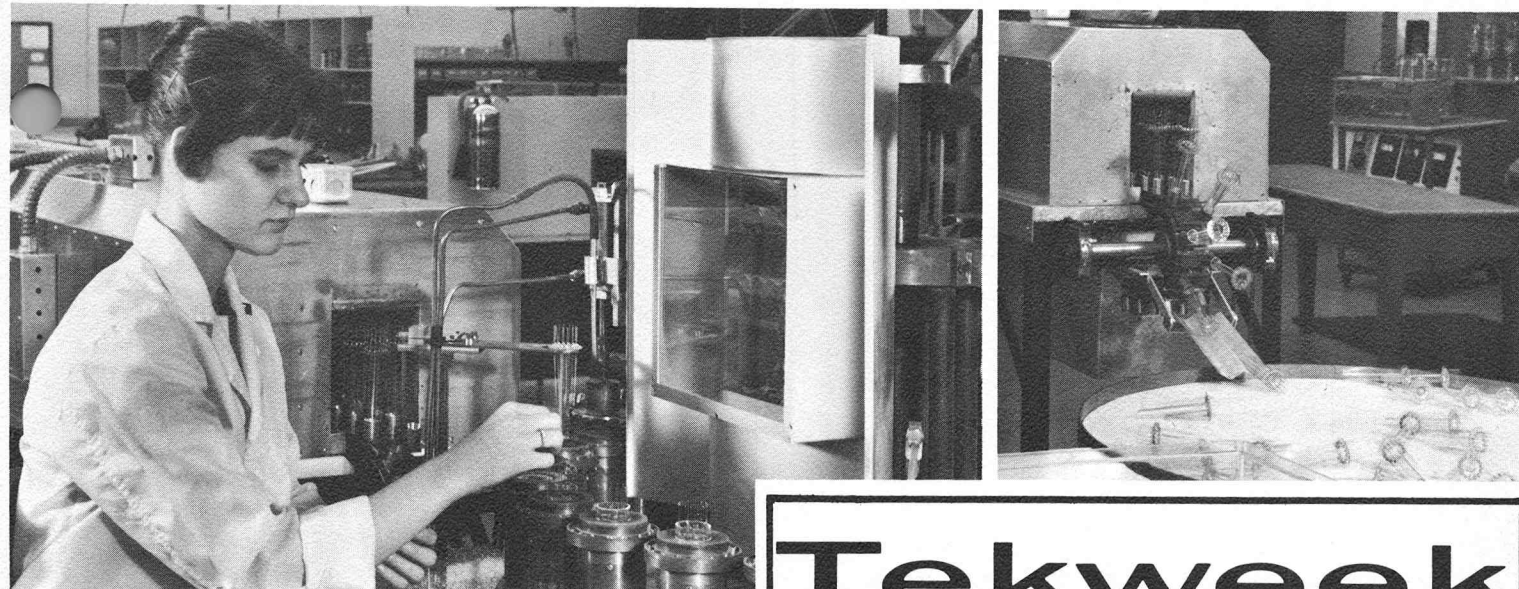


# Automated Process Increases CRT Stem Production



**MORE PRODUCTION** results, now that CRT's new annealing oven is linked to a Tek-built CRT stem-forming machine. Patty Kornahers puts stem components into molds of the stem-forming machine, where they are shaped, fused together in a vacuum-tight seal, and conveyed into the annealing oven. Photo left shows oven dropping out the completed stems at a rate of one every 18 seconds.

# Tekweek

Tektronix, Inc., Beaverton, Oregon

Vol. 3, No. 46

February 15, 1963

## CRT Area Increases Stem Production Capacity, Links Stem-Forming Machine and Annealing Oven

CRT stem production for standard five-inch tubes is expected to increase from 200 to a maximum of 600 per day in the next few weeks, Joe Van Lunen (CRT Gun Assembly GM) announced.

A stem is the glass structure containing the lead wires which make the electrical connections from the oscilloscope through the base of the tube to the internal elements of the cathode-ray tube. Joe added that we will be able to meet 95 per cent of stem demands and gain improved quality.

Previously, the annealing process was the limiting factor in completing CRT stems; now, a new automated annealing oven has been installed. Annealing, in simple terms, occurs when a glass product is heated uniformly to its working point and then cooled in gradual stages. Fabrication causes strain patterns in the glass; annealing removes them.

## JC Program Features 'American Heritage'

"The US Constitution — An Instrument for the Creation and Preservation of Our American Heritage" is the theme of an American Heritage program, sponsored by the Beaverton Jaycees next Thursday night at Beaverton school auditorium at 8 p.m. The JC's have invited the general public to hear the following guests speak about the Constitution: US Senator Wayne Morse, former Oregon governor Elmo Smith and Oregon Supreme Court Judge Arno Denecke.

CRT decided to build its own stems because of a number of supply and quality problems. CRT stems are essential to over-all CRT quality and performance; they often required specifications which suppliers found difficult or impossible to meet.

In 1960, CRT Manager Derrol Pennington asked Bela Kirchner (CRT Production Engineering) and Joe to look into the feasibility and economy of manufacturing stems. Later, Charlie Porches (CRT Production Engineering) joined the project.

By late 1961, Jack Smits (CRT Mechanical Equipment) — working closely with Bela, Charlie and Joe — had built an automatic stem-forming machine which produced the first prototype stems.

