Central Bureau for Astronomical Telegrams
INTERNATIONAL ASTRONOMICAL UNION
Mailstop 18, Smithsonian Astrophysical Observatory, Cambridge, MA 02138, U.S.A.
IAUSUBS@CFA.HARVARD.EDU or FAX 617-495-7231 (subscriptions)
CBAT@CFA.HARVARD.EDU (science)
URL `http://cfa-www.harvard.edu/iau/cbat.html` ISSN 0081-0304
Phone 617-495-7440/7244/7444 (for emergency use only)

COMET P/2006 D1 (HILL)

R. Hill reports his discovery of a comet with a tail $\sim 40''$ long in p.a. 300° on CCD images taken with the 0.68-m Schmidt telescope in the course of the Catalina Sky Survey (discovery observation tabulated below). Following posting on the 'NEO Confirmation Page', G. Hug and D. Tibbets report that CCD frames taken on Feb. 23.3 UT with the 0.7-m reflector at Eskridge, KS, show a tail $70''$ long in p.a. 310°, while the object appears diffuse with a hint of tail in p.a. $\sim$ 300° on frames taken by Hug on Feb. 24.4 with a 0.30-m Schmidt-Cassegrain reflector at Scranton, KS. C. Hergenrother writes that a co-added 1500-s *R*-band exposure, taken on Feb. 24 with the University of Arizona 1.54-m Kuiper telescope at Catalina Station, shows P/2006 D1 to have a nearly stellar coma and a straight, narrow tail $125''$ long in p.a. 305°.

2006 UT	α_{2000}	δ_{2000}	Mag.
Feb. 22.36014	$12^h25^m45^s.91$	$+2°37'03''.0$	20.3

The available astrometry, the following preliminary elliptical orbital elements, and an ephemeris appear on *MPEC* 2006-D38.

$$\begin{array}{lll} T = 2005 \text{ Nov. } 6.000 \text{ TT} & \omega = 115^\circ.649 & \\ e = 0.69463 & \Omega = 1.202 & \left.\right\} 2000.0 \\ q = 1.74153 \text{ AU} & i = 14.846 & \\ a = 5.70307 \text{ AU} \quad n^\circ = 0.072367 & P = 13.6 \text{ years} & \end{array}$$

RS OPHIUCHI

S. P. S. Eyres, University of Central Lancashire; T. J. O'Brien and T. W. B. Muxlow, University of Manchester; M. F. Bode, Liverpool John Moores University; and A. Evans, Keele University, report the detection of RS Oph in the radio. On Feb. 17.5 UT (4.7 days after the reported outburst; cf. *IAUC* 8671), Very Large Array (VLA) observations show fluxes of 2.8 $\pm$ 0.2 mJy at 21.1 cm, 15.2 $\pm$ 0.2 mJy at 6.2 cm, 23.2 $\pm$ 0.6 mJy at 2 cm, and 26.2 $\pm$ 0.5 mJy at 1.3 cm. Observations with MERLIN show 5-cm fluxes of 31.2 $\pm$ 0.9 mJy on Feb. 18 and 39.5 $\pm$ 0.9 mJy on Feb. 20. This is much brighter than anticipated at this stage when compared with observations of the 1985 outburst (23 mJy on day 18 of outburst; cf. Padin, Davis, and Bode 1985, *Nature* **315**, 306). Further VLA, MERLIN, VLBA, and EVN observations are being scheduled. All observers are urged to secure spectroscopic and photometric observations of this star over the next few days, weeks, and months.

2006 February 24 *Daniel W. E. Green*