

THE ASTRONOMER Electronic Circular No 446 1990 Sept 21 18.10UT  
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# COMET HOLT-OLMSTEAD (1990k)

E. Bowell, Lowell Observatory, reports the discovery by Henry E. Holt and C. Michelle Olmstead of a comet on 0.46-m Schmidt films taken by Holt, Olmstead, H. R. Holt, and J. A. Brown at Palomar. H. E. Holt measured, and S. J. Bus reduced, the following positions:

1990 UT	R.A. (1950)	Decl.	m1
Sept. 14.34983	1 39 13.7	+ 7 38 01	17.5
17.42726	1 37 47.5	+ 8 03 49	

IAUC 5093

# 1990 SA

R. H. McNaught, University of Adelaide, reports his discovery of a fast-moving asteroidal object on U.K. Schmidt Telescope plates taken by K. S. Russell. McNaught observed with the Uppsala Southern Schmidt:

1990 UT	R.A. (1950)	Decl.	V	Observer
Sept. 16.58867	23 05 05.01	- 3 51 20.9	15.5	Russell
16.63034	23 05 05.50	- 3 55 42.7		"
17.53346	23 05 20.69	- 5 29 29.2		McNaught
17.56377	23 05 20.92	- 5 32 34.7		Russell
17.58461	23 05 21.23	- 5 34 37.9		"
17.59564	23 05 21.14	- 5 35 49.0		"
17.60953	23 05 21.48	- 5 37 11.9		"
18.45470	23 05 36.52	- 7 01 44.6		McNaught
18.45959	23 05 36.57	- 7 02 09.6		"

Preliminary orbital elements from the above observations:

T = 1990 July 9.813 ET Peri. = 119.185  
 e = 0.54503 Node = 171.517 1950.0  
 q = 1.14462 AU Incl. = 41.806  
 a = 2.51578 AU n = 0.246999 P = 3.99 years

1990 ET	R.A. (1950)	Decl.	Delta	r	V
Sept. 16	23 04.93	- 2 48.5	0.383	1.386	15.0
21	23 06.33	-10 58.7			
26	23 07.97	-17 28.8	0.473	1.449	15.9
Oct. 1	23 09.97	-22 28.8			
6	23 12.36	-26 14.6	0.597	1.515	16.8

# FN ANDROMEDAE (Q1990/74)

Patrick Schmeer, Federal Republic of Germany, reports an outburst of FN Andromedae (RA 01h09m09s DEC +35 01'31", 1950) as follows:

1990 Sept 16.959UT, [14.1; 19.060, 13.5; 19.101, 13.5; 19.882, 14.0.

This is the first outburst of this star detected by our patrol. As no chart has been issued by TA or AAVSO, Patrick has faxed a copy but unfortunately the quality has been affected by transmission noise. However it is sufficient to identify the star. Further details on request.

Guy M Hurst