due to loss of his helmet. Thereafter, the sudden control stick input to the left and against the stops, caused the aircraft to lose lift from the rotors, enter a negative g-load and loose engine power that caused the aircraft to roll and dive, impacting the water at high speed.

The Investigation lists a number of factors that could have contributed to the accident:

- The pilot was most likely not sufficiently experienced to fly the gyrocopter in an air race as he had just over 20 hours as pilot in command time on the gyrocopter.
- The pilot selection process lacked robust qualification procedures as all pilots nominated were allowed to compete by the FAI.
- The pilot was allowed to take part in the race even though he had less than the 45 hours of pilot in command on the gyrocopter as stipulated in the GCAA CAAP 15 Flying Displays.
- The race course did not have a safe height established and most of the flight was performed at an average of 100 feet above the water.
- Most of the flight was flown at speeds in the yellow precautionary speed range between 120 and 185 km per hour.

Several safety recommendations are mentioned in the final report, addressed to the Fédération Aéronautique Internationale and the UAE General Civil Aviation Authority.

Archive photo of A6-GY0. (Photo: FAI Mediateam)

> *The Air Accident InvestigationSector (AAIS) of the United Arab Emirates published the report on 10 October 2017. The Dutch Safety Board provided assistance. The report can be downloaded from the AAIS website at http://www.gcaa.gov.ae/en/epublication/pages/investigationReport.aspx*

Published reports

Crashed during emergency landing on the beach, Velocity 173RG, PH-FUT, Santa Cruz de Tenerife (Spain), 27 December 2016

The amateur-built aircraft, powered by a piston engine with a push propeller, with on board the pilot and two passengers, departed from Tenerife-North Airport with destination Essaouira-Mogador Airport in Morocco. During climb, at an altitude of 3500 feet, the pilot felt a vibration in the aircraft and, thirteen minutes after departure, he informed air trafic control that he returned to Tenerife-North Airport. Eight minutes later the vibration increased. The pilot declared an emergency en reported he was going to land on the beach of Las Teresitas, because he expected he could not make the airport because he had reduced engine power to lower the vibration.

Air traffic control informed the emergency services. The pilot unfastened his seatbelt to make sure the passenger seated behind him had fastened his belt correctly. He forgot to refasten his own belt after turning around. He then noticed what smelled like burning plastic and he turned the engine off. The vibration diminished.

When the pilot descended towards the beach, he saw a lot of people there; so instead of landing straight in he decided to turn right and land on the water. The left wingtip touched the water first, which made the aircraft yaw left before eventually stopping on the sand, perpendicular to the shoreline. The pilot was seriously injured, the passengers remained uninjured. The aircraft was severly damaged.

The pilot stated after the accident that the strong vibration was caused by a part that detached from the engine and ended up in the propeller. He did not know what caused the initial vibration. Technical investigation revealed that it is probable that the small vibrations felt initially were caused by a fracture in the right exhaust manifold. As a result of the fracture, the final portion of said manifold, was only being held in place by the thermal tape covering them. Once the tape broke, the assembly detached, striking and breaking one of the propeller blades. This is when the much stronger vibrations began, as did the smell of smoke, since exhaust gases began to accumulate in the engine compartment.

The kit manufacturer recommends to fasten the last segment of the exhaust with a cable to prevent it from impacting the propeller if it breaks off. This recommendation was not followed; the last segment of the exhaust was not secured. As this part was fallen in the sea and was not recovered, it did not become clear how the exhaust manifold was mounted. The kit manufacturer also stated the use of thermal tape would also have concealed any potential cracks or fractures during visual inspections. The tape would also trap in moisture, thus promoting the corrosion of any parts in contact with the moisture. When the fracture area was inspected, it was noted that it had different colors, indicative of gradual wear of the material, not by impact.

