

Jamhuuriyadda Federaalka Soomaaliya

Hay'adda Duulista Rayidka & Saadaasha Hawada

جمهورية الصومال الفدرالية
هيئة الطيران المدني
والأرصاد الجوية الصومالية



Somali Federal Republic
Somali Civil Aviation &
Meteorology Authority
(SCAMA)

Preliminary report on Flight TSY 810 accident

Report date 17 October 2015

Table of contents

i. Introduction	P3
ii. Summary of the reports received from various accounts	P3
a. On duty Controller's account	P3
b. Favori Accounts	P4
c. The pilot of the flight TSY810's account	P5
iii. Report Findings	P6
➤ Cut-off time	P6
➤ NOTAMs	P7
➤ Damage to the aircraft after the crash	P8
iv. Conclusion	P8
v. Appendix	
✓ Controller Report	
✓ Pilot's account	
✓ Favori Report	
✓ NOTAMS	
✓ Eyewitness account	
✓ Photos from the wreckage	

Preliminary report on Flight TSY 810 accident

I. Introduction

The flight TSY 810 that involved the accident, Airbus A300, with registration mark SUBMZ, is an Egyptian registered aircraft that solely intended for cargo transport. On the day of the accident it was hauling cargo for AMISOM.

According to its waybill or cargo manifest, it was carrying 41,260.0kg. It departed Cairo for Mogadishu on 12/10/2015 at 10:45Z (13:45 Mogadishu time) and arrived Mogadishu airport at 15:27Z (18:27 local).

As indicated on its flight record sheet, its uplift fuel was 47,500ltr during takeoff. Given to the current season, the official Mogadishu sunset time is 15:00Z (18:00 local) and the Mogadishu airport operates only daylight hours, from sunrise to sunset. This means that the flight TSY 810 arrived 27 minutes later after the airport is closed.

II. Summary of the reports received from various accounts

a) On duty Controller's account

Mogadishu aerodrome control tower only provides advisory service to aircraft taking off, landing or flying within the vicinity of the airport.

The report received from the duty controller on 12/10/2015, indicate that, he has received an arrival message regarding flight TSY 810 from Mogadishu Flight Information Centre based in Nairobi. He informed the Centre in Nairobi that the airport is closed at the estimated arrival time (ETA) of the aircraft

and advised them to divert the flight TSY 810 to the alternate aerodrome. No feedback was received from the centre regarding the diversion request.

At 14:45Z flight TSY 810 made the first contact to the duty controller giving his estimated arrival time to be at 15:02Z (18:02 local). As before, the controller informed the pilot at his ETA the airport is closed, but the pilot insisted he is going to land. The controller provided the necessary information including the latest weather at the airport and the runway in use.

At 18:02 the controller contacted the pilot requesting his position as he did not turn up at his estimated arrival time. The pilot revised his ETA to 15:27Z (18:02 local) as he was 54NM (100km) to Mogadishu. At 15:27Z the aircraft appeared on final approach Runway 05 where the pilot was advised to land at his own discretion since the controller's instruction was only advisory and not clearance.

The flight TSY 810 did not land and commenced missed approach, from there every attempts made for landing was unsuccessful. At one point the pilot mistook street parallel to the runway lighted by flood lights with intention of landing but was alerted that the runway was on his right and the approach was discontinued. The pilot at low altitude overshoots the runway for another attempt to land.

From there, the aircraft did not make any more attempts to land and it disappeared from the controller's sight. At about 19:40 local time the controller received information from AMISOM that the aircraft has crashed.

b) Favori Accounts

Favori LLC, a handling company at Mogadishu airport has received a handling request from Tristar Air on 12/10/2015 at 12:00 local time. According to their report, the aircraft was scheduled to arrive at 12:00 local time but due to delays at departure airport amended

estimate time of arrival (ETA) was sent requesting an extension to hours of operation by two hours.

Favori declined this request and advised the airline operator to let the aircraft arrive not later than 15:30 local time. At 10:52 local, further message was sent indicating revised ETA of 18:00 local. However, that did not happen as the aircraft made the first landing attempt at 18:25 local time.

As it was dark and the runway has no lighting, Favori brought in cars parked on both ends of the runway to assist the pilot to land safely. The aircraft made three failed attempts to land that took 45 minutes circling over the airport. The Captain was then advised to proceed to the alternate aerodrome but had no enough fuel for the diversion.

At about 19:40 local the aircraft disappeared and no further communications were received from the pilot.

c) The pilot of the flight TSY810's account

Flight TSY810 overflew the aerodrome at 18:27 local (15:27Z) with 9500kg of fuel and joined a right downwind for runway 05 along the coastline, but on short final went around reporting the approach had become unstable.

During the go around the aerodrome appeared to their left and ocean to the right hand requested to join extended centerline for two minutes then joined another right hand downwind and final for runway 05 but reported they could not see the runway.

The crew advised that they were no longer able to divert having cut into the diversion fuel during that second approach reporting they had now 6000kg of fuel left.

The controller instructed the crew to join another right downwind for runway 05, the crew refused as they were confused with the directions given by the controller, who repeatedly advised them that the runway was on their right hand side.

Tower instructed them to have another go round to join another right downwind for runway 05 issuing vectors to the right, the crew advised they had 4000kg of fuel left, the fourth approach to runway 05 failed with 2000kg of fuel left.

