

AIRCRAFT ACCIDENT REPORT

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| MANUFACTURER | CESSNA AIRCRAFT COOPERATION |
| OPERATOR | WINGS JAMAICA LIMITED |
| AIRCRAFT | CESSNA 172 |
| SERIAL NUMBER | 172 59746 |
| NATIONALITY | JAMAICAN |
| REGISTRATION | 6Y-JGT |
| PLACE OF ACCIDENT | MOUNT LEBANON, ST. ANDREW, JAMAICA 1803N. LAT. 7641W. LONG. |
| DATE & TIME OF ACCIDENT | MAY 30, 1996 AT 0709 HRS. LOCAL |
| CERTIFICATE OF AIRWORTHINESS | VALID TO 29.12.96 |

All times in this report are local times, unless otherwise stated

1. SYNOPSIS

- 1.1 On May 30, 1996 a Cessna 172 aircraft registered 6Y-JGT at approximately 0703 hours local time, departed from Tinson Pen Aerodrome, Kingston on a training flight to Ken Jones Aerodrome, Portland and to return to Tinson Pen over the same route. The aircraft was under the command of a student pilot who had previously completed a similar flight to Montego Bay and return.

The route was as follows:-

Tinson Pen to Annotto Bay to Buff Bay to Ken Jones Aerodrome. At a briefing for the flight given by the instructor, the student pilot was given details of the flight, the route and facilities provided along the route. The flight plan was prepared by the student pilot and was checked by the instructor before the flight departed.

At approximately 0703 hours, local time, May 30, the aircraft departed from Tinson Pen with the student pilot aboard to Annotto Bay and Ken Jones. The heading from Tinson Pen to Annotto Bay was 014 degrees made up as follows:-

| | |
|--------------------|-------------|
| Track | 007 degrees |
| Drift | 3 degrees |
| Magnetic Variation | 4 degrees |
| Total heading | 014 degrees |

This is the heading 014 degrees recorded in the flight plan and was expected to be the heading of the aircraft after it was airborne.

- 1.2 The following is a verbatim statement made by the student pilot after the flight.

“I took off from Tinson Pen via runway 32 at 0703 local time and reported airborne to Manley Tower. I was instructed to report at their northern boundary. I copied their request and replaced the radio. I turned right and headed across Kingston toward the hills. I lined up with what I thought was Stony Hill and headed towards it.” “I saw Oaklands (Constant Spring Road) on my right, so I thought I was on the right track. I started looking out for the blue buildings of the Stony Hill H.E.A.R.T. Academy. I had estimated Stony Hill at 0709 local time, so when I did see it at 0707 hours, I was not too worried. At this time, I had leveled off at 2,500 feet.” The aircraft was now flying between 2 hills which eventually enclosed the area. The student pilot tried to turn out of the area but was unable to complete the turn; full power was applied but the student pilot realized that the aircraft could stall. At a cleared area appeared on the port side of the aircraft and shortly after the

starboard wing struck at a pine tree estimated 50 feet above the ground. The top of the trees were severed from the trunk. The aircraft began an uncontrolled descent destroying a number of young trees, the student pilot switched off the master switch and magnetos. On reaching the ground, the aircraft turned towards the north with fuselage pointing down the side of the mountain.

2 FACTUAL INFORMATION

2.1 HISTORY OF THE FLIGHT

The aircraft was on at a training flight from Tinson Pen to Ken Jones Aerodrome under the command of a student pilot, a young lady, who had recently completed at a similar training flight to Sangster Airport, Montego Bay and return.

The night before the departure of the aircraft, the flight plan, a copy annexed hereto, was prepared by the student pilot, and examined by her instructor.

On May 30, the aircraft departed at 0703 hours for Ken Jones and after being airborne for a short period the aircraft turned to an "easterly heading" and shortly after was passing Oakland on the right. Shortly after an aircraft was seen and heard passing about one mile north of Gordon Town heading towards the East. The position of the aircraft as it passed Oakland and Gordon Town suggest that the heading of the aircraft was 090 degrees more or less.

