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Report A-019/2020

Accident occurred to the aircraft
PIPER PA-28-161, registration
G-CETE, on June 26, 2020 at
the La Axarquia-Leoni Benabu
aerodrome (Málaga)



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Notice

This report is a technical document that reflects the point of view of the Civil Aviation Accident and Incident Investigation Commission (CIAIAC) regarding the circumstances of the accident object of the investigation, and its probable causes and consequences.

In accordance with the provisions in Article 5.4.1 of Annex 13 of the International Civil Aviation Convention; and with articles 5.5 of Regulation (UE) n° 996/2010, of the European Parliament and the Council, of 20 October 2010; Article 15 of Law 21/2003 on Air Safety and articles 1., 4. and 21.2 of Regulation 389/1998, this investigation is exclusively of a technical nature, and its objective is the prevention of future civil aviation accidents and incidents by issuing, if necessary, safety recommendations to prevent from their reoccurrence. The investigation is not pointed to establish blame or liability whatsoever, and it's not prejudging the possible decision taken by the judicial authorities. Therefore, and according to above norms and regulations, the investigation was carried out using procedures not necessarily subject to the guarantees and rights usually used for the evidences in a judicial process.

Consequently, any use of this report for purposes other than that of preventing future accidents may lead to erroneous conclusions or interpretations.

This report was originally issued in Spanish. This English translation is provided for information purposes only.

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Abbreviations

AESA	State Air Safety Agency
ARC	Airworthiness review certificate
ATO	Approved training organisation
h	Hour
HL	Local time
KIAS	Indicated airspeed in knots
kg	Kilogram
kt	Knot
m	Metre
PPL(A)	Private pilot licence
VFR	Visual flight rules

Synopsis

Owner and operator:	AERODYNAMICS MÁLAGA S.L.
Aircraft:	PIPER PA-28-161, registered G-CETE
Date and time of the accident:	June 26, 2020; 09:05 HL ¹
Place of accident:	La Axarquía aerodrome - Leoni Benabu (Málaga)
Persons on board:	One pilot, uninjured
Type of flight:	General Aviation – instruction flight - solo
Flight phase:	Landing – landing roll
Rules of flight:	VFR
Date of approval:	25 November 2020

Summary of the accident

On June 26, 2020, the aircraft PIPER PA-28-161, registration G-CETE, suffered an accident during landing at the La Axarquía - Leoni Benabu aerodrome (Málaga), when it hit a fence adjacent to the runway.

The investigation has determined that the probable cause of the accident was the loss of control of the aircraft, whilst landing on runway 30 at the aerodrome.

¹ The time reference used in this report is local time

1. FACTUAL INFORMATION

1.1. Flight history

On Friday, June 26, 2020 at 09:05 a.m., the PIPER PA-28-161 aircraft, registration G-CETE, suffered an accident during an instructional flight at the La Axarquía - Leoni Benabu aerodrome (Málaga).

The aircraft had taken off from the same aerodrome with a single occupant on board, in order to carry out an instructional flight consisting of circuits. During the fourth landing on Runway 30 at the aerodrome, the aircraft departed the left side of the runway, striking the airfield perimeter fence. As a consequence, there was significant damage to the propeller, wings and landing gear. The sole occupant on board was unharmed.

1.2. Injuries to persons

Injuries	Crew	Passengers	Total in the aircraft	Other
Fatal				
Serious				
Minor				
None	1		1	
TOTAL	1		1	

1.3. Damage to aircraft

As a result of the accident, the aircraft suffered damage to both wings, landing gear and propeller. The nose and right main gear wheels were detached and the left main gear had collapsed.

1.4. Other damage

The aircraft collided with a metal fence located to the left of runway 30, which can be seen in Figure 1.



Figure 1. Damage to metal fence

1.5. Personnel information

The 26-year-old student pilot, of Spanish nationality, was undergoing instruction to obtain the PPL (A) license. He had a Class 2 medical certificate valid until September 06, 2020

According to the information provided, he had 34.5 hours of total experience, all of them on the G-CETE aircraft.

1.6. Aircraft information

The PIPER PA-28-161 aircraft, registration G-CETE and serial number 2842079, was manufactured in 2000 and entered in the UK Aircraft Register on August 26, 2014. The last ARC had been issued on June 1 2020 valid until May 20, 2021, with the aircraft at that time having 9174 flight hours. It is a single-engine, low-wing aircraft with a maximum take-off mass of 1055 kg, equipped with a THIELERT TAE 125-02-99 engine and a three-bladed wooden propeller.

An image of the instrument panel of the aircraft is included in Figure 2.



Figure 2. G-CETE aircraft instrument panel

According to the *Pilot's operating manual*, the final approach speed with flaps at 40° is 63 KIAS.

1.7. Meteorological information

The meteorological station located 5 km southeast of the aerodrome registered a southerly wind of 5 km / h, with a maximum strength in the ten minutes prior to the accident of 8 km / h.

1.8. Aids to navigation

Not applicable. The flight was carried out under the visual flight rules.

