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NOTE ON KM Cas

As pointed out by L. Wackerling in Information Bulletin No. 436, the spectral type of KM Cas is given as M6e $\alpha$  in the General Catalogue of Variable Stars although in several other publications it is classified as an OB star. On this account Wackerling suggested that the star might be of the VV'Cephei type.

I have examined several infrared objective prism plates, taken in the early 1950's, that cover the position of this star. In no case does the star, identified from Kholopov's identification chart (Kholopov 1949), appear to be an M star, although its recognition as such would be quite unambiguous if the type were as late as M2. The small amplitude of the light variation precludes the possibility of spectral variation from M6 to M1, and the fact of the case appears to be that the GCVS simply erred in assigning the M6 type. This error evidently came about through assuming the variable to be identical with the M star Dearborn 25762 (Lee et al 1947), an identification made by Kukarkin et al (1949). The latter reference was suggested to me by W.P. Bidelman. The M star has also been classified and published by Nassau and Blanco (1954). My plates show both the variable and the M star.

The coordinates of both stars have been measured on a Burrell Schmidt direct plate, using four nearby Smithsonian Astrophysical Observatory Catalogue stars as reference stars. The results are:

	Rect. (1900)	Decl.
KM Cas	2 <sup>h</sup> 21 <sup>m</sup> 58. <sup>s</sup> 7	+61° 2' 54"
Dearborn M 25762	2 21 42.4	+60 59 01
= Case M 140		

The position for KM Cas is in excellent agreement with that given in the GCVS; that for the M star differs by about 3' in each coordinate from the Dearborn position (which is also different from the GCVS position), but agrees well with the published Case position.

Since KM Cas is a B star, its variable classification as SRa is also in error. My plate material is insufficient to establish the correct classification.

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