

an image of the test pattern on the monitor. The Diascope is designed so that the image on the monitor will be an exact replica of the original pattern if the surface of the vidicon is in optical axis and at a distance of 0.69 in. from the front of the C mount of the camera; otherwise the camera and the vidicon have to be realigned optically, mechanically and electronically until the correct image appears on the monitor. The device has a self-contained lamp and power source.

A narrow bandpass filter consisting of a single wafer of quartz has been developed at Bell Telephone Laboratories. The filter replaces a conventional filter network of two hybrid transformers, four variable capacitors and two crystal resonator units. The device can be fabricated for use at frequencies ranging from 1 to 150 MHz. It is made from a circular wafer of quartz, approximately 10 mm in diameter and 1 mm thick on which two gold electrodes are deposited. Each electrode consists of two identical rectangular sections deposited on each side of the quartz wafer which is then mounted in an hermetically sealed cylinder about  $\frac{1}{4}$  in. in diameter and  $\frac{1}{4}$  in. high.

Such a device exhibits the transmission properties of a conventional filter network if the electrodes and the spacing between them are properly designed. Essentially the device is designed so that the quartz under both electrodes has a single resonant frequency. However, when the device is used as a filter, the crystal resonates

at two different frequencies; one below the original design resonance and one above the original resonance. The property of dual resonance is attributed to mechanical coupling of energy between the resonators.

New TNC and BNC insertion units, series 091 and 090, respectively, have been announced by Bishop Instrument, 440 Forest Ave., Portland, Maine 04101. The units, designed to provide convenient housings for networks to be inserted in coaxial lines, have component cavities 1 in. in diameter with lengths of 1, 2 or 3 in. The housing is nickel-plated brass that can be soldered at any point for minimum inductance ground connections with Teflon insulation. Connectors include 2 TNC jacks, 2 BNC jacks or 1 BNC plug and 1 BNC jack. Prices are from \$12.00 to \$14.00.

Products recently announced by Microwave Associates, Inc., Burlington, Mass., include the MA-2A 2-W, 2 GHz all solid-state microwave, STL, intercity or TV pickup relay, and the MA-7A  $\frac{1}{4}$ -W, 7 GHz, STL, intercity or TV pickup all solid-state TV relay. The FRV 7001 is a 7 GHz  $\frac{1}{4}$ -W all solid-state heterodyne TV relay for intercity multihop and STL service. Other products include a tunnel diode low-noise RF receiver preamplifier for 2 GHz, 7 GHz and 13 GHz auxiliary relay use and a low-noise all solid-state AFC TV relay receiver at 2 GHz, 7 GHz, and 13 GHz for use with klystron relay transmitters.



## employment service

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 These notices are published for the service of the membership and the field. They are inserted three months, at no charge to the member. The Society's address cannot be used for replies.

### Positions Wanted

**Cameraman.** Highly exp'd, thorough knowledge in all fields of camera work. French, English speaking. Desire posit. with high responsibilities in industrial, commercial or other film production. Available immediately. Résumé on request. Write: George Miklachevsky, (in April) Wiesenstrasse 8, CH 8700 Kusnacht-ZH, Switzerland; (from May) c/o Epanchin, 27 Brown St., Sea Cliff, N.Y. 11579.

**A/V Communication Specialist.** American established in Europe. Fluent several languages. Senior executive positions consulting to governments, schools, UN agencies, industry. Educational technology, industrial training, ETV. Industry/education/documentary film production. Currently holding seminars throughout Europe, writing, and consulting on major TV current-affairs series. Seeks challenging, responsible, rewarding tie with US firm. Eric Hecker, 26 Rue de Tourville, 78 St-Germain-en-Laye, France.

**Electronic Engineer.** B.E.E., 1943. M.E.E., 1951. Diversified research and development exp. in instrumentation and communications. Desire challenging position in N.Y.C. in TV or related areas in m-p. Write Ap't. S.T., 578 E. 16th St., Brooklyn, N.Y. 11226.

**Cameraman-Editor-Recordist.** 2 years college, 16 years exp. in electronics and photography. At home in all phases recording, sound, m-p and still photography, editing. Desire to relocate on Eastern Seaboard in responsible position with reliable concern. Résumé on request. Gillespie, 2505 Pershing Ave., Richmond, Va. 23228.

**Experienced film maker.** With latest camera and sound recording equipment, seeks connection in New York metropolitan area. Leo E. Zappe, 321 River Rd., Nutley, N.J. Tel: 201 667-2323.

**Capable Film Student.** Looking for job in film or TV production. Exp. in editing. Worked also as productions asst. Contact: Eila Kaarresalo, 264 50th Street, Brooklyn, N.Y. 11220, Tel: 492-5945.

### Positions Available

**First Cameraman.** Must have strong background in creative lighting and heavy industrial shooting. Self-starter who can work on his own or with small crew. Fair amount of out-of-town-travel. Fred Berney, Academy-McLarty Prod., 20 Mesmer St., Buffalo, N.Y.

