

# TELETOPICS

## BRITISH TV AMATEURS SET WORLD RECORDS

NEW world records were created recently when an amateur television contact was established between G3NOX/T, near Saffron Walden, Essex, and G3ILD/T, near Darlington.

The path distance between the two locations was 200 miles and this QSO has the distinction of being the first in which amateur TV sound and vision signals have been transmitted simultaneously over such a range, and also of being a distance record for two-way /T contacts.

The QSO took place on September 3rd this year, at 08.30 GMT, with G3NOX/T transmitting a vision signal on 436Mc/s and G3ILD/T on 428Mc/s. Respective power inputs at peak whites were 150W and 100W.

## Cameras Monitor Rocket Blast-off

AT Cape Kennedy, Florida, where America's space scientists conduct their practical work of rocket launching, two Marconi colour television cameras were installed recently to televise the blast-off and first few minutes of flight of a Saturn rocket. (These are the rockets being used by the U.S.A. in its research and development programme for more advanced manned space flights.)

One camera was installed one thousand feet from the launching pad, where by remote control it followed the course of the rocket after take-off.

In a more vulnerable position was the second Marconi camera. This was at the very top of the umbilical tower which holds control connections between the rocket and the launch control centre. Here the flaring jet stream of the rocket passed within fifteen feet of the camera, moments only after blast-off.

To protect the camera from the heat and shock waves, a specially designed housing was employed. This was made of wood sheathed with copper, with a protective glass lens window set in one side, and purged with nitrogen to eliminate the possibility of explosion in the terrific heat.

## C.C.TV AT AIRPORT RELAYS FLIGHT INFORMATION

A CLOSED-CIRCUIT TV installation at Liverpool Airport enables visitors to see arrival and departure board information on television receivers situated in lounges and restaurants throughout the main airport building.

As subcontractors to Standard Telephones and Cables Limited, EMI Electronics Ltd. installed three cameras, four monitors and a control console in a sound-proofed studio.

One of these cameras transmits pictures of the arrival and departure boards, while another transmits advertising slides. The third televises the girl announcers, who can make special announcements from time to time over the system.

In the studio the announcer can see her own picture, a preview picture of the flight board, or the next advertising slide on the three monitors situated at the head of the control console. From this position she selects the picture to be transmitted and this appears on the fourth monitor.

## New target material for Image Orthicons

A NEW material known as ELCON is the result of an extensive research and evaluation programme carried out by the English Electric Valve Co. Ltd. to improve the properties of its image orthicon camera tube targets. This new target material achieves an unprecedented 750 hours of guaranteed life of the image orthicons, with indications from experience with pre-production samples of operational lives as long as 3,000 to 5,000 hours.

With the ELCON target, electronic rather than ionic conduction is employed in transferring the charge pattern from the image side to the beam side. (ELCON—ELECTRONIC CONDUCTING, as opposed to ionic conducting.) Ion migration is therefore virtually eliminated and in consequence there is no significant deterioration in performance with time. This means that sensitivity and stability of contrast reproduction remains constant and there is complete freedom from sticking pictures for life. Also no warm-up delay is experienced with the ELCON target.

This new material, which is seen as a major technical breakthrough, will be featured in the full EEV range of 3in. image orthicons now in current production.