When CRT moved into its new building one year ago, the stem-forming equipment moved with it. Refinements had raised the production capacity; stem annealing was done in small ovens, a batch at a time—200 per day maximum.

With both the stem-forming and annealing processes linked, production rate is determined by the

## TWX Operations Move

Customer Service TWX operations moved Monday to a different IO building location. The new delivery station is 74-720.

TWX Manager Dick Taylor, Kathy Nelson and Dottie Spent can be reached on extensions 241 and 242. Alice Jacobs has extension 243; Fay Lindstrom is on extension 244.

capacity of the stem-forming machine, which is 1600 per day.

Here's what happens in the sequence: The circular table of the stem-forming machine has 24 molds. At the beginning of the process, glass tubing is put in the mold and 14 wires are placed in holes around it. An outer glass ring is placed in position outside the wires.

As the table turns, the mold passes through a series of heating stages during which upper molds come down and compress the assembly passing below. After four compressions, which mold the stem glass a little at a time, the glass is properly fused—vacuum tight—around the wires. The stems are now ready for annealing to take out the strains created during heating and compression.

An automatically timed arm lifts the stem from the forming mold and places it on a holder on the annealing oven conveyor. The conveyor carries the stem slowly through the oven. Inside the ten-foot-long structure are four heating areas individually controlled by thermocouples. The zones heat up the stem gradually to the proper annealing temperature. They also control the stem's cooling rate.

The CRT stem is moved to the end of the oven where it drops onto a cooling turntable. It is then checked with a polariscope (a strain-gauge for glass), checked for quality, tested and put on the shelf in the CRT Small Parts department.

(continued on page 4)

## Technical Editing Service Offered

To help prepare and place technical and application articles for publication, Tektronix has engaged the services of Lew Winner, a resident of New York City, who will be Technical Relations consultant.

When he made the announcement February 8, Chuck Gasser (Advertising manager) said he believes that this encouragement for employees to write technical articles is a step forward for Tek.

Chuck cited, in particular, Lew's experience as public relations, publications and exhibit consultant to Northwest Electronics Research and Engineering Meeting (NER-EM), Joint Computer conferences and Association for Computer Machinery conferences.

Lew's duties as Technical Relations consultant will include preparing articles from information supplied by Tektronix; editing, condensing and revising rough drafts of articles and conference papers written by Tektronix employees, and placing all appropriate articles in trade magazines.

## Sixteen Attend Seminar

Sixteen Teks attended a value engineering seminar at the Sheraton hotel last Thursday. The seminar was called "How to Implement a Value Analysis Program in Your Firm." The following employees were there:

Bill Cottingham, Jesse Gard, Wallace Blackburn, Bill Wane, Dwane Romine, Rich Murtagh, Chuck Pearce, Jay Chido, Loren Trumbo, Don Floren, Dick Tollisen, Dick Swanson, Charles Wilson, Glenn Pelikan and Paul Gaertner.

# Departmental News

## Plant 3, John's Jewels

When Barbara Angell transferred from our group to be Plant 3 receptionist, cake was served.

Margaret Starr was congratulated when she announced her engagement.

Cupcakes were served for Dorothea Lloyd who transferred to Capacitors.

Cake was served by Olivia Lavine and Patricia Dunmire for first Tek anniversaries.

## Plant 2, Planning

Cake was served February 5, for this month's birthdays: Jim Kurilo, Elaine Kinsman and Ardath Wilcox.

Jean Banko is new in the Stock area; she is a transfer from Plant 2, Mechanical Assembly.

## Plant 2, Phil Mallery's Group

Hazel Cook treated us to celebrate her fourth year at Tek.

Mary Mercer and Jeanne Bell have been loaned to Capacitors. Emily Tuttle is on loan to us from Planning.

Mary Gray left on maternity leave.

## Plant 1, John Stevens' Group

Our sympathy to Mary Robertson whose stepfather passed away.

Marge Montague and Esther Liski celebrated birthdays.

Cathy Fleury is on loan to F&M Quality Assurance.

## Plant 1, Kit Prep & Mechanical

Beulah Brogaard went on maternity leave.

Frances Finley celebrated her fourth Tek anniversary.

Kit Prep served cake to honor January birthday celebrants.

Gea Becker transferred to Diodes; cake and ice cream were served.

## Coils Goils

Rose Williams (4) and Mary Schilling (2) celebrated Tek anniversaries and treated the group.

## Plastics Nite Owls

A surprise baby shower was given for Bernie Wennermark; that same day he departed for his new job in engineering. Ada Mericka transferred to day shift.

Christina Etter, Eddie Panian and Kathy Wolf celebrated birthdays this month.

## CRT Gun Wiring

Enid Gritman has a new granddaughter.

Ida St. Clair celebrated her 25th wedding anniversary. We presented her with a clock.

Millie Kennedy is on loan to our group from Pumps.

Mae Hammond celebrated her fourth Tek anniversary.

We will miss our custodian, Al Ely, who is transferring to Ceramics.

## Plant 3, Glen's Star Gazers

We had a smorg for Mildred Bomhoff and Jackie Higley who are going to Capacitors, and for Evelyn Stanley's return to swing shift.

Officers of our new group are Etta Cook, group representative; Marge Madden, alternate; Alice Buckner, social chairman; and Gary L. Siewell, Tekweek reporter.

Doris Erickson celebrated her fourth Tek anniversary with treats.

## Plant 2, Ram's Lambs

Cake was served for January birthdays. Alice Dahl (7) and Dora Jensen (6) celebrated Tek anniversaries.

