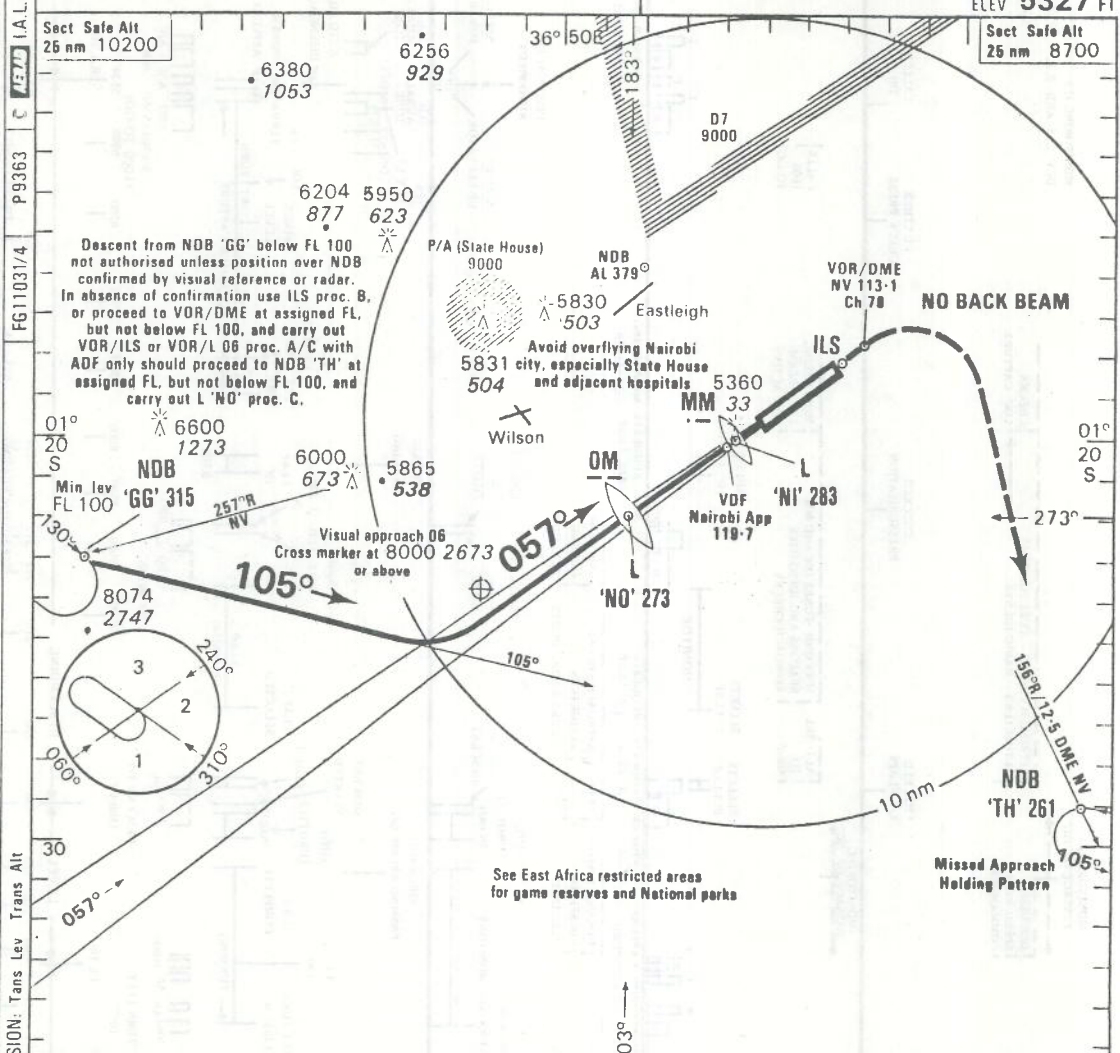
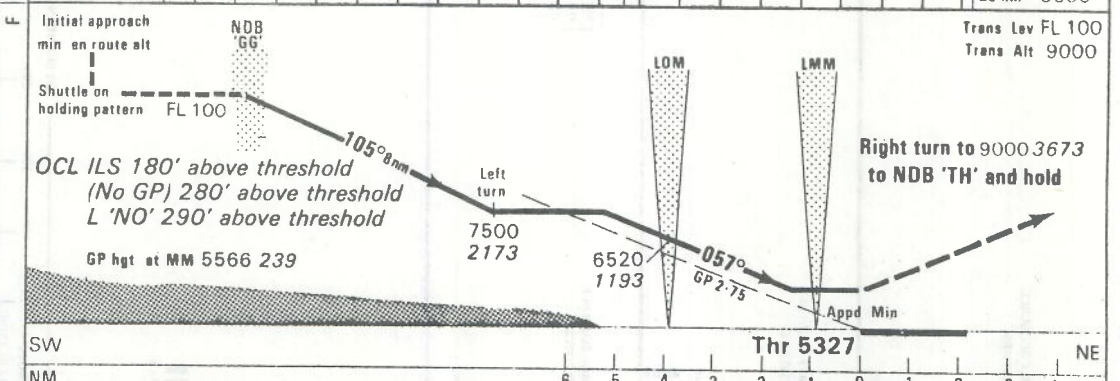


