

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

Number 4274

Konkoly Observatory  
 Budapest

1 December 1995

*HU ISSN 0374 - 0676*

**TWO NEW VARIABLE STARS**

My continuing photographic patrol has resulted in the discovery of 2 more variable stars that are not listed 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, Kazarovets et al., 1993; Kazarovets and Samus, 1995). Nor are they listed in the New Catalogue of Suspected Variable Stars (Kholopov et al., 1982). Positions and preliminary magnitude ranges, types, and periods are given in Table 1, which continues the list in Kaiser (1994). Figures 1 and 2 are finder charts for DHK 42 and 43 respectively.

Table 1

Var. Designation	RA (1950)	Dec (1950)	Range	Type	P (days)
DHK 42=GSC 1272:0567	4 <sup>h</sup> 18 <sup>m</sup> 29 <sup>s</sup>	20°8'55"	12.5-<15.5p	M	~322
DHK 43=GSC 2759:1984	23 <sup>h</sup> 8 <sup>m</sup> 1 <sup>s</sup>	34°30'1"	11.7-12.4p	SR	~60

Both variables were discovered using photographs taken with the Automatic Photographic Patrol (APP). David B. Williams has examined both DHK 42 and 43 on the Harvard patrol plates and has confirmed variability and determined preliminary periods. DHK 42 was also visually confirmed by Tim Hager, who reported it as <14.2 in March of 1995 and as bright as 11.3 in August, 1995. It is a mira variable located in Taurus on the far side of the Hyades star cluster. DHK 43 is a semiregular variable in Pegasus. Both photographic and ongoing photoelectric observations will be published when analysis is completed.

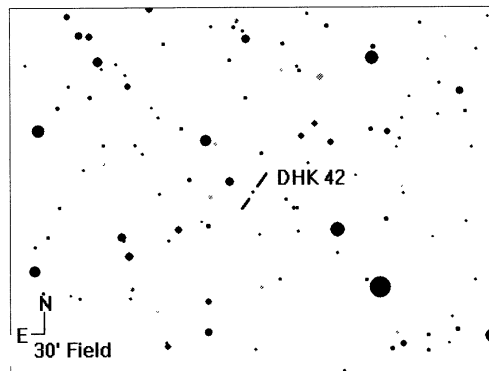


Figure 1

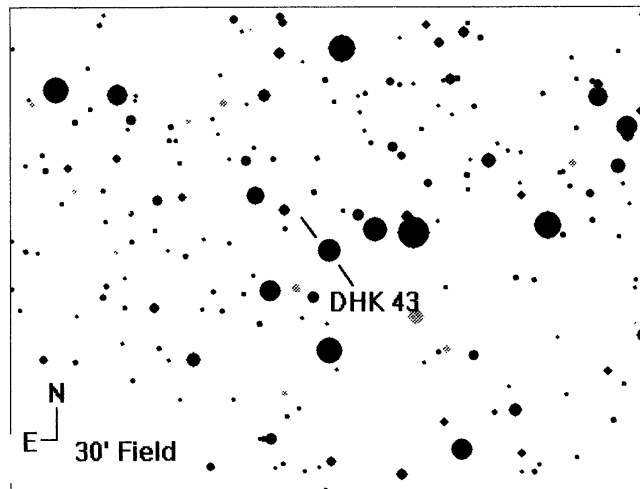


Figure 2

The construction of the APP was supported by a grant from NASA administered by the American Astronomical Society to whom I'm most grateful. I would also like to thank David B. Williams and Tim Hager for helping confirm the variability of these stars. The variables were detected using a projection blink comparator (PROBLICOM) as described by Mayer (1977).

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#### References:

- Kaiser, D. H., 1994, *Inform. Bull. Var. Stars*, No. 4119  
 Kazarovets, E. V., and Samus, N. N., 1990, *Inform. Bull. Var. Stars*, No. 3530  
 Kazarovets, E. V., and Samus, N. N. and Goranskiy, V.P., 1993, *Inform. Bull. Var. Stars*, No. 3840  
 Kazarovets, E. V., and Samus, N. N., 1995, *Inform. Bull. Var. Stars*, No. 4140  
 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