The movies are made through a Zeiss $\frac{1}{4}$ Å filter mounted on a 6-in. portable telescope and controlled by a programmer that takes pictures automatically at various wavelengths, exposure settings, and time intervals. The strength of this method of observing solar activity lies in the fact that the data contain spatial, temporal, and spectral information simultaneously and can be presented in a very efficient way. Preliminary analysis is presented, but detailed quantitative analysis of this data will await construction of a high-speed computer oriented microdensitometer.

This work was conducted under U. S. Air Force Space Systems Division Contract AF04(695)-1001.

Sixty-Two Hour (Continuous) Solar Movie for the Study of Supergranules. THOMAS J. JANSSENS, ERNEST H. ROGERS, AND DALE VRABEC, *Aerospace Corporation*.—In order to study the time changes of slowly varying supergranules an H α telescope was set up above the arctic circle at Thule, Greenland, where continuous movies were made of the H α network taking advantage of the "midnight sun." Installation of the telescope and the observing conditions experienced are described. Surprisingly, these included extended periods of excellent seeing.

The photographs were taken at intervals of 3 sec at H α +0.6 Å of a quiet region on the sun's equator. Due to solar rotation, the guiding had to be adjusted every 12 h. The data record of the 62 h period of observing consists of about 70 000 frames, from which certain frames are selected to obtain movies of various lengths. Three interesting phenomena which are presented are very fast periodic spiculelike absorption features in the absorption network, coherent waves of velocity patterns seen in areas between the network, and the very slow changes in the pattern of the network and the cells.

At the time of this writing a quantitative study is not complete, but well under way. A detailed study of many interesting phenomena will have to await construction of a high-speed computer-oriented microdensitometer.

This work was conducted under U. S. Air Force Space Systems Division Contract AF04(695)-1001.

Blanketing Effect in Am Stars. CARLOS JASCHEK AND MERCEDES JASCHEK, *Perkins Observatory and La Plata Observatory*.—It has been pointed out recently that the position of the Am stars in the $U-V$, $B-V$ diagram can be explained as a blanketing effect, and it has also been proposed that the blanketing vectors, which connect the observed values of $U-V$, $B-V$ with the corrected ones, are parallel among themselves and of constant moduli. In this paper the authors have made a multicolor

approach to the same problem. By using five-color data it was possible to show that the blanketing explanation when applied to a larger material (29 stars) permits a consistent interpretation of the observed colors. The blanketing vectors in the $(U-V, V-B)$ diagram can be derived from the multicolor data alone without recourse to theory and the values so derived agree with those found by different procedures. Although the directions of these vectors are parallel, their moduli are not constant. The moduli were found to be proportional to the metallicity of the star, this latter being defined as the difference, in tenths of spectral type, between the classification of the metallic lines and the hydrogen lines.

Two Nitrogen-Weak Supergiants. MERCEDES JASCHEK AND CARLOS JASCHEK, *Perkins Observatory and La Plata Observatory*.—From Cordoba plate material taken with a dispersion of 42 Å/mm it was found that the southern B2 supergiant HD 96248 exhibits extremely weak ionized nitrogen lines. This seems to be the only abnormality in an otherwise normal star, insofar as colors and absolute magnitudes are concerned. A careful search of Perkins plate material resulted in the finding of HD 14443, which duplicates almost exactly the previously mentioned star. This seems to be the first case of a nitrogen abnormality found in early type high-luminosity stars and attention is called to the possibility that this might be related to the nitrogen abnormalities in the Wolf-Rayet stars.

Optical Identification of some Weak Radio Sources. DAVID L. JAUNCEY AND RICHARD HUNSTEAD, *Cornell-Sydney University Astronomy Centre*.

(Abstract withdrawn).

Galactic X-Ray Statistics. HUGH M. JOHNSON, *Lockheed Missiles and Space Company*.—H. Friedman, E. T. Byram, and T. A. Chubb (*Science* 156,