

STA	SIGHT NO.	HI	RI	REAMAN	HP	VH	HD	ΔF	ELEV.	
					②	MAY 22	1957			spitzer 16
A28	0107	4.0	1.2	+14	3.6	+16.8	117.6	+17.2	3717.6	
"	A29	"	2.0	+2	7.0	+4.0	199.6	+1.0	3701.4	
"	0108	"	1.1	+44	3.5	+48.1	85.0	+48.9	3749.3	
"	0109	"	4.0	+43	8.5	+172	304.0	+167.5	3867.9	
A29	A28	3.8	2.1	-2	7.0	-4.2	199.6	~	3700.4	B.S.
"	A30	"	1.1	+38	9.4	+41.8	96.3	+45.6	3747.0	
"	0110	"	1.5	-38	3.6	-57	124.5	-57.2	3644.2	
"	0111	"	1.8	-15	9.5	-27	176.1	-21.3	3680.1	
A30	A29	3.6	1.1	-35	9.4	-38.5	96.3	~	~	B.S.
"	A31	"	2.0	+19	8.5	+38	192.4	+33.1	3780.1	
"	0112	"	1.6	+12	3.8	+19.2	154.6	+19.0	3766.0	
A31	A30	3.8	2.0	-19	8.5	-38	~	~	3747.0	B.S.
"	A32	"	2.7	+6	5.4	+16.2	268.4	+14.6	3774.7	
"	0113	"	2.1	+36	9.0	+75.6	178.5	+70.4	3850.5	
"	A33	"	4.1	-29	3.0	-119	365.0	-118.2	3662.0	
"	0114	"	1.0	-28	9.5	-28	88	-18.5	3761.6	
A32	A31	4.0	2.7	-5	5.4	~	~	~	~	B.S.

(3) MAY 24, 1957

Spider 17

		HT	RT	Roaman	HP	VH	HD	ΔE	EL	"	
Δ32	Δ34	4.0 ⁺	1.6	+11	4.8	+17.6 ⁺	158.3	+16.8	378.11.5	-	
	⊙115	"	1.3	-27	8.6	-35.0	114.4	-30.4	374.4.3		
	⊙116		2.6	-25	8.4	-71.0	222.8	-66.6	370.8.1		
Δ54	Δ32	4.0	1.6	-11	-4.8				3774.7		B.S.
	⊙117	"	2.6	+13	+5.6	33.8	256	+32.2	3823.7		
	⊙118	"	2.2	-28	8.9	-61	201	-66.1	3723.4		
Δ33	Δ31	4.2	4.2	+30	2.9						B.S.
	Δ35	"	2.2	-11	5.7	-24.2	217.6	-22.7	3639.3		
	⊙119	"	1.0	-21	9.5	-21	95.5	-15.7	3646		B.S.
Δ35	Δ33	4.0	2.1	+12	5.6						B.S.
	⊙120	"	.9	+6	6.4	5.4	89.5	+3.0	3642.3		
	Δ36	"	1.1	-10	3.5	-11.0	109.0	-11.5	3627.8		
426	424	4.0	1.6	-13	4.7	~	~	~			B.S. ELV Δ26 = 36.0.1
	⊙121	"	2.1	+24	8.1	+46.4	197.0	+42.3	3722.8	6.2	
	Δ37	"	2.2	+32	2.2	70.4	194.7	+72.2	3752.7	11.5	
	⊙122	"	1.1	+47	2.5	57.7	87.4	+53.2	3733.7	20.6	
	⊙123	"	1.9	+42	4.0	+79.8	148.2	+79.8	3760.3		

$$\begin{array}{r} 41.5 \\ 3.7 \\ \hline 37.8 \end{array}$$

$$\begin{array}{r} 1.1 \\ 1.2 \\ \hline 2.3 \\ \hline 1.2 \\ \hline 1.2 \end{array}$$

