

Section/division **Occurrence Investigation**

Form Number: CA 12-12a

<b>AIRCRAFT ACCIDENT REPORT AND EXECUTIVE SUMMARY</b>
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				Reference:	<b>CA18/2/3/9165</b>	
<b>Aircraft Registration</b>	<b>ZS-OSS</b>	<b>Date of Accident</b>	16 April 2013		<b>Time of Accident</b>	1557Z
<b>Type of Aircraft</b>	DH-82 Tiger Moth		<b>Type of Operation</b>	Private		
<b>Pilot-in-command Licence Type</b>		CPL	<b>Age</b>	54	<b>Licence Valid</b>	YES
<b>Pilot-in-command Flying Experience</b>		Total Flying Hours	870.6		Hours on Type	252
<b>Last point of departure</b>		Mahikeng airport . (FAMM), Mahikeng, North West				
<b>Next point of intended landing</b>		Mahikeng airport . (FAMM), Mahikeng, North West				
<b>Location of the accident site with reference to easily defined geographical points (GPS readings if possible)</b>						
In the Modimola dam, under water. Located 3.4nm bearing 194° from FAMM airport (GPS S25° 51q55+ E025° 31q31+)						
<b>Meteorological Information</b>		Surface wind light and variable, Visibility >10km Temp. 28° Celsius dew point 04° Celsius. Few clouds at 4000 feet. No significant weather reported.				
<b>Number of people on board</b>		1+1	<b>No. of people injured</b>	0	<b>No. of people killed</b>	2
<b>Synopsis</b>		<p>A pilot accompanied by passenger took off from Mahikeng Airport for a short scenic flight with the intent to land back at Mahikeng before sunset. Their taxi to and take-off from runway04 was uneventful. Whilst in contact with tower the pair indicated that their detail would last about ten minutes and that they would contact tower as soon as they were finished.</p> <p>A few minutes before the aircraft was reported missing a witness states that he saw an aircraft operating above the water. Suddenly it banked left and then started losing height in a nose dive attitude and hit the water. It disappeared under the water.</p> <p>Mahikeng tower tried to contact the aircraft on frequency but failed. Search and rescue of the two occupants was initiated. The aircraft remained underwater until recovered by an SAPS diving unit at approximately 18:00Z. The pilot and his passenger had suffered fatal injuries and the aircraft was completely destroyed.</p>				
<b>Probable Cause</b>		<p>losing of control by flying low over water</p>				
<b>IARC Date</b>				<b>Release Date</b>		



## AIRCRAFT ACCIDENT REPORT

**Name of Owner/Operator** : Pearl Coral 1323 CC  
**Manufacturer** : De Havilland  
**Model** : DH 82  
**Nationality** : South African  
**Registration Marks** : ZS-OSS  
**Place** : Modimola Dam  
**Date** : 16 April 2013  
**Time** : 1557Z

*All times given in this report are Co-ordinated Universal Time (UTC) and will be denoted by (Z). South African Standard Time is UTC plus 2 hours.*

### Purpose of the Investigation:

*In terms of Regulation 12.03.1 of the Civil Aviation Regulations (1997) this report was compiled in the interest of the promotion of aviation safety and the reduction of the risk of aviation accidents or accidents and not to establish legal liability.*

### Disclaimer:

*This report is given without prejudice to the rights of the CAA, which are reserved.*

