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# NASA TECH BRIEF



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## Ultraminiature Television Camera

An ultraminiature television camera with a total volume of 20.25 cubic inches has been developed. The design utilizes microelectronic modular assembly packaging techniques and contains a magnetically deflected and electrostatically focused vidicon, automatic gain control circuit, power supply, and transmitter. The camera requires 28 vdc power, operates on UHF, and accommodates standard 8-mm optics. Maximum resolution has been obtained by using interlace scan techniques.

The camera to this point has displayed resolution and performance favorable to the successful development of an ultraminiature television system. The camera has demonstrated its ability of transmitting a picture with resolution in excess of 400 lines and to maintain the size requirements demanded of an ultraminiature instrument.

The ultraminiature television camera that has been designed conforms to conventional television practice

and is compatible with standard commercially available television monitors.

Complete details of this development are contained in *Ultraminiature Television Camera*, by R. J. Deterville and N. Drago, Teledyne Systems Company, Final Report, July 1966. Copies of this report are available from:

Technology Utilization Officer  
Marshall Space Flight Center  
Huntsville, Alabama 35812  
Reference: B67-10469

### Patent status:

Inquiries about obtaining rights for the commercial use of this invention may be made to NASA, Code GP, Washington, D.C. 20546.

Source: R. J. Deterville and N. Drago  
of Teledyne Systems Company  
under contract to  
Marshall Space Flight Center  
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Category 01