

Computation Center staff member Robert De Prisco at one of increasing number of remote consoles.

remote terminals throughout the Institute and are connected to the Computation Center by telephone lines. Thus, a researcher or student can go to a console convenient for him and run his program without ever going to the Computation Center.

SUPER COOP

The maroon and gold truck shuttles steadily back and forth carrying stock from the Technology Store to the new Coop on the street floor of the Student Center. Actually, the Coop is going home, for it began in the old Tech Block when MIT moved to Cambridge in 1916. Except for familiar faces and merchandise, the new Coop bears little resemblance to the crowded Technology Store that has housed it since 1937. Carpeted floors and wide aisles invite book and record browsing; mirrored pillars encourage trying things on in the clothing departments.

Occupying four times as much floor space as before, all departments in the Coop will be expanded and some new ones will be added. For the first time there will be a complete women's shop, similar to the one at the Harvard Square Store. Its elegant fitting rooms are approached through a gold-leaf doorway. In addition, a full scale drug department and an optical shop will make their appearance.

Nearly half the store will be occupied by book and record departments. Already large shipments of textbooks are arriving, being marked and stacked for registration day, when for

NEW GENERATION

Continuing a tradition of cooperation, MIT and IBM last week announced a new \$6,000,000 computer will be installed in the Computation Center. Within the next year and a half the 7094 will be replaced by the IBM System/360, Model 67, a time-sharing machine approximately 15 times as powerful as the present one. IBM not only will install the new computer, but will contribute toward the cost of maintaining and operating it.

The Computation Center has contributed to many of the most important advances in computer technology since it began nine years ago. It pioneered the system of time-sharing, by which the computer can switch from one problem to another so rapidly that to each person it appears as if he alone were using the system. The present computer can accommodate 30 such users at once; the System/360 will be able to handle more than 200.

Computer consoles, resembling ordinary electric typewriters, are located at



Book section of new Coop being stocked for the opening next month.

A special order section in the cashier's office will handle any desired items not regularly stocked.

The Lobby Store, separate from the main Coop, will remain open in the evenings, filling last-minute needs like paper, toothpaste, aspirin and candy. The barbershop with eight chairs --an increase of two--will no longer open to the main store, but will be on the lower level.

Membership in the Coop is available to all who work at MIT, in addition to students, and the new store will certainly invite attention when it opens around the first of September.

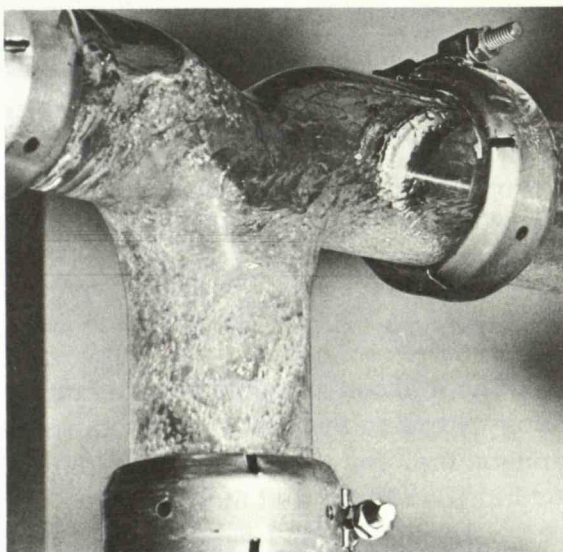
IN TUITION

Beginning this fall, tuition assistance offered by the Institute will be available to more people and will cover more educational costs than ever before. For the first time, full-time members of the research and administrative staff will be eligible to receive tuition assistance for approved work-related courses. Also, the Institute will reimburse staff members and employees up to 75% of tuition and allowable costs, to a maximum of \$300 per calendar year, for successfully completed courses. Revised descriptions of the Tuition Assistance Plan and revised application forms soon will be available from supervisors or from the Office of Personnel Relations.

EVERY DRIBBLE BIT HURTS

All over the Institute venerable fans have returned from years of storage in dusty closets to replace, as best they can, the now forbidden water-wasting type air conditioners. Except for small, room-size air conditioners and large cooling plants using re-circulated water, all water-cooled systems needed only for comfort are being turned off until MDC water restrictions are removed. Water-cooled systems needed for research facilities affecting the national security are still permitted, but may be curtailed if the water shortage continues.

Please get in touch with Mr. Barraford (Ext. 756) or Mr. Webber (Ext. 748) for questions and information about water restrictions which may affect your work, and avoid wasting a single drop.