APPENDIX A

NAIROBI Approach 119.7
NAIROBI Tower 121.3
SRE 119.5
ILS-110.3. NL or L 'NO' 06
PROCEDURE A
ELEV 5327 FT
 R A F Safe Alt
 10 nm 10400
 25 nm 10400



Sect Safe Alt 25 nm 9700
 Trans Lev FL 100
 Trans Alt 9000

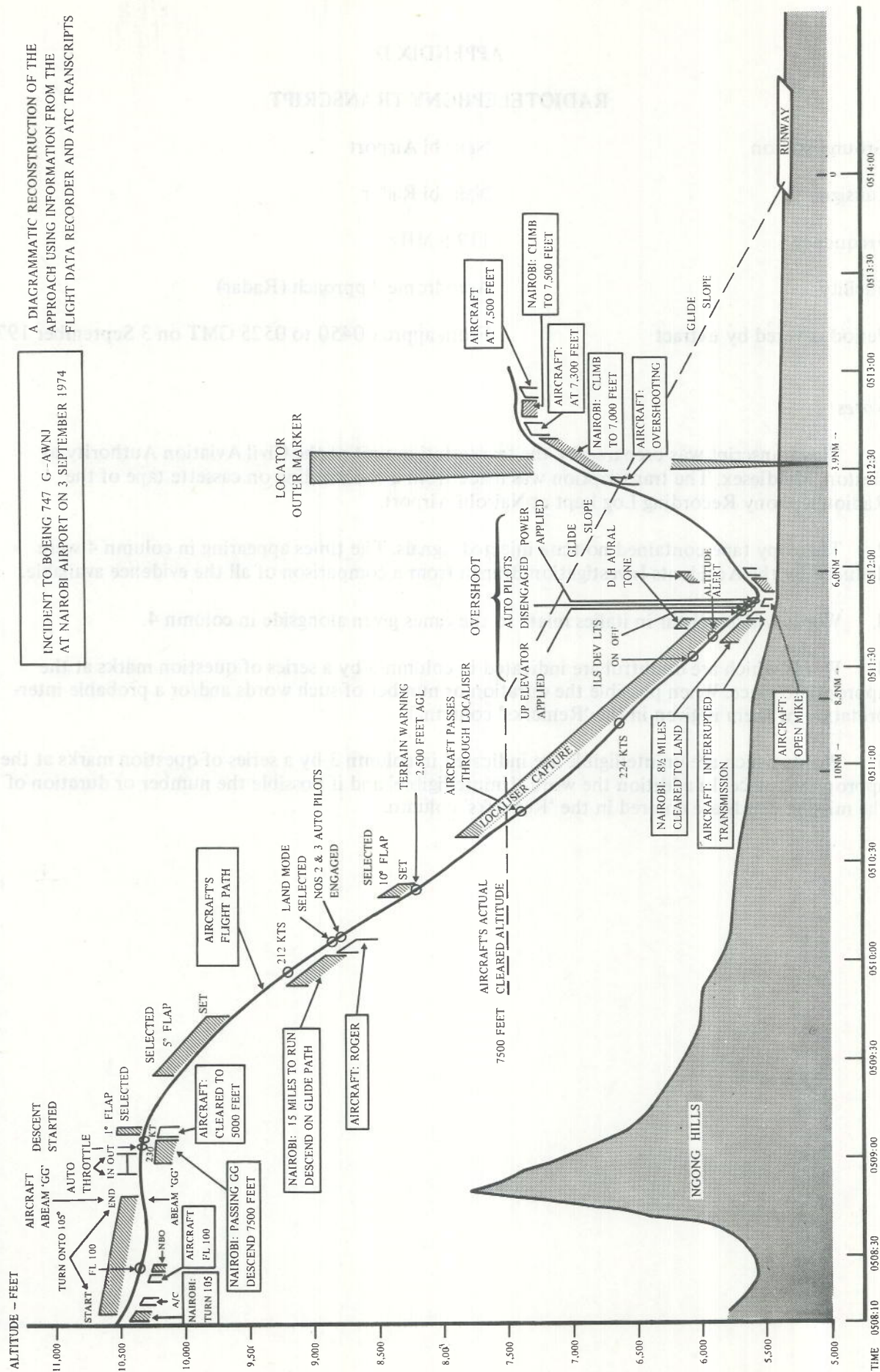


GROUND SPEED IN KNOTS		70	90	110	130	150	170	190	210	Bearings are magnetic Var 3°W Elevations in feet AMSL 6600 Heights above threshold 06 1273	
TIME	NDB 'GG' TO TURN 8 nm	6.51	5.20	4.22	3.42	3.12	2.49	2.32	2.17		
FROM	LOM TO THRESHOLD 3.9 nm	3.21	2.36	2.08	1.48	1.34	1.23	1.14	1.07		
GP 2.75°		FT PER MIN		340	438	535	632	729	827	924	1021

ILS-110.3. NL or L 'NO' 06 PROCEDURE A **EFFECTIVE 1.8.74** **B1** **NAIROBI**

B XIDN99A - APPENDIX B

VERTICAL CROSS SECTION OF FLIGHT — APPENDIX C



APPENDIX D
RADIOTELEPHONY TRANSCRIPT

Ground station	Nairobi Airport
Callsign	Nairobi Radar
Frequency	119.5 MHz
Facility	Aerodrome Approach (Radar)
Period covered by extract	From approx 0450 to 0525 GMT on 3 September 1974

Notes:

1. This transcript was prepared by the transcription unit of the Civil Aviation Authority at Heston, Middlesex. The transcription was made from a re-recording on cassette tape of the Radiotelephony Recording Log kept at Nairobi Airport.
2. The copy tape contained no time injected signals. The times appearing in column 4 were deduced by the Accidents Investigation Branch from a comparison of all the evidence available.
3. Words which appear in italics relate to the times given alongside in column 4.
4. Words which are doubtful are indicated in column 3 by a series of question marks at the appropriate place. When possible the duration or number of such words and/or a probable interpretation of them is given in the 'Remarks' column.
