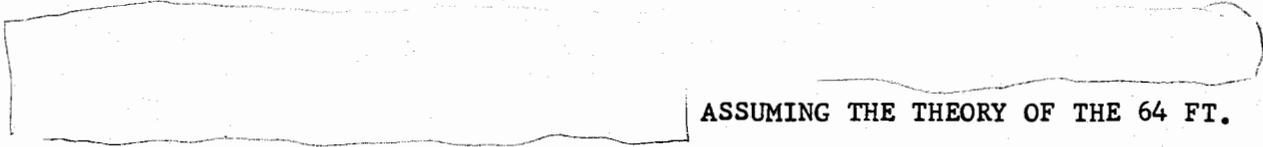




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E W

PLOTTING THESE DATA INDICATES A PRIME SEARCH AREA CENTERED AT 1°46.1'W AND 37°14.6'N OR ON AN AZ = 122° RANGE 9700 FT. FROM LATEST RELEASE POINT WITH A RADIUS OF 3000 FEET. FROM OUR PLOT THIS IS AN AREA INCLUDING HALF LAND AND HALF WATER. ACCORDING TO ASSELIN THIS AREA HAS BEEN FAIRLY WELL SEARCHED.



DoF  
b(3)

ASSUMING THE THEORY OF THE 64 FT.

CHUTE BEING OUT, THESE RESULTS WERE NOT GIVEN STRONG WEIGHT IN DEFINING SEARCH AREAS. THE RESULTS ARE AS FOLLOWS:

<u>RELEASE VELOCITY</u>	<u>RELEASE ALTITUDE</u>	<u>REMARKS</u>	<u>X</u>	<u>Y</u>
515	30,500		-10,473	+20,868
515	30,500		-10,299	+17,464
515	30,500		-9759	+13,529

DoF  
b(3)

USING THE 64 FOOT CHUTE THEORY AND NEW WEIGHTS, THE FOLLOWING RESULTS WERE OBTAINED AND USED IN DETERMINING SECOND SEARCH AREA.

<u>RELEASE VELOCITY</u>	<u>RELEASE ALTITUDE</u>	<u>REMARKS</u>	<u>X</u>	<u>Y</u>
400 FPS	30,500	2 STAGE, C <sub>D</sub> S = 18 @25 K FT. C <sub>D</sub> S = 1600 WT. TO 1500	-15,349	+39,780
400 FPS	30,500	2 STAGE, C <sub>D</sub> S = 18 @20 K FT., C <sub>D</sub> S = 1600 WT. TO 1500	-11,424	+29,493
400 FPS	30,500	2 STAGE, C <sub>D</sub> S = 18 @15 K FT., C <sub>D</sub> S = 1600 WT. TO 1500	-6805	+5957
400 FPS	30,500	2 STAGE, C <sub>D</sub> S = 18 @25 K FT., C <sub>D</sub> S = 1600 WT. TO 500	-25,326	+72,543

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<u>RELEASE VELOCITY</u>	<u>RELEASE ALTITUDE</u>	<u>REMARKS</u>	<u>X</u>	<u>Y</u>
615 FPS	30,500	2 STAGE, $C_D S = 13.8$ @15 K FT., $C_D S = 1600$ WT. TO 500	-15,480	+32,053
400 FPS	30,500	2 STAGE, $C_D S = 18$ @15 K FT., $C_D S = 2400$ WT. TO 1500	-9348	+25,044

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NOTE: THE NEW WINDS FOR S.L. AND 5,000 FT. HAVE BEEN INCLUDED. ASSELIN'S DESCRIPTION OF 64 FT. CHUTE INDICATES TO US EITHER THE CHUTE HAS A LINE OVER OR A SPLIT GORE IN WHICH CASE A  $C_D S$  OF 1200 TO 1600 IS POSSIBLE.

THESE IMPACT POINTS FALL ALONG A NOMINAL AZIMUTH OF  $111^\circ$  TRUE FROM THE RELEASE POINT. THE SECOND AREA TO SEARCH WOULD START AT A POINT 4 N.M. FROM RELEASE POINT ( $1^\circ 43'W$ ,  $37^\circ 14'N$ ) TO 8 N.M. ( $1^\circ 38'W$ ,  $37^\circ 12.5'N$ ). ASSUME AT THE 4 N.M. POINT A  $\pm 0.5$  N.M. DISPERSION, INCREASING TO  $\pm 1.0$  N.M. AT THE 8 N.M. POINT. THE THIRD AREA WOULD EXTEND FROM THE 8 N.M. POINT TO ONE 12 N.M. ( $1^\circ 33'W$ ,  $37^\circ 11'N$ ) ALONG  $111^\circ$  TRUE. ASSUME A  $\pm 1.0$  N.M. DISPERSION. IT IS DOUBTFUL, BASED ON LATEST ASSUMPTIONS, THAT THE UNIT OR PARTS COULD BE BEYOND 12 MILES FROM THE RELEASE POINT.

