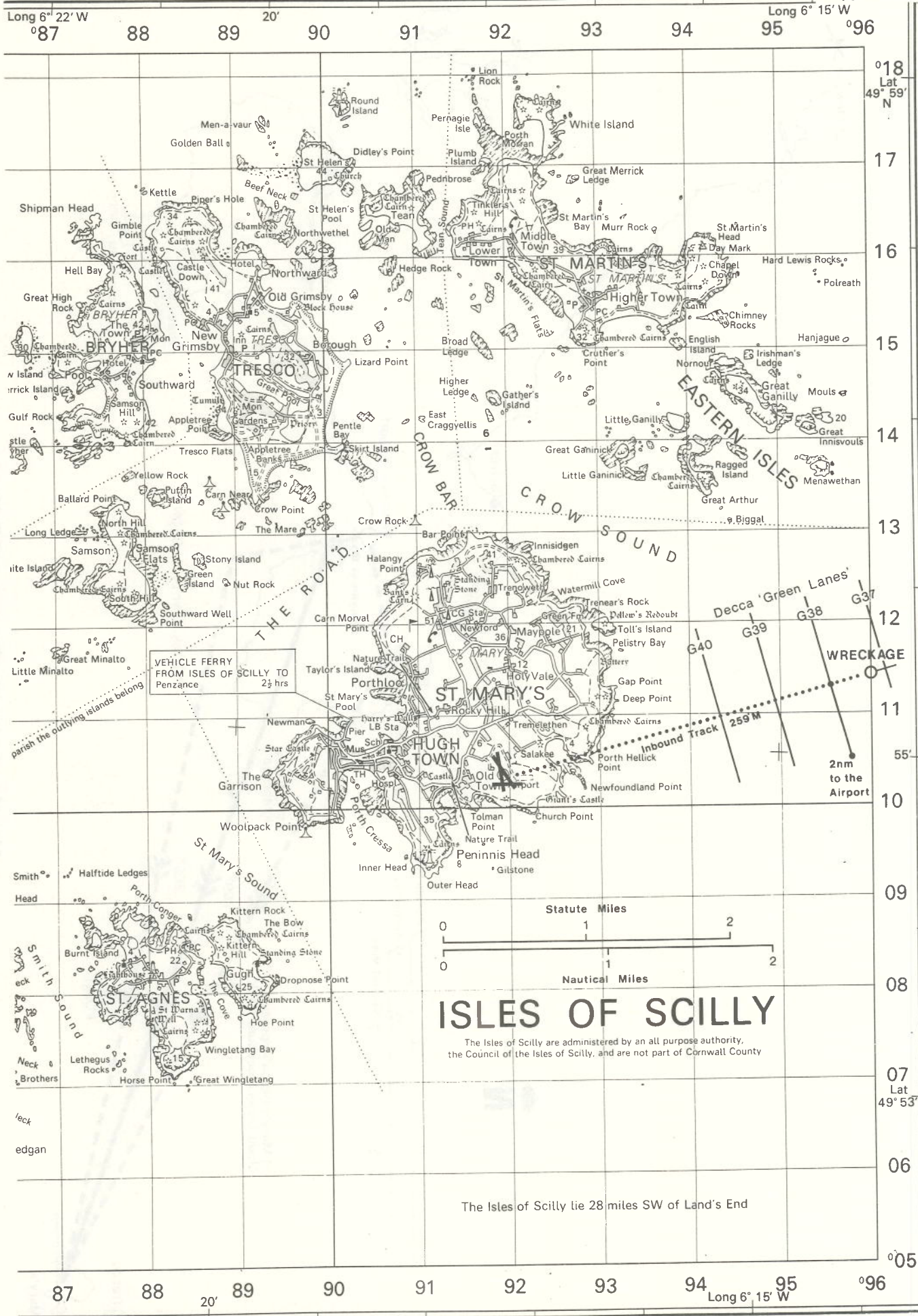


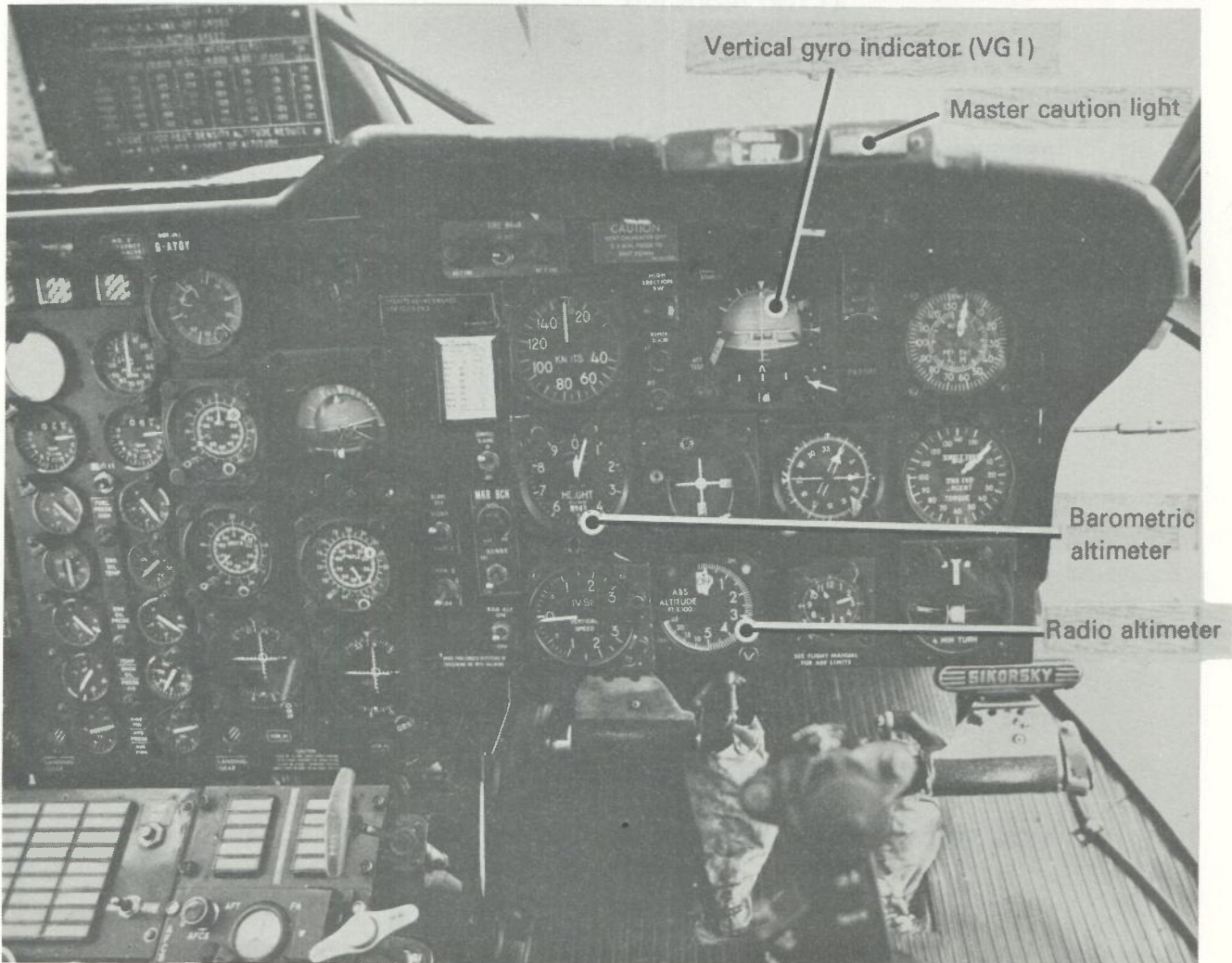
