



# AIB Bulletin

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Category: 1.3

**Aircraft Type and Reg:**

Piper PA32-300 5H-MTU Serial No. 32-40541

**No & Type of Engines:**

One Lycoming IO-540 KIA

**Year of Manufacture:**

1974

**Date: & Time (UTC):**

11<sup>th</sup> December 1999 at Approximately 0920 hrs

**Location:**

Amani Gomvu Aerodrome 0657S 3931E

**Type of Flight:**

PRIVATE

**Persons on Board:**

Crew 1 Passengers - NIL

**Injuries:**

Crew NIL Passengers - NIL

**Nature of Damage:**

Substantial damage to left wing and tail plane

**Commander's Licence:**

CPL

**Commander's Age:**

58 Years

**Commander's Experience:**

1318 hours of which about 1250 were on type

Last 90 days: 92 hrs

Last 28 days: 1 hr

**Information Source:**

Telephone call from the pilot on 13<sup>th</sup> December 1999

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The Bulletin contains facts relating to the accident which have been determined up to the time of issue. This information is published to inform the public and the aviation industry of the general circumstances of the accidents at the preliminary/stage and must necessarily be regarded as tentative and subject to alteration or correction if additional evidence becomes available.

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The pilot of 5H-MTU filed a flight plan to operate from Dar es Salaam International Airport to Amani Gomvu and return on 11<sup>th</sup> December 1999 under visual flight rules.

Pre-flight action was carried out and the aircraft departed Dar es salaam at 0911 with an ETA Amani Gomvu of 0922. The take off and climb to 1500 feet was normal.

The pilot reported destination in sight to Dar ATS at 0919 and thereafter changed frequency to 118.2 Mhz.

From observation of Windsock at Amani Gomvu, the pilot estimated the wind to be North Easterly and chose to land on runway 01. The course was taken to position the aircraft right hand down-wind runway 01 having followed the vicinity of the coastline.

While positioning for downwind runway 01 at 700 feet and the threshold of runway 19 visible at 2 O'clock position the engine stopped. Efforts to re-start the engine by activating the electric pump and switching tanks from the right main to the left main fuel tank failed. The pilot subsequently initiated a forced landing straight ahead.

The aircraft touched down on a stretch of grass just beyond some tall trees on an approximate heading of 220<sup>o</sup> and rolled for 78 metres before the left wing collided with bush trees and separated. The left wing subsequently lifted off the aircraft, flew across the fuselage and landed just beyond the path of the left wing. As the aircraft continued to roll, the left horizontal stabilizer collided with a thick stump causing damage to the tail cone and the rudder. After covering a further 44 metres 5H-MTU came to rest facing 175<sup>o</sup> and was 58 metres beyond the left edge of runway 19 and 300 metres from the threshold of the runway.

There was no fire and the pilot was not injured. The aircraft sustained substantial damage to the left wing, the tail plane and the tail cone.

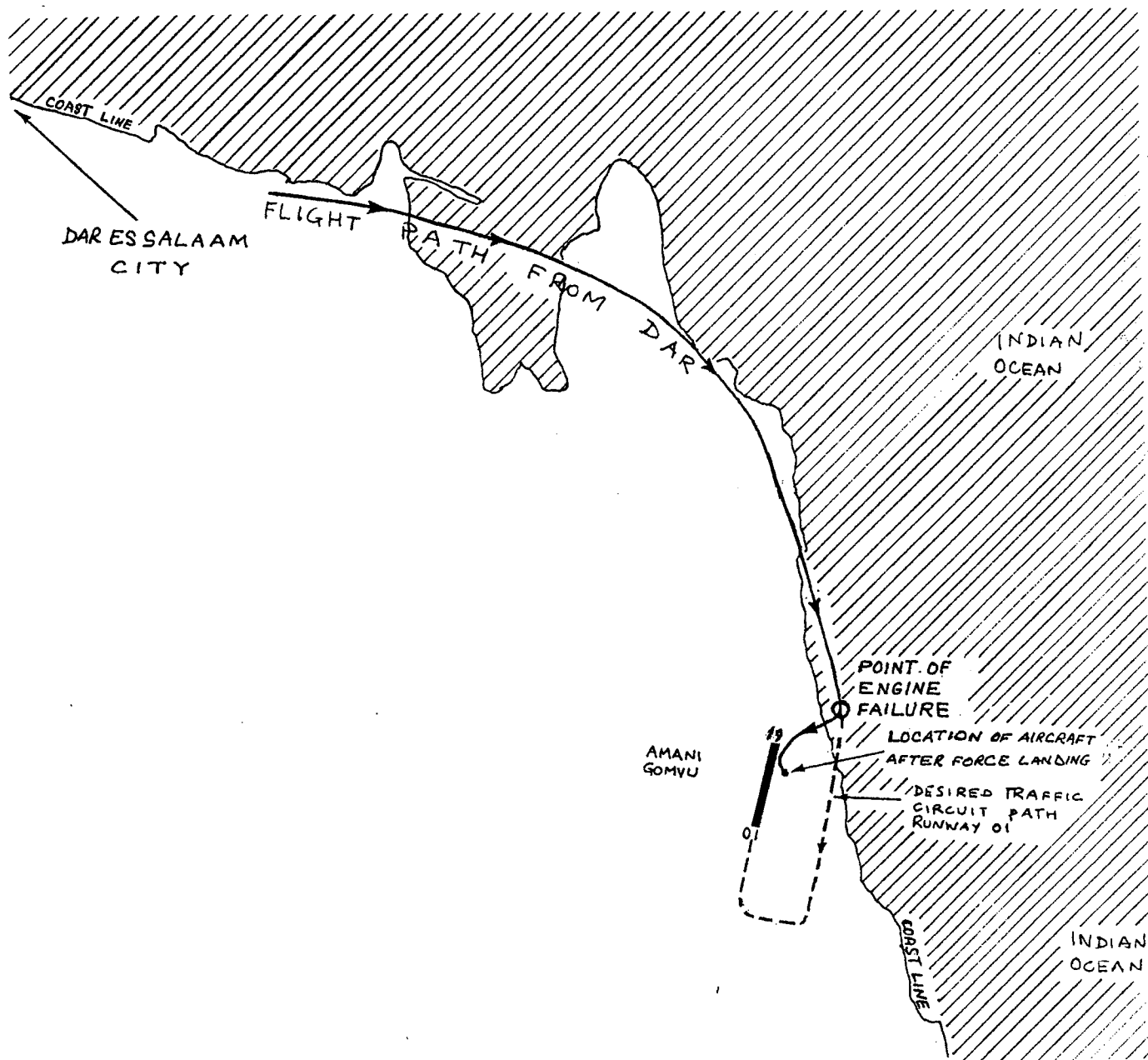
In order to avoid the possibility of fire at the crash site the pilot cleared the grass on the area surrounding the aircraft. He also de-fueled the aircraft. Sixty litres of fuel was recovered from the left main tank and about 10 litres from the right main tank. The pilot himself testified that on take-off from Dar es Salaam he had 120 litres of fuel distributed equally among the two main tanks.