$$\begin{array}{r} 1.6 \\ 1.6 \\ \hline 1.76 \end{array}$$

$$\begin{array}{r} 180 \\ 1.6 \\ \hline 165.2 \end{array}$$

$$\begin{array}{r} 40 \\ 11 \\ \hline 400 \\ \hline 44.0 \end{array}$$

$$\begin{array}{r} 1.6 \\ 1.6 \\ \hline 1.60 \\ \hline 2.40 \end{array}$$

$$\begin{array}{r} 3752.7 \\ 17.3 \\ \hline 37357.4 \end{array}$$

$$\begin{array}{r} 160 \\ 157 \end{array}$$

$$\begin{array}{r} 3752.7 \\ 32.2 \\ \hline 3790.5 \end{array}$$

$$\begin{array}{r} 30 \\ 2.2 \\ \hline 600 \\ \hline 66 \end{array}$$

$$3590.8$$

$$\begin{array}{r} 74.0 \\ 2.8 \\ \hline 71.2 \end{array}$$

$$\begin{array}{r} 15 \\ 15 \\ \hline 30 \\ \hline 15 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 20 \\ 20 \\ \hline 40 \\ \hline 20 \end{array}$$

$$\begin{array}{r} 116 \\ 2.7 \\ \hline 198.8 \end{array}$$

$$\begin{array}{r} 3824.0 \\ 60.8 \end{array}$$

$$\begin{array}{r} 3890.8 \end{array}$$

$$\begin{array}{r} 3627.8 \\ 22.1 \\ \hline 3605.7 \end{array}$$

$$\begin{array}{r} 3890.8 \\ 45.0 \\ \hline 3935.8 \end{array}$$

$$\begin{array}{r} 150 \\ 27.5 \\ \hline 127.5 \end{array}$$

$$\begin{array}{r} 200 \\ 2.6-6 \\ \hline 173.4 \end{array}$$

$$3590.8$$

$$\begin{array}{r} 3605.8 \\ 153 \\ \hline 3590.5 \end{array}$$

$$\begin{array}{r} 20 \\ 1.2 \\ \hline 200 \\ \hline 24 \end{array}$$

$$\begin{array}{r} 172 \\ 47 \\ \hline 75 \end{array}$$

$$\begin{array}{r} 20 \\ 6.0 \\ \hline 120 \end{array}$$

$$\begin{array}{r} 3540.5 \\ 715 \\ \hline 3590.8 \end{array}$$

$$\begin{array}{r} 120.4 \\ 119.0 \end{array}$$

$$540.8$$

$$\begin{array}{r} 3752.7 \\ 71.2 \\ \hline 3824.0 \end{array}$$

$$\begin{array}{r} 58.6 \\ 3.8 \\ \hline 54.8 \end{array}$$

$$\begin{array}{r} 170 \\ 2.2 \\ \hline 165.8 \end{array}$$

$$\begin{array}{r} 2.1 \\ 1.7 \\ \hline 3.8 \\ \hline 42.5 \end{array}$$

STA	SIGHT	HI	RI	REMARK	HP	VH	HD	ΔE	ELEV	
				(4)			MAY 25, 1957			
										Spider 18
Δ37	Δ 26	4.0 ⁺	2.3	= 31	2.2 ⁻	~ ⁺	~	~	~	B.S., EL Δ37 = 3752.7
	⊙ 124	"	1.6	-11	4.3	-17.6	157.6	-17.3	3735.4	-5'
	⊙ 125	"	1.5	+25	3.7	+37.6	148.2	+37.8	3790.5	...
	Δ38	"	2.0	+35	2.8	+70.0	173.4	+71.2	3824.0	
Δ38	Δ37	4.0	2.0	-33	2.9	~	~	~	~	B.S.
	Δ39	"	2.2	+30	3.2	66.0	198.0	+66.8	3890.8	1.2
Δ39	⊙ 126	4.6	1.0	-9	3.6	-9	98.1	-10.0	3880.8	1.4
	⊙ 127	"	1.5	+36	3.8	+54	127.5	+54.8	3945.6	1.5
	⊙ 128	"	1.1	+40	3.6	+44	188.0	+45	3935.8	2.0
Δ36	Δ35	3.0	1.1	+13	3.6	~	~	~	~	EL Δ36 = 3627.2
	Δ40	"	1.2	-20	4.5	-24.0	115.2	-22.5	3605.8	-4
	⊙ 129	"	1.7	-16	9.0	-27.0	165.8	-21.0	3609.8	2.5
	⊙ 130	"	1.2	+3	8.6	+3.6	119.6	-2.0	3625.8	.3
Δ40	Δ36	3.0	1.2	+23	4.5	~	~	~	~	B.S. ELEV Δ40 = 3625.8
	Δ41	"	.8	-20	3.5	-16	76.8	-15.5	3590.3	4
Δ41	Δ40	3.2	.8	+22	3.5	~	~	~	~	B.S. ELEV Δ41 = 3590.3
	Δ42	"	.7	-20	9.7	-14	67.2	-7.5	3582.8	4