## 1. FACTUAL INFORMATION

### 1.1 History of Flight

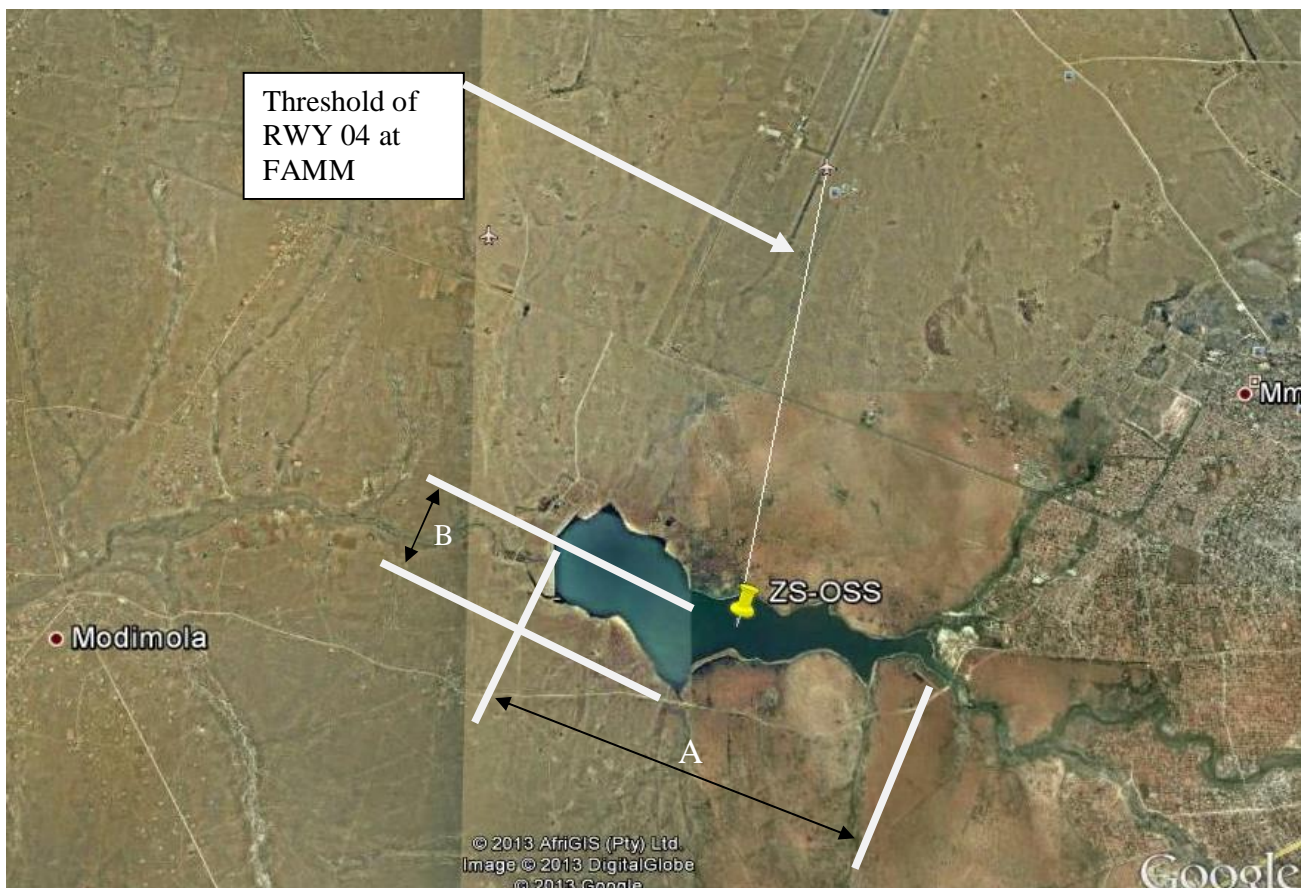
1.1.1 On the 16 April 2013 the pilot offered a scenic ride around Mahikeng International Airport (FAMM) to the passenger, a male flight instructor from African Union Aviation Academy (AUAA), based in Mahikeng. The pilot and his passenger filled the aircraft with 10 gal of fuel and continued to do a pre-flight inspection. The flight was meant as a birthday gift for the passenger. They requested taxi instructions from FAMM tower. Tower instructed them to taxi to the holding point of runway 04.

1.1.2 After taxiing to the holding point at time 15:37Z the aircraft was cleared for take-off. The initial climb was uneventful. The level to which it climbed was not clear in the tapes provided by Air Traffic and Navigation Services (ATNS). The aircraft flew to the dam and was over the dam at 15:39Z.

1.1.3 At 15:40 they advised Air Traffic Control (ATC) that they would be operating around

the Modimola Dam, see picture 1 (GPS S25° 51q55+ E025° 31q31+), and would report detail complete and then fly back for landing. That was their last recorded call to ATC. There was no other known traffic in the vicinity of the dam at the time. At 15:58Z the ATC tried at least three times to contact the aircraft but in vain.

