

**Goddard loop recorded at Woomera (Red Lake),
Mercury Tracking Station No. 9,
during the flight of John Glenn's MA-6, Friendship 7.**

Early hours of 21 February 1962 (Central Australian Time).

Tape preserved by Red Lake's Bill Miller.

Digital copy by Campbell Miller. Annotated, and minor noise reduction by Colin Mackellar, April 2016.



CD 1 – Side 1 of tape. Orbit 1.

Track	Event	Time from start of tape
01	Liftoff	00:00
02	Bermuda (John Hodge) reports good UHF contact	03:09
03	Bermuda VERLORT valid track	03:47
04	Bermuda FPS-16 valid track	03:56
05	Bermuda carrier on	05:42
06	Bermuda closest Radar approach	06:30
07	Bermuda UHF fading, switching to HF	07:52
08	Bermuda lost track	08:10
09	Cape Flight (Chris Kraft) calls Canary Capcom	08:40
10	Cape Procedures (Gene Kranz) Comm check to Muchea and Woomera	10:25
11	Canary Capcom calls, 1st orbit	11:32
12	Canary Air / Ground	12:58
13	Cape Flight to Canary post pass	17:37
14	Cape Flight to Muchea Capcom (Gordon Cooper)	18:51
15	Cape Procedures comm check to Muchea and Woomera, then Cape Flight calls Muchea	21:20
16	Muchea Command carrier on, 1st orbit	25:03
17	Muchea 1st orbit, Muchea Comm Tech (Gerry O'Connor) calls	25:36
18	Muchea – looking for the lights of Perth	28:33
19	Muchea – lights in sight on the ground	30:39
20	Woomera, 1st orbit. (Capcom Fred Volpe .)	31:29
21	Woomera, end of pass	37:50
22	Cape Flight to Muchea and Woomera post pass, then Guaymas	39:03
23	Woomera, then A/G through Guaymas. 'Fireflies' still present.	41:14

End of Side 1.

CD 2 – Side 2 of tape. Orbits 2 and 3.

Track Event Time from start of tape

Orbit 2

01	Bermuda, 2nd Orbit	00:05
02	Cape Flight calls Muchea prior to AOS, 2nd Orbit	02:52
03	Muchea Comm Tech calls	05:32
04	Cooper – Is Landing Bag switch in the Off position?	08:09
05	Woomera AOS, 2nd Orbit	09:33
06	Woomera LOS, Cape Flight calls	15:51
07	Cape Flight calls Hawaii Capcom	18:56
08	Hawaii, 2nd Orbit	20:14
09	Cape Flight calls California	21:07
10	A/G through California	22:00
11	Bermuda to Cape Flight	23:55
12	Report – Astro working Canary on HF	26:21

Orbit 3

13	Woomera comm check to Cape Flight	26:27
14	Cape Flight comm check to Muchea	26:37
15	IOS (Indian Ocean Ship) contact time reported, 3rd orbit	27:59
16	Muchea Command carrier on, 3rd orbit	28:06
17	Muchea air ground online, Muchea Comm Tech calls	28:32
18	Glenn: Request send message to Commandant US Marine Corps	30:11
19	Leave switch for Landing Bag in Off position	30:58
20	Muchea VERLORT LOS	33:59
21	Woomera Systems	34:13
22	Cape Flight calls Muchea Capcom	35:54
23	Cape Flight calls Hawaii Capcom re Landing Bag	37:15
24	Hawaii Command carrier on	40:34
25	Cape Flight to Hawaii – put switch in Auto position	40:40
26	MA-6 over Hawaii	41:50
27	Comment on ACS attitudes through Hawaii	42:40
28	5 minutes to Retrograde burn	44:25
29	Hawaii LOS 3rd orbit	44:48
30	Cape Flight calls California Capcom	45:49

End of Side 2, not long before re-entry.

(Thanks to Gene Kranz for identifying the Woomera Capcom.)