

AIRCRAFT ACCIDENT REPORT (Ref. N0 1/2016)

**Report on the Accident (collision) between
Aircraft (Reg No. G-SLYN)
And an ENEMED Fuel Bowser.
(5th of July 2016)**

This investigation has been conducted in accordance with *Annex 13
to the ICAO Convention on International Civil Aviation, EU
Regulation No 996/2010* and
*The Civil Aviation (Investigation of Air Accidents and Incidents) Regulation; Legal Notice
16 of 2013.*

Under these Regulations, the sole objective of the investigation of an accident or incident is the prevention of accidents and incidents in the future. It is not the purpose of this investigation to assign fault or blame and the reporting process should not be used to determine liability.

Accident (Collision) between Aircraft G-SLYN and an ENEMED fuel Bowser.

Report Number 1/2016.

Place of Accident:	Apron 1, Taxilane Kilo
Date and Time:	5 th July 2016.
Number of Persons on board.	4; Pilot + 3 Passengers.
Number of Fatalities or Injuries	Nil.

Aircraft Details

Registered Owner/Operator:	European Pilot Academy
Type:	PA28
Nationality:	British Registration G-SLYN

Fuel Bowser Details

Registered Owner/Operator:	ENEMED.
AVP No.	2243
Make:	Fiat Iveco

Introduction

- (0.1) The accident was reported to me by Maj. R. Xuereb at approximately 18.00 (LT) hrs on the day of the accident. I immediately contacted Ms. J. Farrugia, who coordinated all communications between myself and MIA and who obtained the necessary permits for me from OMAS and the Security Forces..
- (0.2) On arriving at the site of the accident, I noticed that MIA authorities had taken all the necessary steps to properly secure the area, including a request for fire cover.

Summary

A four seater single engine aircraft of the type PA28 (RegNo. G-SLYN) landed on RWY 13 and its pilot followed ATC clearance/instructions to taxi to Park 1, where the aircraft was going to be refuelled. During taxi it collided with a fuel bowser of the type (Fiat) Iveco (AVP No. 2243) operated by ENEMED. The bowser was parked on the inner part of taxilane "K" (Kilo Inner), in such a way that it was blocking the entrance to Park 1. (Appendix 1 –plan view of Park 1).

Investigation and Findings

Inspection of the accident site.

- (1.0) I began the investigation with an inspection of the accident site where I noted evidence such as the point of impact, the vehicles final resting positions, skid marks, scrub marks, and gouge marks (or the lack thereof). The Weather conditions and visibility at the time of the accident were excellent and although the Pilot was following the correct taxi procedure he miscalculated the space needed to safely make it past the obstacle (the fuel bowser). This resulted in the aircraft's left wing striking the Fuel Bowser, causing damage to the outer part of the left wing's leading edge and superficial damage to the Fuel Bowser.



1.1 To arrive at a logical and objective conclusion I needed to understand why the fuel bowser was parked in that place and what caused the driver to park in that spot. The point of impact relative to the control tower was also an important factor since it had to be ascertained whether the position of the fuel bowser, and hence of the accident, was evident from the control tower. In theory the controller could

have advised the pilot to “taxi with caution”, or “stop taxiing” until the bowser was moved, however, when I viewed the area from the control tower a different reality emerged. Because of the geographical location of the control tower (specifically, its distance from apron 1) it would have been difficult for the controller to see the fuel bowser unless s/he knew exactly what to look for or had a valid reason to look in that direction. The ENEMED fuel bowzers are painted white and have a medium sized red stripe along both sides such that, from a distance, they are difficult to spot because they can easily blend with the surrounding structures.



- 1.2 I noted that there were no skid marks and that the aircraft was pointed to its left in the direction of the fuel Bowser. This could indicate that the pilot never found it necessary to apply brakes until his port-side wing collided with the Bowser. The CCTV footage of the collision confirms this.
- 1.3 The position of the fuel bowser clearly indicated that neither the “Red limit lines” on the Apron nor the bowser’s position (*blocking the entrance to Park 1.*) were taken into consideration when the bowser was parked.
- 1.4 During the on-site interview, the PIC (*who was visibly still in shock*), assumed that he would clear the fuel Bowser because he was taxiing on the centreline. CCTV footage confirms that the Bowser was clearly and in plain view obstructing his taxi-way; therefore a collision was inevitable.



- 1.5 The Driver said that he was instructed to proceed to Park 1 to refuel an Aircraft owned and operated by the European Pilot Academy (*Note. The aircraft was rented for a private flight by the PIC*). On arrival, he found that the Aircraft had not yet landed; consequently he had to wait until it arrived. CCTV footage confirms that the Bowser was on site approximately 13 minutes before the arrival of the aircraft. On the 5th of July, the day of the accident, the Outside Air Temperature was 29 degrees Celsius (*METAR LMML 051545Z 24008KT CAVOK 29/19 Q1015 NOSIG*), which would

have made it impossible for anyone to sit in the cabin of a non-air-conditioned fuel-bowser for approximately 15 minutes. That is why the driver and his assistant were outside the truck and the fuel-bowser was parked in the location of the collision; which is the only area in Park1 that would be in the shade at that time of day. When queried about the fact that the bowser was obstructing the taxi-way, the driver pointed out that there was enough space on the right side of the bowser for an aircraft the size of a PA28 to pass safely. (Ref., CCTV footage)

- 1.6 During the interview I asked the driver how he communicates with his dispatch office if for example there is emergency situation and he needs to communicate immediately to declare the situation. He answered that ENEMED provides a hand-held radio, but that he did not have one with him on that day. When I asked if he had the facility to communicate with the control tower or at least listen to ATC, he informed me that the radio he had in the fuel-bowser was broken.
- 1.7 I checked and photocopied all official documents, airport passes and licenses, while on site and found them to be correct and according to regulations.