New glass pipes in Life Sciences are reminders to save water.

the first time, books and students can be matched in a reasonably orderly fashion. Large selections of paperbacks, general hard-bound books and records will be displayed to make self-selection easy, and a desk for special orders promises speedily-filled requests.

A spacious appliance and gift section will make its appearance along walnut paneled walls, the photography department will have room to display and demonstrate its wares, and stationery and greeting cards will have much larger assortments from which to choose.

MESSENGER EMERITUS

"Oh, I'll keep busy," Frank Conlan said when he retired as a Graphic Arts messenger last week. On his immediate list of things to do is a top-to-bottom redecorating job on his house, wallpapering, painting and refinishing floors.

Spare time has never meant idle time to Frank. For years he has been a meat cutter for a packing house on Friday nights, rising early Saturday morning to work at the egg market in Faneuil Hall. In off hours at home he busies himself turning out woodworking novelties.

Frank was a member of the Boston Police Department for 42 years before his first retirement. While there he headed up a 1,000 member division of junior police, supervising organized sports and sightseeing trips throughout the Boston area. Once on a hike through the Museum of Fine Arts a missing boy was found sound asleep in a mummy case.

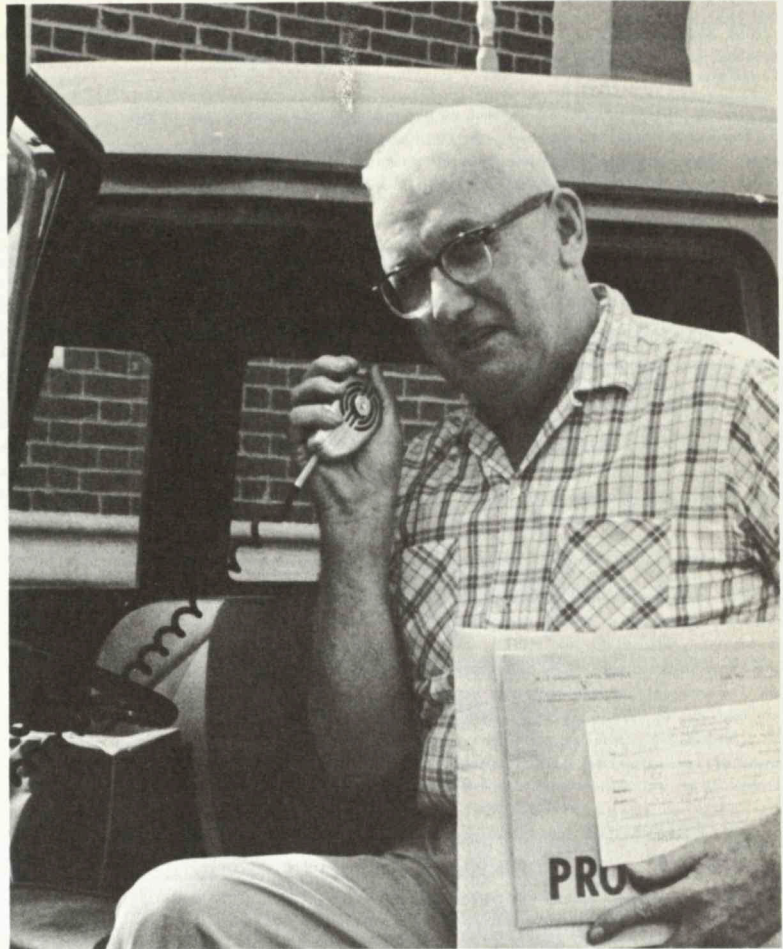
When he first came to MIT seven years ago, Frank was the only Graphic Arts messenger. He covered the whole campus on foot, sometimes hiking as much as 19 miles in a day. Now three messengers cover three separate routes by truck. In the five years since Frank has been motorized, he's gained a pound.

In the evenings Frank frequently is found as far away as Pittsfield or Holyoke participating in meetings and social occasions of the 104th Yankee Division Veterans Association, of which he is an officer. He went with General Pershing to fight in the Mexican revolution in 1916, then spent about three years in France during World War I, returning with the Croix de Guerre, a Purple Heart and a Silver Star.

Sightseeing around Boston and frequent trips to northern New England and Canada have made Frank a "walking map," a title he intends to uphold in retirement. "You have to keep going or you'll get old," he says.