Bill Mayer treated us to celebrate the birth of his son.

Merna Faul (Personnel Services) was guest speaker at our group meeting.

Terry Shaner and Judy Henningsen are training in Cables and Dorothy Garrett is in Shortline.

## Plant 3, Gipson's Girls

Millie Millsap and Choeta Marsh are on loan to Capacitors.

## Plant 3, Forrest Martin's Group

Our new group officers are Dottie Shupp, group representative; Neppie Wilcox, alternate; Jan Harris, social chairman; and Linda Ludwig, Tekweek reporter.

Cora Erickson, Linda Ludwig, Elsie Blatter and Lila Linker treated the group last week on their Tek anniversaries.

Alvina Powelson is working at Sunset for a couple of weeks.

## Plant 1, Howard's Cowards

We had a kitchen shower for Linda Hocking.

Jeannette Traugher has gone to Quality Control.

Margaret Stewart's son, John, received his Eagle Scout rank January 31. We had a Valentine's Day smorg.

## Facilities

Two birthday parties were held recently. Ross Hood (Maintenance Electrician) said he was 25 years young; Irene Kukkola (Facilities Purchasing) claims to be 21.

## Accessories, Days

Ruby Shipley went on maternity leave February 8; Lorena Long has gone on a six-week sick leave.

Naomi Fisher treated the department on her second Tek anniversary.

## Plant 3, Tom Moore's Group

Bonnie Evans became a grandmother for the first time January 25, when her daughter gave birth to a 7 lb. 9 oz. boy.

Olive Spitzer treated us when she celebrated her third Tek anniversary.

## Capacitors, Swing

New in Capacitor assembly is Elsie Larson, on loan from Plant 2 Unit Wiring.

Lola Nofziger served a treat January 5, to celebrate her one-year Tek anniversary.

New group manager in the Potentiometer and Resistor area is Jim Robinson, a transfer from Capacitors Component Engineering.

## Plastic Pills, Days

Stella White won our weight-losing contest. We have decided that next time we won't let her enter. That gal had 18 pounds worth of will power.

Ada Mericka came from Molding, swing, to Molding, days.

Bernie Wennermark of swing shift Plastics Processing is now in Plastics Engineering, days.

## Plant 1, Fables from Finals

Bob Donaldson and Frank Arena are on loan to Preprod; Mike Berlant is on loan to Shipping.

## Capacitors, Days

Loretta Beber, Lola Harrison and Hazel Tillman (all on loan to us) treated us last week. Darlene Moore and Barbara Williams were treated to birthday cake.

Arline Skelton terminated because of ill health.

Gea Becker, from Kit Prep, Plant 1, transferred into Diodes. Mary Mercer, Jeanne Bell and Mildred Paulson are loaned to Pots from Unit Wiring.

## Plant 3, Jim's Gems

Cake was served January 25, for the birthdays of Irene Johnson, Emma Willard and Cathy Hershell.

Sara Evans went on maternity leave February 1; she treated us to cake.

Hilda Compton and Joyce Melcher celebrated their first Tek anniversaries.

Nonie Redmond's son, Harv, is one of the Oregon high school seniors participating in the music seminar at Pacific university.

## Ceramics

Our group served cake at coffee break January 31, to honor Irv Walton who is terminating. He is moving to his home state, New York, with his family. Irv worked in Ceramics Engineering for 18 months.

## Plant 2, East End Finals

Denny Askew was elected group representative; Dick Ericson is assistant. Jerry Smith is first alternate; Glen Pratt is second alternate. Ray Anderson is Tekweek reporter.

Richard Hill is back at work following a short stay in the hospital.

## Plant 2, Vern Keller's Group

Kitty Anderson is running a "clip joint" on swing shift for two weeks.

## Plant 2, Kit Prep & Cables

Cookies were served for Roberta Williams and Irma Butterfield who transferred from swing shift and for Frances Woodruff who transferred to Wire Prep.

## Transformers

Anniversaries were acknowledged by Florence (Flip) Nedrow and Dick Merrow. Flip was accredited with three years as a winder on the automatic, February 8; Dick was in our assembly area two years, February 6.

## Plant 1, Bill Henningsen

Beulah Williams became a grandmother February 2. It's a girl, Rebecca Lee, born to Connie and Dan DeClerk.

## CRT Bulb Prep

We welcome some new help in our area—Linda Hollowell, who will be working with the PVA internal graticule, and Dennis Brown and Bonam Wiley, working with glass salvage.

Donna Mosier was surprised at a bridal shower after working hours in the CRT lunch room. She will be married tomorrow.

## Plant 3, East Side Gang

New group representative is Madge Worley; alternate is Betty Menard; Marie Ramakers is social chairman; and Tekweek reporter is Pat Russell.

## Plant 3, Fred's Switchers

Elections were held February 1. New officers are Mary Ethridge, group representative; Lee Greene, alternate; Anita Moore, social chairman; and Abbie Kent, reporter.

## Plant 1, Rickman's Relics

Dee Ohlsen was elected alternate group representative; Joscelyn Blake is social chairman.

Elodee Roe, from day shift Mechanical, is back from maternity leave, working swing.

Mable Bean and Freda Medearis treated the group on their fourth Tek anniversaries.

Ada Reynolds, Jean Bueneman and Ilene Watson were welcomed back to Cables after working two months in Capacitors; Mable Bean, Hilde Drugan, Ella Beaver, Alma Cooley, Irene David and Connie Anderson left February 11, to work in Capacitors for two months.