1.1.4 A witness, an Aircraft Maintenance Engineer (AME) on his way home, who was standing at the dam shore, stated that he saw an aircraft operating above the water and that the aircraft engine sounded as if it was losing power but it did not stop. He said it seemed that the aircraft was in some form of difficulty. The aircraft then banked left and suddenly started losing height in a nose dive attitude and hit the water. It went straight down into the water with a big splash. The witness's distance from the point of impact could not be determined.



**Figure 1:** The dam is situated 3.48nm (6.45km) bearing 194° from Mahikeng airport. Its **length -A-** is 4,137km and the **width -B-** is 1.276km; depth unknown. Elevation is 4041 ft. AGL

1.1.5 The witness noticed that no one was coming to the surface. This made him nervous. Further, he was powerless since he could not swim. He nevertheless

reported the accident to the airport's fire department, which in turn alerted the ATC in the tower. The search for the wreckage involved the South African Police Services (SAPS) and colleagues from the flying academy.

- 1.1.6 From the shoreline the SAPS Search and Rescue (SAR) vehicle spotted a yellow tail in the water at approximately 18:00Z. Rescue could not be effected since it was too late for divers to be deployed. Both occupants sustained fatal injuries in the crash. The recovery resumed the following morning, with the pilot being recovered at 08:00Z. The passenger and the aircraft were recovered at 12:58 Z.

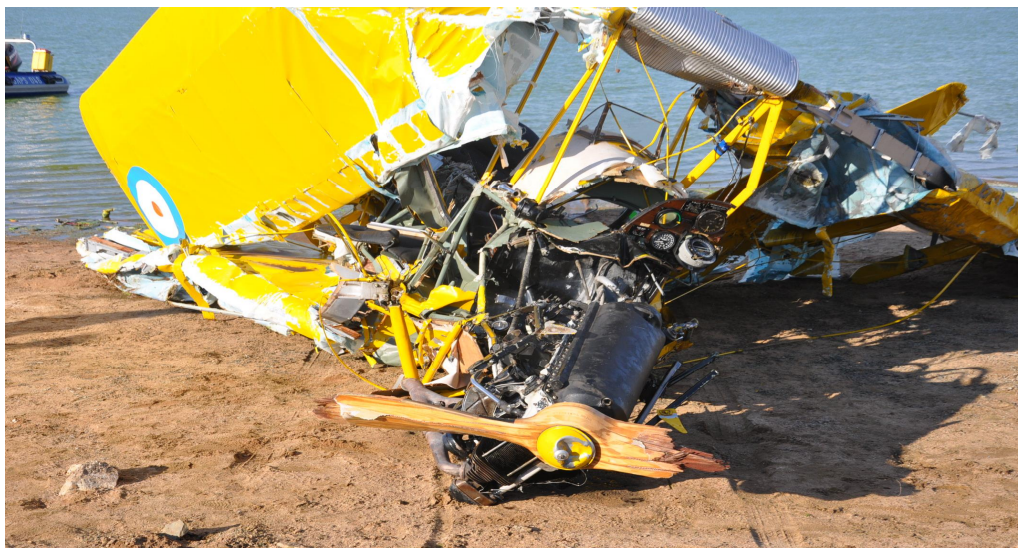
## 1.2 Injuries to Persons

Injuries	Pilot	Crew	Pass.	Other
Fatal	1	-	1	-
Serious	-	-	-	-
Minor	-	-	-	-

- 1.2.1 The pilot and his passenger suffered fatal injuries in the crash. Both were South African citizens.

## 1.3 Damage to Aircraft

- 1.3.1 The aircraft was completely destroyed.



**Figure 2:** Aircraft wreckage recovered by SAPS divers

- 1.3.2 The propeller blades shattered as they contacted the water and the pieces that

broke from it were no longer attached.