WESTGATE WINNERS

The Westgate Athletic Club softball team won the MIT Summer Softball League competition when the season closed August 12. Maintenance (Ed Nordstrom, Manager) and Westgate (Ed Pollard, Manager) were tied for first place at the end of the regular schedule. Westgate won the ensuing playoff, 10 to 5, to take the league championship, then went on to win three contested playoff games to become playoff champion as well. All together, Westgate won 14 games, lost one, and scored 209 runs to 60 for their opponents from the other eleven teams in the league.



Signing off at Graphic Arts: Frank Conlan.

FOR SALE, ETC.

- Corona Zephyr port typewriter, \$10; Columbia record player, \$15; 4-drw wooden desk, \$15. Call Ed Caress, ext 4541 or 868-9133.
- 3-piece home metal workshop: lathe, shaper & miller, many extras. First \$1200 takes the lot. EX 5-4235 evgs.
- US and misc foreign coins, some in folders, gd start for collector, circulated to fine cond, reas. Also, wanted by collector: stamps from foreign mail, will buy or trade with other collectors. Bob, ext 3868.
- Brutal Beast class 14' sailboat, wonderful for youngsters & oldsters, \$95. Bob Sherwood, ext 6573.
- Must sell: dbl bed, 5-drw chest, desk, bookcase, etc. Call 324-8079.
- Magnavox hi fi, exc sound, like new, table/floor model, leather top, \$34, will haggle. Mark, ext 30557.
- Blue silk sofa, with slipcovers, reasonable. BE 2-0959.
- Brand new fibreglas cover for compact car, \$15. Judy, ext 737.
- Skinner (baby) box with repurchase option, \$50. VO 2-3844.
- Tonneau cover for '58 Chevy convert. Joe Wolf, ext 3772.
- Brand new carry case for all new Polaroid colorpack cameras. List \$10.50, will sell for \$5. Don Dewey, ext 82-201.
- Solid maple rocker, will haggle, moving, must sell. Call 491-4125.
- Brown studio couch, almost new, sleeps 2, \$35. Call ext 3566 or 265-7603.
- Lady's ski boots, Rogg, size 7 1/2 M, exc cond. Orig \$100, now \$15. Ski poles, \$3; 2 ski racks for VW, \$4, assorted lift tickets thrown in free. E. Sullivan, ext 422 Linc.
- Marimekko dress, sleeveless, dk brown print, size 8-10, never worn. Mary, ext 2436.
- 3 Free kittens, 9 weeks old. Ext 2758, Betty McCarroll.
- Leaving country, must sell household furn & appliances. Elaine, ext 5496 or 547-8518 evgs.
- 5 pieces Atlantic luggage, brand new, still in cartons. Retail \$86, asking \$70. Also 8 cu ft Servel gas refrig, \$35. Mrs. Ryan, 762-6095.
- Roberts 770 tape recorder with crossfield heads, 2 AR3 spkrs, unused. Call 254-7541.
- Royal port typewriter, \$35; butterfly chair, \$4; sectional sofa, \$25; baby carriage, \$14; chest, \$10; window fan \$10, scales \$2; '62 VW, 35,000 mi, \$900 or best offer. KI 7-0238.
- 2 6.00x15 tires and rims, like new; 2 6.00x15 snow tires and rims, \$35 for the lot. Ext 5274.
- Port sewing mach, \$30; K table, 5 chairs, \$10; dresser, \$6. Call 547-8919.
- House lots, 1 acre, West Andover. Ext. 5434.
- 4 mc/s Heathkit scope with probe. Bob Norander, 893-9200, ext 2209.
- 3 beds, 2 bureaus, couch, coffee table, side table, bar, fireplace set. Maggie, ext 2661.
- Maytag dryer, electric, like new, sell \$50 or trade for gas dryer. Ext 2489.
- Coins for sale, US, Canadian, British. Alan Kessler, ext 5853 Linc.
- Remington office model typewriter, gd cond. Ext 4061 or 625-1762 evgs.
- Man's bike, gd cond, \$25. Cameron Smith, TR 6-8996 evgs.
- Upright piano, gd cond, \$40. Ext 5275 or UN 8-9766.
- Vacuum cleaner, attachments, \$25; coffee maker, new, \$10; Polaroid camera, access, bag, \$15. Call 232-6671.
- Taylor-tot deluxe stroller, \$15. Kiddie-koop crib & matt, \$25, both exc cond. H. Curtis, ext 6116.
- Man's 10-spd bicycle, 27x1 1/4 tires, exc cond, best reas offer. Douglas, ext 3584.
- Single bed, with box spring and matt, exc cond, \$30. L. Brekka, ext 8049 or 862-6021, ext 49.
- Small clothes dryer, brand new. WA 4-7914.
- Transcription turntable, viscous damped tone arm with diamond cartridge, EICO, HFT90, FM tuner, all in table top cab; Pioneer PAX 12C speaker in Gately corner horn, all gd cond, \$100. Fisher, ext 3968.
- 2 large wooden desks, suitable for filing (6 drw), \$25 or best offer. Call 547-3064.