De Spanish Civil Aviation Accident and Incident Investigation Commission (CIAIAC) published the report in December 2017. The Dutch Safety Board provided assistance. The rapport can be downloaded from the CIAIAC website: http://www.fomento.gob.es/NR/rdonlyres/15166EE7-3BFC-4E85-9B20-2C1ACAC5B54D/147490/2016_045_A_ENG.pdf

Archive photo of PH-FUT. (Photo: Texel International Airport)

Occurrences that have not been investigated extensively

Hard landing, Schroeder Fire Balloons G, PH-MMK, near Zeijerveld,
7 September 2017

The balloon company had received a booking for a flight with seven passengers on 7 September 2017. This flight was to start from the Elsloo take-off location. The hot-air balloon PH-MMK, a Schroeder Fire Balloons G 60/24, was used for the balloon flight. The balloon pilot scheduled to perform the flight started preparing for the flight early in the morning. She consulted the Royal Netherlands Meteorological Institute (KNMI) website for the weather forecast for balloon flights in the northern region, as well as a general aviation meteo website. This information revealed that at that moment, there were no objections against balloon flights in the evening. There was a minor chance of a light isolated shower, and there was a wind of more than fifteen knots at 250 feet in the west. The balloon pilot checked the weather forecast again around 14.00 hours. The KNMI forecast for the region, issued at 13.30 hours, presented the same picture as in the morning. Because there was still a slight chance of a shower, the balloon pilot contacted the KNMI in De Bilt by telephone. The meteorologist who spoke with her indicated that the showers would become less active the course of the afternoon and that the wind would also decrease by the end of the afternoon, from 8-10 knots to 6-7 knots. On learning this, the balloon pilot decided that the flight could go ahead.

Around 18.00 hours, staff members of the balloon company and the passengers gathered on the field from which the balloon should depart. The balloon was assembled and the passengers were given instructions on what to do and what not to do during the flight. The balloon pilot made the weight and balance calculation for the flight, which demonstrated that the take-off weight of the balloon was well within limits.

Because the balloon pilot noticed a grey sky coming from the west, she contacted the KNMI again by telephone around 18.20 hours. It appears from the recording of this conversation that the balloon pilot and the meteorologist only spoke about the possibility of precipitation. The meterologist indicated that the front boundary of a band of clouds would cross the take-off location around 19.15 hours and that a few drops of rain might fall from these clouds, but that this would not amount to much. After this information, the pilot decided to proceed, and the balloon finally took off at 18.45 hours. Although the wind was not strong, it came more from the west than was expected. The wind was expected to come from the direction 220° at five knots. However, given the flight direction, the wind was coming from the direction of around 246°. According to the balloon pilot, this deviation was not unusual, though. It would not present a problem for the flight.

At first, the flight was uneventful. After about half an hour, the pilot noticed that the circumstances were not as expected. This is why she decided to land earlier than planned. She gave instructions to the passengers and lowered the balloon. After she had started descending for landing, it turned out that the balloon was deviating from its course at low height. This caused the pilot to abort the landing and make the balloon go up again. A little later, the balloon pilot started preparing for the second landing attempt. According to her, the balloon had a speed of about twelve knots at that time. She expected the wind to be less strong on the ground. However, when the balloon descended to lower heights, she noticed that the wind was stronger than expected. She thought that this would not present any problems. At first, the ballon flew in the direction of a corn field with a farm behind it. The pilot decided not to land there, but to continue flying at a low height. No problems had occurred till that moment. When she saw a suitable landing place a little later, the pilot tried to land the ballon there. However, an unexpected gust of wind pushed the balloon down, causing the basket to hit the ground hard. The pilot then opened the burner to its maximum capacity, after which the balloon rose again. She took the balloon up to about 1,000 feet in order to fly over a high-tension line. At this height, she was faced with a strong wind, blowing in gusts. This wind was so strong that the envelope of the balloon was pushed in and the basket was swinging in all directions. The balloon pilot expected a hard landing, and told the passengers to keep down in the basket. >

Archive photo Schroeder Fire Balloons G hot-air balloon. (Photo: captain)

Occurrences that have not been investigated extensively

The pilot continued the flight, looking for a suitable landing place.

The first place she saw was a corn field. She opted for a steep approach and quickly lowered the balloon into the direction of the corn field, but when she was heading for this at a low height, she saw a tree standing right in front of the field, towards which the balloon was sailing. She tried to fly over it, but the balloon was pushed down and was out of control. The balloon's basket then hit the stem of the tree hard, and the balloon's envelope came down over the top of the tree. The basket stayed upright and the passengers fell on top of each other, but they did not fall from the basket. The pilot quickly released the air from the envelope so that the grip of the wind abated somewhat. The balloon landed in the vicinity of Zijerveld around 19.40 hours.