**Project Engineer & Design Engineer for Television Systems.** Project Engineer responsible for technical planning, coordination with suppliers, liaison with customer engineers, etc. He

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1—RCA PR31 35mm Opt Recorder—Sync Drive  
1—RCA PR32 16mm Opt Recorder—Sync Drive  
1—RCA PR23 35/23mm Opt Recorder—Selsyn Drive  
3—RCA RT11 1/4" Tape rec/rep -Direct Drive  
1—Ampex 300 3c 1/2" Tape 3 track rec/rep  
1—Ampex 300 sc 1/2" Tape 3 track with sel/sync  
1—RCA Optical Recording Chain M1 10234 & 10236  
Write or call Gus Mortensen for information at Manhattan Sound Co., 460 West 54 St., New York, N.Y. 10019, PL 7-9800

must be able to use practical engineering methods to solve wide range of technical problems. Exp. in electro-mechanical design and familiarity with electronic circuitry important. Design Engineer must have TV equipment exp. Responsible for trouble shooting, developing modifications for special requirements and designing new equipment to meet high performance goals. Positions are with small TV co. having outstanding record in high quality television display systems. Each position will involve major responsibilities and individual initiative. Send résumé or letter describing your background to: Theatre Network Television, Inc., 62-10 34th Ave. Woodside, N.Y. 11377.

**Filmstrip and Slide-Film Cameraman.** For Ox-berry animation camera. Excellent opportunity. Exp. only. Bebell Color Labs, 108 W. 24th St., New York, N.Y. WA 4-8573.

**Cameraman-Editor.** For permanent posit. with in-plant industrial m-p unit producing sales, public relations, educational and documentary films. Exp. with editing equipment and techniques, lighting, the operation of Mitchell and Arriflex cameras preferred. Submit résumé and salary requirements to J. W. Lovell, General Electric Co., Bldg. #6, Room #231, 1 River Rd., Schenectady, N.Y. 12305.

**Camera Technicians.** Large rental company, New York City. Interested in setting up mechanics in their own business. Experienced in BNC, R-35, Arriflex. No investment necessary. A. Frankel, 271 Piccadilly Downs, Lynbrook, N.Y. 11563.

**Lab Supervisor.** Established San Francisco Bay Area m-p lab. Applicant must have working knowledge of timing, processing, printing, quality control, etc. Must have organizing ability and be able to work harmoniously with all people. P.O. Box 8423, Airport Branch Post Office, San Francisco, Calif. 94128.

**Mechanical Design Engineers.** Immediate openings for engineers with design experience in cine cameras and projectors, slide projectors and allied equipment. Exceptional opportunity for advancement in expanding and dynamic organization. Liberal benefits including profit sharing. Please send résumé to: R. L. Pugh, Bell & Howell Co., 7100 McCormick Rd., Chicago, Ill. 60645.

# Display Systems Engineers

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## **Graphic Systems Engineers**

Requires B.S., M.S. or Ph.D. in E.E. or Physics, with 3-5 years' experience in advanced system design for graphics. Must have familiarity with electronic tubes, A/D converters, function generators, video amplifiers, integrated analog circuits, encoder and logic design for digital computers. Background in EDP systems methodology is desirable.

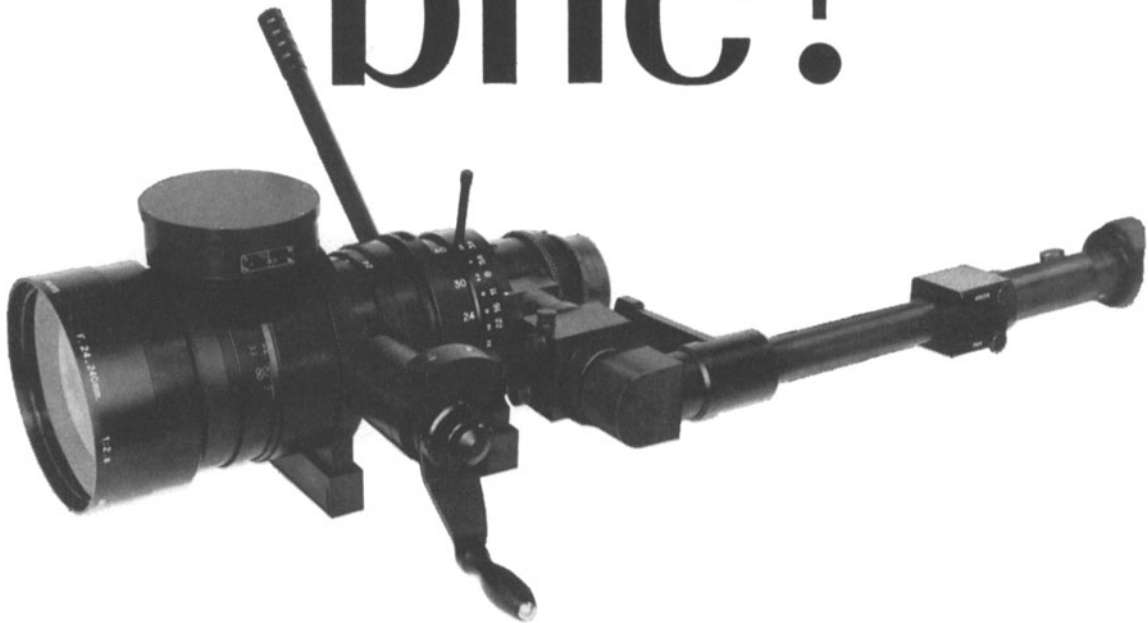
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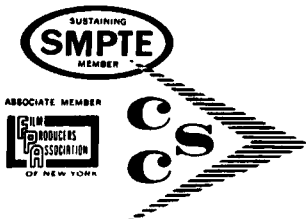


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