5. Words which are unintelligible are indicated in column 3 by a series of question marks at the appropriate place. In addition the word 'Unintelligible' and if possible the number or duration of the missing words are entered in the 'Remarks' column.

LINE NO.	FROM	RECORDED INTELLIGENCE	TIME (GMT)	REMARKS
Col 1.	Col 2.	Col 3.	Col 4.	Col 5.
1	BA 029	ER RADAR SPEEDBIRD ZERO TWO NINE IS ER ON THIS FREQUENCY		
2				
3	NAIROBI RADAR	NO CONTACT ON SPEEDBIRD ZERO TWO NINE STANDBY		
4				
5	EC 613	SIX ONE THREE DESCENDING TO ONE ONE ZERO		
6				
7	NAIROBI RADAR	ONE THREE ROGER MAI - ER REACHING FLIGHT LEVEL ONE ZERO ZERO MAINTAIN FURTHER DESCENT AFTER PASSING THE GOLF GOLF		
8				
9				
10	EC 613	SIX ONE THREE		
11				
12	NAIROBI RADAR	ER THE SPEEDBIRD ZERO TWO NINE NAIROBI RADAR HOW DO YOU READ		
13				
14	NAIROBI RADAR	EAST AFRICAN SIX ONE THREE COULD YOU RELAY TO SPEEDBIRD ZERO TWO NINE APPROACH CLEARS HIM TO THE GOLF GOLF FLIGHT LEVEL ONE FIVE ZERO NO DELAY EXPECTED FOR I L S APPROACH RUNWAY ZERO SIX		
15				
16				
17				
18	EC 613	ER SIX ONE THREE ER ZERO TWO NINE ER YOU ARE CLEARED GOLF GOLF FLIGHT LEVEL ONE FIVE ZERO NO DELAY EXPECTED I L S ZERO SIX		
19				
20				
21				
22	EC 613	SPEEDBIRD ZERO TWO NINE		
23				
24	EC 613	ER HE SEEMS TO HAVE CHANGED FREQUENCY ER RADAR		
25				
26	NAIROBI RADAR	SIX - EAST AFRICAN SIX ONE THREE TURN LEFT LEFT NOW HEADING ONE ZERO FIVE		
27				
28				
29	EC 613	LEFT TURN -		
30				
31	NAIROBI RADAR	LEFT HEADING ONE ZERO FIVE SIX ONE THREE		
32				
33	EC 613	LEFT LEFT ONE ZERO FIVE SIX ONE THREE		
34				
35	+	ZERO ONE NINE YOU ARE CLEARED GOLF GOLF FLIGHT LEVEL ONE FIVE ZERO		
36				