After leaving Gordon Town the aircraft entered at a narrow and steep valley from which the aircraft could not climb out or make at a 180 degree turn.

On the port side of the valley there is an area which appeared to have been cultivated and was not covered with grass and some young trees. The student pilot stated that she contemplated making a landing on that side. At the north-west end of the grass area there were tall pine trees and the aircraft inadvertently struck at a pine tree 45 to 50 feet which severed the top of the tree from the trunk.

- 2.2 The aircraft commenced an uncontrolled descent among some young trees and the aircraft turned to a northerly heading and down the slope of the mountain. It came to rest approximately 20 yards north of the ground impact.

The student pilot was not injured, but the aircraft was destroyed by impact with a few tall trees and other younger trees along the wreckage trail. The aircraft was completely destroyed. The starboard wing was severed from the fuselage, the leading edge of the port wing was severely damaged and fuel was leaking from that tank. The engine was partly severed from its mounting by the forward momentum and the propeller blades bent. The under carriage was destroyed and severed from the fuselage and the tail planes was twisted.

The radio and instruments from the cockpit and the engine and propellers were retrieved by workmen of Wings Jamaica Limited.

After the aircraft came to rest the student pilot released her safety harness and climbed out of the wreckage unhurt.

She heard some men calling as she left the wreckage and met them about 200 feet away; they were advised to stay away from the aircraft because of fuel leaking from the port wing tank. The student pilot was taken to the estate office and later to the University Hospital.

2.3 DAMAGE TO AIRCRAFT

The aircraft and most of its components were destroyed beyond repairs.

2.4 OTHER DAMAGE

A number of pine trees were destroyed.

2.5 PERSONAL INFORMATION

Student Pilot

.Age : 18 years
.Licence : Student Pilot Licence
.Last Medical Certificate :
.Date Issued :
.Aircraft Type : Cessna 172

Flying hours - Day : 28.5 Hours
 Night : NIL

Last 28 days : N/A

2.6 AIRCRAFT INFORMATION

.TYPE : Cessna 172
.MANUFACTURER : Cessna Aircraft Corporation
.YEAR OF MANUFACTUR : 1971
.REGISTERED OWNER : WINGS JAMAICA LIMITED
.CERTIFICATE OF MAINTENANCE : VALID TO 29.12.96

2.7 METEOROLOGICAL INFORMATION

The meteorological office has no record of any severe weather near 0703 hours local time on May 30, 1996. Observation before and after

the accident in coded report are as follows:

All times in (a) and (d) hereto are by the Universal Time Clock UTC)

2.7.1

- (a) 30 1000 KT MET Report MKJP 30 1000Z Wind
00 000 KT VIS 10KM Cloud Few 3200ft CB
AIR TEMP/DEW ft. 24/XX QNH 1013 HPA
- (b) 30 1000 KT MET Report MKJP30 1100Z Wind
00 000 KT VIS 10KM Cloud Few 2200ft CB
AIR TEMP/DW PJ 29/XX QNH 1014 HPA
- (c) 30 1000 KT MET Report MKJP30 1200Z Wind
00 000 KT VIS 10KM CLOUD few 2200ft CB
AIR TEMP/DEW PT 31XX QNH 1014 HPA
- (d) 30 1000 KT MEReportot MKJP 30 1300Z wind
00 000 KT VIS 10KM CLOUD FEW 2200ft CB
AIR/TEMPDEW PT.31/XX QNH 1014 HPA

2.7.2 The aircraft was not flying in instrument meteorological conditions from take-off to the time of the accident.

2.8 AIDS TO NAVIGATION

- 2.8.1 On the date of the accident the visibility was 10Km with a few cumuli-nimbus cloud at 2,200 ft., air temperature 24 degrees QNH 1013.
- 2.8.2 After the aircraft was airborne and beyond the end of runway 32, the student pilot turned the air craft to an "easterly heading" estimated at 070 degrees more or less and passed "Oakland" by less that a mile and after five miles passed at a position one mile north of Gordon Town. The aircraft's position on passing Oakland and the position north of Gordon Town puts the aircraft on heading of 090 degrees.
- 2.8.3 Leaving Gordon Town, the aircraft entered at a valley - "Content Gap" between two ranges of the Blue Mountains. While the student pilot was concerned with clearing the valley the starboard wing inadvertently struck at a pine tree about 50 feet above the earth severing the top of the tree from the trunk. The aircraft received substantial damage to that wing and commenced an uncontrolled descent.

