

OBJECTIVES OF GEMINI EVA

- DEVELOP BASIC EVA CAPABILITY
- USE EVA TO INCREASE THE BASIC CAPABILITY OF THE SPACECRAFT
- DEVELOP OPERATIONAL TECHNIQUES AND EVALUATE ADVANCED EQUIPMENT IN SUPPORT OF EVA FOR FUTURE PROGRAMS

FIGURE 1

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SUMMARY OF GEMINI EXTRAVEHICULAR
ACTIVITIES STATISTICS

GEMINI MISSION	IV	VIII	IX-A	X	XI	XII
LIFE SUP SYSTEM	VCM	ELSS ESP	ELSS AMU	ELSS	ELSS	ELSS
UMB LTH, FT	25	25	25	50	30	25
MANEUVER DEVICE	HHMU	HHMU	AMU	HHMU	HHMU	--
UMB EVA, HR:MIN	0:36	--	2:07	0:39	0:33	2:06
STANDUP, HR:MIN	--	--	--	0:50	2:10	3:24
TOTAL EVA, HR:MIN	0:36	--	2:07	1:29	2:43	5:30

FIGURE 2

We have accumulated a total of 6 hours umbilical EVA time, and a little over 6 hours of standup EVA mode with the open hatch, for a total of slightly over 12 hours. (I might add, at this point, that in training for these 12 hours we have devoted somewhere in the neighborhood of 1,300 hours training for this EVA flight experience.)

Our first EVA experience was in Gemini IV. The posture that the pilot has here (fig. 3), Astronaut White, is that of a neutral position of the suit. When he moves his arms or legs or body away from this neutral attitude he has to exert forces somewhat against the suit. This flight was conducted as an evaluation of a hand-held maneuvering unit. We used ventilation control module, supplied by oxygen from the spacecraft, to maintain the suit pressure and create a ventilated condition within his suit.