After the landing, it turned out that four passengers were injured. Upon arrival of the emergency services, they were taken to hospital to be examined. Two persons appeared to have sustained a fracture to the leg, and two persons were hospitalised for observation for two days.

Investigation

The balloon pilot possessed a valid licence for the type of balloon used and also had a valid medical certificate. She had about 600 hours of experience with approximately 600 balloon flights.

The investigation showed that the hot-air balloon, both the envelope, the basket and the burner with gas cylinders were in an airworthy condition and played no role in the occurrence of the accident.

The investigation into the weather conditions shows that the information available before the flight provided no indication of strong winds at the time of the balloon flight and the landing.

Information from the KNMI indicated that an analysis of satellite images revealed that there were many high clouds, in connection with a disturbance approaching from the west. The precipitation underneath was hardly visible or not visible at all. Besides, the resolution of the satellite images in relation to the size of this precipitation area is insufficient for observing details. The speed at which the showers travelled was higher than that of the balloon, causing the showers to overtake the balloon. The shape of the precipitaiton area caused the balloon to stay inside the sphere of influence of the showers for a long time. In spite of the fact that these showers displayed little activity on the radar, they did cause considerable gusts of ground wind.

Weather conditions

Location: near Zijerveld, 7 September 2017, around 19.40 hours.

Wind and temperature	Wind direction (degrees)	Wind speed (knots)	Temperature (°C)
On the ground	220	7-10 gust 15-20	16
500 feet	230	10	14
1000 feet	230	15	13
1500 feet	240	15	11
2000 feet	240	15	10
3000 feet	240	15	8

(Source: KNMI)

The accident was caused by unexpected guts of wind at low height, resulting in insufficient control of the hot-air balloon. This type of weather was not recognised by the meteorologist because of limited visibility caused by high clouds in combination with the limitations of the satellite images. This made the balloon pilot decide to proceed with the flight on the basis of insufficient weather information.

Classification: *Accident*
Reference: *2017095*

Loss of separation after CTR crossing without permission, Douglas C-53D, LN-WND, near Schiphol Airport Amsterdam, 7 September 2017

The Douglas C-53D took off from Groningen Airport Eelde around 14.00 hours for a VFR flight to Chichester/Goodwood Airport in the United Kingdom. The crew had submitted a flight plan for the flight indicating that the planned route went southwest from Groningen Airport Eelde, via the Spijkerboor beacon (SPY), directly to Ostend in Belgium. The route ran over the IJsselmeer and Markermeer through the Schiphol Airport control zone (CTR) to the North Sea Coast.

After LN-WND had left Groningen Airport Eelde CTR, the crew contacted the Nieuw Milligen air traffic control service (Dutch Mil Info). The Dutch Mil Info air traffic controller confirmed radar contact and informed the crew of LN-WND of the air pressure values. After LN-WND had left the Dutch Mil zone and entered the area controlled by Amsterdam Information, the crew did not report to Amsterdam Information but stayed tuned to Dutch Mil.

Even after LN-WND entered the Schiphol CTR at a height of 1000 feet, the crew stayed tuned to the Dutch Mil Info radio frequency. When the crew saw other aeroplanes approaching Schiphol, they realised their aeroplane was within the Schiphol CTR. They then contacted Dutch Mil, informed them of their situation, and asked for the correct frequency of the Schiphol air traffic control service Meanwhile, the crew kept flying on the same course and at the same altitude.

The Schiphol air traffic control service saw LN-WND enter the northern part of the CTR on the radar and noticed that the aeroplane was heading for the approach area of the runways 18R and 18C. Attempts made by air traffic control to establish radio contact with the crew of the aeroplane failed until the crew of LN-WND came in on the frequency provided by Dutch Mil. At that moment, LN-WND was flying right behind and under a Boeing 747 that was about to land on runway 18R. Air traffic control did not have to take measures to avoid a dangerous situation, though. Air traffic control informed the crew of LN-WND of the situation, who stayed in contact until the aeroplane had left the CTR.

Radar images show that the minimum separation between LN-WND and the Boeing 747 was 0,7 NM horizontally and 500 feet vertically. The required separation between two aircraft is 3 NM horizontally and 1000 feet vertically.

