



The Tiro weather satellite is pictured during its assembly at the Space Center of Radio Corp. of America's Astro-Electronic Products division, Princeton, N.J. A half-scale model is on display at the Conrad Hilton where the National Assn. of Broadcasters is meeting.

## Model Of Weather Satellite Shown At NAB Convention

A half-scale model of the nation's weather satellite went on display Sunday at the 38th annual convention of the National Assn. of Broadcasters.

The model of the Tiro satellite was developed for the government by the Radio Corp. of America and is one of the highlights of the company's exhibit in the Conrad Hilton Hotel.

All the instrumentation, with the exception of the battery which is recharged by solar cells, was developed by RCA and the entire assembly of the 270-pound space vehicle was done by the company.

The two television cameras in Tiro weigh about 15 pounds each and are identical except for lenses. One camera has a wide-angle lens capable of viewing a cloud-atmosphere area of some 800 miles on a side.

The second camera has a narrow-angle lens for sharper coverage in a smaller area. Each of the cameras is the size of a water tumbler.

### Stored On Tape

In contrast to commercial TV cameras, these instruments are designed to take a series of still pictures in sequence and store them on magnetic tape for playback on command when in range of receiving stations.

In Washington, where data will be channeled, scientists already have expressed pleasure on the clarity and scope of the pictures of cloud formations.

The drum-shaped Tiro, a cylindrical vehicle 42 inches in diameter and 19 inches high, also is capable of sending TV pictures directly to earth without storing the images on tape. The Russian satellite, which

photographed the far side of the moon, was incapable of direct moving TV contact, delegates to the convention said.

RCA Sunday also announced a new method of FM installations in which a single station can send three separate programs on the same channel. This, in effect, will triple the use of single frequencies, cutting costs at the same time.

For example, an FM station could send out a program for its home listeners while at the same time using the identical frequency to send a musical program to factories, restaurants and bars.

Of interest to the trade, seeking to cut costs, was a new type of television broadcasting equipment which can handle a full day's programming automatically with perforated tapes taking over the job electronically.