

Annex A  
To Report 79-139

**CABIN CREW CURRENCY  
FLIGHT – PROCEDURES  
TE 901 – 28 NOVEMBER 1979**

		<b>Last DC 10 Refresher Course</b>	<b>Last Avmed Refresher Course</b>	<b>Last Day of Flight</b>	<b>Flight Hours since 31 Oct 79</b>
Chief Purser	McPherson, Roy William	9 May 79	21 Jun 79	23 Nov 79	47
Purser	Collins, Martin John	6 Jun 79	14 May 79	25 Nov 79	54
Purser	Scott, Russell Morrison	4 Jul 79	2 Aug 79	22 Nov 79	58
Assistant Purser	Bennett, David John	26 Jan 79	18 Jun 79	25 Nov 79	50
Assistant Purser	Findlay, Michael James	1 Jun 79	15 Feb 79	23 Nov 79	25
Senior Cabin Crew Member	Carter, Graham Ronald	2 May 79	8 Feb 79	16 Nov 79	41
Senior Cabin Crew Member	Marinovic, Suzanne Margaret	4 May 79	19 Apr 79	24 Nov 79	59
Senior Cabin Crew Member	Maxwell, Bruce Rhodes	8 Jun 79	18 Jun 79	22 Nov 79	61
Cabin Crew Member	Keenan, Dianne	20 Jun 79	5 Mar 79	26 Nov 79	18
Cabin Crew Member	Lewis, James Charles	7 Feb 79	30 Aug 79	26 Nov 79	37
Cabin Crew Member	Morrison, Katrina Mary June	23 Mar 79	25 Jun 79	23 Nov 79	45
Cabin Crew Member	Sicklemore, David Brian	17 Jan 79	9 Aug 79	16 Nov 79	34
Cabin Crew Member	Simmons, Stephen George	3 Aug 79	3 Sep 79	25 Nov 79	46
Cabin Crew Member	Wolfert, Marie-Therese	17 Jan 79	26 Mar 79	22 Nov 79	63
Cabin Crew Member	Carr-Smith, Elizabeth Mary	11 Jul 79	2 Apr 79	22 Nov 79	35

**EXPLANATION OF ANTARCTIC HORIZON AND SURFACE DEFINITIONS****GUIDE TO THE DEGREE OF SURFACE DEFINITION:**

GOOD	SNOW SURFACE FEATURES SUCH SASTRUGI, DRIFTS, AND GULLIES ARE EASILY IDENTIFIED BY SHADOW. (THE SUN IS USUALLY UNOBSCURED).
FAIR	SNOW SURFACE FEATURES CAN BE IDENTIFIED BY CONTRAST. NO DEFINITE SHADOWS EXIST. (THE SUN IS USUALLY TOTALLY OBSCURED).
POOR	SNOW SURFACE FEATURES CANNOT BE READILY IDENTIFIED EXCEPT FROM CLOSE UP. (THE SUN IS USUALLY TOTALLY OBSCURED).
WHITEOUT	SNOW SURFACE FEATURES CANNOT BE IDENTIFIED. LOSS OF HORIZON, THE SNOW SURFACE MERGES WITH THE WHITENESS OF THE SKY. NO SHADOWS OR CONTRAST EXIST. DARK COLOURED OBJECTS APPEAR TO "FLOAT" IN THE AIR. (THE SUN IS TOTALLY OBSCURED ALTHOUGH THE OVERCAST MAY EXHIBIT CONSIDERABLE GLARE ..... THE GLARE APPEARS TO BE EQUALLY BRIGHT FROM SURFACE REFLECTION ..... AND FROM ALL DIRECTIONS).

**GUIDE TO THE DEGREE OF HORIZON DEFINITION:**

GOOD	THE HORIZON IS SHARPLY DEFINED BY SHADOW OR CONTRAST.
FAIR	THE HORIZON MAY BE IDENTIFIED ALTHOUGH THE CONTRAST BETWEEN SKY AND SNOW SURFACE IS NOT SHARPLY DEFINED.
POOR	THE HORIZON IS BARELY DISCERNIBLE.
WHITEOUT	TOTAL LOSS OF HORIZON, THE SNOW SURFACE MERGES WITH THE WHITENESS OF THE SKY.
NO HORIZON	TOTAL LOSS OF HORIZON DUE TO CONDITIONS OTHER THAN WHITEOUT, E.G. BLOWING SNOW, FOG, ICE FOG.