The captain of LN-WND said that they had planned the flight the day before, using aeronautical charts and a GPS navigation programme on an iPad. After the aeroplane took off from Eelde on 7 September 2017, the navigation progamme on the iPad stopped functioning after five minutes, so that the crew had to navigate by means of beacons and charts. They maintained radio contact with Dutch Mil and after they had passed the SPY beacon and were approaching the Schiphol CTR, they expected to be instructed to switch to Schiphol air traffic control. However, this did not happen. Next, it turned out that they did not have the correct radio frequencies at their disposal either, as these frequencies were also in the navigation programme and had not been written down. As the crew focussed on finding out the frequencies, they did not pay attention to navigation.

Not until they were flying in the approach area of runways 18R and 18C did they notice that they were flying in the Schiphol CTR. They then asked Dutch Mil for the frequency of the Schiphol traffic control service, which they contacted after having received the frequency. They were told by the traffic controller that they had entered the Schiphol CTR without permission and that they had caused a loss of separation with another aeroplane. The crew was not aware that the boundary of the airspace that is the responsibility of Dutch Mil is partly situated above the IJsselmeer, nor did they know that they had to switch to the correct frequency themselves. >

Archive photo of LN-WND. (Photo: L. Fekete)

Occurrences that have not been investigated extensively

They had seen the Boeing 747 flying to the right of them, but both crew members were convinced that this aeroplane was flying more than 1000 feet above them and that it presented no danger, nor did they experience turbulence when the aeroplane had flown over them.

The crew of LN-WND consisted of two airline pilots. The captain had 47 years of experience as an airline pilot and had made more than 16,000 flight hours. The first officer had 40 years of experience as an airline pilot and had made approximately 17,000 flight hours. Both had a valid pilot licence and a valid medical certificiate.

This incident was caused by inadequate flight preparation by the crew of LN-WND. The airspace between the Eelde and Schiphol CTRs has been classified as G class airspace up to a height of 1500 feet. This means that there is only air traffic information available and no air traffic control: the latter is a responsibility of the flight crew. The aeronautical chart also clearly indicates the boundaries of the airspace for which Dutch Mil is responsible and where a switch to another frequency should be made, i.e. above the IJsselmeer.

The Schiphol CTR is also clearly indicated on the aeronautical chart. Part of the route had been planned from the SPY beacon directly to Oostende. The line of this route runs through the Schiphol CTR, which is something the crew could and should have known. Moreover, alle radio frequencies are indicated on the aeronautical chart. Completely relying on an electronic navigation programme without creating a possibility of having relevant information available in cases of breakdowns testifies to insufficient flight preparation.

As a result of the above, the crew found out too late that they had entered the Schiphol CTR and were coming too close to an aeroplane approaching Schiphol. This seems rather remarkable for a crew with 16,000 to 17,000 hours of flight experience.

Classification: *Serious incident*
Reference: *2017096*

Airprox, Cessna 172, PH-KAC, Remotely Piloted Aircraft Systems (RPAS), near Wijhe, 14 October 2017

The Cessna 172 M, with registration PH-KAC, was making a sightseeing flight. The captain and two passengers were on board. Visibility was more than 10 kilometres. Around 16.35 hours, while flying at an altitude of approximately 700 feet in a southerly direction along the IJssel river, close to the built-up area of the village of Wijhe, the captain saw a small white Remotely Piloted Aircraft Systems (RPAS, drone) with four rotors coming straight at them from a distance of about fifty to one hundred metres. The captain immediately commenced a descent and managed to evade the drone. The captain estimated the height difference when passing at twenty metres. Flying drones at this height is not allowed there.

Almost all near-collisions with RPAS, often referred to as drones, cannot be thoroughly investigated by the Dutch Safety Board as neither the operator nor the drone can be located. The same applies to this case.

The captain had a total flight experience of 15,865 hours, of which 693 hours with the relevant type. He possessed an Air Transport Pilot License (ATPL), including a Single Engine Piston rating (SEP).

Classification: *Serious incident*
Reference: *2017111*

Archive photo of PH-KAC. (Photo: Special Air Services b.v.)

Occurrences that have not been investigated extensively

Possible collision, Remotely Piloted Aircraft Systems (RPAS), Antares 20E, D-KLEP, near Zandvoort, 28 October 2017

Several gliders were flying at low height along the sand dunes between Noordwijk and Zandvoort from 12.00 hours. Pursuant to article 4.5 of the Air Traffic Exemption scheme Decree 2014, flying gliders at low height is allowed here from 15 October 15 to 14 May.[1] The minimum flight height permitted is five metres above the beach or dunes.