- Hercules 3 spd lt weight racer bike, \$25. Also wanted: riders to Calif in Sept, any route. Stoecker, ext 2888.
- Metal K cab; man's golf clubs; Wharfedale, Garrard components, assorted drapes. Call 782-9864.
- Dbl bed, spring & matt, gd cond, \$25. Call MI 3-3843.
- Winchester national match model 70, 30-06 with case & 200 rounds ammo, shooting coat & glove, \$125. Call ext 5363 Linc or 369-6646.
- Brand new f/1.2 Canon Pellix, \$325 or best offer. Dheek, 868-9593 evgs.
- Free: new tan cat collar, size 6. Call ext 5391.
- Owens Seaskiff cruiser, 1961, 25', sleeps 4, 185 hp, exc cond, always on fresh water, \$3,795. Ext 30317.
- Regis German shepherd puppy, ext 30202 or 256-7582.
- Man's bike, 4 spd, generator & light; girl's bike; Corona Zephyr port typewriter, \$20 each. Bb, ext 3772.
- K table with 6 chairs, \$30; 8x10 brown tweed reversible rug & cushion, \$25; chest, \$25. Call 862-4511.
- Hickory skis, 6'9", \$10; Norelco shaver used 1 month, \$8. Call 442-2887 evgs.
- German Olkoff string bass with case, \$220. R. Metzinger, ext 30437.
- 12' Lapstrake runabout boat, 15 hp Evinrude motor & trailer, all in gd running cond, \$200. WA 6-2781.
- Blue sofa, 80", exc cond. Carol, ext 4936 or 762-1126 evgs.
- Beautiful blue and white English style baby carriage; also car bed, both nearly new, both for \$33. Call 354-5496.
- 16' Sniper sailboat, good daysailer, \$395. Call 523-4668 evgs.
- HH Scott LT 10 FM tuner, Mux adaptor, Garrard signature 400 changer with stereo diamond stylus, dual channel all trans 20w amp, 2 RJ sandalwood encs with panasonic 8 PW1 spkrs, \$150. Fisher, ext 3968.
- Complete dbl bed, dressers, desk, sofa, chairs, rugs, K cab, curtains, shades. Call ext 5939 or 354-1028.
- Citizen hand equipment, 2-way radios for sale. Ken, ext 30541.
- 13" rim for Falcon or Comet. Lou Goldish, ext 3584.
- Dressmaking, alterations, invisible mending, etc. Call 625-0539.
- Modern style desk with formica top, \$19. Call 924-3707.
- Slide ruler, K&E "log log decitrig;" 1 yr old, \$20. David, ext 2250.
- '29 Model A Ford, restored, hydraulic brakes, \$450. Call 566-8248.
- '54 MG TF, green & white, red int, R&H, extras, largely restored, ext 2488 or 484-8378.
- '55 Chevy, 2-dr, 6 cyl, auto, very gd eng, \$100 or best offer. Call 266-2276 evgs.
- '56 Chevy hrd tp, new eng, tires, gd cond, \$250; also baby carriage, orig \$120, now \$25. Ext 30341.
- '56 Buick, \$150. Call 628-5809.
- '56 Dodge, p steering, new paint, gd cond, WA 3-8985.
- '58 Renault Dauphine, running cond, best offer; also baby crib, matt & cover, \$7. Getty, ext 5284 or 923-8995.
- '58 Plymouth, std shift, gd running cond, \$100. John, ext 2942.
- '59 Galaxy, Ford, 4-dr, hd tp, p steering, R&H, \$525. Call VO 2-0248.
- '59 Simca 4-dr sedan, 65,000 mi, over 30 mpg, gd cond, \$150. Ext 4110 or 698-6761.
- '59 Dauphine, 48,000 mi, rebuilt eng, auto trans, must sell, returning to Europe, \$200. Call 924-4268.
- '59 Ford sta wgn, p steering & brakes, eng & trans recently rebuilt, \$400. Ext 2523 or 783-0661.
- '60 Ford Falcon, auto trans, exc cond, \$500. Call 267-2818.
- '60 Rambler 4-dr sedan, std trans, gd tires, batt, etc, \$250. FA 5-8693.
- '61 Rambler American, 30,000 mi, auto trans, reclining seats, all extras, \$700. Call Alice, ext 5918.
- '61 Fiat zagato-Abarth record monza coupe, 750 cc, mint cond. Bill, ext 2941.
- '61 Ford Falcon 2-dr sedan, std shift, 35,000 mi, avail Oct. 20, exc cond, \$600. Sylvia, ext 2130 or 536-1339 evgs.
- '62 VW sedan, exc cond, R&H, best offer. RE 4-3607 weekdays.
- '62 Corvair Monza, R&H, all equip, \$1200. Ext 4201.
- '62 Buick Invicta, white conv. Call 924-2288.
- '62 VW sedan, white, sun roof, ski rack, low mi, asking \$850. Al Diffley, ext 2360.
- '62 VW, 30,000 mi, luggage rack, R&H, 4 seat belts, \$950. Henry, ext 3756.
- '62 Volvo, sport model, heater, low mi, green, \$1100. KI 7-4763.
- '62 TR 3B, black, ww's, heater, \$1200. Ext 5545.
- '63 Studebaker, white, 2-dr, std shift, best offer. Call 275-7545.
- '63 Corvair Monza, aqua convert, auto, \$1,300. Patricia Brown, 729-3133
- '63 VW sedan, 21,500 mi, opening rear window. Call ext 5260.