-Origin doubtful

LINE NO.	FROM	RECORDED INTELLIGENCE	TIME (GMT)	REMARKS
Col 1.	Col 2.	Col 3.	Col 4.	Col 5.
37				
38				
39	NU	NOVEMBER UNIFORM FIVE FIVE		
40				
41		--		
42				
43	NAIROBI APPROACH	AIRCRAFT CALLING APPROACH WHAT'S YOUR CALLSIGN AGAIN		
44				
45	ACH	BA 029 -BIRD ZERO TWO NINE		
46				
47	NAIROBI RADAR	ER SPEEDBIRD ZERO TWO NINE NAIROBI RADAR HOW DO YOU READ		
48				
49				
50	BA 029	ER READING YOU FIVES NOW SPEEDBIRD ZERO TWO NINE		
51	NAIROBI RADAR	ROGER STANDBY ONE BREAK-		
52				
53	NAIROBI RADAR	EAST AFRICAN SIX ONE THREE YOU ARE APPROACHING THE LOCALIZER FROM THE LEFT COMPLETE YOUR TURN ON AND DESCEND ON THE GLIDE PATH		
54				
55				
56				
57	EC 613	TURN ON DESCEND ON THE GLIDE SIX ONE THREE		
58				
59	NAIROBI RADAR	SPEEDBIRD ZERO TWO NINE YOU ARE CLEARED TO THE GOLF GOLF FLIGHT LEVEL ONE FIVE ZERO NO DELAY EXPECTED FOR I L S APPROACH RUNWAY ZERO SIX		
60				
61				
62				
63	BA 029	ROGER SPEEDBIRD SIX ONE NINE - ER CORRECTION ZERO TWO NINE IS CLEARED TO THE GOLF GOLF FLIGHT LEVEL ONE FIVE ZERO NO DELAY EXPECTED FOR I L S ON ZERO SIX AND REQUEST YOUR LATEST WEATHER		
64				
65				
66				
67	NAIROBI RADAR	???		???
68				Unintelligible word
69				

-Re-recording interrupted.

LINE NO.	FROM	RECORDED INTELLIGENCE	TIME (GMT)	REMARKS
Col 1.	Col 2.	Col 3.	Col 4.	Col 5.
70	NAIROBI RADAR	ZERO TWO NINE THE NAIROBI MET REPORT FOR ZERO FOUR THREE ZERO THE WIND IS ONE NINE ZERO DEGREES LESS THAN FIVE VISIBILITY IS BETTER THAN TEN KILOMETRES TWO OKTAS AT EIGHT HUNDRED FEET TEMPERATURE AND DEW POINT IS ONE ONE Q N H ONE ZERO TWO ZERO DECIMAL FIVE TEMPO THREE OKTAS AT EIGHT HUNDRED FEET		
71				
72				
73				
74				
75				
76	BA 029	ROGER THANKYOU VERY MUCH ONE ZERO TWO ZERO DECIMAL FIVE		
77				
78	NAIROBI RADAR	ZERO TWO NINE WHAT WOULD BE YOUR RADIAL NOW AND D M E		
79				
80	BA 029	ER SPEEDBIRD ZERO TWO NINE IS ONE SORRY-		
81				
82	BA 029	-ONE THREE SEVEN D M E STANDBY RADIAL		
83				
84	NAIROBI RADAR	TWO NINE ROGER		
85				
86	BA 029	ZERO TWO NINE IS ON THREE FOUR ONE RADIAL AT ONE THREE FIVE D M E		
87				
88				
89	NAIROBI RADAR	ZERO TWO NINE ROGER		
90				
91		--		
92				
93	NAIROBI RADAR	SPEED-SPEEDBIRD ZERO TWO NINE NAIROBI RADAR REQUESTING NUMBER OF SOULS ON BOARD		
94				
95				
96	BA 029	ER SPEEDBIRD ZERO TWO NINE STANDBY		
97				
98	BA 029	SPEEDBIRD ZERO TWO NINE WE HAVE TWO NINE NINE SOULS TWO NINE NINE		
99				
100				
101	NAIROBI RADAR	ZERO TWO NINE ROGER		
102				