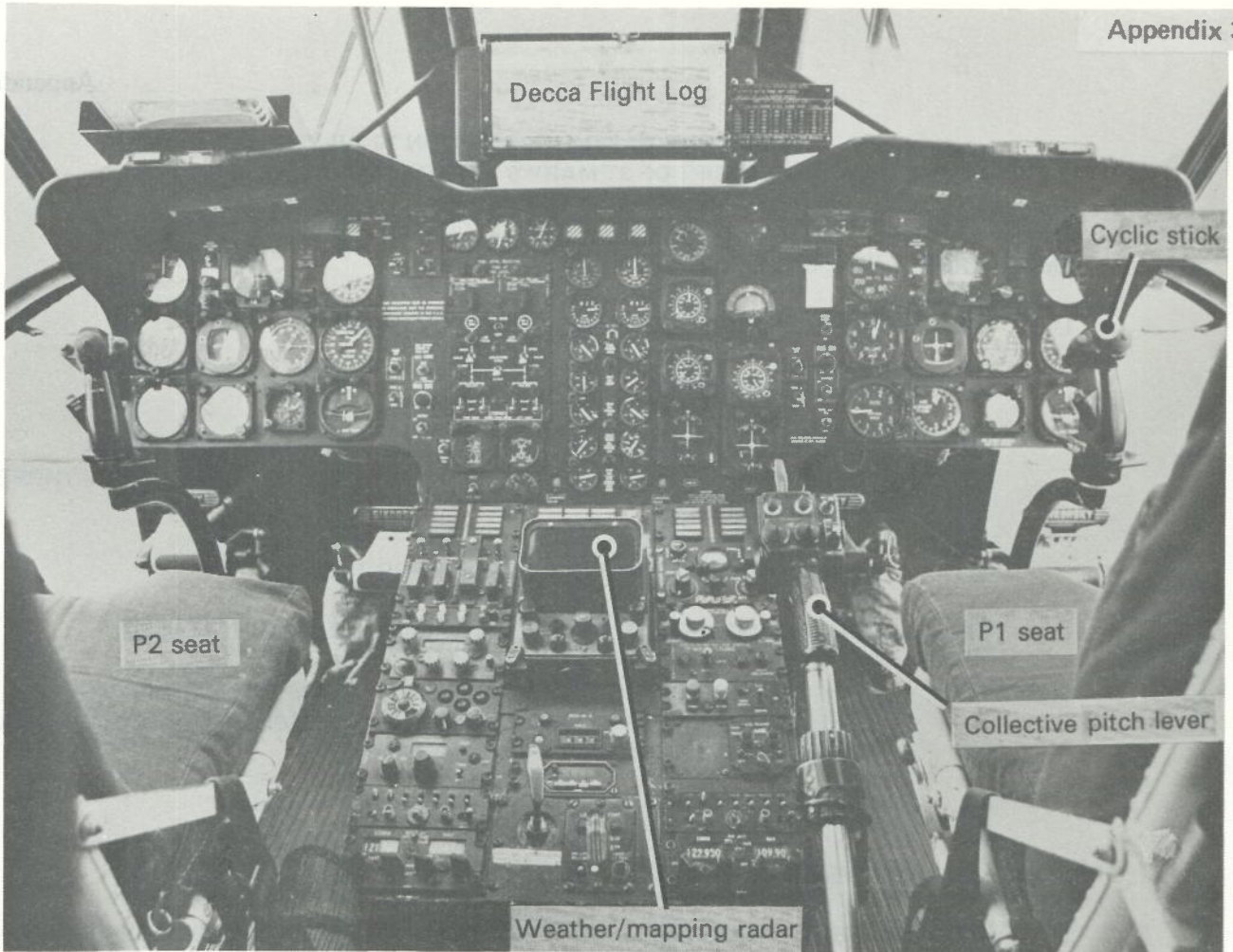
Map of routes between Penzance and St Mary's