Amani Gomvu airstrip, elevation 240 feet is located in a tropical bush/forest land about 30 miles south of Dar es Salaam. The accident occurred in a rainy season when the surrounding area was covered with tall grass rising up to 70 inches. There were also scattered bushes and tall trees surrounding the runway. Examination of the area in the vicinity of the runway showed that if the strip 40 metres beyond both runway edges and 60 metres beyond both ends had been cleared as directed by TCAA it would have been possible for the pilot to locate a stretch of grass which would have either allowed him to return to the runway from the point of touch down or would have been long enough for him to stop the machine without hitting trees.

The weather was described by the pilot as being excellent.

The engine, a Textron Lycoming IO-540 KIA, had logged 1230 hours and had 770 hours to go before the next overhaul. The cause of the failure was not immediately known.

Further investigation is being conducted to determine the cause of the engine failure in flight.



### ACCIDENT TO PIPER PA 32-300 5H-MTU NEAR AMANI GOMVU AIRSTRIP ON 11 DECEMBER 1999



Five passengers boarded the aircraft at Chankonde for a flight to Dar es Salaam. The pilot said that all the heavy baggage and two members of the hunting party left by road for Dar es Salaam. The remaining five who boarded the aircraft carried only hand luggage.

In the preparation for take-off the pilot taxied to the threshold of runway 07, made the "first selection" of flaps and applied full power on brakes. He testified that he did not lean the mixtures since he saw no requirement for this.

The initial phase of the take-off roll appeared normal to the pilot. When the aircraft had covered about 600 metres and was accelerating through 65/70 Kt it went through a muddy ditch causing the pilot to feel deceleration. It immediately became apparent that he was not going to achieve the take off speed and clear the trees in the foreground. The pilot subsequently decided to abort the take-off. When the engines were throttled back and brakes were applied the aircraft continued to roll on wet and slippery sandy surface till it overran the end of runway 07 and collided with trees located about 60 metres beyond the end of the runway.

As the aircraft impacted the trees in the accident sequence, both wing sections outboard of the engines separated and caught fire. The aircraft came to rest about 56' metres forward of the detached wing sections. The grass beneath the aircraft and the right engine were also on fire.

The pilot was unable to open the cockpit door because it was blocked by a tree. He subsequently rushed behind and opened the main door. As he did so, one passenger, "who was tall and muscular" pushed the pilot causing him to fall by the doorway on the ground where grass surface was on fire. All the five passengers stepped on the pilot and escaped.

The pilot managed to rise on his own, returned to the cabin and picked the fire extinguisher. He subsequently fought the fire under the fuselage, the tail and the right engine. He was also joined by a vehicle which had 20 litres of water and this was used to put out the fire on the left hand side of the fuselage.

The passenger who was in the co-pilot seat sustained a cut on his eye brow and another passenger suffered minor burns on his fingers.

The pilot whom the passengers used as a stepping stone and a fire blanket sustained first degree burns to his face and both arms.

Both wings and parts of the tail plane were torn off the fuselage by impact with the trees. They were also partly destroyed by fire. The fuselage suffered relatively less damage and the cabin remained intact. However, much of the interior equipment was destroyed by unknown persons a few days after the accident when the wreckage was left unguarded.

The weather at the time of the accident was reported to be sunny with no wind. The ground was wet from rains which had been falling in the area.

Chankonde airstrip, elevation 3380 feet has one runway 07/25 which is 1000 metres long and 30 metres wide. The surface is sand with some patches of scattered grass. There are tall trees starting 60 metres beyond the end of runway 07.