2.9 DAMAGE TO AIRCRAFT

- 2.9.1 The starboard wing was broken and severed from the fuselage.
- 2.9.2 The port wing was damage and fuel was leaking from that wing. The under carriage was completely broken off, the engine was broken off from its mounting and the propeller blades were bent, the tail planes were twisted and bent.
- 2.9.3 The student pilot was not injured and she left the aircraft and joined a number of men all employees of the estate. They were advised not to go near the aircraft as fuel was leaking from the port wing tank.
- 2.9.4 The student pilot was escorted to the estate office and taken to the University Hospital.

3 ANALYSIS

- 3.1 No evidence was found of any preflight defect in the aircraft or its

equipment.

- 3.2 The accident occurred when the aircraft inadvertently flew into a pine tree and the starboard wing received substantial damage.
- 3.3 The evening before the flight, the instructor and student pilot had discussed the route for the flight and the completion of the flight plan.
- 3.4 Shortly after the aircraft departed the student pilot turned the aircraft to an "easterly heading" between 040 degrees and 090 degrees. Oakland was seen on the starboard side of the aircraft and five miles further on with at a heading of approximately 090 degrees an employee of Mount Lebanon Estate saw the aircraft passing overhead one mile north of Gordon Town. (The aircraft's position at Oakland and Gordon Town showed that the aircraft was on at a heading of 090 degrees). The aircraft position was also 6 nautical miles east of the track to Annotto Bay.
- 3.5 The aircraft entered a valley and struck a pine tree with the starboard wing and was forced to make an emergency landing destroying a number of young trees.
- 3.6 A copy of the flight plan prepared by the student pilot and the instructor is annexed hereto, nowhere in the flight plan is there a flight to Annotto Bay in which the course exceeds a heading of 014 degrees (014degrees).

CONCLUSIONS

FINDINGS

- 3.7 The aircraft had been properly maintained and its documentation was in order.

- 3.8 The student pilot had the proper certificates and was authorized to carry out the flight.
- 3.9 The flight plan was prepared by the student pilot and was approved by the instructor.
- 3.10 When the aircraft should have been on a heading of 014 degrees to Annotto Bay, the student pilot altered the aircraft's heading to an "easterly direction" 060 degrees to 090 degrees approximately.
- 3.11 A short time after the aircraft passed Oakland the aircraft was seen passing a position one mile north of Gordon Town. The aircraft's position when passing Oakland was estimated at less than a mile from Oakland; the two positions in which the aircraft was reported suggested that the aircraft was on at a heading of 090 degrees more or less.
- 3.12 The aircraft flew into at a narrow valley and the starboard wing hit a pine tree about 50 feet above the ground. The right wing was partly severed from the fuselage; the aircraft went into an uncontrolled descent the struck the ground approximately 50 yards from the tree. The aircraft came to rest with the fuselage pointing down the side of the mountain.
- 3.13 The student pilot was not injured and was escorted away to the residential area.
- 3.14 There was no fire.

3.15 CAUSE

- 3.15.1. The accident was the result of the student pilot ignoring the

information contained in the flight plan. In a distance of 9 miles along the track to Annotto Bay the aircraft was 6 to 7 miles off track. The main heading of the aircraft to the crash site was 62 degrees; at a difference of 48 degrees. The weather was not a factor in the aircraft's position and there was no evidence that the compass were out of order.

No explanation was given in respect to the distance the aircraft was off track.