ISLES OF SCILLY

The Isles of Scilly are administered by an all purpose authority, the Council of the Isles of Scilly, and are not part of Cornwall County

The Isles of Scilly lie 28 miles SW of Land's End



Detail of cockpit layout

ACCIDENT TO S61N, G-BEON, ON 16 JULY 1983
TRANSCRIPT OF ST MARY'S AERODROME (ATC) TAPE

GMT FROM MESSAGE

1114 ON ER SCILLIES GOLF BRAVO OSCAR NOVEMBER

ATC OSCAR NOVEMBER

ON OSCAR NOVEMBER WE'RE LEVEL AT TWO THOUSAND FEET ON ONE ZERO ONE ZERO ESTIMATING YOU AT THREE EIGHT WITH TWENTY THREE PLUS THREE

ATC ROGER YOU'RE INBOUND TO SCILLIES OR TRESKO

ON ER SCILLIES FIRST THEN WE'LL GO AND HAVE A GO AT TRESKO

1120 ATC ROGER(?) CORRECTION DELTA ALFA IS OPPOSITE DIRECTION AT FIFTEEN HUNDRED FEET THE REGIONAL ONE ZERO ONE ZERO QFE ALSO ONE ZERO ONE ZERO TEMPERATURE PLUS TWO ZERO