-Re-recording interrupted.

LINE NO.	FROM	RECORDED INTELLIGENCE	TIME (GMT)	REMARKS
Col 1.	Col 2.	Col 3.	Col 4.	Col 5.
103				-Re-recording interrupted.
104				
105	BA 029	SPEEDBIRD ZERO TWO NINE IS OUT OF THREE SEVEN ZERO FOR ONE FIVE ZERO		
106				
107				
108	NAIROBI RADAR	ZERO TWO NINE ROGER		-Re-recording interrupted
109				
110				
111				
112	NAIROBI RADAR	SPEEDBIRD ZERO TWO NINE THE LANDING V C TEN REPORTS CLOUD BASE AT THREE HUNDRED FEET		
113				
114	BA 029	ZERO TWO NINE		
115		--	0502+00	Re-recording interrupted.
116				
117				
118	NAIROBI RADAR	ER SPEEDBIRD ZERO TWO NINE WHAT WOULD BE YOUR RADIAL AND D M E	0502+08	
119				
120	BA 029	SPEEDBIRD ZERO TWO NINE D M E FOUR SEVEN STANDBY-	0502+17	
121				
122	BA 029	ER SPEEDBIRD ZERO TWO NINE THE RADIAL IS THREE ONE FIVE FORTY SIX MILES	0502+25	
123				
124				
125	NAIROBI RADAR	ROGER SPEEDBIRD ZERO TWO NINE YOU ARE RADAR IDENTIFIED MAKE YOUR HEADING ONE SIX ZERO DESCEND FLIGHT LEVEL ONE TWO ZERO	0502+30	
126				
127				
128	BA 029	ROGER SPEEDBIRD ZERO TWO NINE HEADING ONE SIX ZERO DESCENDING TO ONE TWO ZERO OUT OF ONE FIVE ZERO	0502+43	
129				
130				
131	NAIROBI RADAR	ZERO TWO NINE THAT IS CORRECT THIS IS RADAR VECTORING INTO THE ILS ? ? ? ? RUNWAY ZERO SIX Q N H ONE ZERO TWO ZERO DECIMAL FIVE		???
132				Unintelligible words.
133			0502+52	
134				
135	BA 029	ROGER SPEEDBIRD ZERO TWO NINE RADAR VECTORING FOR ZERO SIX ONE ZERO TWO ZERO DECIMAL FIVE	0502+58	
136				
137				

LINE NO.	FROM	RECORDED INTELLIGENCE	TIME (GMT)	REMARKS
Col 1.	Col 2.	Col 3.	Col 4.	Col 5.
138	BA 029	SPEEDBIRD ZERO TWO NINE IS LEVEL ONE TWO ZERO	0504+06	
139	NAIROBI RADAR	ZERO TWO NINE MAINTAIN YOU HAVE THIRTY MILES TO RUN TO THE GOLF GOLF BEACON		
140				
141				
142				
143	BA 029	ZERO TWO NINE	0504+14	
144				
145	BA 029	ER SPEEDBIRD ZERO TWO NINE ER WAS THAT TWO ZERO OR THREE ZERO	0504+21	
146				
147				
148	NAIROBI RADAR	NOW TWO SEVEN MILES TO RUN TWENTYSEVEN TO RUN TO THE GOLF GOLF		
149				
150	BA 029	TWENTYSEVEN THANKYOU	0504+30	
151	NAIROBI RADAR	ZERO TWO NINE DESCEND FLIGHT LEVEL ONE ZERO ZERO	0505+47	
152				
153	BA 029	ZERO TWO NINE CLEARED TO ONE ZERO ZERO	0505+55	
154				
155	NAIROBI RADAR	CORRECT		
156				
157	BA 029	ZERO TWO NINE IS OUT OF ONE TWO ZERO	0506+14	
158				
159	NAIROBI RADAR	ZERO TWO NINE		
160				
161	NAIROBI RADAR	ZERO TWO NINE YOU HAVE THIRTEEN MILES TO RUN TO THE GOLF GOLF ONE THREE	0506+26	
162				
163				
164	BA 029	ZERO TWO NINE	0506+32	
165				
166	NAIROBI RADAR	SPEEDBIRD ZERO TWO NINE TURN LEFT HEADING ONE ZERO FIVE	0508+11	
167				
168	BA 029	LEFT TO ONE ZERO FIVE SPEEDBIRD ZERO TWO NINE	0508+18	
169				
170	BA 029	LEVEL ONE ZERO ZERO TWO NINE	0508+23	
171				