## Plant 2, Bob's Vyna Koters

Don Loos transferred to Capacitors. Recent election results placed Gale Byars in the group representative seat with Don Nordone as alternate and Al Christie as reporter.

Tim Harms has a game leg; seems he got his leg confused with a basketball and tried to put it in the basket.

## Shop, Chips from the Chipper

We wish Mike Martin lots of luck on his new job in Plastics Tooling.

Group representative is Hap Flynn; alternate is Leonard Miller; and Jim Brennan is Tekweek news reporter.

## Plant 2, The Solderettes

Cake was served to celebrate the birthdays of Jeanne Green, Anna Scott and Connie Adams.

Clara Martin is on sick leave.

## Plant 3, Planning

Mary Williams treated us when she marked her fourth Tek anniversary.

The new Plant 3 receptionist is Barbara Angell, daughter of Ed Angell of Cabinetizing.

Our sympathy to Pauline Johnson whose father passed away recently.

Dick Mash and Chuck Harding of Special Stock have swapped shifts. Chuck will work on his house during the daylight hours.

## Food Service

Elizabeth Hamilton, who will celebrate two years in our department next Thursday, can be justly proud of her two youngest children who made headlines in the local Newberg paper. Judy, a high school senior, was January "Girl of the Month" at Newberg high school. Richard, who received a BS degree from Portland State college in 1962, and is currently studying for his masters in Washington, D.C. at American university, has been selected as a member of the Peace Corps. He began a two-month training course at Lincoln university in Oxford, February 7. After a ten-day visit he will finish training in Puerto Rico. From there, he will travel to Liberia to teach.

Glady's Farah, who is on sick leave, served refreshments to commemorate four years at Tektronix.

## Thank You

My sincere thanks for all my Tek friends for the lovely flowers and cards I received during my recent illness. Loretta Hamel (Plant 2 Test).

We sincerely thank the many people at Tek who sent cards and kind expressions of sympathy at the loss of our son-in-law. Our daughter, Janice, was deeply touched by the thoughtfulness of the group in CRT, and she expresses her appreciation. Charlotte Howell (CRT Production Engineering), Jesse Howell and Janice Bolton.

I wish to thank my friends at Tek for the thoughtful words of sympathy and for the lovely flowers at the death of my father. Mary Robertson (Assembly, Plant 1).

Thanks to our many Tek friends. You have been very kind and considerate during our recent time of sorrow. Beulah Veach (IMPS Accessories), Debbie Selland, Mr. and Mrs. Eugene Selland.

I'd like to thank all Tek personnel for the flowers they sent while I was hospitalized. Gary Vandehey (Test, Plant 3).

We thank our friends at Tek for sympathy and thoughtfulness that was expressed when my father passed away. Ralph Vandehey and family (Building Services).

I thank all my friends at Tek for the lovely plant and the cards they sent during my recent illness. Arlene Reed (Assembly, Plant 2).

# Trading Post

Deadline: ads must be received at the Tek-week office by Friday noon to appear in the following issue; send to delivery station 74-298

or phone extension: 405; 1 ad per person per issue; 15-word limit does not include name and phone number.

## SC. FOR SALE

**ENCYCLOPEDIA:** American Peoples, '54 edition, 20 volumes with stand, \$50. Gail, PR 5-9670, 6-9 p.m.

**JOHNSON MOTOR:** '62, 18-hp, never used, new guarantee, \$355. Chuck, ext. 351 or 287-9571 aft. 4:30.

**SENTINEL REVOLVER:** .22 Hi-Standard, 6-in. barrel-tooled holster, \$42.50 new, asking \$35. Al, ext. 447 or MI 4-9798.

**BOLEX:** 8-mm, turret w/3 lenses, case & access., \$195. Bob, ext. 369 S or CH 4-1714 aft. 5:30.

**TOY POODLES:** white, purebred, \$40. AV 6-1187 aft. 4.

**FIGURE ICE SKATES:** ladies, white, size 7, \$10; '61 T-Bird fender skirts, \$20. Dean, ext. 325 or MI 4-8996.

**LUGGAGE RACK:** for standard cars, \$6 or trade for VW cartop carrier. Mickey, ext. 447 or MI 6-1294.

**PORTABLE HEATER:** 220V, thermostat control, \$20. 289-1232.

**TABLE SAW:** 8" Craftsman, ¼-hp motor, \$90 or best offer. Ralph, ext. 7291 or MI 4-2849.

**FREEZERS:** chest type, 14.5 cu. ft. Frigidaire, \$90; 12.5 cu. Coldspot, \$75. Everett, ext. 7354 or OL 6-7022.

**SKIN-DIVING OUTFIT:** wetsuit, tank, spear gun, mask, etc., like new, \$100. Jay Quimby, ext. 7695 or BE 6-9960.

**PLAYPEN:** no pad, bassinet, car bed, stroller, car seat, very gd. cond., all for \$30 or sell separately. Bud Ramsdell, ext. 7185 swing or MI 4-9608 days.