$$\begin{array}{r} 40 \\ \times 6 \\ \hline 240 \end{array}$$

$$\begin{array}{r} 3505.6 \\ 15.2 \\ \hline 3489.9 \end{array}$$

$$\begin{array}{r} 3535.2 \\ 32.6 \\ \hline 3505.6 \end{array}$$

$$\begin{array}{r} 12 \\ \times 6 \\ \hline 72 \end{array}$$

$$\begin{array}{r} 14 \\ \times 6 \\ \hline 84 \end{array}$$

$$\begin{array}{r} 22 \\ \times 6 \\ \hline 132 \end{array}$$

$$\begin{array}{r} 3535.2 \\ 14.1 \\ \hline 3524.1 \end{array}$$

$$\begin{array}{r} 42.8 \\ 18.2 \\ \hline 74.6 \end{array}$$

$$\begin{array}{r} 60 \\ \times 4 \\ \hline 240 \end{array}$$

$$\begin{array}{r} 19 \\ \times 6 \\ \hline 114 \end{array}$$

$$\begin{array}{r} 63 \\ \times 12 \\ \hline 756 \end{array}$$

$$\begin{array}{r} 170 \\ 14.1 \\ \hline 100.1 \end{array}$$

$$\begin{array}{r} 60 \\ \times 12 \\ \hline 720 \end{array}$$

$$\begin{array}{r} 42.2 \\ 46 \\ \hline 328 \end{array}$$

$$\begin{array}{r} 17 \\ \times 12 \\ \hline 204 \end{array}$$

$$\begin{array}{r} 3505.6 \\ 23.6 \\ \hline 3529.2 \end{array}$$

$$\begin{array}{r} 3505.6 \\ 25.3 \\ \hline 3480.3 \end{array}$$

$$\begin{array}{r} 17 \\ \times 12 \\ \hline 204 \end{array}$$

$$\begin{array}{r} 20.8 \\ \times 6 \\ \hline 124.8 \end{array}$$

$$\begin{array}{r} 3505.6 \\ 8.3 \\ \hline 3513.9 \end{array}$$

$$\begin{array}{r} 27 \\ \times 8 \\ \hline 216 \end{array}$$

$$\begin{array}{r} 3532.8 \\ 44.6 \\ \hline 3577.4 \end{array}$$

$$60$$

$$\begin{array}{r} 10.8 \\ 9.7 \\ \hline 6.1 \end{array}$$

Spider 19

STA	SIGHT ON	HI	RI	REAMAN	HP	VH	HO	HP	ELEV.		
Δ42	441	3.5	0.7	+22	9.8	~ +	~	~	~		
	⊙131	3.15	0.5	-17	3.8	-8.5	48.5	-8.2	3574.6	3	BS. EL. 442 = 3572.0
	Δ43	"	1.2	-43	4.4	-45.6	106.0	-44.6	3538.2	12	
Δ43	Δ42	4.2	1.2	+40	4.45	~	~	~	~		BS. ELEV Δ43 = 3538.2
	⊙132	"	0.5	0	3.2	0	50	0	3538.2		
	⊙133	"	0.6	-22	3.3	-13.2	57.0	-14.1	3524.1	5	
	Δ44	"	1.0	-40	9.6	-40.0	80.0	-32.6	3505.6	10	
444	Δ43	4.4	1.1	+43	9.55	~	~	~	~		BS. ELEV Δ44 = 3505.6
	⊙134	"	0.6	-41	3.7	-24.6	49.2	-25.3	3480.3	18	
	⊙135	"	0.6	+12	3.3	+7.2	59.2	+8.3	3513.2	14	
	⊙136	"	0.5	+46	3.8	+23	31	23.6	3529.2	20	
	⊙137	"	0.6	-19	9.7	-11.4	58	-15.7	3489.9	3.8	