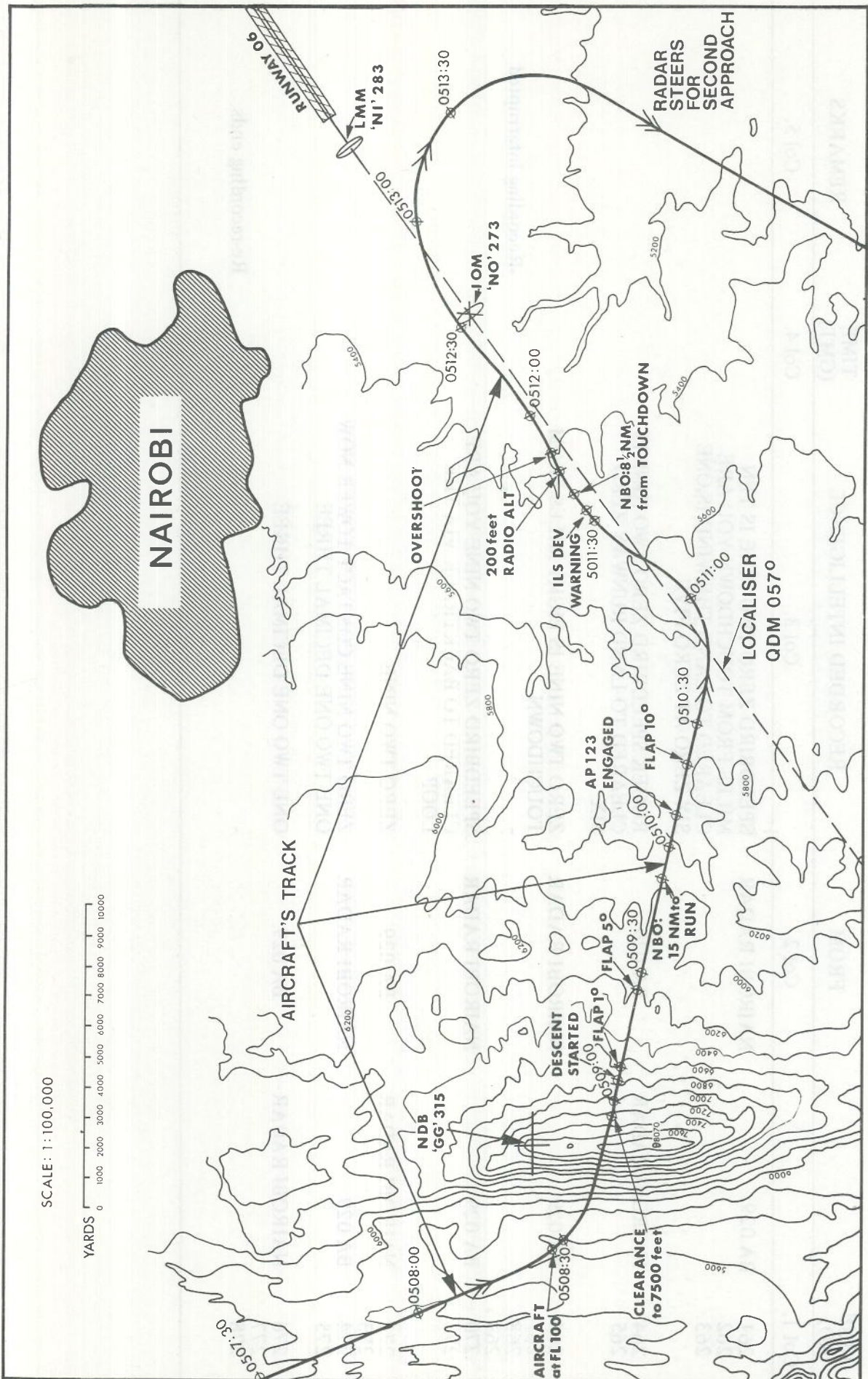
LINE NO.	FROM	RECORDED INTELLIGENCE	TIME (GMT)	REMARKS
Col 1.	Col 2.	Col 3.	Col 4.	Col 5.
172	NAIROBI RADAR	ROGER MAINTAIN YOU HAVE ONE AND HALF MILES TO RUN TO THE GOLF GOLF	0508+26	
173				
174				
175	BA 029	ROGER	0508+29	
176				
177	NAIROBI RADAR	SPEEDBIRD ZERO TWO NINE YOU ARE PASSING THE GOLF GOLF BEACON THIS TIME DESCEND SEVEN FIVER ZERO ZERO FEET THE Q N H IS ONE ZERO TWO ZERO DECIMAL FIVE	0508+59	
178				
179				
180				
181	BA 029	ROGER SPEEDBIRD ZERO TWO NINE CLEARED TO FIVE THOUSAND FEET ON ONE ZERO TWO ZERO DECIMAL FIVE	0509+10	
182				
183				
184	NAIROBI RADAR	ZERO TWO NINE YOU ARE FIFTEEN MILES TO BE-TO RUN TO TOUCHDOWN RUNWAY ZERO SIX AND YOU ARE APPROACHING THE LOCALIZER FROM THE LEFT COMPLETE YOUR TURN ON AND DESCEND ON THE GLIDE PATH	0510+02	
185				
186				
187				
188	BA 029	ROGER SPEEDBIRD ZERO TWO NINE CLEARED TO TURN ON THE I L S ZERO SIX AND DESCEND ON THE GLIDE PATH	0510+07	
189				
190				
191	NAIROBI RADAR	THAT'S CORRECT		
192				
193	NAIROBI RADAR	SPEEDBIRD ZERO TWO NINE IS EIGHT AND HALF MILES FROM TOUCHDOWN TOWER CLEARS YOU TO LAND AND THE WIND IS ONE EIGHT ZERO AT LESS THAN FIVE	0511+38	
194				
195				
196				
197	BA 029	ROGER SPEEDBIRD ZERO TWO NINE ONE EI- -----	0511+47	Transmission Stopped.
198			0511+51	-- Transmitter open
199				
200	NAIROBI RADAR	I SAY AGAIN THE WIND IS ONE EIGHT ZERO AT LESS THAN FIVE KNOTS	0511+57	
201				
202	BA 029	-ZERO TWO ZERO ROGER -	0512+00	Background tone to trans-
203				mission
204	BA 029	SPEEDBIRD ZERO TWO ONE IS OVERSHOOTING	0512+26	
205				