**ZENITH HEARING AID:** like new, cost \$175, sell for \$100. YU 5-3512.

**TORY:** w/wall bracket & fixture, \$7.50. Glen, ext. 452.

**KEYSTONE CAPRI CAMERA:** 8-mm, w/case, .38 S & W, 1 box ammo., \$65. MI 4-3326.

**OUTBOARD MOTOR:** 35-hp, elec. starter & generator, \$150. CY 2-5057.

**BATHINET:** \$5; TV stand, \$2; ski boots, size 10½, \$15. Ext. 224 S or AT 8-2431.

**CARTOP CARRIER:** used once, \$7.50. AT 7-0412.

**KEYSTONE MOVIE CAMERA:** 8-mm, turret lens, built-in haze & type "A" filter, one year old, \$35. PR 5-4403.

**ALFALFA HAY:** 1st & 2nd cuttings, no rain, \$32/ton. Ext. 7767 or KE 9-3321 aft. 6.

**WESTERN SADDLE:** ladies, gd. cond., bridle & blanket, \$95. MI 4-5408.

**PRESSURE COOKER:** 7-qt., \$10; movie lights & tripod, \$10. BE 6-8810 aft. 4:30.

**BOY'S BIKE:** 24-in., gd. cond., see at Marv's Chevron, Cornelius, \$10. EL 7-9615.

**PACKARD-BELL TV:** excel. cond., table model w/legs, will take trade, '58 model, \$55. Don, ext. 7695 or 232-5590.

**TYPEWRITER:** Hermes rocket lightweight port., two-color ribbon, excel. cond., best offer. Ext. 7694 or OL 4-2315 aft. 7.

**PLYWOOD BOAT:** 14-ft., \$25; Tonneau cover for '61 TR-3, \$7.50. MI 8-3002 aft. 4.

**THREE END TABLES:** blond, \$12; chrome set, \$25; stroller, \$5; baby tenda, \$5. MI 4-8687.

**LOW STATION:** complete, MBR-5 MB-560 trans., incl. power supplies, cables, etc., excel. cond., \$25. Dick Morris, ext. 7161.

**UPRIGHT PIANO:** \$125; hide-a-bed, Simmons, \$60; 19-cu. ft. Amana Freezer, \$100; BC 669 Transeiver 80/160 meter. Don Middleton, ext. 7460 or 654-1270.

## MISC. FOR SALE

**HAM GEAR:** Apache TX-1 trans., \$240; wiring comparable to Tek's. John Bookout, ext. 7160 or BE 2-1419.

**TEETER-BABE:** \$5; set of 6 Playtex nurses, \$5; adjust. dress form, \$7.50. MI 8-5864.

**WURLITZER SPINET PIANO:** limed oak, w/bench, excel. cond., \$450; '58 Hotpoint, burners & oven work, fair cond., \$35. Ext. 607 or CY 2-3875.

**BUNK BEDS:** wagon-wheel design, maple, w/springs & mattress, \$50. Ext. 7488.

**ADMIRAL DISHWASHER:** portable, '62, excel. cond., \$100. MI 6-2475.

**HOTPOINT DRYER:** ventless, \$75; Kenmore auto. washer, \$35; Coldspot 16-ft. chest-type freezer, \$65; or all three for \$150. Dennis Binkerd, ext. 7164 or MI 8-4554.

**REMINGTON ROLLING BLOCK:** 7-mm, N.R.A. good w/2 boxes shells, \$15. Ext. 7184 or CY 2-1728.

**WALNUTS:** 25 cents/lb. MI 4-4271.

**DISHES:** Weillware, dogwood pattern, 71-piece set, \$15. MI 4-6321.

**OIL HEATER:** w/thermo, used 3 mos., \$150; 7-horse rototiller, used 4 mos., cost \$465, sell for \$300. 246-7124 aft. 4:30.

**COMPLETE STICK SETUP:** for Ford 272, 292 & 312, \$100. MI 6-2381.

**SPOTTING SCOPE:** Bushnell sentry, 20-pwr., 50-mm, \$35, make offer or trade. EL 7-2332.

**WEINER PIGS:** \$12 ea. Mat Golden, 331-2695.

**PENN REEL:** w/drag, glass rod, will del. Sunset area. NE 6-2356.

**6-YEAR CRIBS:** two, w/mattress, like new, \$20 and \$25. MI 8-5821.

## CARS FOR SALE

'53 MERCURY: 4-dr., o/d, \$235; clean. CH 4-3632.

'50 LINCOLN: gd. cond., \$150. MI 4-5753 eves.

'31 FORD: pickup, spoke wheels, runs, \$150. Darlene, ext. 229 or MI 4-7478, if no ans. call MI 6-1050.

'59 VW: black, gd. cond., \$1000. MI 8-2693 aft. 4.

'52 CHRYSLER: New Yorker, low mileage, \$225. Zane, ext. 7223 or CH 6-4970.

'60 OLDS 88: 2-dr. hdtpp., deluxe trim, hydro., econ. eng., r/h, pwr. steer. & brakes, w/w tires, \$2195. Dick, ext. 7490 or NE 6-6971.

'53 CHEV: Bel Air, stick shift, gd. second car, make offer. Joe, ext. 7680.

'57 FORD: Fairlane, 2-dr. hdtpp., V-8, Ford-o-matic, w/w tires, \$795. Dick, ext. 627 or 777-2501.

'51 FORD: Victoria, o/d, \$800 or make offer. MI 4-6946 exc. Fri. eves or Sat.

'58 VOLVO: 2-dr., tip-top shape, \$795 or best offer. MI 4-3326.

'50 FORD: 4-dr., stick, 6-cyl., \$50 or best offer. Ext. 7138 or MI 4-8529.