ON ONE ZERO ONE ZERO COPIED ECHO OSCAR

DA DELTA ALFA'S JUST PASSED MID POINT

1120 ATC DELTA ALFA ROGER AN' COPY OSCAR NOVEMBER OPPOSITE DIRECTION AT TWO THOUSAND

DA AFFIRMATIVE

BETWEEN 1120 HRS AND 1123 HRS THERE WERE NO RELEVANT TRANSMISSIONS

ATC OSCAR NOVEMBER WHAT'S YOUR FLIGHT NUMBER FOR THIS ONE PLEASE

1123 ON ER OSCAR NOVEMBER WE'RE NOT TOO SURE STANDBY

ON ER FIVE NINE ONE EIGHT

ATC ROGER

ATC ARE ALL THE PASSENGERS FOR SCILLIES OR SOME FOR TRESKO AS WELL

ON NO THERE'S SOME FOR TRESKO AS WELL

ATC YOU DON'T KNOW THE NUMBER

ON ERM HANG ON I'LL HAVE A WORD WITH PENZANCE

1124 ON OSCAR NOVEMBER IS PASSED LONG SHIPS

ATC OSCAR NOVEMBER ROGER

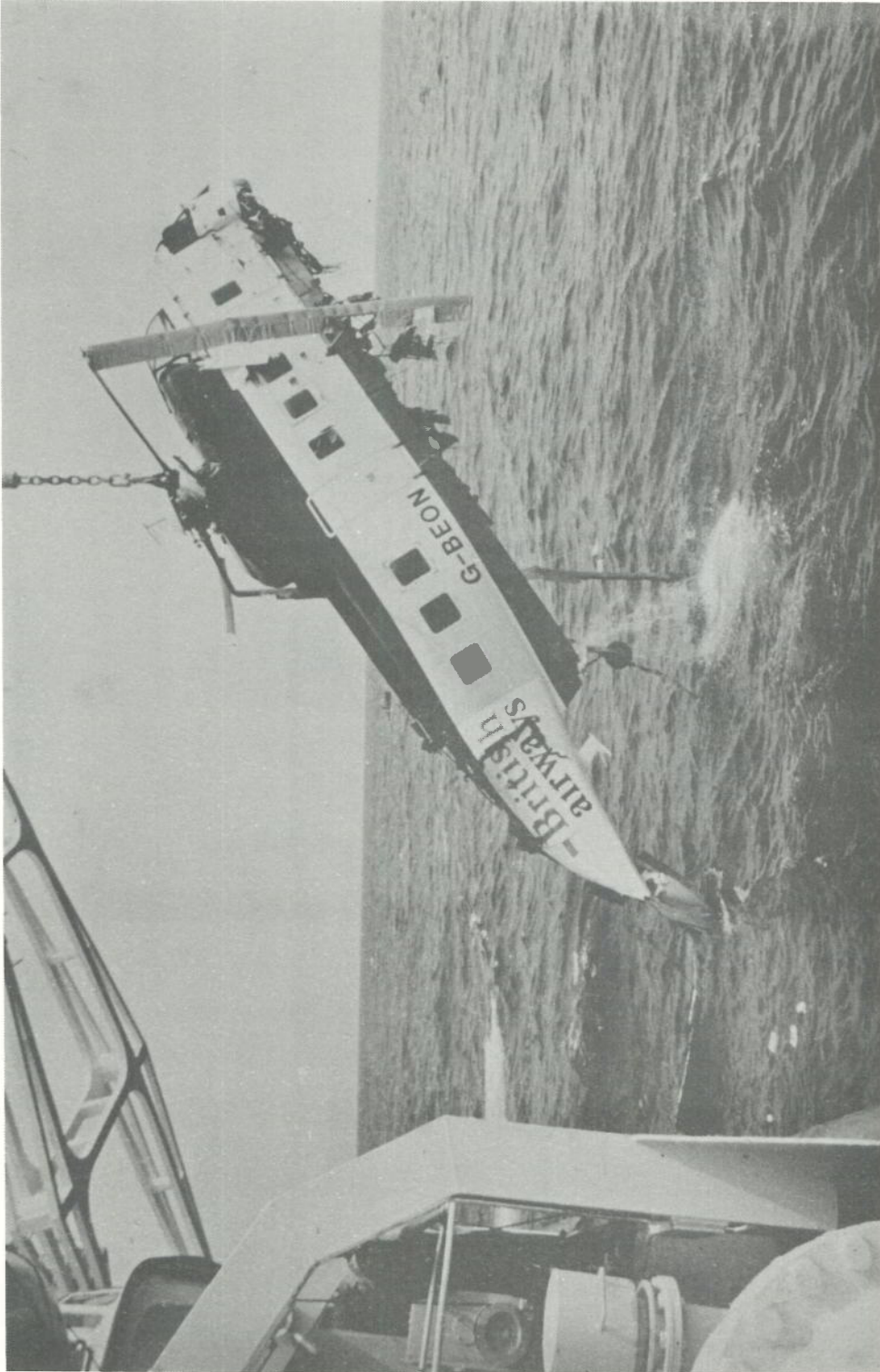
1126 ON ER SCILLIES OSCAR NOVEMBER

GMT FROM MESSAGE
 1126 ATC OSCAR NOVEMBER
 ON ER WE HAVE ONE THREE PASSENGERS FOR ST MARY'S AND THE REST FOR
 TRESKO
 ATC ROGER
 ON AND ST MARY'S OSCAR NOVEMBER WE HAVE PASSED ER DELTA ALFA SO AT
 EIGHTEEN MILES RANGE WE'RE DESCENDING TO FIVE HUNDRED FEET
 ATC OSCAR NOVEMBER THAT'S UNDERSTOOD ROGER
 DA DELTA ALFA'S LONG SHIPS
 ATC DELTA ALFA ROGER
 1130 ON AND OSCAR NOVEMBER HAS PASSED MID POINT AT ER FIVE HUNDRED FEET
 ATC OSCAR NOVEMBER ROGER