**NOTE:** OCCASIONALLY A POOR OR NO HORIZON CONDITION WILL OCCUR IN ONE DIRECTION ONLY. REPORT THIS CONDITION: AS POOR HORIZON SOUTH THRU WEST, OR NO HORIZON EAST, FOR EXAMPLE.

ABRIDGED TRANSCRIPT OF A SUNDSTRAND, MODEL B  
COCKPIT VOICE RECORDER, SERIAL NO. 256  
REMOVED FROM ZK-NZP  
(FLIGHT TE 901) WHICH WAS INVOLVED  
IN AN ACCIDENT AT ROSS ISLAND ON  
28 NOVEMBER 1979  
THE TIME IS GMT

Note: Air-Ground communications are co-ordinated with and supplemented by ground based recordings.

**LEGEND**

CAM	Cockpit area microphone voice or sound source
RDO	Radio transmission from:
-1	Voice identified as Captain
-2	Voice identified as Co-pilot
-3	Voice identified as Flight Engineer (Brooks)
-4	Voice identified as Flight Engineer (Malone)
-5	Voice identified as P. Mulgrew
-?	Unidentified voice
CTR	McMurdo Centre/Ice Tower
*	Unintelligible word
%	Background conversation not pertinent to the operation of the flight
()	Questionable text
(( ))	Editorial insertion
- - -	Pause
@	Ground Proximity Warning System
(HF/VHF)	Type of Transmission

**AIR-GROUND COMMUNICATIONS**

<b>Time &amp; source</b>	<b>Content</b>
0017:40 RDO-2 (VHF 2)	McMurdo New Zealand nine zero one
0017:55 CTR (HF)	New Zealand 901 this is the Mac Centre Forecaster Over
0017:59 RDO-2 (HF)	Roger Mac Centre New Zealand 901 go ahead

**INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>
	*****
0017:00 CAM-4	Do you want any landing data about here?
CAM-1	No
0017:05 CAM-4	You've just got your altimeters to set through transition
0017:13 CAM-1	I think we'll start down a little early here
CAM-2	OK, I'll see if I can get hold of them on VHF
	%
0017:53 CAM-?	How far away were we (from McMurdo)
0017:56 CAM-?	About a hundred and forty miles

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT****Time & source****Content**

0018:05  
CTR  
(HF)  
Yes sir. If you have copied our latest weather we have a low overcast in the area (at) about 2000 feet and right now we're having some snow but our visibility is still about 40 miles and if you like I can give you an update on where the clear areas are around the local area

0018:29  
RDO-2  
(HF)  
Yes 901 that would be handy we'd like to descend to flight level 160

0018:41  
CTR  
(HF)  
Kiwi 901 Mac Centre descend and maintain flight level 180 over

0018:47  
RDO-2  
(HF)  
Roger 901 - - - flight level 180

**Time & source****Content**

0018:11  
CAM-1  
Clouds come down a bit \*\*\* may not be able to \*\*  
McMurdo. Very hard to tell the difference between the  
cloud and the ice \*\*

%

0018:27  
CAM-1  
\*\* better conditions \*\* before

0019:22  
CAM-?  
That'll be round Cape Bird wouldn't it?

CAM-?  
Right Right

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>	<b>Time &amp; source</b>	<b>Content</b>
0018:52 CTR (HF)	901 this is the forecaster again it looks like the clear areas around McMurdo are at approximately between 75 to 100 miles to the northwest of us (but) right over McMurdo we have a pretty extensive low overcast over		
0019:14 RDO-2 (HF)	Roger . . New Zealand 901 thanks	CAM-4	Got a low overcast over McMurdo
		0019:39 CAM-1	Doesn't look very promising does it?
		CAM-2	No
		CAM-4	No
0019:47 CTR (HF)	Kiwi 901 Mac Centre		
0019:49 RDO-2 (HF)	Centre New Zealand 901		
0019:56 CTR (HF)	Roger within a range of 40 miles of McMurdo we have a radar that will, if you desire, we can let you down to one thousand five hundred feet on radar vectors over		
0020:07 RDO-? (HF)	Roger New Zealand 901 that's acceptable		

