

C of J Release. 31st. 9

Bloemfontein in South Africa is one of the world's most important centres for astronomers because of its exceptionally clear atmosphere all the year round.

For this reason it was chosen as the location for some important astronomical observations that have recently taken place, using a unique television system. The function of the television camera, which was specially developed by Pye engineers in Cambridge, was to enable observers to take a series of photographic exposures of the Moon, Mars, etc. from the television screen. The installation of the television camera to the 27½" refracting telescope was carried out under the guidance of Mr. Somes Charlton (with the beard) at the Lamont-Hussey Observatory, which stands high up on Naval Hill in the middle of the Franklin Game Reserve. The camera and compressed air leads were securely attached. The latter was used to cool the special low light level television image tube. Some remarkably clear photographs of the Moon were obtained during the period of preliminary testing. Because of the variations in atmospheric conditions, the television observer watches the TV screen very carefully before choosing the right moment to take his photograph.

A form of inter-communication was used between the operator on the telescope and the television to enable co-ordination of the adjustments at the television camera and the control unit. The photographic recording was made on single 35 mm. pictures each of which were obtained in rapid succession. Each day Mr. Somes Charlton examined the processed film; in this particular shot he is looking at the television images of the Moon which we have just seen.

#### Dope Sheet Breakdown.

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|----------|---|
| Scene 1: | Aerial view Bloemfontein.   |
| 2:       | High long shot centre of City.  |
| 3:       | Closer shot centre of City.   |
| 4:       | L.S. Governor's House on hill. Camera pans across Game Reserve to show Observatory in far distance.                       |
| 5:       | M.L.S. Pride of lions resting.  |
| 6:       | M.L.S. Dome of Observatory.   |
| 7:       | Int. Observatory. Two men bring in T.V. camera and place at base of telescope.  |
| 8:       | M.S. Technician tuning RX Monitor set and screen. Still camera is set in front of screen.                                 |
| 9:       | Cable being fixed to T.V. camera.   |
| 10:      | Securing cable to T.V. camera.  |
| 11:      | Ditto scene 8.  |
| 12:      | One man swings base of telescope with T.V. camera now fixed to position for viewing.                                      |
| 13:      | Side view of receiver and screen with technician. Still cameraman walks into frame and looks through viewfinder.          |
| 14:      | T.V. cameraman and assistant making final adjustments to camera and telescope.  |
| 15:      | C.S. T.V. cameraman looking through viewfinder.   |
| 16:      | C.S. T.V. screen with view of Moon.   |
| 17:      | Back view of Monitor technician and still cameraman.  |
| 18:      | Low angle looking up telescope mounting as it slowly revolves with roof in synchronisation with the movement of the Moon. |
| 19:      | C.S. wheels carrying roof and slowly revolving.   |
| 20:      | Pulley wheels driving (Scene 19).   |
| 21:      | Synchrometer.   |
| 22:      | T.V. Assistant making adjustments.  |
| 23:      | T.V. cameraman.   |
| 24:      | T.V. screen.  |
| 25:      | Wheels (as Scene 20).   |
| 26:      | Roof as Scene 18.   |
| 27:      | As Scene 22.  |
| 28:      | T.V. screen.  |
| 29:      | Monitor RX. technician and still cameraman. Back view.  |
| 30:      | Side view of Scene 29. Still cameraman taking pictures.   |
| 31:      | T.V. screen.  |
| 32:      | Still cameraman examining film.   |
| 33:      | C.S. same.  |

Kindly note - No verbal mention of Rob Geo. Somes! Thanks!