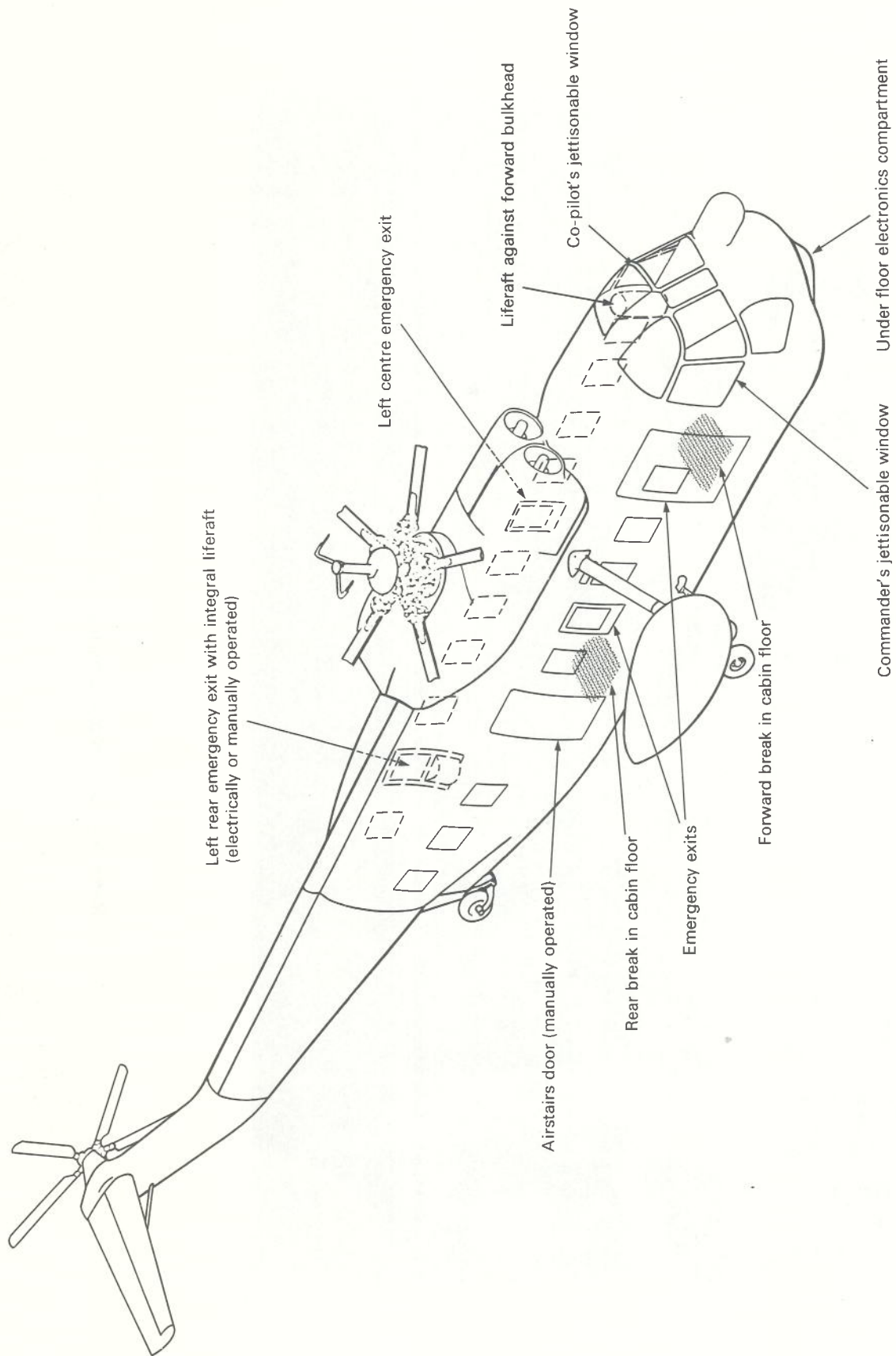
BETWEEN 1130 HRS AND 1132 HRS THERE WERE NO RELEVANT TRANSMISSIONS

ATC OSCAR NOVEMBER YOUR RANGE NOW
 1132 ON OSCAR NOVEMBER ER WE'VE GOT ABOUT SIX MILES TO RUN TO ST MARY'S
 ATC ROGER
 PM 510 FIVE ONE ZERO TAXY
 ATC FIVE ONE ZERO YOU'RE CLEAR TAXY RUNWAY TWO EIGHT THE QNH AT
 ST MARY'S ONE ZERO ONE FOUR
 PM 510 TEN FOURTEEN THANK YOU
 ATC --AR NOVEMBER YOUR RANGE NOW
 1133 ON OSCAR NOVEMBER JUST UNDER FIVE MILES
 ATC ROGER
 ATC FIVE ONE ZERO WILL YOU BE READY READY FOR IMMEDIATE
 PM 510 AFFIRMATIVE
 ATC CLEAR TO BACK TRACK TWO EIGHT
 PM 510 ROGER
 ATC OSCAR NOVEMBER REPORT APPROACHING TWO MILES
 ON OSCAR NOVEMBER