**AIR-GROUND COMMUNICATIONS**

<b>Time &amp; source</b>	<b>Content</b>
0020:11 CTR (HF)	Roger
0020:28 CTR (HF)	Kiwi 901 McMurdo Centre, estimate your DME from McMurdo – over ((not recorded on CVR tape due reversal))
0020:33 RDO-2 (HF)	Roger we're approximately one one four

**INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>
0020:17 CAM-1	* that's what we want ***
CAM-?	** going down
0020:20 CAM-2	** one hundred and fourteen miles **
	%
0020:30 PA-1	- Gents we're going initially to eighteen thousand and the cloud cover in the McMurdo area has increased although the visibility is forty kilometres so ground visibility is good and we - - - will be taking advantage of the radar facilities at McMurdo for letdown which should take us below the cloud and give us a view of the McMurdo area, that is always likely to change of course depending on any variations in the weather but we're hopeful we'll be able to give you a look at McMurdo today. Thank you.

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>	<b>Time &amp; source</b>	<b>Content</b>
0020:40 CTR (HF)	Kiwi niner zero one confirm one hundred and ninety four one niner four		
0020:46 RDO-1 (HF)	Negative on one four one hundred and fourteen		
0020:58 CTR (HF)	Kiwi nine zero one attempt contact one two six decimal two	CAM-3	We're going below cloud, letting down below cloud ((comment to unknown person))
0021:05 RDO-2 (HF)	Roger niner zero one	CAM-2	Try another receiver
0021:14 RDO-2 (VHF 2)	Mac Centre New Zealand nine zero one on one two six two do you read		
0021:42 RDO-2 (VHF 1)	Mac Centre New Zealand nine zero one on one two six two do read?		% ((Rustling paper))
		0022:29 CAM-1	What's the weight here?
	((Calls to and from South Pole/Mac Centre))	CAM-3	A hundred and ninety-nine and a half  %



**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>	<b>Time &amp; source</b>	<b>Content</b>
		0023:07 CAM-1	We'll have a minimum of two sixty ((knots))
		CAM-2	OK beauty
		0023:11 CAM-1	It's actually two fifty two for one point five
0023:30 CTR (HF)	Kiwi niner zero – correction New Zealand niner zero one – New Zealand – nine zero one Mac Centre how do you read?  ((South Pole transmissions))		
		0023:36 CAM-?	We've got ninety miles to go but ah
		0023:48 CAM-3	Did he call nine zero one then or - - - ?
0023:50 RDO-2 (HF)	Mac Centre New Zealand nine zero one on ah eight nine nine seven - - no reply on one two six two		
0023:58 CTR (HF)	New Zealand nine zero one Roger, do you have a good lock on our Tacan channel twenty-two niner channel two niner over		%
0024:05 RDO-2 (HF)	Negative at this point. Confirm the frequency one zero niner point two		

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT****Time & source****Content**

0024:17  
CTR  
(HF) Roger our Tacan channel is two niner-two niner

0024:24  
RDO-2  
(HF) Roger New Zealand nine zero one standby

0024:31  
CTR  
(HF) Kiwi nine zero one contact tower at one three four decimal one

0024:38  
RDO-2  
(HF) Understand one three four decimal four

0024:42  
CTR  
(HF) That's one three four decimal one

0024:47  
RDO-2  
(HF) Roger – one three four decimal one

**Time & source****Content**

CAM-3 Have you got the radio information - - - right get yourself the Tacan frequency

%

0024:44 ((Sound of altitude alert))