#### 1.4 Other Damage

1.4.1 There was no other damage.

#### 1.5 Personnel Information

Nationality	South African	Gender	Male	Age	54
Licence Number	027 043 2982	Licence Type	Commercial		
Licence valid	31/05/2013	Type Endorsed	Yes		
Ratings	Instructor Gr III				
Medical Expiry Date	31/05/2013				
Restrictions	Corrective lenses				
Previous Accidents	None				

#### Flying Experience:

Total Hours	870.6
Total Past 90 Days	21.6
Total on Type Past 90 Days	11
Total on Type	252

1.5.1 The PIC, who had joined the academy in February 2013 as an aircraft's responsible person, owned and operated this antique aircraft. He offered the passenger a joyride to celebrate his 23<sup>rd</sup> birthday.

1.5.2 The passenger held a valid South African Commercial Pilot's Licence (CPL) and was a Grade II flight instructor at the Academy but was not rated on this aircraft type. His file indicated he had a total of 1498.6 flying hours entered in the pilot's logbook on the 18 February 2013 and had been an instructor at the academy for under 3 years.

#### 1.6 Aircraft Information

##### Airframe:

Type	De Havilland DH 82A
------	---------------------

Serial Number	82982	
Manufacturer	De Havilland	
Date of Manufacture	1941	
Total Airframe Hours (At time of Accident)	688	
Last MPI (Date & Hours)	09/04/2013	678
Hours since Last MPI	10	
C of A (Issue Date)	30/04/2002	
C of R (Issue Date) (Present owner)	15/08/2008	
Operating Categories	Part 91	

**Engine:**

Type	Gypsy Major
Serial Number	A164631
Hours since New	680.17
Hours since Overhaul	317.17

**Propeller:**

Type	Dunbar DC-193-140-I-DH
Serial Number	1330C
Hours since New	+/- 535.77
Hours since Overhaul	Unknown

- 1.6.1 DH-82 Tiger Moth is a tail-dragging single engine aircraft with a wooden propeller. The aircraft has biplane wings and is constructed from metal and mostly wooden frame to reduce weight. The fuselage and empennage are covered by fabric. Its moving surfaces are controlled by metal cables and chains from the cockpit control column. There are no flaps on the aircraft but ailerons on the lower wings.
- 1.6.2 During the initial call to Mahikeng Tower, the pilot advised tower that they were two souls on board and that they had one- and-a- half hours of fuel. That duration is equivalent to half the full tank. Full tank is 20gal. Fuel consumption is 6.5gal/h, endurance is thus 3 hours.

**1.7 Meteorological Information**

Wind direction	350°	Wind speed	02kts	Visibility	9999
Temperature	28°C	Cloud cover	FEW	Cloud base	4000ft
Dew point	04°C				

1.7.1 Weather information as obtained from the SA Weather Services for FAMM on the 16 April 2013 at 16:00Z. Extract of the weather report attached as Annexure 5.

## **1.8 Aids to Navigation**

1.8.1 The aircraft was fitted with standard navigational equipment as approved at the time of certification by the regulator. No defects were recorded or reported prior to or during the accident flight.

## **1.9 Communications.**

1.9.1 The aircraft was equipped with standard communication systems and none was reported unserviceable prior to the accident. Communication between the ATC and the aircraft was conducted on FAMM tower frequency 119.3MHz.

## **1.10 Aerodrome Information**

1.10.1 The accident did not happen at an aerodrome, but at Modimola dam, which is situated about 3.48nm from the aerodrome at an elevation of 4041ft AMSL.

## **1.11 Flight Recorders**

1.11.1 The aircraft was not fitted with a cockpit voice recorder (CVR) or a flight data recorder (FDR), and neither was it required by regulations to be fitted to this type of aircraft and operation.

## **1.12 Wreckage and Impact Information**

1.12.1 The aircraft impacted Modimola dam late in the afternoon. The aircraft and occupants remained submerged until the following day when they were recovered by SAPS divers. The exact co-ordinates of the impact could not be determined.

- 1.12.2 The flight control components exhibited accident damage and their connecting cables were assessed and found to be intact prior to the accident. The flight controls were able to move freely.
- 1.12.3 The aircraft was completely destroyed in the crash. The wooden propellers tips were both broken at different lengths and both the bi-wings broke backwards. The left main undercarriage broke during the accident sequence.
- 1.12.4 The main or major components of the aircraft were still attached to the aircraft when it was floated and then pulled out of the water by an SAPS diving unit. The body of the passenger was still trapped in the wreckage and Jaws of Life . a heavy metal cutting tool - had to be used to free him.



