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2005 NB_7

M. K. Shepard, Bloomsburg University of Pennsylvania; M. C. Nolan, National Astronomy and Ionosphere Center; L. A. M. Benner, J. D. Giorgini, and S. J. Ostro, Jet Propulsion Laboratory, and C. Magri, University of Maine at Farmington, report: "Arecibo delay-Doppler images (2380 MHz, 12.6 cm) obtained on Apr. 11–12 show that the Apollo-type object 2005 NB_7 (e.g., *MPECs* 2005-N32, 2005-T82, 2008-F18; *MPO* 135910) is a binary system. Preliminary estimates of average diameters, based on range estimates at 7.5-m resolution, are 0.5 and 0.2 km ($\pm$ 0.1) km. The rotation period of the primary has not been determined but, based on the estimated diameter and observed bandwidth, is $\geq$ 2.5 hr. The semi-major axis of the relative orbit is $\geq$ 0.6 km; the system orbital period is not known."

V2468 CYGNI

R. J. Rudy, R. W. Russell, and D. K. Lynch, The Aerospace Corporation; and C. E. Woodward, University of Minnesota, report on SpeX observations (wavelength range 0.8–2.5 μm) made with the Infrared Telescope Facility (IRTF) on Mar. 13 and Apr. 12 UT: "V2468 Cyg (cf. *IAUCs* 8927, 8928) continues to display a very rich emission-line spectrum. Although features of C I, N I, O I, and Fe II still persist, the Ca II infrared triplet, which was very strong in March, is nearly undetectable in the April spectrum. The He I lines are now quite strong, and He II features are beginning to emerge. The O I lines indicate a reddening of $E(B–V)$ = 0.77. There is no indication yet of dust formation."

V459 VULPECULAE

R. W. Russell, D. K. Lynch, R. J. Rudy, The Aerospace Corporation; and C. E. Woodward, University of Minnesota, report on IRTF SpeX observations, obtained as above on Apr. 12.62 UT: "V459 Vul (cf. *IAUC* 8907) is one of the small number of classical novae to display C I and coronal lines simultaneously. Of the latter, [S IX] at 1.25 μm is the highest-excitation and [Si VI] at 1.96 μm is the strongest. He II lines and the unidentified novae lines are present as well. The O I lines, which are still quite strong, indicate a reddening of $E(B-V)$ = 1.0, some of which is probably local to the nova since the spectrum exhibits thermal emission from dust beyond 1.5 μm."

2008 April 17 *Daniel W. E. Green*