0024:51  
CAM-? Nav track – Alt Cap

%

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>	<b>Time &amp; source</b>	<b>Content</b>
0025:14 RDO-2 (VHF 1)	Mac Tower this is New Zealand nine zero one on one three four decimal one do you read?		*
			%
		CAM-3	** on the radio licence
			%
		CAM-1	Do you want to try the tower?
		CAM-2	That's what I've just tried
0025:42 RDO-2 (VHF 1)	Mac Tower New Zealand nine zero one on one three four one do you read?		
		0025:56 CAM-1	Try them again on one two six two
0026:00 RDO-2 (VHF 1)	Mac Centre this is New Zealand nine zero one on one two six do you read		%
		CAM-?	*****
0026:14 to 0026:35 CTR (VHF)	((Ice Tower called 901 twice – not recorded on CVR))		Well I had a yellow book on this
			%

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>	<b>Time &amp; source</b>	<b>Content</b>
0027:09 RDO-2 (VHF 1)	Mac Tower this is New Zealand nine zero one on one three four decimal one do you read		
0027:28 RDO-2 (HF)	Mac Centre this is New Zealand nine zero one on eight nine there's no reply on one three four one	CAM-1	Nothing at all
			%
0027:35 CTR (HF)	New Zealand niner zero one roger, Mac-Ice Tower is attempting contact on both one three four decimal one and one two six decimal two. Attempt contact when you're approximately 80 DME over.		
		0027:45 CAM-?	((Laughter))
			((Conversation relevant to change of visitors to flight deck))
0027:47 RDO-1 (VHF 1)	Ah McMurdo Tower New Zealand nine zero one on one three four decimal one do you read? ((Not recorded on ground tape))		%
		0028:47 CAM-2	You didn't get the Tower did you?
-?	(Mac Centre Mac 40643)		
0029:02	Air New Zealand niner zero one Mac Centre do you have		

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>	<b>Time &amp; source</b>	<b>Content</b>
CTR (HF)	uniform hotel foxtrot frequencies		
		CAM-1	No, negative, no we haven't got it
0029:11 RDO-2 (HF)	Negative New Zealand nine zero one		
0029:15 CTR (HF)	Roger – standby Ice Tower is trying to contact you on both one twenty six two and one three four point one		
0029:24 RDO-2 (HF)	Roger thanks		
0030:09 CTR (VHF)	Air New Zealand 901 McMurdo Tower ((Not recorded on CVR))		
		CAM-? 0029:38 CAM-1	If we go lower *** cabin depressurised I'll just give him a call on one two six two
0029:44 RDO-1 (VHF 2)	Ah McMurdo New Zealand nine zero one one two six two do you read? ((Not recorded on ground))		
0030:12 RDO-1 (VHF 2)	Ah McMurdo nine zero one on one two six do you read ((Not recorded on ground))		%

**AIR-GROUND COMMUNICATIONS**

<b>Time &amp; source</b>	<b>Content</b>
0030:35 RDO (VHF 1)	Ah Mac New Zealand ah - - - nine zero one on one three four decimal one zero do you read (Not recorded on ground))

**INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>
0030:30 CAM-1	Can you hear him there at all?
CAM-2	No
CAM-4	No
	%
0031:01 CAM-1	I'll have to do an orbit here I think
	%
0031:08 CAM-1	Well actually it's it's clear out here if we get down - - - and
CAM-?	It's not clear on the right hand side here
CAM-2	No
0031:20 CAM-1	If you can get HF contact tell him that we'd like a further descent – we have contact with the ground and we could if necessary descend doing an orbit
0038:28 CAM-2	OK

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT****Time & source****Content**

0031:37  
RDO-2  
(HF) Mac Centre New Zealand nine zero one

0031:41  
CTR  
(HF) New Zealand nine zero one Centre go ahead

0031:44  
RDO-2  
(HF) Roger New Zealand nine zero one still nothing on one two six two or one three four decimal one - - -

0032:07 We'd like further descent or we could orbit in our present position which is approximately forty three miles north – descending VMC

0032:08  
CTR  
(HF) Roger Kiwi New Zealand nine zero one, VMC descent is approved and keep Mac Centre advised of your altitude

0032:10  
RDO-2  
(HF) Roger New Zealand nine zero one we're vacating one eight zero we'll advise level

**Time & source****Content**

%

0032:22  
CAM-1

I'll come round there and set that down (at) ten thousand

CAM-2

OK

%

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT****Time & source****Content**

0033:17  
CTR  
(VHF)  
Air New Zealand 901 Mac Centre how do you hear?  
(Not recorded on CVR))

**Time & source****Content**

0032:33  
CAM-?