At 16.01 hours, while flying about three kilometres to the south of Zandvoort over the foot of the dunes in southerly direction, at a height of about thirty metres, the right wing of D-KLEP, an Antares 20E glider, was hit by something. The pilot heard a loud bang, but was unable to see what hit the glider. He then slowed down his flight and checked the control system of the plane. This check demonstrated that everything was still in working order. A little later, the glider landed on Langeveld glider airfield. On inspection after the flight, a tear with a length of about twenty centimetres was discovered in the right winglet. The edges of the tear were jagged, which might indicate that it had been in contact with a propeller. There was no sign of blood or feathers. Based on the damage pattern, it is not unlikely that a collision with a drone had occurred. However, no remains of a drone were found in the winglet.

There are no known witnesses of the occurrence. Another glider pilot saw what may have been a drone flying in the vicinity of the position of the occurrence, some ten minutes earlier. There was also a person standing at the waterline, looking towards the sea. Flying drones is permitted at this location at the height at which the plane was flying.

The captain had a total flight experience of 1054 hours (1326 starts), of which 361 hours (75 starts) with the relevant type of glider. He possessed a Glider Pilot Licence (GPL) with winching, towing, and self-launch ratings.

Classification: *Serious incident*
Reference: *2017116*

Archive photo of D-KLEP. (Photo: owner)

1 https://zoek.officielebekendmakingen.nl/stcrt-2014-35511.html

Damage to the winglet of D-KLEP. (Photo: owner)

Airprox, APEX DR 400/140 B, PH-SVU, Airbus Helicopters EC 120 B, PH-ECE, circuit of Breda International Airport, 6 November 2017

The persons on board PH-SVU, an Apex DR 400/140B, were practising landings followed by take-offs (touch and go's) on runway 25 of Breda International Airport (Seppe). An instructor and a student, who was flying the aeroplane, were on board. When PH-SVU was flying on downwind, the instructor issued a downwind call through the radio. At that moment, the crew saw a helicopter approaching the circuit area of runway 25 and when PH-SVU was flying on final, they saw that this helicopter was flying on downwind. After that, they lost sight of the helicopter. PH-SVU landed on runway 25, and just as the pilot wanted to select power to take off again, the crew heard the sound of a helicopter above them. Then they saw the helicopter flying at a height of less than ten metres over PH-SVU and landing right in front of them on the second half of the strip. The instructor immediately took control and braked hard to stay behind the helicopter. The helicopter kept flying just above the strip and subsequently taxied towards the airport service building. The crew of PH-SVU never heard a radio call from the helicopter.

Later, the captain of the helicopter PH-ECE, an EC-120, said that he had performed a pipeline check together with an observer and that they were flying to Seppe to fill up. About five minutes before the reporting point, near Bergen op Zoom, the captain reported to Seppe airport service through the radio. On joining runway 25 on downwind, the captain transmitted his position. The only other aeroplane he heard on the radio was a plane flying over the airport at 1000 feet. As he did not hear or see any other air traffic, he made a short turn from downwind to base and from there to final. The captain reported this through the radio and subsequently landed on the second half of runway 25. When PH-ECE was taxiing off the runway, the observer asked the captain whether thay should not have given priority to that other aeroplane. At that time, the captain had no idea what he was talking about, and only when he was held to account by the instructor of PH-SVU did he realise what had happened. He stated that he had never seen PH-SVU or heard it on the on-board radio.

The airport service employee on duty had heard PH-SVU transmit the positions on downwind and final and PH-ECE report on downwind and base. As this situation was not abnormal, he did not permanently keep both aircraft in sight. He did not see the occurrence happen until the very last moment, when he did have not enough time to warn both pilots through the radio.

The occurrence could take place because both crews never heard each other's radio messages. PH-ECE was flying a short circuit from downwind which made the helicopter end up halfway the runway on final, above PH-SVU that had flown a full circuit. The reasaon for the short circuit of PH-ECE was that the captain thought that there was no other aircraft flying in the circuit and that a helicopter is capable of making short turns. >

Archive photo of PH-SVU. (Photo: Texel International Airport)

Occurrences that have not been investigated extensively

The captain of PH-ECE had never seen PH-SVU, but his observer had. However, the observer only remarked on this afterwards. Generally speaking, it is recommended to ask all persons on board an aircraft that is flying on sight to report to the captain if they see other air traffic flying close by.

