

HARVARD COLLEGE OBSERVATORY

ANNOUNCEMENT CARD 1374

Satellite 1957 α - Since artificial earth satellites are short-lived astronomical bodies they should, presumably, be handled observationally and orbitally as are comets. As a tentative system of notation, pending IAU agreement, we shall identify each one by the year of its launching, followed by a letter of the Greek alphabet, to indicate successive order of launching. When more than one object is observable from one launching, a number shall follow the Greek letter in inverse sequence of brightness; the brightest component shall be α_1 , the next brightest α_2 , etc.

From press and radio accounts, Satellite 1957 α was launched by the USSR during the night of October 3-4. Observations of only two components have been reported to the Astrophysical Observatory of the Smithsonian Institution. All estimates of brightness for α_1 (both visual and photographic) give the second magnitude. Estimates of α_2 range from the 4th to the 6th magnitude. From USSR reports of the satellite's dimensions, α_2 is probably the radio satellite and α_1 is the last rocket stage.

The following optical observations of Satellite 1957 α_1 and α_2 have been received:

Source	Date	Time	Position	Type
	October	U.T.		of Obs.
Geophysics Institute, College (Fairbanks), Alaska				
	6	5 ^h 01 ^m 00 ^s	65° N 180° E	vis.
			Alt. Az.	
Mt. Stromlo, Canberra, Australia				
	8	9 ^h 37 ^m 31 ^s	13 ^h 37 ^m -65°	pg.
			R.A. Dec.	
Sydney, Australia				
Wood	8	9 ^h 39 ^m 8 ^s	15 ^h 50.7 ^m -62°.8	vis.
			R. A. Dec.	
Woomera Range, Australia				
		Lat. 30° 55'.8 S	Long. 136° 46' .8 E	
	8	11 ^h 15 ^m 25 ^s	25° 30' .9 N 266° 17' .9 E	vis.
			Alt. Az.	
New Brook, Alberta, Canada				
		Lat. 54° 19' 28" N	Long. 112° 57' 16.3"	
Beals	9	11 ^h 52 ^m 11 ^s	15 ^h 37 ^m 49°.1 N	pg.
			R. A. Dec.	

1957 October 11

Fred L. Whipple

Notes by Ted Molczan:

1. I re-typed HAC 1374 for legibility, taking care to closely reproduce the original text and layout.
2. The stated U.T. time of the observation by the Geophysics Institute is in fact the local time. The correct U.T. time was 15^h 01^m 00^s.
3. The Sydney, Australia observation correlates most closely with the co-ordinates of the Sydney Observatory (SAO Site 2601). The cited source is believed to be Harley Wood, Director of the Sydney Observatory. SAO Special Reports No.6 and No.10 attributed it to Sydney Moonwatch (SAO Site 602).
4. The correct spelling of the site of the Alberta, Canada observation is Newbrook. The hemisphere was omitted from its longitude; it is of course in the western hemisphere. The cited source is Carlyle S. Beals, Director of the Dominion Observatory in Ottawa.