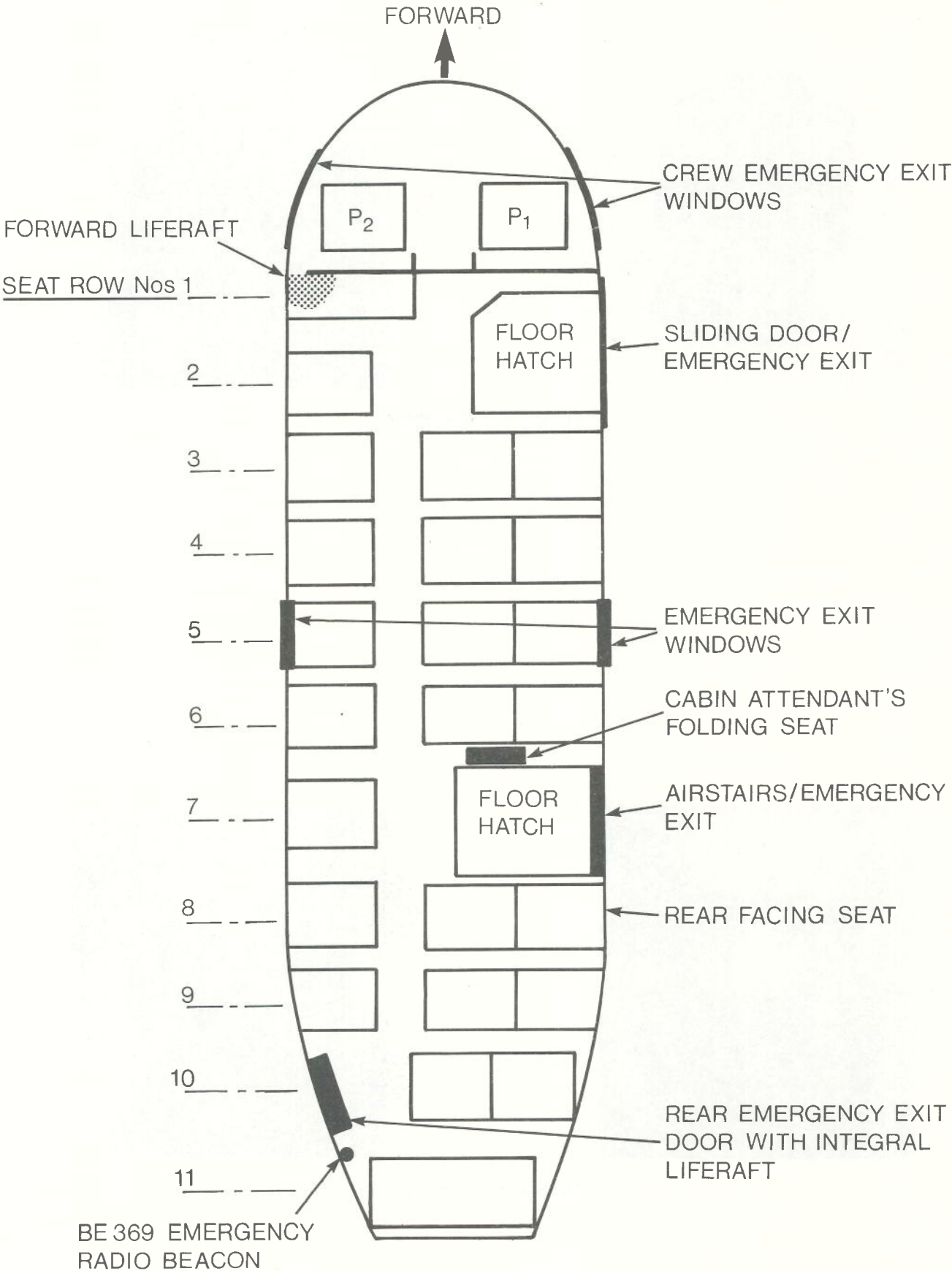
GMT	FROM	MESSAGE
1134	ATC	FIVE ONE ZERO CLEAR FOR TAKE OFF RUNWAY TWO EIGHT IT'S RUNWAY HEADING UNTIL YOU'RE THROUGH A THOUSAND FEET SURFACE WIND'S THREE ZERO ZERO DEGREES AT FIVE KNOTS
	PM 510	ROGER CLEAR TAKE OFF RUNWAY HEADING UNTIL THROUGH ONE THOUSAND THANK YOU
	ON	AND OSCAR NOVEMBER IS COMING DOWN TO TWO MILES
	ATC	CONTINUE THE APPROACH RUNWAY TWO EIGHT SURFACE WIND'S THREE ZERO ZERO DEGREES AT FIVE KNOTS QFE ONE ZERO ONE ZERO
	ON	-CAR NOVEMBER ONE ZERO ONE ZERO
1135	ATC	OSCAR NOVEMBER IS CLEAR TO LAND THREE ZERO ZERO DEGREES AT FIVE KNOTS
1136	PM 510	FIVE ONE ZERO IS TURNING ON COURSE
	ATC	ROGER FIVE ONE ZERO WHAT LEVEL ARE YOU CLIMBING TO
	PM 510	FIVE ZERO
	ATC	REPORT LEVEL PLEASE
	PM 510	ROGER
1138	ATC	OSCAR NOVEMBER SCILLIES
	ATC	GOLF BRAVO ECHO OSCAR NOVEMBER SCILLIES
	ATC	GOLF BRAVO ECHO OSCAR NOVEMBER SCILLIES
1139	ATC	BRYMON FIVE ONE ZERO SCILLIES HOW DO YOU READ
	PM 510	FIVE ONE ZERO FIVE BY FIVE



