

COMMISSIONS 27 AND 42 OF THE IAU
 INFORMATION BULLETIN ON VARIABLE STARS

Number 3814

Konkoly Observatory
 Budapest
 27 November 1992

HU ISSN 0324 - 0676

TWELVE NEW OR UNDESIGNATED VARIABLES

A continuing photographic patrol has resulted in the discovery of 12 more variable stars that are not included in the General Catalogue of Variable Stars (Kholopov et al. 1985) or the subsequent Name Lists of Variable Stars (Kholopov et al. 1985, 1987, 1989; Kazarovets and Samus 1990). Five of these stars are listed in the New Catalogue of Suspected Variable Stars (Kholopov et al. 1982), and this report represents independent confirmation of their variability. Positions and preliminary magnitude ranges, types, and periods are given in Table I, which continues the list in Kaiser (1991).

David B. Williams has examined DHK 25-28 and 30-36 on the Harvard patrol plates and confirmed variability within the stated photographic magnitude ranges. These observations will be published when analysis is completed. I have used the Harvard plates to find the period of the new eclipsing binary DHK 29 (Kaiser and Baldwin 1992).

I am grateful to Dr. Martha Hazen, curator of astronomical photographs at Harvard College Observatory, for use of the Harvard patrol plates. I would also like to thank Marvin E. Baldwin and David B. Williams for helping to confirm the variability of these stars. The variables were detected using a projection blink comparator (PROBLICOM) as described by Mayer (1977).

TABLE I.

Var. Designation	RA (1950)	Dec (1950)	Range	Type	P (days)
DHK 25 - NSV 1040 BD +59°594 IRC +60111	03 ^h 03 ^m 39 ^s	+60° 17.8'	11.4-12.1 pg	SR	350:
DHK 26 - NSV 5949	12 45 23	+34 40.0	11.9-12.8 pg	SR	300:
DHK 27 - BD +38°780 HD 275647 SAO 56620	03 37 24	+38 50.4	10.5-11.4 pg	Lb	Irreg.
DHK 28 - BD +26°4660 SAO 91369	23 33 37	+27 24.6	10.6-11.3 pg	SR	150:
DHK 29 - BD +33°4070 SAO 70629	20 51 10	+33 55.7	8.9- 9.5 V	EA	1.9021
DHK 30 - GSC 1859:0163	05 22 29	+29 35.8	11.1-11.8 pg	SR	250:

TABLE I (cont.)

DHK 31	BD +32°996 HD 35816 SAO 58083	05 25 36	+32 26.3	9.6-10.1 pg	SR:	70:
DHK 32	- GSC 2407:0390	05 25 33	+32 23.1	11.1-11.7 pg	SR	80:
DHK 33	- GSC 4767:0829	05 35 22	-01 39.2	12.1-13.0 pg	Ib:	Irreg.
DHK 34	- NSV 3288	06 53 43	+14 23.0	11.1-12.2 pg	SR	130:
DHK 35	- NSV 13854 BD +54°2603 HD 206695 IRC +50393	21 40 30	+54 36.0	11.1-12.2 pg	Ib:	Irreg.
DHK 36	- NSV 13889 BD +12°4694	21 47 23	+12 28.7	10.7-11.2 pg	SR	60:

Note: In the absence of other catalogue designations, variables are identified by their Guide Star Catalogue numbers (Space Telescope Science Institute, Baltimore, 1989, CD-ROM). In these cases, finding charts will be published with the analysis of observations.

DANIEL H. KAISER
2631 Washington Street
Columbus, IN 47201 U.S.A.

References:

- Kaiser, D. H.: 1991, Inform. Bull. Var. Stars No. 3677.
 Kaiser, D. H., and Baldwin, M. E.: 1992, Inform. Bull. Var. Stars No. 3815.
 Kazarovets, E. V., and Samus, N. N.: 1990, Inform. Bull. Var. Stars No. 3530
 Kholopov, P. N., editor, et al.: 1982, New Catalogue of Suspected Variable Stars, Moscow.
 Kholopov, P. N., editor, et al.: 1985, General Catalogue of Variable Stars, Moscow.
 Kholopov, P. N., Samus, N. N., Kazarovets, E. V., and Perova, N. B.: 1985, Inform. Bull. Var. Stars No. 2681.
 Kholopov, P. N., Samus, N. N., Kazarovets, E. V., and Kireeva, N. N.: 1987, Inform. Bull. Var. Stars No. 3058.
 Kholopov, P. N., Samus, N. N., Kazarovets, E. V., Frolov, M. S., and Kireeva, N. N.: 1989, Inform. Bull. Var. Stars No. 3323.
 Mayer, B.: 1977, Sky and Tel., 54, 246.