**Figure 3:** Wreckage salvaged from the water

### **1.13 Medical and Pathological Information**

- 1.13.1 The pilot held a valid SACAA medical certificate at the time of the accident. The Autopsy Report of the PIC indicated he had multiple bruises and cuts predominantly to the front of the body. The cause of death was drowning due to neck fracture and



brain damage as per the report.

1.13.2 The passenger's report findings amongst other injuries includes signs of water aspiration in the lungs and fractured mid shaft left femur (thigh bone). The cause of death was determined to be drowning due to brain damage and a fractured femur.

#### **1.14 Fire**

1.14.1 There was no evidence of pre- or post- impact fire.

#### **1.15 Survival Aspects**

1.15.1 The accident was not survivable.

1.15.2 Both occupants were found to be fatally injured underwater with the wreckage. They could not be extracted on the night that they were located. The rescue operation resumed at daylight the following morning. The SAPS diving unit extracted the pilot under water first, then struggled for hours trying to extract the passenger. They, the diving unit, decided to extract the wreckage with the passenger inside because the two could not be separated.

1.15.3 Once the wreckage was pulled out of the dam, the Jaws of Life were used to free the passenger.

1.15.4 Their three point harnesses broke during impact, and the seats were ripped from the floor. The aircraft's control columns projected from the floor upwards into the pilot and passenger cubicles. Both control columns were broken at approximately half length.

#### **1.16 Tests and Research**

1.16.1 The aircraft was submerged for approximately 18 hours. The engine had to be stripped down and immersed in oil to avoid rusting. All the engine's internal metal parts that were treated indicated normal wear and tear. Some damage to the engine parts was caused by the accident.

## **1.17 Organizational and Management Information**

1.17.1 This was a private flight organised by the owner as a present to the passenger to celebrate his 23<sup>rd</sup> birthday. The owner and the passenger were colleagues at African Union Aviation Academy (AUAA).

1.17.2 The Aircraft Maintenance Organisation (AMO) that performed the last maintenance on the aircraft prior to the accident flight was in possession of a valid AMO Approval certificate No 1194.

## **1.18 Additional Information**

1.18.1 None

## **1.19 Useful or Effective Investigation Techniques**

1.19.1 None

## **2. ANALYSIS**

2.1 The pilot and owner of the aircraft was properly qualified and medically fit to conduct this flight. There was no exchange of cash between the parties. The flight was meant as a present to the passenger who had just turned 23 years old.

2.2 Weather did not contribute to this accident. The wind was light at 02 knots and visibility more than 10km. There were few clouds at 4000 feet AGL temperature 28° Celsius and the dew point 04° Celsius. This is supported by the official weather report provided by the South African Weather Services.

2.3 The aircraft had approximately 10 gal of fuel according to a witness who was present during pre-flight check. Maintenance records indicated that all MPI had been complied with as per regulations. The aircraft's engine was under water for approximately 18 hours. The engine had to be preserved as quickly as possible to avoid corrosion. When it got to Transvaal Aircraft Maintenance (PTY) LTD (TAM) workshop in Wonderboom airport the engine was taken apart.