AIRCRAFT ACCIDENT REPORT
CESSNA 172, 6Y-JGT

May 30, 1996

MOUNT LEBANON, ST ANDREW

STATEMENT OF STUDENT PILOT

26/6/96

On the 30th May, 1996 after having cleared for take off with Manley Tower, I went on the runway at Tinson Pen. I took off from Tinson Pen and was told by Manley Tower to clear the boundary of the airfield. I copied the rest and hung up the microphone.

After the aircraft was airborne I started to make turn and I turned towards the hillside, lined up with the hillside and moved towards the hill, at approximately 0707 hours, after taking off at 0703 hours I identified "Oaklands" at the corner of Mannings Hill road - Mary Browns corner.

I continued on my path, "Oaklands being in the vicinity of Constant Spring area. Later on I made a turn to a field to which I thought it was in a passage way and I realised later that it was a closed area and tried to turn off, but was unable to do so. The next step was to try and climb but realised that the angle which I need to climb would stall the aircraft, so I relowered the nose some, and again was unable to do so for any length of time. What I was seeing was the mountains getting very close and the only solution was, at that time, to land the plane.

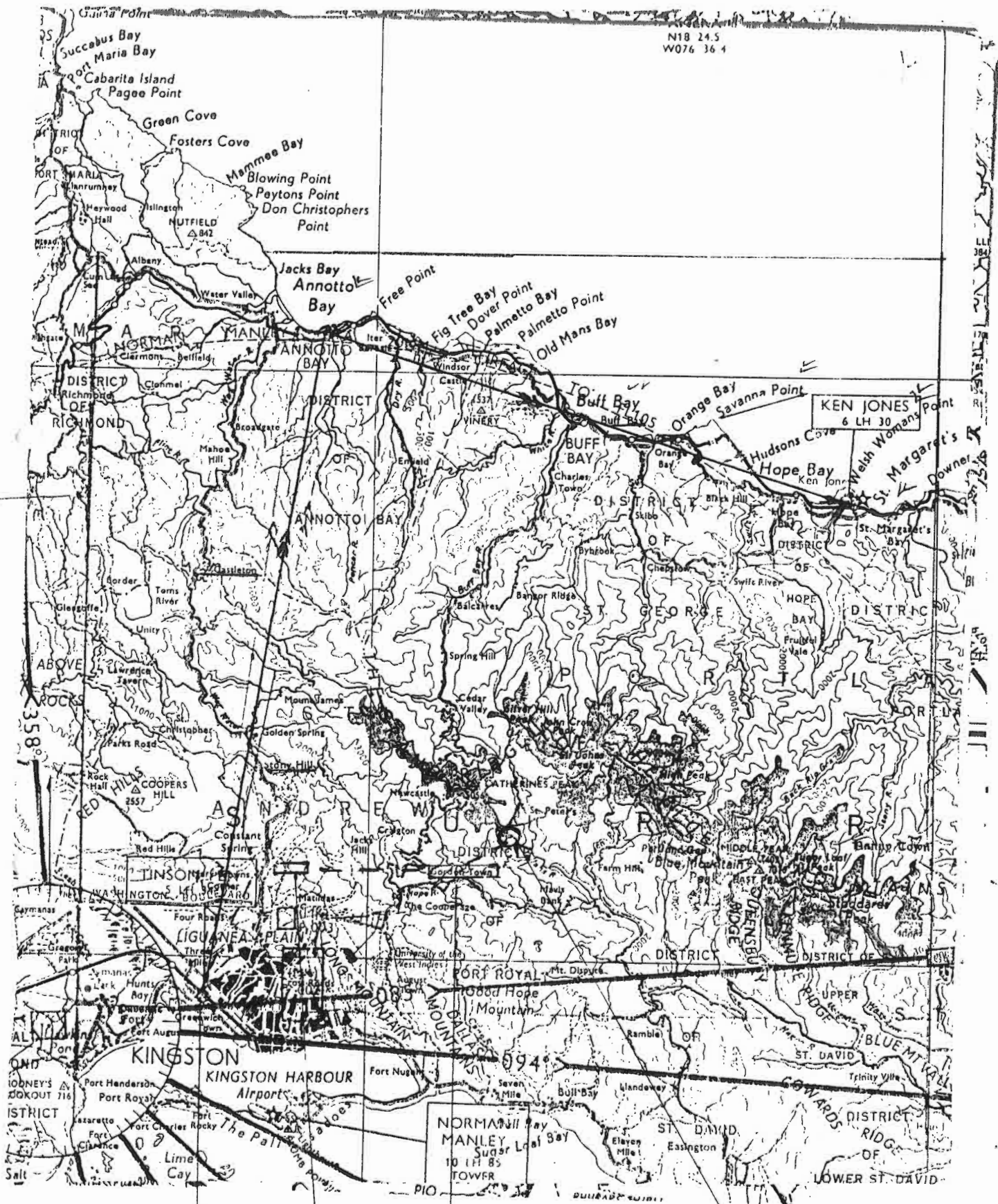
There was a relative clear area free of trees which seemed available to try and land. I started my plan, switched off mags and master switches and on my way down one wing, (starboard wing) hit a tree. Next thing I know I was in among the young trees with my seat belt fastened.

