

COMMISSION 27 OF THE I. A. U.  
INFORMATION BULLETIN ON VARIABLE STARS  
NUMBER 347

Konkoly Observatory  
Budapest  
1969 April 30

A SEARCH FOR THE VARIABLE OPTICAL COMPONENT  
OF THE PULSAR NP0527

The pulsar NP0527 is within about  $1^\circ$  of the pulsar NP0532 in the Crab Nebula and has a similar integrated electron density. As a result it has been suggested<sup>1</sup> that NP0527 was ejected from the Crab Nebula. The optical variation of NP0532 has been reported<sup>2</sup>.

A blink search for a high velocity object at the position of NP0527 was made. Using a blue plate taken on 8 March 1969 on the 26" at Herstmonceux and a copy of the blue POSS print, the search was complete down to about  $18^m.5$ , and an area twice the radio error box covered. Since the proposed proper motion is 4.8" per year, the motion of the pulsar over the seventeen years would be easily detectable. No such object was found. If the pulsar was ejected from the Crab, its average luminosity must be less than this limit.

A. J. PENNY

Royal Greenwich Observatory, 23rd April, 1969

- 1 Reifenstein, III, E.C., Brundage, W.D. and Staelin, D.H., Phys. Rev. Lett., 22, 311, 1969
- 2 Cocke, W.J., Disney, M.J. and Taylor, D.J., Nature, 221, 525, 1969