- 2.4 The aircraft taxied and got airborne from runway 04 at 15:37Z safely after following Mahikeng Tower instructions. The pilot indicated that they wanted to operate around the dam for approximately 10 minutes and then return for landing. FAMM tower allowed them to operate over the dam since there was no traffic in the area. They were also instructed to report detail complete.
- 2.5 At 15:40Z a witness, an aircraft maintenance engineer, on his way home from work claims to have seen an aircraft flying low above the water. The aircraft engine sounded as if it was losing power but it did not stop. He said it seemed that the aircraft was in some form of difficulty and it banked to the left with nose down attitude. It then went straight down into the water with a big splash. Seconds later the aircraft had disappeared under the water and no one surfaced.
- 2.6 The wreckage, when analysed, indicated that impact was at a high angle. Both bi-planes were bent backwards in a symmetrical fashion. The undercarriage was also broken, which indicated that there was no delay between the two wings hitting the water. If the angle was low or the point of first contact was the undercarriage the aircraft would have overturned and the wings would have sustained minimal damage.
- 2.7 There is evidence indicating that at the time of impact the engine had power. The propeller blade tips that broke off would have been still attached if the aircraft entered the water with blades wind milling. The aircraft had power and hence the tips that broke off could not be found due to the forces involved as the blades struck the water. The broken area had very sharp splinters indicating that the propeller broke into several pieces.
- 2.8 The pilot lost of control of the aircraft just before impact as the witness has indicated in paragraph 2.5 above. He paints a picture of an aircraft losing control before impacting water.

### **3. CONCLUSION**

#### **3.1 Findings**

- 3.1.1 The aircraft was certified, equipped and maintained in accordance with existing regulations and approved procedures.
- 3.1.2 Proper pre-flight inspection was conducted and the pair filled the aircraft with 10 gallons of recommended fuel.
- 3.1.3 There was no evidence of airframe failure or system malfunction prior to the accident. The damage to all control surfaces and joining high tension cables was attributed to the severe impact forces.
- 3.1.4 Weather did not contribute to the accident.
- 3.1.5 They conducted the most of the flight at low level because the tower last saw them after take-off.
- 3.1.6 The propeller blade tip damage was consistent with the engine producing power at the time of impact.
- 3.1.7 The pilot was licensed and qualified for the flight in accordance with existing regulations
- 3.1.8 The recording of the communication between the pilot and Mahikeng Tower indicates that the tower was unable to keep a visual watch of the aircraft even though it was within 4nm of the tower.
- 3.1.9 The post-mortem results indicate that the pilot and his passenger died as a result of injuries sustained during the accident and not due to any pre-existing condition.

## **3.2 Probable Cause/s**

- 3.2.1 Loss of control by flying low over water.

## **4. SAFETY RECOMMENDATIONS**

- 4.1 None

## **5. ANNEXURES**

- 5.1 Equipment list
- 5.2 Transcript between ATC and ZS-OSS
- 5.3 Certification of Airworthiness and Registration
- 5.4 Table of Specifications

## 5.5 Weather Report

## 5.6 Witness statement

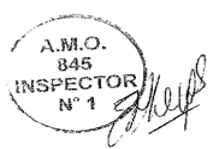
## Annexure 1: Equipment list

Revision date 2000-12-06

CONTINUATION OF PAGE 3 OF 43

EQUIPMENT LIST (24)

AIRCRAFT TYPE	REGISTRATION	SERIAL NO.
DH 82A	ZS-OSS	82982
FRONT COCKPIT		
=====		
1 off RPM INDICATOR		
1 off OIL PRESSURE GAUGE		
1 off TURN AND BANK INDICATOR		
1 off AIR SPEED INDICATOR		
1 off ALTIMETER		
1 off P-8 COMPASS		
2 off SEAT CUSHIONS		
1 off CONTROL STICK		
REAR COCKPIT		
=====		
1 off RPM INDICATOR		
1 off OIL PRESSURE GAUGE		
1 off TURN AND BANK INDICATOR		
1 off AIR SPEED INDICATOR		
1 off ALTIMETER		
1 off P-8 COMPASS		
2 off SEAT CUSHIONS		
1 off CONTROL STICK		
1 off FIRE EXTINGUISHER		
1 off COM 11 RADIO		
LOCKER		
=====		
1 off RADIO BATTERY		
1 off FIRST AID KIT		



## Annexure 2: Transcript between ATC and ZS-OSS

Transcript between Mahikeng Tower Controller and ZS-OSS on Mahikeng Tower frequency 119.3 MHz