After the occurrence, the Breda International Airport Safety Committee issued a statement drawing attention to the need of reporting the positions of the aircraft in the circuit. At the very least, approaching downwind (entry point), flying on downwind, and turning to final should be transmitted by radio. It was also indicated that using landing lights can enhance the visibility of aircraft in the circuit.

Classification: *Serious incident*
Reference: *2017117*

Archive photo of PH-ECE. (Photo: Texel International Airport)

Hard landing, ASK-21, PH-1449, Haamstede Airfield, 18 November 2017

During a winch start, the pilot disconnected the winch cable at low height because the traction force of the winch failed. This was followed by a hard landing with damage to the fuselage and the nose wheel. The pilot and his passenger were unharmed.

The investigation report demonstrated that the winch of the gliding club in question may not have been functioning adequately, which resulted in insufficient traction power on the cable, as well as insufficient climb power of the glider. This problem had occurred before. This is why the gliding club has drawn up internal recommendations about knowledge of and complaints registration for the winch. The gliding club also wants to define more clearly who within the club is responsible for the functioning of the winch. The final objective is to achieve better control of the risks connected to the winch start. According to the gliding club, the recommended measures will be implemented before the 2018 season. A final recommendation is aimed at improving the skills of the glider pilots through training, should climb power prove to be insufficient during the winch start.

The captain had a total experience of 145 hours (698 starts) with gliders, of which 20 hours (60 starts) with the relevant type. He possessed a Glider Pilot Licence (GPL) with a winching rating.

Classification: *Accident*
Reference: *2017123*

Archive photo PH-1449. (Photo: gliding club)

Rectification
The Quarterly Report Aviation July-September 2017 included the description of the incident "Carburetor fire during start-up, Piper PA-28-161 Warrior II, G-BJSV, Lelystad Airport, 22 August 2017". The text mentions, among other things, that gasoline (Mogas) is less volatile than 100LL/AVGAS. This is not correct: gasoline is more volatile than 100LL/AVGAS.

The Dutch Safety Board in four questions

1

What does the Dutch Safety Board do?

When accidents or disasters happen, the Dutch Safety Board investigates how it was possible for them to occur, with the aim of learning lessons for the future and, ultimately, improving safety in the Netherlands. The Safety Board is independent and is free to decide which incidents to investigate. In particular, it focuses on situations in which people's personal safety is dependent on third parties, such as the government or companies. In certain cases the Board is under an obligation to carry out an investigation. Its investigations do not address issues of blame or liability.

Recently the Dutch Safety Board reported about the New Year's Eve Safety Risks, Cooperation on nuclear safety and environmental safety of cannabis grow rooms.

2

What is the Dutch Safety Board?

The Safety Board is an 'independent administrative body' and is authorised by law to investigate incidents in all areas imaginable. In practice the Safety Board currently works in the following areas: aviation, shipping, railways, roads, defence, human and animal health, industry, pipes, cables and networks, construction and services, water and crisis management & emergency services.

3

Who works at the Dutch Safety Board?

The Safety Board consists of three permanent board members. The chairman is Tjibbe Joustra. The board members are the face of the Safety Board with respect to society. They have extensive knowledge of safety issues. They also have wide-ranging managerial and social experience in various roles. The Safety Board's office has around 70 staff, of whom around two-thirds are investigators.

4

How do I contact the Dutch Safety Board?

For more information see the website at www.safetyboard.nl
Telephone: +31 70 - 333 70 00

Postal address
Dutch Safety Board
P.O. Box 95404
2509 CK The Hague
The Netherlands

Visiting address
Lange Voorhout 9
2514 AE The Hague
The Netherlands

DUTCH SAFETY BOARD

Credits

This is a publication of the Dutch Safety Board. This report is published in the Dutch and English languages. If there is a difference in interpretation between the Dutch and English versions, the Dutch text will prevail.

April 2018

Photos
Photos in this edition, not provided with a source, are owned by the Dutch Safety Board.

Source photo frontpage:
Photo 3: Captain