1.9. Communications

Not applicable.

1.10. Aerodrome information

The La Axarquía - Leoni Benabu aerodrome is located in the province of Malaga. It is a private facility consisting of a paved track with a 12/30 orientation, 637 m long and 20 m wide. The elevation of the aerodrome is 40 m. The geographical coordinates are: 36°48'06 "N 004°08'08" W.

1.11. Flight recorders

The aircraft was not equipped with a conventional flight data recorder or a cockpit voice recorder. The pertinent aeronautical regulations do not require the installation of any type of recorder for this type of aircraft.

1.12. Wreckage and impact information

The landing was made on runway 30 of the aerodrome. The aircraft departed the left side of runway and came to rest as it collided with a fence 30 m from the runway center line.

Figure 3 shows the damage suffered by the aircraft.



Figure 3. Damage to aircraft G-CETE

The sketch included in Figure 4 roughly indicates the path followed and the final position of the aircraft.

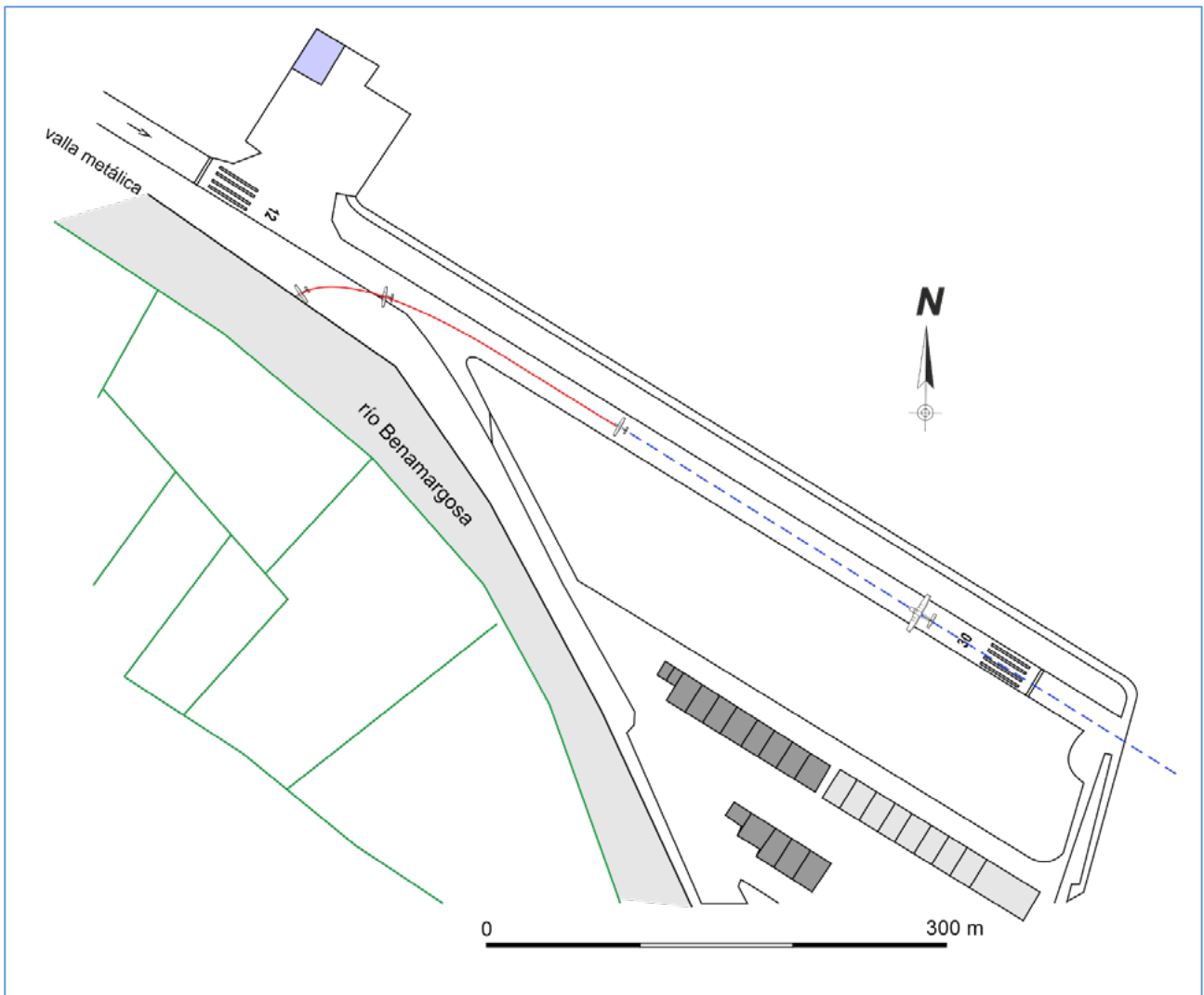


Figure 4. G-CETE aircraft position after the accident

1.13. Medical and pathological information

Not applicable.

1.14. Fire

There was no fire in the aircraft or in the surroundings.

