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COMET C/2007 VO$_{53}$ (SPACEWATCH)

An apparently asteroidal object discovered at Mt. Lemmon on 2008 Jan. 11, and posted on the 'NEOCP', was identified by T. Spahr with observations made by the Spacewatch survey of an object designated 2007 VO$_{53}$ (astrometry on *MPS* 225225; mag 20.6–20.8 on Nov. 5.3 UT; discovery observation tabulated below) on 2007 Nov. 1 and 5, along with other prediscovery observations. J. Montani reports that Spacewatch 120-s images obtained on Jan. 13 at the 1.8-m telescope by M. Read show a convincing coma of diameter 3″–4″. The newly available astrometry, orbital elements (epoch = 2010 May 4.0 TT, T = 2010 Apr. 26.8275 TT, e = 0.998997, q = 4.845156 AU, ω = 75°.0133, Ω = 59°.7363, i = 86°.9952, equinox 2000.0), and an ephemeris appear on *MPEC* 2008-B16.

2007	UT	α_{2000}	δ_{2000}
Nov.	1.26107	$4^{\rm h}05^{\rm m}28\overset{\rm s}{.}01$	$+15^\circ09'28\overset{''}{.}9$

V597 PUPPIS

J.-U. Ness and S. Starrfield, Arizona State University; G. J. Schwarz, West Chester University; and J. P. Osborne and K. Page, University of Leicester, report on behalf of the Swift nova-CV group on an x-ray detection of V597 Pup on Jan. 8.02 and 17.18 UT. The count rates, after PSF correction and correction for bad columns, were 0.010 ± 0.003 and 0.012 ± 0.002 counts/s, respectively, in the XRT energy band 0.3–10 keV. The source is soft, with the majority of counts below 0.7 keV. V597 Pup was not detected in two earlier Swift observations obtained on 2007 Nov. 20 and Dec. 11. Nearly simultaneously with the first Swift detection, R. J. Rudy, R. W. Russell, and D. K. Lynch, The Aerospace Corporation; C. E. Woodward, University of Minnesota; and A. Rivkin, Johns Hopkins University Applied Physics Laboratory, obtained spectroscopic observations spanning 0.8–2.42 μm using the Infrared Telescope Facility (+ SPeX) on Jan. 7.48. V597 Pup (cf. *IAUC* 8896) has now reached moderately high excitation, suggesting that the x-ray detection represents the ionizing source. Strong lines of He II, the unidentified nova lines at 1.11, 1.19, 1.55, and 2.09 μm, and weak coronal lines of [S VIII], [Si VI], and [Ca VIII] were detected. The H I and He I lines remain broad and flat-topped with FWHM ≈ 3500 km/s. The O I lines that are fluorescently excited by Lyβ are still present and indicate a small reddening of $E(B-V) \sim 0.3$. There are no indications of dust formation in the nova.