- '63 Chevy sta wgn. Bel-aire, auto trans, 17,000 orig mi, like new, under sell market by \$200. Call 277-0567.
- '63 1/2 Dodge Dart 270, auto, all extras, perf cond. Call 935-2669.
- '64 white Bonneville convert, p steering & brakes, AM-FM R, exc cond, cost \$4400, will sell for \$2900. CE 5-7306.
- '64 NSU motorcycle, 250 cc, 7,800 mi, exc cond, tool kit & tire pump. Ben, ext 5849 Linc.
- '64 Chevy convert, auto, super sport, fully equipped, 283 eng, \$2100. Mike, ext 6454.
- '64 Chevy II, 20,000 mi, going to Europe, best offer. Joe, ext 3363.
- '65 VW 1500 square back. R. Harlan, ext 8053 or 646-8350 evgs.
- Spacious, nicely furn 4-rm apt, Newton Centre, sep entrance, parking, \$150/mo incl ht and util, adult couple pref. BI 4-2961 evgs.
- Amherst area, 4-rm unfurn Cape Cod house, oil ht, 27 acres, Sept or Oct to May or June, \$80/mo plus utils. Lynn, ext 2528 or 227-8959 evgs.
- Beacon Hill apt, unfurn, 2 rms & lg K, conv to MIT, refs required, avail Sept 1, \$85. Call 742-4188 evgs.
- Burlington 6-rm ranch, tool & dog house, 20,000 sq ft with shrubbery, on dead-end st near main routes, 8 mi from Hanscom, orig owner asking \$18,200. Call BR 2-1271.
- 7-rm heated apt near Central Sq, avail Oct 1. Call UN 4-3929.
- Hull Village, ranch, 5 lg rms, 2 B, mod K, southern exposure, asking \$20,000. Call 925-3024.
- Peabody ranch, half hour to Camb, 3 BR, all elec K, \$16,900. Call collect (212) 549-9497.
- Bedford, 2 BR duplex apt, 5 min from Linc, fenced yd, full basement, avail Sept 15, yr lease, \$115/mo. Call 275-7897.
- Brighton apt, furn, 4 rms & B, avail 9/20, married couple, \$110/mo. Ext 4586 or AL 4-4726.
- Effic apt, furn, LR-BR, Kette, B, hall, ample parking, yr lease, \$75/mo. Apt 12A 51 Park Dr, Boston. Call 267-0360.
- Sublet, 2-floor town house apt, 3 BR, 3B, for 1 month or more beginning Sept 3. Call 868-0745.
- 4-rm apts for rent, walking distance to MIT. Call ext 2537.
- Weymouth, 2 BR, 2-story house, shed & garage, 3/4 acre, \$14,000. Ext 7643 or ED 5-1368 evgs.
- Wayland 8-rm Cape, dead end street, wooded acre, 20 min to MIT, \$27,800. Call 358-7169.
- Wanted: 2 or 3 BR furn home with yard for visiting French researcher. Mrs. Brown, ext 4818.
- Wanted: play pen. Call 666-9469 evenings.
- Wanted: female rmmate to share mod furn Back Bay apt with 2 others. Lorraine, ext 5495.
- Wanted: small house or nice apt to rent in vic Linc. J.S. Ussalis, Linc ext 7866 or 245-3076.
- Wanted: Honda 50, will pay \$150-175. Paula, ext 30395.
- Wanted: female rmmate to share apt with 3 others in Brookline area, beginning Sept. Martha, 734-9586 evgs.
- Wanted: furn apt or room with K for one month, Sept 1. Reliable couple without children or pets. Janie, ext 30555, or 547-4721 evgs.
- Wanted: tent with floor, umbrella type, about 9x9 or larger. Dick Barone, ext 3854.
- Wanted: Potter's wheel, cheap. Chris, ext 2623 or Linda, ext 2614.
- Wanted now: female rmmate for 3 BR furn apt, walking dist to MIT. Also 1961 Lambretta scooter for sale, gd running cond, \$125. Call 354-1466.
- Wanted: children to fill fall session openings in Westgate Nursery School. Barbara Binsack, 547-7772 or Kathy Eckenberry, 547-1736.
- Wanted: ride from MIT to Wakefield 8 to 4:30. Doug Nicoll, ext 6063.
- Wanted: female rmmate for apt 5 min walk from MIT, Sept 1, \$40/mo; also homes for 3 5-month old kittens. Pat Margolin, ext 6062 or 876-9689 evgs.
- Wanted: woman to care for child, week days full time. Call 762-7621 evgs.
- Wanted: apt and female roommates in early 20's. Call AS 7-5337 evgs.
- Wanted: 1 or 2 gentle horses or ponies for riding. Susan, EM 9-3486 Concord.
- Wanted: woman to care for girl 6 and boy 4 at Westgate, starting Sept 20, hours to be arranged. Call 899-1737.
- Wanted: lively 3rd roommate to share mod apt on Harvard St near H Sq, starting Sept, \$73,33/mo. Call 491-7298 evgs.
- Wanted: rider from Parsons St, near Soldiers Field Rd, Brighton, for 2 girls, daily 9-5. Judy, ext 2691.
- Wanted: rider from Wash DC area to San Francisco, leaving Sept 15-20. Bill, 227-9684.
- Wanted: female roommate, own BR, Boylston St, Fenway area. Christa, 266-5864 after 7 p.m.