1.15. Survival aspects

There were no deformations in the cabin of the aircraft. Seat belts fulfilled their restraint function.

1.16. Tests and research

1.16.1 Student pilot statement

The student pilot on board the aircraft declared the following: "On 06/26/2020 I got ready to make my second solo flight. I did all the necessary procedures to start the aircraft, communicated to go to the runway 30 siding, and after the checks I lined up on the runway ready for takeoff. I did three good, smooth touchdowns supervised by my instructor with no problem. In the fourth I was a little over speed (80 kt). I had a good glide path, but when flaring, it floated a bit, lengthening the landing. When I touched down the plane made a strange turn to the left, I quickly put full power to go back into the air, but the torque effect made it turn even more to the left. I saw that I could not miss the obstacles (reeds, trees), and I decided to throttle back to idle and try to correct the plane towards the center of the runway. Once off the runway the plane was uncontrollable, I clearly visualized the imminent collision and just before impacting I decided to turn off the engine. After the impact I saw that there was no damage and I got out of the plane. The school services immediately arrived to help me".

1.16.2 Information provided by the instructor

"The student in solo flight was making his fourth circuit on runway 30, with calm winds and optimal weather conditions. From the ground I maintained constant visual and radio contact with the aircraft. The previous touchdowns and takeoffs had been correct, having carried out a go around in one of them. The last circuit was correct seen from the ground, as well as the communications. In the final section the aircraft was stabilized, maintaining the descent path and captured centerline without apparent long corrections. It reached the runway past the touchdown marks and a bit fast as the low flare lengthened and touched down in the second third of the runway, probably due to a gust of tailwind or crosswind. After the landing, the plane was slightly yawing to the left. After this I saw it curl even further to the left. At that moment I stopped hearing the engine and I could see the plane off the runway in the grass, where the accident later occurred. I went to the place and saw that the student had secured the aircraft and got out of it by his own means".

1.16.3 Examination of the aircraft

It was observed that both wings were significantly damaged due to the impact with the fence. The damage was located mainly at the ends of the wings. It was also found that two of the landing gear wheels had come off, and that there was damage to the propeller blades.

There had not been any deficiency in the aircraft that had an influence on the accident. There was continuity of the flight and nose wheel controls.

1.16.4 Landing procedure established in the ATO manual

The landing procedure established in the school manual is as follows:

- On final approach, the crosswind will be compensated by the "drift correction method" up to about 200 ft AGL. At approximately this altitude, the drift correction method will gradually begin to change to "low plane".
- The runway threshold must always be crossed at a minimum height of 50 ft.
- Check to be expressly "AUTHORIZED TO LAND".
- Touch down will be made before the end of the middle of the first third of the runway.
- Always be prepared to perform a GO AROUND (visual approaches) or FAILED APPROACH (instrumental approaches) manoeuvre, performing one or the other without delay, if:
 - a) Is ordered by ATC
 - b) The landing is unsafe
 - c) Visual contact is lost
- During the landing roll, the crosswind will continue to be corrected while the plane is decelerating.

The procedure does not include the indications made by the aircraft manufacturer for the landing phase for the model Piper PA-28-161. Such indications are included in part B of the manual.

1.17. Organizational and management information

Aerodynamics Málaga, S.L. is a training center that has approval number E-ATO-226 by AESA. It operates at the La Axarquía - Leoni Benabu aerodrome and at the Malaga - Costa del Sol airport.

1.18. Additional information

Not applicable.

1.19. Useful or effective investigation techniques

No special investigative techniques were required.

2. ANALYSIS

On June 26, 2020, the Piper PA-28-161 aircraft, registration G-CETE, took off from the La Axarquía aerodrome for a local flight, with a single student, whose purpose was to practice circuits. According to the instructor's statement, the student made three landings and take-offs without any problem, as well as a go around. In the fourth landing and take-off, the student indicated that he was going fast, and that the approach had been stable. When going faster than it should, the flare was a little longer than usual. After putting the wheels on the runway, the aircraft began to move to the left, at which point the pilot decided to apply power without having previously corrected the deviation. This was done by seeing that the remaining runway was shorter than usual, as the previous landing had been a little longer due to speeding. When trying the go around, the pilot did not correct the expected spin effect of the aircraft by swerving and hitting the fence.

The student's decision to cut power and stay on the ground was correct, as he avoided reaching the gate with greater speed.

It is considered that the meteorological conditions did not influence the accident.

3. CONCLUSIONS

3.1. Findings

- The documentation of the student pilot and the aircraft was valid and in force at the time of the accident.
- The student pilot took off from the La Axarquía - Leoni Benabu aerodrome, to carry out an instruction flight consisting of take-offs at the same aerodrome.
- During the fourth landing on runway 30 of the aerodrome, the aircraft veered to the left, leaving the runway and hitting a fence nearby.
- There was no personal injury.

3.2. Causes

The investigation has concluded that this accident was caused by the loss of control of the aircraft during the landing on runway 30 of the aerodrome, resulting in a collision with a fence located in the vicinity of it.

4. SAFETY RECOMMENDATIONS

None.