

# ROCKET PROTOTYPE OF AN X-RAY OPTICAL SYSTEM FOR SURVEYING AND LOCATING COSMIC X-RAY SOURCES

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The characteristics of an X-ray detection system based on an array of parabolic reflectors that provide a line-shaped focus will be described. The most recent rocket instrument has an overall length of about two meters and utilizes a pair of thin-window gas-flow proportional counters for detecting the X-rays. The variation of effective aperture with X-ray energy, the amount of scattering from the mirror surfaces, and the quality of the optical focus will be discussed. Estimates of the sensitivity of a larger set of X-ray optics used as a survey system, and when combined with a special grating to form a spectrograph, will be presented.

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## DISCUSSION

*E. A. Trendelenburg:* Is it intended to fly your experiment on a satellite?

*P. C. Fisher:* An experiment involving a pair of mirror arrays, and including a spectroscopic capability has been proposed for satellite use.