I heard, I don't remember if I called out first but some communication was established between some one on the ground and myself. We kept calling each other until we met.

Three employees of the farm came together and I walked with them to the "common area" where the workers of the ~~estate~~ assemble.

The manager was called by radio and I was carried to the University Hospital.

N18 24.5
W076 36.4



TOWNSON ROAD

GORDON TOWN

CRASH SITE

CAYLAND

WINGS JAMICA FLIGHT SCHOOL

| | | | | | | | |
|---------------|--|---------------------|--|-------------------------|--|----------|--|
| FLIGHT PLAN | | TYPE OF FLIGHT PLAN | | AIRCRAFT IDENTIFICATION | | GMT CONV | |
| DATE PREPARED | | TIME | | CLASS | | EST + 8 | |
| FROM | | TO | | CLASS | | CST + 0 | |
| FROM | | TO | | CLASS | | MST + 7 | |
| FROM | | TO | | CLASS | | PST + 0 | |
| FROM | | TO | | CLASS | | EDT + 4 | |
| FROM | | TO | | CLASS | | CDT + 3 | |
| FROM | | TO | | CLASS | | MDT + 9 | |
| FROM | | TO | | CLASS | | POT + 7 | |

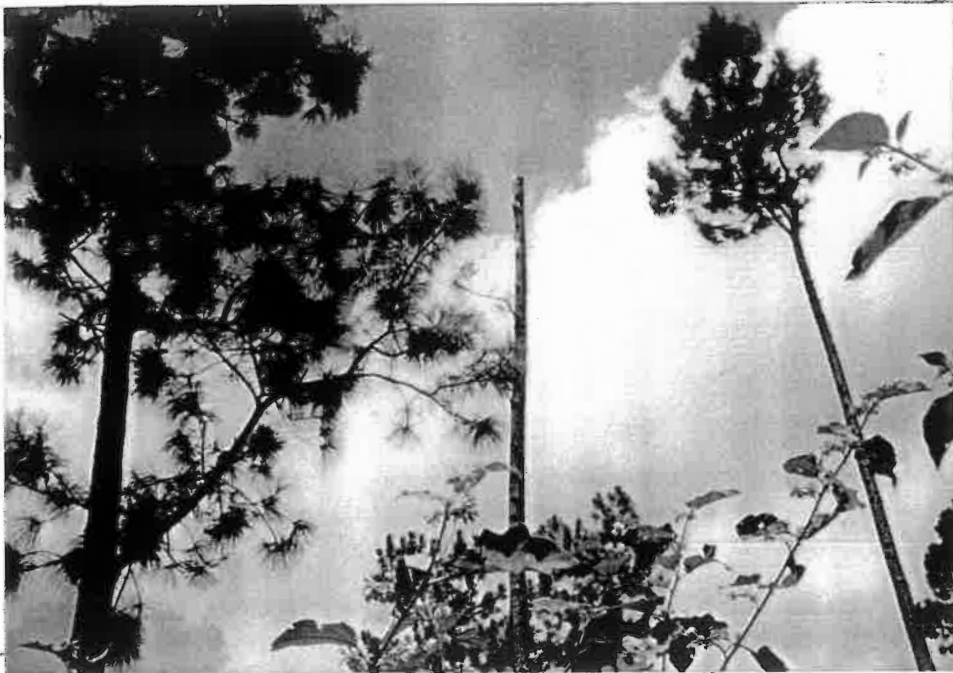
| WEATHER | | |
|---------|-------------|-----------|
| ENROUTE | DESTINATION | ALTERNATE |
| | | |