They give us ten thousand?

CAM-?

No clearance

CAM-2

Got to keep them advised

CAM-3

No but see if we can descend VMC

0032:45  
CAM-1

I'll do an orbit here to get down I think - - - and keep them advised of our altitude

033:01  
-?

I see alt, heading select, vert speed

0033:21  
CAM-3

We are descending below cloud now so better photographs soon

CAM-?

Ah ah ((Japanese voice))

CAM-1

Actually it's clear ahead there

CAM-3

We're going down below cloud

CAM-1

No I can't

CAM-1

I'd better come round (here) (again)



**AIR-GROUND COMMUNICATIONS**

<b>Time &amp; source</b>	<b>Content</b>
0033:34 CTR (HF)	Kiwi 901 – Correction Air New Zealand 901. Recycle your transponder – squawk 0400 – ((Not recorded on CVR))

**INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>
CAM-4	Are we (continuing) to ten thousand at (this speed)
CAM-3	McMurdo's here but we are going down and then we'll go to McMurdo once we get down below the cloud
CAM-1	Three thirty five eight two yes well I won't be doing eight two
CAM-4	Right
CAM-1	Just one point five speed
0033:51 CAM-4	That's if you want to go past six.
	%
034:21 PA-1	Captain again ladies and gentlemen we're carrying out an orbit and circling our present position and will be descending to an altitude below cloud so that we can proceed to McMurdo Sound - - - thank you.
-2	Damn – I had whole series of figures – visual figures holding TACAN during the descent.

**AIR-GROUND COMMUNICATIONS**

<b>Time &amp; source</b>	<b>Content</b>
0035:27 RDO 2 (VHF 1)	Mac Tower this is New Zealand nine zero one on one three four decimal one do you read
0035:33 CTR (VHF)	Air New Zealand nine zero one you're loud and clear
0035:36 RDO 2 (VHF 1)	Roger nine zero one you are now loud and clear also we are presently descending through flight level one three zero VMC and the intention at the moment is to descend to one zero thousand
0035:52 CTR	Roger understand you will be descending to one zero thousand VMC and you are requesting a radar letdown

**INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>
-?	Excuse me, will it be difficult to get down and see Scott Base
-?	They'll have no problem when we x x x x x.
-?	Thanks
0035:15 CAM-2	Transponder is now responding
CAM-1	OK
0035:20 CAM-4	Still no good on that frequency though?
CAM-2	No

%

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>	<b>Time &amp; source</b>	<b>Content</b>
(VHF)	through the cloud		
		0035:53	((Sound of altitude alert))
0036:00 RDO 2 (VHF 1)	That is affirmative nine zero one		%
0036:10 to 0038:29	((Ice Tower (VHF) made six calls to 901. These were not recorded on the CVR))	0036:18	((Sound of altitude alert))
		0036:20 CAM-1	Are we cleared below one one thousand
		CAM-2	No I told him we were going down to ten
		0036:25 CAM-1	Oh I see all right
			%
		0036:32 CAM-2	We've lost him again
		?	Yes
		0036:34 CAM-4	Ten thousand armed I see
0036:37 RDO 2	Ah New Zealand nine zero one do you read?		%

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>	<b>Time &amp; source</b>	<b>Content</b>
(VHF 1)			
	((Not recorded on ground tape))	0036:48	((Sound of altitude alert))
			%
		0037:06 CAM-1	Well no the cloud base is low and ah
		BREAK IN TAPE 1719 – 1723	
		0037:20 CAM-4	You're through ten thousand are you going to hold it here
		CAM-1	Yep
0037:27 RDO-2 (VHF 1)	Mac Tower New Zealand nine zero one we seem to have lost contact again were level at ten thousand feet in the ah VMC		
	((Not recorded on the ground tape))		%
		0037:45 CAM-2	I'll go back to HF Jim
		CAM-1	OK
		0037:54 CAM-1	Well we're having trouble with communications right now so if you'll just wait there and see what we come up with