2.0 Further investigation

On the 28th of July 2016, the PIC and personnel from MATS and ENEMED were petitioned to attend an interview at the Ministry for Tourism, in connection with the accident.

- 2.1 ATC did not request ‘fire cover’ after the accident, as matter of fact assistance was requested by MIA. I discussed the sequence of events with the ATC controller to see why he did not make the request. MATS made a statement in relation to this query. *Quote. “The pilot reported “We have a problem; should be OK”, the controller replied “G-YN, require assistance?” and the pilot reported “Negative”. The controller said that the offer of assistance is the standard ATC reply, and a pilot’s negative report is accepted with no further attempts at obtaining information normally made. Communication is low on a pilot’s priority requirements and ATC refrains from unduly bothering aviators who, nevertheless, have a responsibility and means to demand assistance. As a matter of fact, on this occasion, it was MIA that informed emergency services of the accident after being alerted by a third-party, the flight-school.”*
- 2.2 With the ENEMED personnel responsible for coordinating the refuelling of aircraft I discussed the fact that the fuel-bowser was on site approximately 13 minutes before the arrival of the Aircraft. Ideally and in normal circumstances the fuel-bowser should be in position at the stand to refuel an aircraft shortly after the aircraft has arrived, once the aircraft’s engines are switched off and the area around the aircraft has been secured. In this event the “European Pilot Academy” requested the refuelling approximately 30 minutes before the aircraft was due to arrive. The reason for this is that the traffic in that area led to very long delay because TAXIWAY KILO is shared among the Aircrafts taxiing into Park 1 and the service vehicles. I must point out that refuelling an aircraft at the correct time is crucial to maintaining on-time departures and that with its limited resources, ENEMED will be a little stretched during the summer period because of the increase in traffic.
- 2.3 In the interview with the Driver and his assistant I discussed the ENEMED’s SOPs (Standard operating procedures) and items already covered in chapters 1.5 and 1.6 of this report.

- 2.4 I interviewed the PIC about his piloting techniques and “airmanship”. The Pilot revealed that while taxiing he did not have the TAXI CHART in front of him. I asked if he was aware that it was essential for a pilot to have the chart corresponding to the task at hand available. For instance; during departure the “SID chart” must be used, and during an approach the appropriate “Approach Chart” and so on. He replied that he was not aware that he should have had the taxi chart available in front of him when taxiing as this was never pointed out to him during training. He said that during his final flight-test, the taxi chart was not in front of him and the examiner did not object or say anything about it.
- 2.5 On the 22nd of August the passengers of the flight were interviewed at the Ministry for Tourism. In general, they commented that they were satisfied with the flight and confirmed that during taxi the fuel-bowser was in plain sight at all times. They also confirmed that during Taxi the PIC adopted a “sterile cockpit procedure”.

Conclusion.

The purposes of this investigation are to heighten safety and to, where appropriate, make recommendations without assigning blame or liability. One has to take into consideration that when put under the microscope, no person will look that good because life was never meant to be viewed in such detail. Features that are normally invisible to the human eye may appear unrealistically bizarre; in truth, they only represent a distorted reality.

It is unquestionably not my intension to create this impression, as I strongly believe that all the people involved in this accident are competent, responsible and dedicated to their jobs. Are there any lessons to be drawn from this experience? To ignore hard facts just because it is comfortable to do so is like wearing a blindfold and declaring that what cannot be seen is not important. Suffice to say that, although we can never reach perfection, it would be unprofessional not to try.

With these thoughts in mind that I make my closing comments.

Closing Comments

Action should be taken to prevent similar accidents in the future. By any standard, this is not a major accident, but its consequences could have been much worse considering that the bowser was carrying 15,000litres of fuel and there were four souls on-board the Aircraft.

Bad habits in flying can mean the difference between a flight that ends successfully and one that ends in disaster. Every effort should be made by all involved to maintain the highest possible standard of safety and professionalism.

Glossary of Abbreviations.

ATC.....	Air Traffic Control.
CAVOC.....	Ceiling and Visibility OK.
CCTV.....	Closed-circuit television.
ENEMED.....	Aircraft Fuel provider.
ICAO.....	International Civil Aviation Organization.
LMML.....	ICAO-code for Malta.
MATS.....	Malta Air Traffic Services
MIA.....	Malta International Airport
METAR.....	Aviation Routine Weather Report.
NOSIG.....	No Significant Change.
OMAS.....	Office of the Manager Airport Security.
PIC.....	Pilot in Command.
QNH.....	Atmospheric pressure adjusted to sea level
SID.....	Standard Instrument Departure
SOP.....	Standard