ATC CLEARANCE/NOTES

09 27 Prominent Point Dept.
 * -> Altitude - 2500ft
 TAS - 105
 1500 ft and descending at Savannah Pt.

| CHECK POINT | FREQ | RDG | DIST | ETE | ETA | ATA | GS |
|----------------|-------|--------|-------|-------|------|------|----|
| FIX | | RADIAL | | | | | |
| Tinson Pen | 120.6 | 014° | | | | 1803 | |
| Story Hill | ↓ | ↓ | 7m | 0:02 | 1209 | | |
| Castleton | 122.8 | ↓ | 6m | 0:02 | | | |
| Annotto Bay | | 107° | 7m | :04 | | | |
| Buff Bay | | ↓ | 9m | :05 | | | |
| Savannah Point | ? | ↓ | 3m | :02 | | | |
| Ken Jones | ↓ | ↓? | 4m | :03 | | | |
| | | | TOTAL | TOTAL | | | |
| | | | 36M | :26 | | | |
| Ken Jones | 122.8 | 295° | | | | | |
| Savannah Pt. | ↓ | ↓ | 4m | 0:02 | | | |
| Buff Bay | ↓ | ↓ | 3m | 0:02 | | | |
| Annotto Bay | 120.6 | 188° | 9m | :05 | | | |
| Castleton | ↓ | ↓ | 7m | :04 | | | |
| Story Hill | ↓ | ↓ | 6m | :03 | | | |
| Tinson Pen | ↓ | ↓ | 7m | :04 | | | |
| | | | TOTAL | TOTAL | | | |
| | | | 36M | :24 | | | |

| LEG | FROM TO | TC | WIND | | WCA | TH | VAR | MH | MILES | GS | TOT TIME | FUEL REQ | FUEL REQ (GALLONS) | FREQ | DEP | ARR | ATIS INFORMATION |
|-----|-------------|----|------|------|-------|----|-------|----|-------|----|----------|----------|--------------------|------------|-----|-----|------------------|
| | | | DIR | VEL | +R -L | | +W -E | | | | | | TO DEST. | ATIS | | | CODE |
| | Tinson Pen | | 007° | 045° | 09 | +3 | 010° | +4 | 014° | 20 | 98 | :12 | TO ALT. | APPROACH | | | WINDS |
| | Annotto Bay | | 107° | 045° | 09 | -4 | 103° | +4 | 107° | 17 | 101 | :10 | + 45 MIN. | TOWER | | | ALT SET |
| | Ken Jones | | 287° | 045° | 09 | +4 | 291° | +4 | 295° | 17 | 108 | :10 | TOTAL REQ | GROUND | | | CEIL-VIS |
| | Annotto Bay | | 187° | 045° | 09 | -3 | 184° | +4 | 188° | 20 | 112 | :11 | ON BOARD | FSS | | | RWY |
| | Annotto Bay | | | | | | | | | | | | RESERVE | UNICOM | | | |
| | Tinson Pen | | | | | | | | | | | | | FIELD ELEV | | | |
| | | | | | | | | | | | | | | RWY LENGTH | | | |



Pine Tree struck by leading edge of starboard Wing



Starboard Wing leading edge broken by impact with Pine Tree and severed from the fuselage.



Engine moved forward from its mounting and both blades bent backwards.

94 92



Closer inspection of Engine.

94 92
Peape 16



Port wing attached to fuselage and leading edge bent by impact with trees.



Density of young trees.