LINE NO.	FROM	RECORDED INTELLIGENCE	TIME (GMT)	REMARKS
Col 1.	Col 2.	Col 3.	Col 4.	Col 5.
206	NAIROBI RADAR	ZERO TWO NINE ROGER ER CLIMB TO SEVEN THOUSAND FEET ON THE QNH AND ER I WILL GIVE YOU ER RADAR VECTING BACK TO THE ILS	0512+40	
207				
208				
209	BA 029	ROGER CLIMBING TO SEVEN THOUSAND FEET WE ARE SEVEN THOUSAND THREE HUNDRED FEET SPEEDBIRD ZERO TWO NINE	0512+41 0512+45	
210				
211				
212				
213	NAIROBI RADAR	ROGER CONTINUE YOUR CLIMB TO SEVEN FIVE ZERO ZERO FEET ON THE QNH ONE ZERO TWO ZERO DECIMAL FIVE	0512+52	
214				
215				
216	BA 029	ROGER WE'RE AT SEVEN FIVE ZERO ZERO FEET ON ONE ZERO TWO ZERO DECIMAL FIVE SPEEDBIRD ZERO TWO NINE	0512+56	
217				
218				
219	NAIROBI RADAR	-		- Transmitter switched
220				
221	BA 029	ER SPEEDBIRD ZERO TWO NINE COULD YOU GIVE US A RADAR HEADING		
222				
223	NAIROBI RADAR	SPEEDBIRD ZERO TWO NINE WHEN READY TURN RIGHT HEADING TWO ONE ZERO		- Change of Controller
224				
225	BA 029	ZERO TWO NINE RIGHT TWO ONE ZERO		
226				
227	BA 029	SPEEDBIRD ZERO TWO NINE THAT'S RIGHT TWO ONE ZERO		
228				
229	NAIROBI RADAR	AFFIRMATIVE HEADING TWO ONE ZERO FOR YOUR DOWNWIND LEG RADAR POSITIONING FOR THE ILS AGAIN RUNWAY ZERO SIX		
230				
231				
232	BA 029	ZERO TWO NINE ROGER		
233				
234	BA 029	ER SPEEDBIRD ZERO TWO NINE COULD YOU CHECK THE QNH PLEASE		
235				
236	NAIROBI RADAR	ONE ZERO TWO ZERO DECIMAL FIVE		- Controller Change
237				