Date: 16 April 2013

Time	From	To	Message
15:36:03	ZS-OSS	ATC	Mahikeng tower oss
	ATC	Oss	Mahikeng tower go aheadō
	ZS-OSS	ATC	Oscar sierra sierra we two (2) on board request just to further afieldō flight level oscar sierra sierra tiger moth
15:36:33	ATC	ZS-OSS	Oscar sierra sierra lqñ reading you strength oneō say againō
	ZS-OSS	ATC	We are two (2) on board request clearance to operate further afield, our endurance is one and half hoursō oscar sierra sierra tiger moth
	ATC	ZS-OSS	Oscar sierra sierra say again destinationō
	ZS-OSS	ATC	(level, destination not clear)ō and then wedl returnō oscar sierra sierra tiger moth
15:37:03	ATC	ZS-OSS	Oscar sierra sierra copied rwy 04 surface wind 03 at 05 knots QNH 1017. Taxi to the holding point rwy 04. Report ready for departureō
	ZS-OSS	ATC	QNH 1017 rwy 04 and we are ready for departureō
	ATC	ZS-OSS	Oscar sierra sierra rwy 04 surface wind light and variable cleared for take-off and report 5 milesō
15:37:33	ZS-OSS	ATC	Cleared for take-off rwy 04 and report 5miles oscar sierra sierra tiger mothō
15:38:38	ATC	ZS-OSS	Ossō
	ZS-OSS	ATC	Go ahead sirō
	ATC	ZS-OSS	Oscar sierra sierra confirm how long your operation will beō
	ZS-OSS	ATC	We will report (not clear time and place...)ō oscar sierra sierra tiger moth
15:39:00	ATC	ZS-OSS	Oscar sierra sierra copiedō
	ATC	ZS-OSS	Oscar sierra sierra report positionō
15:40:00	ZS-OSS	ATC	Now over head the dam sir low level oss
	ATC	ZS-OSS	Oscar sierra sierra copied report detail completeō
	ZS-OSS	ATC	We will report detail complete, low level oscar sierra sierra tiger moth
15:57:59	ATC	ZS-OSS	Oscar sierra sierra Mahikeng towerō .
	ATC	ZS-OSS	Oscar sierra sierra Mahikeng towerō .
	ATC	ZS-OSS	Oscar sierra sierra Mahikeng towerō .

**Annexure3: Certification of Airworthiness and Registration**

AW 36287

**SOUTH AFRICAN CIVIL AVIATION AUTHORITY**  
REPUBLIC OF SOUTH AFRICA



**CERTIFICATE OF AIRWORTHINESS** CERTIFICATE NO:444/ZS-OSS/9

1 Nationality and registration marks	2 Manufacturer and manufacturer's designation of aircraft	3 Aircraft serial number
ZS-OSS	DE HAVILLAND AIRCRAFT COMPANY DH-82A	82982

4 Categories: **STANDARD Part 135**

5 This certificate of airworthiness is issued pursuant to the Convention on International Civil Aviation, dated 7 December 1944 and the Aviation Act, 2009 (Act 13 of 2009), as amended, and the Civil Aviation Regulations, 2011 as amended, in respect of the above-mentioned aircraft which is considered to be airworthy when maintained and operated in accordance with the foregoing and the pertinent operating limitations.

**Patrick Kunene**  
Manager Testing  
Standards (AME)

6 Special conditions: None

7 Original date of issue: 2002/04/30


8 Expiry date: 2014/04/29

South African Civil Aviation Authority  
**DIRECTOR OF CIVIL AVIATION**

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CAR47B

**SOUTH AFRICAN CIVIL AVIATION AUTHORITY**  
REPUBLIC OF SOUTH AFRICA



**CERTIFICATE OF REGISTRATION** CERTIFICATE NUMBER : 444/ZS-OSS/1

1 Nationality and registration marks	2 Manufacturer and manufacturer's designation of aircraft	3 Aircraft serial number
ZS-OSS	DE HAVILLAND AIRCRAFT COMPANY DH-82A	82982

4 Name of owner: PEARL CORAL 1323 CC

5 Address of owner: WATERBESSIE STREET 13  
ROODEKRANS  
ROODEPOORT  
1724

6 It is hereby certified that the aircraft described above has been duly entered on the South African Civil Aircraft Register in accordance with the Convention on International Civil Aviation dated 7 December 1944 and with the Civil Aviation Regulations, 1997, as amended.