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT****Time & source****Content**

0038:07  
RDO-2  
(VHF 2)

Mac Tower New Zealand nine zero one how do you read now one three four one

((Not recorded on the ground))

0038:29  
RDO-2  
(HF)

Mac Centre this is New Zealand nine zero one on eight nine

CTR  
(HF)

901 loud and clear go ahead

0038:38  
RDO-2  
(HF)

Roger nine zero one we briefly had contact on one three four one we've now lost contact we're maintaining ten thousand feet presently thirty four miles to the north of McMurdo

0038:47  
CTR  
(HF)

Niner zero one Roger your lost comms with the tower say again your altitude?

**Time & source****Content**

((Comment to person/s unknown))

%

0038:23  
CAM-1

I've got to stay VMC here so I'll be doing another orbit

%

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>	<b>Time &amp; source</b>	<b>Content</b>
0039:07 RDO-2 (HF)	Roger we're maintaining one zero thousand – ten thousand		
0039:16 CTR (HF)	OK Roger and keep trying the Tower one two six decimal two and one three four point one they heard you too sir		
0039:25 RDO-2 (HF)	Roger dee		
0039:32 RDO-2 (VHF 1)	Mac Tower New Zealand nine zero one on one two six two do you read?  (( Not recorded on ground tape))		
0040:05 RDO-2 (VHF 2)	Mac Tower New Zealand nine zero one on one three four one do you read?  ((Not recorded on ground tape))		
		0040:19 CAM-4	Try putting number two on that frequency
		0040:28 CAM-3	Lost contact when we got down a bit lower
0040:43 RDO-2 (VHF 2)	Mac Tower New Zealand niner zero one on one three four decimal one do you read?		

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT****Time & source****Content**

((Not recorded on ground))

0041:25  
RDO-2  
(VHF 1)

Ah McMurdo New Zealand nine zero one on one two one five do you read?

((Not recorded on ground))

(Interjection)

**Time & source****Content**

0040:56  
CAM-1

Wonder if they can get us on one two one five then?

(Ratchet sound)

%

0041:15  
CAM-2

Right - - - shall I try it on one two one five?

0041:34  
CAM-1

Well look go back to HF

CAM-2

Yes

0041:00  
CAM-1

Tell him we can make a visual descent descending

0401:45  
CAM-?

My God

CAM-1

On a grid of one eight zero

CAM-2

Yes

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT****Time & source****Content**

0041:55  
RDO-2  
(HF) Ah Mac Centre New Zealand (901 on eight nine)  
  
(Words in brackets interrupted by Voice recorder test signal))

CTR  
(HF) Zero one Mac Centre go ahead

0042:01  
RDO-2  
(HF) Roger nine zero one still negative contact on VHF we are VMC and we'd like to let down on a grid of one eight zero and proceed visually to McMurdo

042:15  
CTR  
(HF) New Zealand niner zero one maintain VMC keep us advised of your altitude as you approach McMurdo over

0042:24  
RDO-2  
(HF) Ah Roger nine zero one we will maintain VMC

0042:34  
CTR  
(HF) New Zealand niner zero one Mac Centre report ten DME from McMurdo

**Time & source****Content**

CAM-1 And make a visual approach to McMurdo

CAM-2 OK

0042:27  
CAM-1 Well we're just going VMC to McMurdo and then come back in

0042:31  
CAM-2 Turn two thousand on the \*\*\* (instruments)



**AIR-GROUND COMMUNICATIONS**

<b>Time &amp; source</b>	<b>Content</b>
0042:40 RDO-2 (HF)	Ah Roger nine zero one to report ten DME McMurdo

**INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>
0042:46 CAM-2	Two thousand feet (yeah ((interjection))) is set-armed
-?	OK
CAM-1	Right. Are your headings OK
CAM-?	IAS hold IAS hold
0042:49 CAM-1	We're VMC around this way so I'm going to do another turn in
0042:59 CAM-1	Sorry haven't got time to talk but
CAM-5	Ah well you can't talk if you can't see anything
0043:02 CAM-1	Both the VHF channels that they use here we're not picking them up at fifty miles
0043:20 CAM-3	** Do you want to swap around while he's (commentating)?
	%
-5	Nothing to commentate on as yet!