LINE NO.	FROM	RECORDED INTELLIGENCE	TIME (GMT)	REMARKS
Col 1.	Col 2.	Col 3.	Col 4.	Col 5.
238	BA 029	ONE ZERO TWO ZERO DECIMAL FIVE		
239				
240	NAIROBI RADAR	CORRECT		
241				
242	NAIROBI RADAR	ER SPEEDBIRD ZERO TWO NINE TURN RIGHT NOW HEADING TWO FOUR ZERO		
243				
244				
245	BA 029	RIGHT TWO FOUR ZERO SPEEDBIRD ZERO TWO NINE		
246				
247	NAIROBI RADAR	SPEEDBIRD ZERO TWO NINE IS THIRTEEN MILES DOWNWIND		
248	RIG	TURN RIGHT HEADING ZERO TWO ZERO TOWARDS THE I L S		
249				
250	BA 029	ROGER RIGHT ZERO TWO ZERO SPEEDBIRD ZERO TWO NINE		
251				
252	NAIROBI RADAR	SPEEDBIRD ZERO TWO NINE ON THE HEADING OF ZERO TWO ZERO YOU ARE APPROACHING THE LOCALIZER FROM THE RIGHT COMPLETE YOUR TURN ON AND DESCEND ON THE GLIDE PATH		
253				
254				
255				
256	BA 029	ROGER SPEEDBIRD ZERO TWO NINE ER APPROACHING THE LOCALIZER FROM THE RIGHT COMPLETE THE TURN ON DESCEND ON THE GLIDE PATH		
257				
258				
259				
260	NAIROBI RADAR	THAT'S CORRECT		
300				
301				
302				
303				
304				
Col 1.	Col 2.	Col 3.	Col 4.	Col 5.
305	NAIROBI RADAR	RECORDED INTELLIGENCE	(0911) TIME	REMARKS

LINE NO.	FROM	RECORDED INTELLIGENCE	TIME (GMT)	REMARKS
Col 1.	Col 2.	Col 3.	Col 4.	Col 5.
261	BA 029	NAIROBI RADAR		
262		SPEEDBIRD ZERO TWO NINE IS TEN MILES FROM TOUCHDOWN YOU ARE CLEARED TO LAND THE WIND IS ONE SIX ZERO AT ZERO FIVE		
263				
264	NAIROBI RADAR			
265	BA 029	ROGER SPEEDBIRD ZERO TWO NINE IS CLEARED TO LAND RUNWAY ZERO SIX		
266	NAIROBI RADAR			
267	BA 029	ZERO TWO NINE IS EIGHT MILES FROM TOUCHDOWN		
268				
269				
270	NAIROBI RADAR			
271	BA 029	SPEEDBIRD ZERO TWO NINE YOU ARE CLEARED TO BACKTRACK VIA THE LOOP		-Recording interrupted
272	NAIROBI RADAR			
273	BA 029	ZERO TWO NINE		
274	NAIROBI RADAR			
275	BA 029	ZERO TWO NINE CONTACT TOWER NOW ONE TWO ONE DECIMAL THREE		
276	NAIROBI RADAR			
277	BA 029	ONE TWO ONE DECIMAL THREE		
278				Re-recording ends

APPENDIX E - GROUND PLOT



APPENDIX F