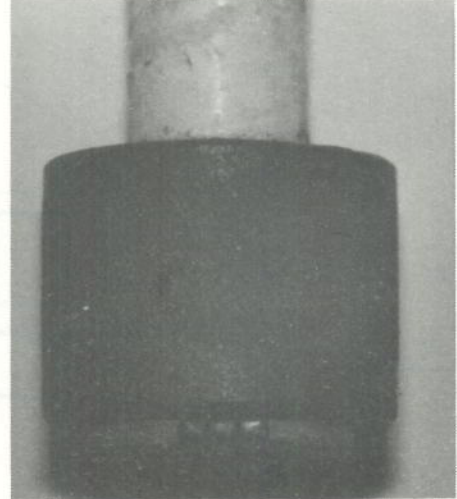
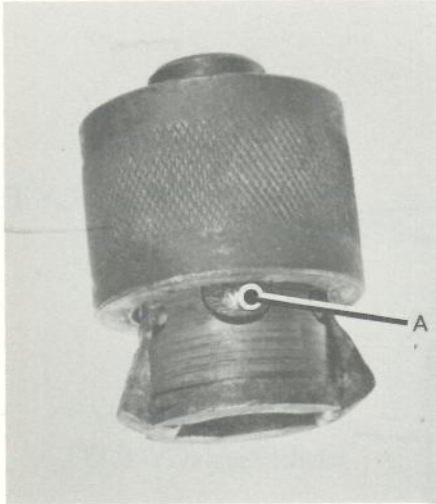
Recovery of wreckage showing impact damage



Sikorsky S61N layout

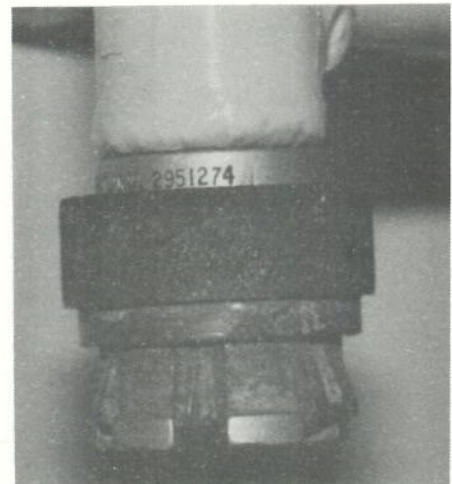
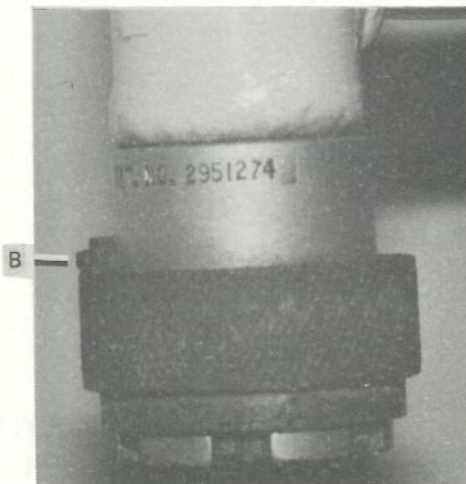


G-BEON's seating arrangement



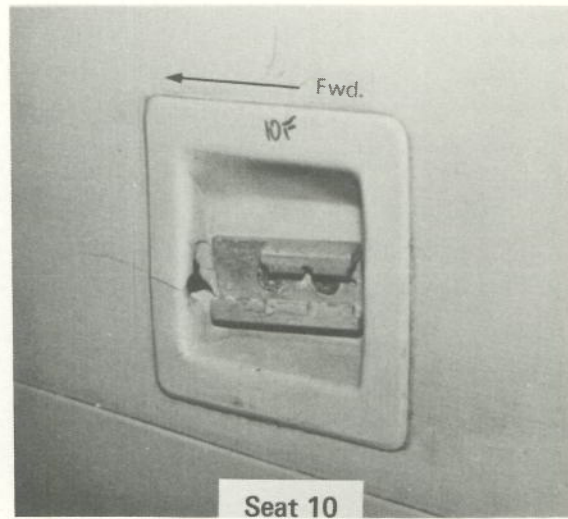
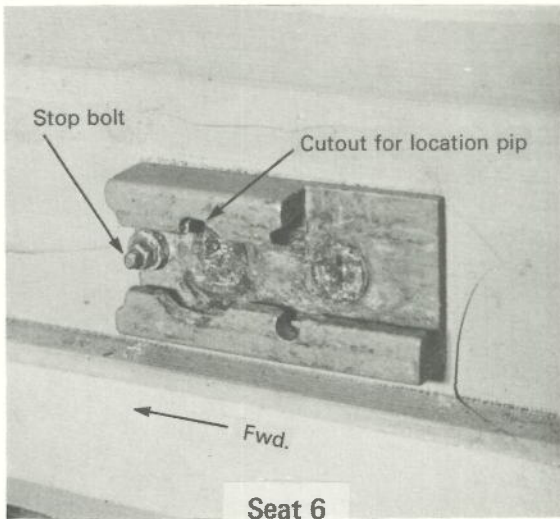
Non-positive Locking Fitting