THE AREA BETWEEN THE FIRST AND SECOND SEARCH AREAS COULD BE CONSIDERED EQUALLY WITH THE THIRD SEARCH AREA IN PRIORITY OF LOOKING.

THE BEST MATCH OF UNITS 1, 2, AND 3 WITH NEW RELEASE POINT WAS OBTAINED WITH THE FOLLOWING.

UNIT 1 FREE FALL FOR 5 SEC. THEN 16 FOOT CHUTE ( $C_D S = 107$ ) TO IMPACT. REL. VEL. 615 FPS, ALTITUDE 30,500, X = -6080, Y = +5869, TOF 186 SEC., IMPACT VELOCITY 135 FPS.

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UNIT 2 TUMBLING ( $C_D S = 18.0$ ), RELEASE ALT. = 615 FPS, ALTITUDE 28,000 FT.,  
X = -4144, Y = -4809, TOF 79.5 SEC., IMPACT VELOCITY 341 FPS.

UNIT 3 DAMAGED 16 FOOT CHUTE ( $C_D S = 40$ ), RELEASE ALT. = 28,000 FT., X = -3963  
Y = 1246, TOF 110 SEC., IMPACT VEL. 226 FPS.

THERE IS A LOT OF EXTRA TRAJECTORY RESULTS INCLUDED; HOWEVER, THEY SHOULD  
HELP GIVE YOU AN IDEA AS TO HOW DIFFERENT PARAMETER VARIATIONS AFFECT THE  
IMPACT POINTS.

NEW SUBJECT: IF UNIT 4 HAS NOT BEEN POSITIVELY LOCATED BY FRIDAY, 11 FEB 1966  
I WILL LEAVE HERE TO REPLACE YOU. ARRIVAL TIME WILL BE FORWARDED LATER.

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$2.2760 \times 10^{-1}$

$5.2 \times 10^{-3}$

$250 \times 10^{-4}$

$\frac{42.2}{5.2} \times 10^{-3}$

47.7

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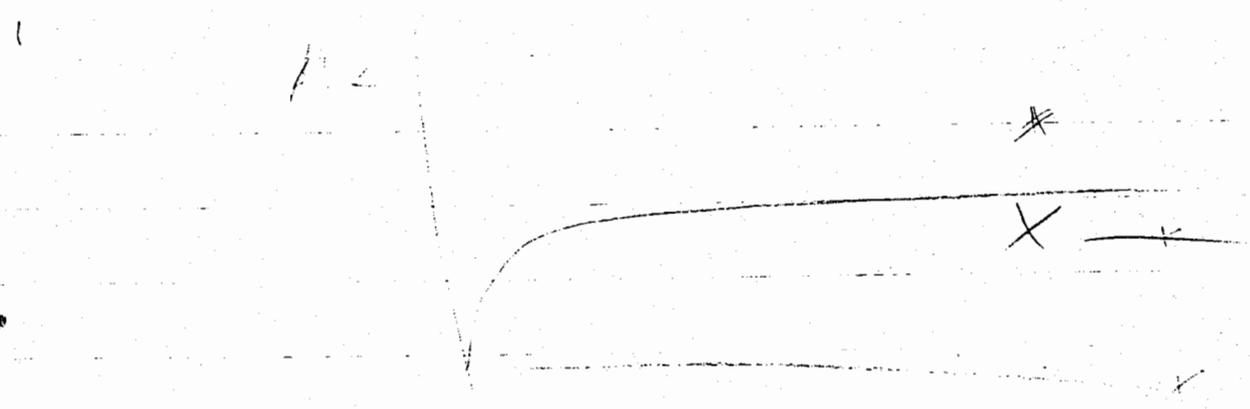
69,000 ft.

1055 sec.

	Dir.	Vel. kts	Alt. (ft)
30K	305	60	300° / 60-DS.
25K	300	55	
20K	290	50	
15K	290	45	
10K	285	30	
5K	270	25	
S.L.	270	20	

$\frac{65 \text{ ft}}{\text{sec}} \times 1055 = 71,700 \text{ ft.}$

① 54-11  
② 185300



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P. Amt.	1/24 to 1/29	X	Y
0,000	355	-9456	3050
1,000	337	-7157	29951
4,000	322	-7300	23640
5,000	302	-1805	15420

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~~1/24 to 1/29~~

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WRB

- Body weight	175	lbs
- clothing + equipment	59	lbs
- ejection seat	130	lbs
- parachute	33	lbs
TOTAL	397	lbs

Shepan

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