Finally, TSY 810 pilot received instruction taking it far to the north for extended downwind to runway 05, the crew advised they had just 400 kg of fuel left and tower instructed to not overfly the village.

Another voice appeared on the tower frequency trying to assist the crew, an engine flamed out, 200 kg of fuel remaining, the second engine flamed out and the crew put the aircraft down on the next free spot visible about 18km west of the airport.

III. Report Findings

1. Cut-off time

Any aerodrome that operated limited period of time in a day has a cut-off time, whereby any flight which intends to go to that aerodrome must observe. For instance, flying from Cairo, if the en-route hours are five hours for example, the cut-off time of Mogadishu airport for flights arriving from Cairo is 10:00Z latest. Any departure after 10:00Z would result the arrival of the flight after Mogadishu airport is closed.

As indicated in the flight record of this aircraft, its take-off time was 10:45Z and the arrival time was 15:27Z, this makes flight duration of 4:42 minutes. This means the flight took off 27 minutes past the cut-off time. As a result of this, the flight arrived Mogadishu when the aerodrome was already closed 27

minutes ago, and Mogadishu has no operating runway lights or precision approaches. Moreover, the aircraft did not have an alternate fuel which the crew intentionally substituted for payload for commercial gain and their 45 minutes reserve was depleted by their failed landing attempts. This led to flight TSY 810 run out of fuel and has to crash land in an open field outskirts of Mogadishu near Arbiska.

According to eye witness, it looks that the pilot mistakenly tried to land on Parallel Street to the left of runway 05 as he was confused with the lights along this street. This street is inside the airport compound, it passes between the control tower building and apron.

NOTAMs

The use of the Mogadishu airport has been restricted operationally after several NOTAMs (A0006/15 NOTAMR A0008/14) were issued by Flight Information Service for Somalia (FIS) office in Nairobi who manages the Somalia airspace. These NOTAMs provide a written notification to pilots before a flight, advising them of circumstances relating to the Somali airspace as well as the airports. It alerts potential hazards that could affect the safety of the flights intending to perform a passenger service from the Mogadishu airport due to potential armed conflict in the city.

On several occasions, Somali Civil Aviation and Meteorology authority (SCAMA) requested FIS office to ease those restrictions by issuing a replacement NOTAM but this has been delayed until 15/10/2015. This means that the Mogadishu airport was internationally closed to operations related civil passenger aircraft until the NOTAM (MKA0041) **A0037/15** was stipulated on 15/10/2015, which specifies the hours of operation of the airport from 06:15am local (03:15Z) to 18:00 local (15:00Z).

It is not clear why these restrictions have not been lifted earlier as the security of the city in general and the airport in particular was relatively

safe. Furthermore, why this release coincides with the event of this accident? It is believed that if this latest NOTAM was available to the crew of the flight TSY 810 prior to departure, it would have a major impact on the pilot's decision to depart Cairo for Mogadishu at such late time (*ref. Attached NOTAM*).

2. Damage to the aircraft after the accident

Flight TSY 810 plane has suffered a total damage that is considered beyond repair but fortunately all crew survived. After the duty controller realised that flight TSY810 has entered an emergency phase, he put the emergency services at Mogadishu airport on full alert. However, flight TSY 810 crash landed on an open field about 18 km west of the airport. The African Union Mission in Somalia (AMISOM) has dispatched two helicopters to assist and rescue the crew but that did not happen due to loose soil at the crash site. AMISOM personnel stationed nearby the site has immediately secured the area surrounding the wreckage of the aircraft and rescued the crew.

Given the current security situation in Somalia, the location and the time of the crash, it was impractical for the emergency services at the airport or in the city to reach the crash site within reasonable time frame.

IV. Conclusion

An Airbus A300 operated by Egyptian cargo carrier Tristar Air crashed near Mogadishu in Somalia on 12 October after several failed attempt to land.

The crew of the flight TSY 810 has been warned numerous times that Mogadishu airport closes at 18:00 local (15:00Z) and there is no adequate runway lights as the airport is not prepared to receive flights during night time hours. Thus, the pilot has intentionally tried to land at the airport while the visibility was limited to few meters due to darkness.

Additionally, the pilot indicate on this report that he was receiving communications from radio stations other than Mogadishu Aerodrome Tower

controller, which if true, complicates the matter further. Numerous occasions in the past, similar complains about other stations interfering the frequency designated for exchange of information between pilots and the controller has been filed by Tower controller (*Ref. ATC tower log book*)

On the other hand, the airspace around the world is divided into several segments, each of which is assigned to a specific class. Most nations adhere to the classification specified by the International Civil Aviation Organization (ICAO). The airspace under the responsibility of Mogadishu Aerodrome Tower is classified as Class G airspace, where Air Traffic Controller (ATC) has no authority or responsibility to control air traffic. Mogadishu aerodrome controller provides an advisory information on the position and, if known, intentions of other aircraft likely to pose a hazard to flight.

After the accident, the Minister of Transport and Civil Aviation of Somalia has appointed a team of investigators to establish the actual cause of the crash. The Black Box, Voice recorder and other documents safely recovered from the wreckage will pave the way for further investigation to substantiate facts involving the accident. This investigation is ongoing and final report will be released on conclusion.

End