'56 FORD: 4-dr., good cond., best offer. MI 8-4991 after 4.

'50 CHRYSLER: 2-dr., dependable, runs good, \$100 or best offer. Ext. 7115 or 292-5889.

'58 FORD: Custom 300, good shape, new brakes, \$925 or best offer. MI 8-2395 aft. 4.

'50 DODGE: Coronet, 4-dr., r/h, 56,000 miles, immaculate, see to apprec., \$200. Ext. 7416 or MI 6-2887.

## CARS FOR SALE

'53 CHEV: r/h, orig. paint, real clean, \$325. 771-3068.

'50 JEEP: Civilian, 4-wheel dr., full top & tow bar, \$600. MI 4-7589.

'54 MERCURY: hdtpp., stick, black, gd. cond., \$375. Roberta Williams, ext. 7795.

## RIDES WANTED

FROM 1197 S W MENLO DRIVE: betw. Allen & Farmington rds., to Sunset, 8:4-30. Gwen Whiteneck, ext. 214 S or MI 4-8340.

FROM S E 18TH: Hillsboro, to Sunset plant, 7:30-4. Mitchell, MI 8-5113.

FROM S E 77TH & POWELL: to plant 3, 7-3:30. PR 1-0929.

FROM S E 73RD & POWELL: to bldg. 76, 7-3:30. Howard Adams, ext. 447 or 774-2558.

FROM S E 136TH: betw. Holgate & Foster, to bldg. 39. Ginger Lewis, ext. 7697 or 775-3857.

FROM CEDAR MILL: to bldg. 47, 7-3:30. Del, ext. 7316.

## HOUSES FOR SALE

2-BDRM: refin., floors, insul. attic & walls, SE, \$7,900, terms. John Warner, page 7301.

MOBILE HOME: ultra modern, 50x10, 2-bdrm., w/w carpet front rm., sacrifice for \$4000, good terms. MI 6-7587 or MI 4-3017.

3-BDRM: 1½ baths, assume loan w/ \$1550 or less, refrig. & stove, w/d, must sell by 3/1. 12365 S W Parkway, Cedar Hills. MI 4-1491.

4-BDRM: 2 baths, hobby rm., dble. gar., fp, hdwd. flrs., ranch style, ½ acre, \$17,750. MI 4-8105.

3-BDRM: new, din. & fam. rms., range & built-ins, 2 baths, fin. dble. gar., \$15,000. MI 8-4381 eves.

3-BDRM: Bel-Air, 2 baths, fp, patio, lge. dble. gar. w/storage, assume GI or \$500 dn. FHA, \$14,500. MI 4-7749.

3-BDRM: fenced back yd., dble. plumbing, bsmt., 2 fp, intercom system, attach. gar., alum. windows, \$17,500. CH 6-2679.

2-BDRM: w/w carpet, drapes, full bsmt., 3 fp, tile bath, S. Burlingame area, \$14,850. CH 6-1025.

3-BDRM: 1 2/3 baths, fp, attach. dble. gar., priv. patio, Beav., \$14,000, nothing down. MI 8-3314.

3-BDRM: 2 baths, 2 fp, liv-din-fam. rms., patio, fenced yd., 1500 sq. ft., 100x100 lot, \$19,000. MI 8-2643.

3-BDRM: 2 baths, liv. & din. rms., fp, kitch. w/eat. area, dishwasher, dble. gar., fenced back yd., \$17,600. CH 4-7084.

2-BDRM: 1/3 view acre, Cedar Mill area, \$7500. MI 6-2467.

## WANTED

VOLUNTEER FIREMEN: two single men for night duty at Cedar Mill fire station, room & cook. priv. plus volunteer pay on fire calls. Chief Foege, MI 4-2214.

2 CRIBS: 6-yr. & 1 other, in good cond. AL 3-8349.

CHESSPLAYERS: swing shift. Lee Miles, MI 4-4557, noon-3 p.m.

HIGH FIDELITY RECORD: & tape copying in 4 or 2 track stereo or mono., also live recording. Charles Harris, ext. 7694 or MI 4-4732.

LETTERING SET: Leroy, Wrico, Zephyr, etc. Bert Grandin, ext. 7762.

3-BDRM HOUSE: to rent, lease or lease/opt., must have oil heat, Cedar Hills dist. MI 8-3614 anytime.

MAHOAGANY TABLE: Duncan Phyffe, drop leaf. Emma Lee Tucker, ext. 270.

## WANTED

MALE KITTEN: pref. black or black & white, short-haired. MI 4-0776.

BOAT BUILDERS: persons interested in plans for building 26-ft. Calkins Bartender boat. Bud, ext. 592.

## RENTALS

1-BDRM: apt. in brick 4-plex, near Cedar Hills, Tek & transp., all util. except. elec., gar., \$95. MI 4-0365.

2-BDRM: avail. Feb. 18, 7100 SW 81st, \$80. Don Mitler, CH 4-2509.

ROOM: or room & board, for working women, in Beav., \$40 for room, \$85 for room & board. Mrs. Fields, 185 S E Betts. MI 4-6995.

2-BDRM: beaut. new luxury apt., at foot of rd. to UO med. school, \$130. Mrs. Nelson, CA 8-2590.

2-BDRM: avail. March 1, new duplex, S E 26th & Francis, fenced patio, built-ins, water, garb. pd., \$95. 234-6027 or MI 4-7642.