A=Collar positioning plunger
B=Collar lock plunger

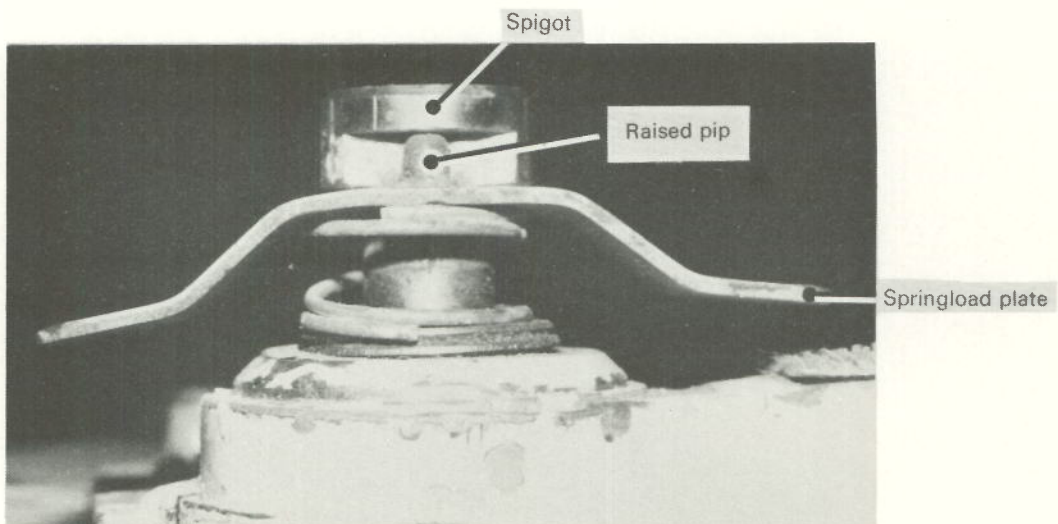


Positive Locking Fitting

Comparison of seat leg attachment fittings



Comparison of seats 6 and 10 forward sidewall fittings



Plan view of typical sidewall spigot and locating plate

EXTRACTS FROM THE BAH OPERATIONS MANUAL

1. Volume V, Section 3, paragraph 32.4.5, referred to the ANO Rule 23 and stated that:

"A helicopter flying outside Controlled Airspace at or below 3000 feet amsl shall remain clear of cloud and in sight of the surface OR"

2. Volume V, Section 3, paragraph 32.6.1.2 Flights under VFR, stated that:

"Flight will not be commenced or continued over the sea unless the minimum cloud ceiling en-route is 300 feet above the water and the forward visibility is not less than 900 metres."

Also that:

"Weather minima for coastal operating sites are subject to the following conditions when the cloud ceiling is less than 500 feet 3. For landing, the coastline must not be crossed until the landing area is in sight."

3. Volume V, Section 3, paragraph 7.4.1 defined the minimum over-sea flight altitude:

"Provided that daylight conditions can be maintained in general the minimum safe altitude for sectors over the sea may be determined by assuming 250 feet clearance over the sea. It is however legally necessary to maintain a 500 feet clearance (not necessarily vertical clearance) from any person, vessel or structure".

4. Volume V, Section 4, paragraph 1.3.1 Normal Route Operation, laid down the duties of S61 crews during the cruise and descent. It was relevant to both VFR and IFR operation. Relevant extracts are as follows:

"Cruise

P2 will navigate and maintain fuel monitoring.

P2 will record and pass to the Captain Met Reports.

Before reaching point of descent Captain will brief P2 on radio aids to be selected. He will ensure that P2 is conversant with let down, overshoot procedure and landing limits.

Descent and Initial Approach.

Captain will handle aircraft, maintain communications and initiate drills.

P2 will tune and identify nav aids as required.

Captain will cross check.

P2 will record and monitor compliance with ATC instructions.

P2 will assist with courses and ETA's as requested by the Captain.

Final Approach-

Captain will handle aircraft, maintain communications and initiate drills.

P2 will tune and identify nav aids as required. Captain will crosscheck.

P2 will record and monitor compliance with ATC instructions.

P2 will monitor all instruments and handle engine controls as required.

P2 will maintain the correctness of the approach and inform the Captain if there are any discrepancies.

Approaching Decision Height.

P2 will call '100 feet above' at Decision Height plus 100 feet.

Captain will prepare for overshoot.

P2 will call 'Visual Contact' as soon as he is sure that there is sufficient visual reference to enable a landing to be made.

Captain will look ahead and complete the approach and landing visually.

At any point approaching Decision Height, if the Captain decides to discontinue the approach, he will call 'Overshooting' and carry out the overshoot manoeuvre."