**AIR-GROUND COMMUNICATIONS**

<b>Time &amp; source</b>	<b>Content</b>
CTR	Gentle 17 – Gentle 17 Mac Centre

**INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>
0043:27 CAM-5	There you go there's some land ahead
-?	Yep
-?	((Where's)) Mt Erebus
-?	North of McMurdo
0043:35 CAM-1	I'll arm the nav again
CAM-2	OK
0043:38 CAM-1	Alt Nav Cap IAS hold
0043:50 CAM-2	I'll go back to one two six two eh Jim?
CAM-1	OK
%	
0044:06 CAM-1	Keeps you busy on comm doesn't it?
CAM-2	Well you know its ah a bit of a nuisance
-?	Where are we?
-3	About up to here now?

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>	<b>Time &amp; source</b>	<b>Content</b>
	Mac Centre be advised – be advised a DC one zero VMC en route McMurdo from the North – Mac Centre out		((sound of rustling paper))
			%
0044:36 CTR (HF)	New Zealand niner zero one Mac Centre if possible give us a tops report on the cloud layers		
		0044:44 CAM-1	OK at fifty miles north it was ten thousand
		CAM-2	OK
0044:47 RDO-2 (HF)	Roger New Zealand nine zero one fifty miles north the base was one zero thousand ten thousand		
0044:57 CTR (HF)	Understand bases are at ten thousand?		
0045:00 RDO-2 (HF)	Affirmative we are now at six thousand descending to two thousand and we're VMC		
0045:08 CTR (HF)	Nine zero one Roger		
		0045:08	((ratcheting sound similar to heading knob reselection))

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT****Time & source****Content****Time & source****Content**

0045:18  
CAM-3 Yes we'll be going down to five thousand feet and then to  
McMurdo – we going down to two

CAM-? Roger

CAM-3 We're going down to two

0045:26  
CAM-1 We had a message from the Wright Valley and they are  
clear over there

CAM-5 Oh good

0045:31  
CAM-1 So if you can get us over that way

0045:33  
CAM-5 No trouble

CAM-1 Right

0045:36  
CAM-5 The Taylor or the Wright now or do yah?

%

-1 No I prefer here first!

%

0046:02  
PA-5 One second – This is Peter Mulgrew speaking again folks  
I still can't see very much at the moment keep you  
informed soon as I see something that gives me a clue as

## AIR-GROUND COMMUNICATIONS

## INTRA-COCKPIT

Time &amp; source

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Time &amp; source

Content

to where we are

-?

((interjection)) altimeters

0046:14  
CAM-1

Two nine three oh - - - right

CAM-2

Yes

0046:19  
PA-5

We're going down in altitude now and it won't be long before we get quite a good (view)

0046:21  
CAM-2

A thousand to go

CAM-1

OK

0046:24  
CAM-2

Alt, Nav Track, Vert Speed

CAM-1

Speed

(Rustling Paper)

0046:28  
CAM-2

Speed I see

(Rustling Paper)

0046:35

((sound of altitude alert))

0046:39

Where's Erebus in relation to us at the moment

**AIR-GROUND COMMUNICATIONS**

<b>Time &amp; source</b>	<b>Content</b>
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**INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>
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CAM-3

CAM-? Left about (twenty)or (twenty) file miles

0046:43 Left do you reckon

CAM-?

CAM-? Well I don't know - - - I think

CAM-? I've been looking for it

-2 Yep Yep

0046:46 I think it'll be erh

CAM-?

0046:48 I'm just thinking of any high ground in the area that's all

CAM-3

CAM-5 I think it'll be left yes

CAM-4 Yes I reckon about here

CAM-5 Yes - - - no no I don't really know

0047:02 That's the edge

CAM-5

0047:06 Down to two thousand feet

CAM-?

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT****Time & source****Content****Time & source****Content**

CAM-1

Yes

CAM-2

Yes

CAM-3  
0047:20

IAS hold

CAM-1

You've got speed set up there anyway haven't you

0047:23  
CAM-4

Alt Cap

-2

Yes Alt Cap (nav) track

0047:28  
CAM-1

Speed, nav track, alt - - -

-?