2-BDRM: pty. furn., avail. Feb. 10, \$75. Forest Grove. BE 2-4747 eves.

3-BDRM: 3-plex, S W Allen ave. Beav., w/w carpet, unfurn., sep. fenced patio, elec. heat, \$125. BE 6-7759 aft. 6.

3-BDRM: pty. furn., Sunset hi, avail. Feb. 23, \$115. MI 4-3047.

1-BDRM: 3 apt., Beav., furn. & pty. furn., \$65, \$70 & 85. Ext. 300 S or MI 4-5075 aft. 2 p.m.

## CHILD CARE

HOT MEALS: any age, day, night & vacation work; experienced. MI 4-0808.

PRESCHOOL CARE: my home, Beav. Mrs. L. B. Vorwerk, MI 4-2408.

BABYSITTING: my home, weekdays, S E Portland. 771-3068.

MULTNOMAH AREA: my home, day, night, weekends, any age. Joy Berg, 9221 S W 43rd, 292-5524.

CHILD CARE: my home, 1 or 2 children, 6 mos. & up. CH 4-9035.

CHRISTIAN HOME: 2 yrs. & up, close to Tek. MI 4-7666.

BABYSIT: my home, 6820 S W Walnut, experienced. CH 6-5647.

## Field Personnel Move, Take Over New Duties

Elmer Seelye, Field Engineer trainee, transferred from Albuquerque to Portland Field Training.

The following Field Maintenance Engineers also transferred: Stanley Griffiths (Portland Factory Repair) to Orange; George Magnett (Field Training) to Washington; Donald Louthan (Field Training) to West L.A. and Dean Hill (Field Training) to Chicago.

## 'Mutiny' Discount Offered

Employees may obtain discount order forms for the movie, "Mutiny on the Bounty," from their area receptionists. The M-G-M film will be shown at a 20 per cent discount price Wednesday, March 6, at the Music Box theatre.



**RAY FORNSHELL SHOWS** his homemade eight-foot camper. Ray, a Mail Room employee, designed and built it during three months' after-work labors. Total cost was about half the normal retail price for similar campers.

## Job Postings

Tektronix employees should contact Alice Kida, ext. 7620 (8-7620 from Sunset) to apply for positions listed in JOB POSTINGS.

**STOCK RECEIVING CLERK:** Man to work day shift for the Materials group of the Planning department of Plant 4, Instrument Manufacturing (J.P. no. 979). **FUNCTIONS:** Deliver materials to various areas in Plant 4; maintain records of material deliveries. **QUALIFICATIONS:** Knowledge of material control functions helpful; ability to work with part numbers helpful; good physical condition—heavy lifting required.

**MESSENGER:** Woman to work day shift for the Messenger Service group of the Plant Supporting Services department of Central Staff Services (J.P. no. 4682). **FUNCTIONS:** Pick up and deliver inter-plant mail; post bulletin boards; operate duplicating machines; type. **QUALIFICATIONS:** Average typing ability; clerical experience helpful; good memory.

**TOOL & CUTTER GRINDER:** Man to work swing shift for the Manufacturing Engineering department of Fabrication & Molding (J.P. no. 5805). **FUNCTIONS:** Grind all types of tools, gauges and parts. **QUALIFICATIONS:** Three to five years' experience in machinery shop; ability to read blueprints and use measuring devices; compatible personality.

## Teks in the News

**Pete Parson** (Plant 3 Test) is vice-chairman of a Hillsboro committee which was formed to sponsor a Hillsboro float in the Portland Rose Festival parade this year.

**Oscar Olson** (Capacitors Component Engineering GM) and **Don Stradley** (Capacitors Mechanical Design GM) visited several California instrument manufacturers this week to study their QC measures and specification parameters for manufacture of components similar to Tek's.

Lafayette field engineer **Tony Bryan** showed Tektronix' film, "Signal Probes," to the February

7 meeting of Livermore, Calif., Amateur Radio club.

Next Monday, Tuesday and Wednesday, **Doug Cure** (Field Information) will attend an American Management Association conference, "Planning and Creating Profitable New Products," in Chicago.

**Hans VanDam** (Controller's staff) received notice February 5, that he had passed his Certified Public Accountant's examination.

Five Tek employees will attend the International Solid-State Circuits conference in Philadelphia, Wednesday, Thursday and Friday. Instrument Design Engineering sends **Norm Winningstad**, **Chuck Edgar** and **Sam McCutcheon**; Research (Semiconductor Devices) men attending will be **John Matcich** and **Bill Myers**.

