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NASA Project Mercury Working Paper No. 192

POSTLAUNCH REPORT
FOR
MERCURY-REDSTONE NO. 3
(MR-3)

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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

SPACE TASK GROUP

Langley Field, Va.

June 16, 1961

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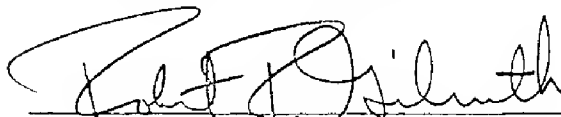
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[REDACTED]

FIGURE 7.3-2 PILOT VOICE COMMUNICATIONS DURING MR-3 FLIGHT

<u>NUMBER</u>	<u>TIME MIN:SEC</u>	<u>DURATION SECONDS</u>	<u>VOICE</u>
1	00:02.3	3	Ahh, Roger; lift-off and the clock is started
2	00:08.3	2	Yes sir, reading you loud and clear
3	00:25.5	8.5	This is Freedom Seven. The fuel is go, 1.2 g, cabin at 14 psi, oxygen is go
4	00:48.5	2.5	Freedom Seven is still go
5	00:58.5	8.5	This is Seven. Fuel is go, 1.8 g, 8 psi cabin, and the oxygen is go
6	01:21.5	2.6	Cabin pressure is holding at 5.5. Cabin holding at 5.5
7	01:33	10	Fuel is go, 2.5 g, cabin 5.5, oxygen is go, the main bus 24, and the isolated battery is 29
8	01:50.5	3	Okay, it's a lot smoother now. A lot smoother
9	02:01	9	Seven here. Fuel is go, 4 g, 5.5 cabin, oxygen go, all systems go
10	02:15	1.5	5 g
11	02:22	2.5	Cut-off. Tower jettison green
12	02:27.5	1.5	Disarm
13	02:32.5	2	Capsule separation is green
14	02:35.5	6	Periscope is coming out and the turn-around has started
15	02:50	3	ASCS is okay
16	02:53.5	2.5	Control movements

[REDACTED]

FIGURE 7.3-2 (Cont'd)

<u>NUMBER</u>	<u>TIME MIN:SEC</u>	<u>DURATION SECONDS</u>	<u>VOICE</u>
17	03:04	4.5	Okay, switching to manual pitch
18	03:21	2.5	Pitch is okay
19	03:24	4.5	Switching to manual yaw
20	03:42	5	Yaw is okay. Switching to manual roll
21	03:55.5	2.5	Roll is okay
22	03:59.5	4.5	On the periscope. What a beautiful view
23	04:05.5	9.5	Cloud cover over Florida. 3 to 4 tenths near the eastern coast. Obscured up to Hatteras
24	04:20.5	8.5	I can see Okeechobee. Identify Andros Island Identify the Reefs
25	04:44.5	4	Start retro-sequence. Retro-attitude on green
26	04:56.5	2.5	Control is smooth
27	05:13	3	Retro one, very smooth
28	05:16.5	1.5	Retro two
29	05:23.5	2.5	Retro three
30	05:31	2.5	All three retros are fired
31	05:35	6	Okay. Three retros have fired. Retro-jettison is back to arm.
32	05:45.5	1.5	Negative
33	05:55	3	Switching to fly-by-wire
34	06:11	2.5	Roll is okay

FIGURE 7.3-2 (Cont'd)

<u>NUMBER</u>	<u>TIME MIN:SEC</u>	<u>DURATION SECONDS</u>	<u>VOICE</u>
35	06:16.5	4.5	Roger; do not have a light
36	06:25	6	I do not have a light. I see the straps falling away. I heard a noise. I will use override
37	06:30.5	3	Override used, the light is green
38	06:36.5	2	Ahh, Roger
39	06:44.5	2	Periscope is retracting
40	06:49	4.5	I'm on FBW. Going to re-entry attitude
41	07:04.5	6	Okay, Buster. Re-entry attitude, switching to ASCS normal
42	07:14	2	ASCS is okay
43	07:25	3	Switching HF for radio check
44	07:39		Ahh, Roger, reading you loud and clear HF, Deke, How me? ¹
45	07:48		Ahh, Reading you loud and clear HF, How me? ¹
46	08:04	3	Okay. This is Freedom Seven
47	08:10	7.5	"G" build-up 3, 6, 9
48	08:21	4	Okay - Okay
49	08:27.5	2	Okay
50	08:36.5	2	Okay
51	08:44	4	This is Seven - Okay

¹HF was not received.

FIGURE 7.3-2 (Cont'd)

<u>NUMBER</u>	<u>TIME MIN:SEC</u>	<u>DURATION SECONDS</u>	<u>VOICE</u>
52	08:51	3	45,000 feet now
53	08:56	1.5	40,000 feet
54	08:58	4	I'm back on ASCS
55	09:05	2	35,000 feet
56	09:14	2	30,000 feet
57	09:20	6	Ahh, Roger, Deke, reading you loud and clear. How me?
58	09:35	1	Ahh, Roger
59	09:39	6	The drogue is green at 21,000. The periscope is out. The drogue is out.
60	09:48	8	Okay at drogue deploy. I've got 70 percent auto - 90 percent manual. Oxygen is still okay
61	10:02	4	And the snorkels (out) at about 15,000 feet
62	10:06	2	Emergency flow rate is on
63	10:08	2	Standing by for main
64	10:15	2	Main on green
65	10:18	2	Main chute is reefed
66	10:22	4	Main chute is green. Main chute is coming unreefed and it looks good
67	10:28	4	Main chute is good. Rate of descent is reading about 35 ft/sec.
68	10:40	2	Hello Cap Com. Freedom Seven How do you read?

FIGURE 7.3-2 (Cont'd)

<u>NUMBER</u>	<u>TIME MIN:SEC</u>	<u>DURATION SECONDS</u>	<u>VOICE</u>
69	10:55	3	Hello CARDFILE 23, this is Freedom Seven. Do you read?
70	11:03	14	Affirmative Indian Cap Com, let me give you a report. I'm at 7,000 feet, the main chute is good, the landing bag is on green, my peroxide has dumped, my condition is good
71	11:29	2	That is affirmative -- please relay
72	12:36	3	Hello CARDFILE 23, CARDFILE 23, Freedom Seven. Over.
73	12:49	13	Ahh, this is Seven. Relay back to Cap Com please. My altitude now 4,000 feet, condition as before, the main chute is good, the landing bag has deployed, the peroxide has dumped
74	14:03	3	Ahh, CARDFILE 23, Freedom Seven
75	14:09	5	I'm about 1,500 feet now. The main chute still looks good. The rate of descent is indicating 30 ft/sec.
76	14:52	1	Ahh, Roger
77	14:59	3	This is Seven. Go ahead
78	15:05	4	Negative. Just relaying my condition is still good. I'm getting ready for impact
	15:22		(Landing)