Altitude (acquired)

-?

What's wrong

-?

Make up your mind soon or - - -

%

0047:43  
CAM-1

We might have to pop down to fifteen hundred here I think

CAM-2

Yes OK

0047:47  
CAM-2

Probably see further in anyway

0047:49

((sound of altitude alert))

**AIR-GROUND COMMUNICATIONS**

<b>Time &amp; source</b>	<b>Content</b>
?	I'll call you – I'll call you back
	((overlapping conversation))

**INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>
CAM-2	It's not too bad
0047:55 CAM-2	I see vert speed for fifteen hundred feet
CAM-4	** it's not right
-?	Bit thick here eh Bert?
0047:59 CAM-4	Yeah my ..... oath
0048:05 CAM-4	You're really a long while on ..... instruments this time are you
( -5 ( ( 0048:10 ( CAM-3 ( ( CAM-5 ( ( CAM-4 ( ( ? ( ( CAM-5	I reckon Bird's through here and  Alt Cap Ross Island there Yes Alt Hold Erebus should be here
- 1	Right



**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT****Time & source****Content****Time & source****Content**0048:12  
CAM-2

(Terrain) fifteen hundred

0048:20  
-?

Capture

0048:22  
CAM-22

Alt hold

0048:23  
CAM-3

Hold on both, nav track

0048:30  
CAM-1

We didn't get that Tacan frequency did we?

CAM-2

No

0048:36  
CAM-3

(Have) we got the latest AIRAD \* on the aircraft?

0048:38  
-?

What's the frequency one oh nine two?

0048:40  
CAM-2

Well we think that's what it is but it's channel twenty nine

0048:46  
CAM-1

Actually those conditions don't look very good at all – do they?

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT****Time & source****Content**

0049:10  
RDO-2  
(VHF 2)  
Mac Tower this is New Zealand nine zero one on one  
three four one do you read?

**Time & source****Content**

CAM-5  
No they don't

0048:50  
CAM-5  
You're down at one one four now are you?

0048:51  
CAM-1  
Fifteen hundred

CAM-5  
Yes

0048:55  
CAM-1  
Have we got them on the tower?

0048:59  
CAM-2  
No - - - I'll try again

0049:00  
CAM-4  
(only got 'em on HF that's all)

0049:04  
CAM-1  
Try them again

CAM-2  
OK

0049:08  
CAM-5  
That looks like the edge of Ross Island there

0049:24  
I don't like this

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT****Time & source****Content****Time & source****Content**

CAM-3

%

0049:25  
CAM-1

Have you got anything from him?

-?

No

CAM-2

No

0049:30  
CAM-1

We're twenty six miles north we'll have to climb out of this

CAM-?

OK

0049:33  
CAM-2

It's clear on the right and (well) ahead

CAM-1

Is it?

CAM-2

Yes

0049:35  
CAM-?

You can see (Ross Island) Right Fine!

0049:38  
CAM-2

Yes you're clear to turn right there's no high

-?

Is it

-5

Yes

**AIR-GROUND COMMUNICATIONS****INTRA-COCKPIT****Time & source****Content****Time & source****Content**

CAM-1

No negative

CAM-2

No high ground if you do a one eighty

0049:44

@

Whoop Whoop

@

Pull up

@

Whoop Whoop

0049:48

CAM-3

Five hundred feet

@

Pull up

CAM-3

Four hundred feet

@

Whoop Whoop

CAM-?

Pull up

@

Pull up

@

Whoop Whoop

((Reduced volume))

@

Pull up

CAM-1

Go round power please

**AIR-GROUND COMMUNICATIONS**

<b>Time &amp; source</b>	<b>Content</b>
From 0049:50 CTR (VHF)	Call six times on VHF and HF to which there was no reply. McMurdo Centre asked local aircraft to call 901 from which there was also no reply

**INTRA-COCKPIT**

<b>Time &amp; source</b>	<b>Content</b>
@	Whoop Whoop
@	Pull - -
0049:50	((End of Recording))