## CRT Automates

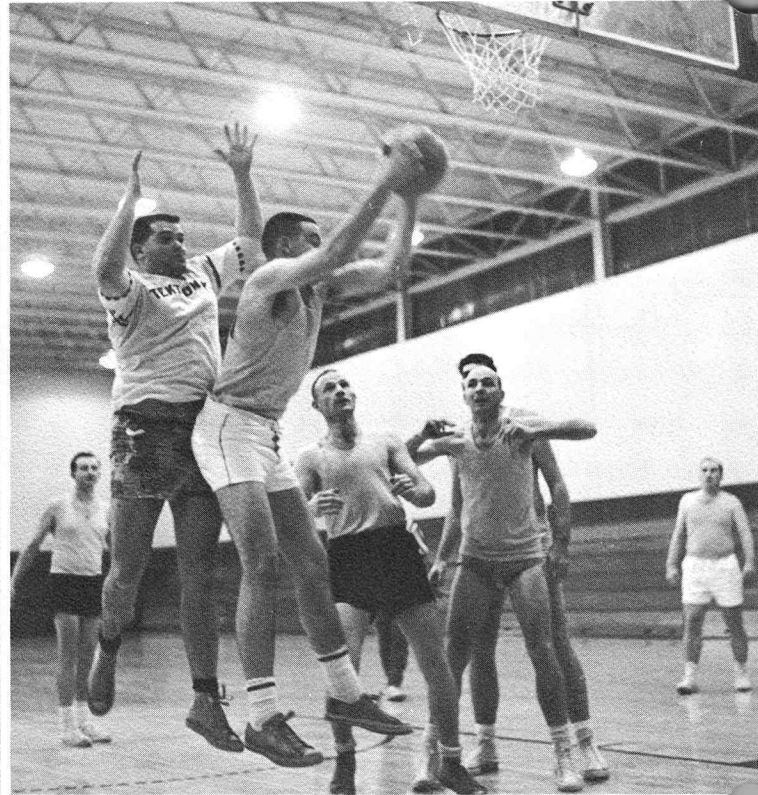
continued

Joe pointed out that other benefits exist beyond increased production capacity: Greater flexibility in building the right stem to meet exact tube requirements, and freedom from depending on a supplier to provide a stem critical to Tektronix' CRT performance.

## Shutterbugs Meet Monday

On Monday, employees interested in forming a Tektronix camera club will meet at 7 p.m. in main conference room of the Metals building. Officers will be elected and a club constitution will be voted on.

# Sports



**PERSONNEL CAPTURES** rebound of Plant 3 shot in critical February 6 Tek Basketball league game. Bob Fowler (Personnel) takes rebound from Dean Christiansen (Plant 3) as Personnel teammates Bob Martyn and Ron Elarth watch. Outside the action are, left to right, Jerry Maxwell (Plant 3), Tom Moore (behind Ron—Plant 3) and Dan Thompson (Personnel). Plant 3 maintained its league lead and unblemished record by winning the game, 47-43.

## Statistics

### BORN:

To **Carolee and Jim Truesdale** (International Marketing), a son **Patrick Wynne**, 9 lbs. 4 oz., February 2.  
To **Eldon and Ruth Hoffman** (Mechanical Instrument Design), a son, **Richard William**, 6 lbs. 14 oz., February 8.  
To **Warren and Sally Reimann** (Component Selection), a son, **Matthew Scott**, 9 lbs. 1 oz., February 2.

### MARRIED:

**Barbara Brisbin** (Unit Wiring, Plant 3) and **Donald Davenport** (Finals, Plant 3), February 1.  
**LaVona Bolin** (Accessories) and **Jerald P. Schwindt**, February 8.

## Tekweek

TEK WEEK is published every Friday for Tektronix employees by the Communications department in cooperation with the Printing and Photography departments. Carol Day, editor-writer; Donn Beck, staff writer; Jane Martin, staff writer; Graphic Arts group, layout and paste-up. Del. station 74-298; extension 405.

## Golfers Elect Officers

Tek Golf club elected 1963 officers February 6. They are: **Joe Almand** (Facilities Coordinator), president; **Floy Parries** (Facilities Design), secretary; **Ross Hood** (Maintenance Electrician), tournament chairman; **Neill Martin** (MMQA), handicap chairman and **Larry Frost** (Facilities Mechanical Design), banquet chairman.

## Bowling

Feb. 4-8

Tektronix league results for the week were:

**Tek Bugs:** Kathy Leslie (Shop Pre-pack) 181; Lois Duke 509. Burt Eberly (Manufacturing Tooling) 240, 589.

**Tek Late Winter Mixed:** Harriet Davis (Plant 1 Assembly) 150, 434. Olan Vineyard (Plant 3 Test) 210, 557.

**Scopettes:** Olive Mead (Plant 1 Assembly) 193; Doris Gibbens (Plant 2 Secretary) 506. Darlene Samuelson (Plant 2 Assembly) 504.

**Tek Women's:** Helen Huff (Plant 1 Assembly) 181, 454.

**Tek Men's:** Bud Jorgenson (DOQA) 216; Dale Stobbe (Shop) 589. Gordon Mery (MSE) staircased: 133, 134, 135.

## Calendar

**Tek Gun club:** Tonight at 7:30, informal .22 caliber shoot, Hind's warehouse.

**Rock club field trip:** 9:30 tomorrow morning, Barview beach. Meet on roadside, Tillamook side of Garibaldi.

**Valentine's Day dance:** Tomorrow night, Hillsboro Moose lodge; ext. 7694 for tickets. Sponsored by Plant 1.

**Tek Bowling tournament:** This Sunday and next Sunday, February 17 and 24, at Valley Lanes.

**Office Girls' dinner:** February 27, 7 p.m., at the River Queen. Reservation deadline today. Ext. 7660 or 640.

**Blood drawing:** 1 to 6 p.m. Friday, March 1, in Bldg. 45 cafeteria. Group II, Hemo Goblins.

**Tek Hockey:** 9:00 March 4 at Memorial coliseum. Tek vs. Blue.

## Tek Tours Arranged

A group of 30 engineering students from Seattle university will tour Tektronix industrial plant next Thursday.

The annual Business-Education Day is April 10. Tektronix will host about 125 Portland teachers that day. They will tour the plant, hear an explanation of operations and have luncheon.