7 **NO ENDORSEMENTS**

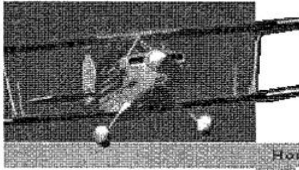
Date of issue: 2008/08/15  
**12032**

**MERRIAM MACHUKA**

**Annexure 4: Table of Specifications**

11/12/13

de Havilland DH 82C Tiger Moth Specifications



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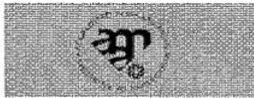
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## de Havilland D.H.82C Tiger Moth - Specifications

### As delivered in 1942

Engine:	145 hp de Havilland Gipsy Major 1C four cylinder inverted air cooled
Length Overall:	23 ft. 11 in.
Height Overall:	8 ft. 10 in.
Wingspan (upper):	29 ft. 4 in.
Seating:	Two (tandem) enclosed cockpits, dual controls, solo from rear seat
Landing Gear:	Conventional with tailwheel instead of skid
Wheel Track:	5 ft. 3 in.
Gross Wing Area:	239 sq. ft.
Propeller:	2 bladed, wooden fixed pitch
Gross Weight:	1,825 lb.
Empty Weight:	1,200 lb.
Useful Load:	625 lb.
Maximum Cruising Speed:	107 mph
Normal Cruising Speed (sl.):	90 mph
Maximum Diving Speed:	180 mph (max RPM in dive 2400)
Rate of Climb:	635 ft. per min.
Service Ceiling:	14,600 ft.
Fuel Capacity:	19 imp. gal.
Oil Capacity:	2.1 imp. gal. in externally mounted tank
Cruising Range:	275 miles



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EAA Aviation Center P.O. Box 3086 Oshkosh, WI 54903-3086 Phone: 920.426.4800

## Annexure 5: Weather Report



Report: Aircraft accident

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Surface Temperature

QNH ANALYSIS (15h00Z 16 April 2013)

The surface analysis shows the weather over Mafikeng is under the influence of a high pressure system, the air is stable.

The observations over the area indicate few to clear sky conditions.

2. OBSERVED WEATHER CONDITIONS AT MAFIKENG AIRPORT

Surface

Date: 2013-04-16 - Time: 15:00Z

FAMM 161500Z 01003KT 9999 FEW040 29/04 Q1017 NOSIG=

Date: 2013-04-16 - Time: 16:00Z

FAMM 161600Z 35002KT 9999 FEW040 28/04 Q1017 NOSIG=

Date: 2013-04-16 - Time: 17:00Z

FAMM 161700Z 02003KT 9999 FEW040 26/04 Q1017 NOSIG=

Date: 2013-04-16 - Time: 18:00Z

FAMM 161800Z 03006KT CAVOK 23/05 Q1018 NOSIG=

FAMM elevation is just above 4000 ft:

Forecast wind at 1000 ft above the aerodrome was 30010KT

Forecast wind at 2000 ft above the aerodrome was 30015KT

**UNCONTROLLED COPY: WHEN PRINTED OUTSIDE ELECTRONIC QUALITY MANAGEMENT SYSTEM**

Public Document:

ZS-OSS

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## Annexure 6: Witness statement

(12)

I, Michael Vusi Magibuko am employed by North West Airline at Mafikeng Airport. As I was going home on the 16 April 2013 at approximately 17:40 pm, I witnessed an aircraft, ZS-085 flying over the Modimolle Dam. The aircraft was flying North East and I was standing approximately 300m North West of the aircraft. The aircraft was flying towards the airport at approximately 9-12m above the water.

The aircraft engine was sounding as if it was losing power although it did not stop. It seemed like the aircraft was in difficulty and it banked slightly to the left with a nose down attitude. It then suddenly went straight down into the water, and the water splashed about 3m upwards.

Seconds later as I could not see anyone in the water, I immediately went to the fire department and reported the accident.

*[Signature]* 18/04/2013

MICHAEL VUSI MAGIBUKO.

.0734380466.

Aircraft Maintenance Engineer. - N.W.A.