$$\frac{6.3}{3}$$

$$\begin{array}{r} 17 \\ 23 \\ 3 \overline{) 69} \\ \underline{66} \\ 31 \\ 3 \overline{) 91} \end{array}$$

$$\begin{array}{r} 230 \\ 23 \\ \underline{227} \end{array}$$

$$\begin{array}{r} 3.5 \\ 7.2 \\ 1146 \\ 7 \\ \underline{1216} \end{array}$$

$$\begin{array}{r} 5262.8 \\ 61.6 \\ \underline{5201.2} \end{array}$$

$$\begin{array}{r} 115 \\ 201.2 \\ 22.8 \\ \underline{5776.4} \end{array}$$

$$\begin{array}{r} 5152 \\ 99.7 \\ \underline{5142.3} \end{array}$$

$$\begin{array}{r} 19 \\ 32 \\ 578 \\ 38 \\ \underline{608} \end{array}$$

$$\begin{array}{r} 2.8 \\ 1.1 \\ 280 \\ 39 \\ \underline{309} \end{array}$$

$$\begin{array}{r} 118 \\ 3 \\ \underline{107} \end{array}$$

$$\begin{array}{r} 520.2 \\ 21.8 \\ \underline{5225} \end{array}$$

$$\begin{array}{r} 17 \\ 1.1 \\ 110 \\ 1.0 \\ \underline{12.1} \end{array}$$

$$\begin{array}{r} 1.14 \\ 1.5 \\ 190 \\ 95 \\ \underline{285} \end{array}$$

$$\begin{array}{r} 320 \\ 12 \\ \underline{308} \end{array}$$

$$\begin{array}{r} 16 \\ 1.1 \\ 180 \\ 54 \\ \underline{224} \end{array}$$

$$\begin{array}{r} 5774.4 \\ 22.2 \\ \underline{5752.2} \end{array}$$

$$\begin{array}{r} 17 \\ 3.2 \\ 570 \\ 34 \\ \underline{5464} \end{array}$$

$$\begin{array}{r} 22.8 \\ 4.4 \\ \underline{27.2} \end{array}$$

$$\begin{array}{r} 1.5 \\ 1.0 \\ \underline{2.5} \end{array}$$

$$\begin{array}{r} 21 \\ 1.1 \\ 270 \\ 21 \\ \underline{291} \end{array}$$

$$\begin{array}{r} 150 \\ 2.5 \\ \underline{147.5} \end{array}$$

$$\begin{array}{r} 149 \\ 11.7 \\ \underline{107} \end{array}$$

$$\begin{array}{r} 1.3 \\ 1.3 \\ \underline{139} \end{array}$$

$$\begin{array}{r} 66.8 \\ 1.3 \\ 57.5 \\ 1.1 \\ \underline{61.6} \end{array}$$

$$\begin{array}{r} 25.0 \\ 1.4 \\ 25.0 \\ 1.1 \\ \underline{26.1} \end{array}$$

$$\begin{array}{r} 140 \\ 2.5 \\ \underline{136.5} \end{array}$$

$$\begin{array}{r} 18.4 \\ 8.5 \\ \underline{10.0} \end{array}$$

$$\begin{array}{r} 110 \\ 5.1 \\ \underline{104.9} \end{array}$$

$$\begin{array}{r} 5726.3 \\ 10.7 \\ \underline{5716} \end{array}$$

$$\begin{array}{r} 3.9 \\ 4.1 \\ 8.0 \\ 1.4 \\ \underline{3.6} \end{array}$$

$$\begin{array}{r} 23.1 \\ 4.5 \\ 18.6 \\ 4.2 \\ \underline{22.8} \end{array}$$

$$\begin{array}{r} 5142316.0 \\ 160 \\ 1 \\ \underline{5142316.0} \end{array}$$

$$\begin{array}{r} 5262.8 \\ 9.7 \\ \underline{52725} \end{array}$$

$$\begin{array}{r} 7.2 \\ 1.7 \\ \underline{1.54} \end{array}$$

$$\begin{array}{r} 220 \\ 1.1 \\ \underline{218.9} \end{array}$$