AMERICAN ROULETTE

The 1965 edition of Accident Facts, compiled by the National Safety Council, devotes considerable space to motor vehicle accidents. Some arresting statistics selected from this publication show that 535 persons died during the 1964 three-day Labor Day holiday. Within the following 12 months, 180 more deaths were directly attributable to injuries sustained during this same period, bringing the final total to 715. Only the Fourth of July and the Christmas holidays exceeded this figure during 1964.

Last year's total motor vehicle accident death toll was 47,700, of which 8,950 involved pedestrians, 24,050 resulted from collisions and 14,600 resulted from non-collision type accidents such as overturning or running off roadways. Only 100 involved collisions with animals, street cars and animal drawn vehicles.

Since nearly two-thirds of all accidental deaths away from work arise out of motor vehicle accidents, you may want to brush up on your driving techniques next Monday evening.

IF AT FIRST YOU DON'T SUCCEED...

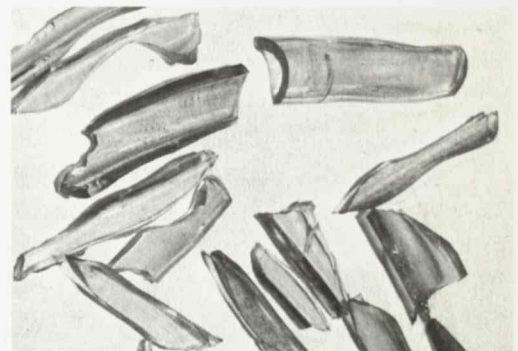
The first run of the National Driver's Test on CBS-TV last spring was a smashing success (no pun intended). An estimated 26,000,000 participated in the original showing. In response to a great demand from the public, the test will be shown again on Monday, August 30, at 10 p.m. E.D.T. If you missed the original test and heard everyone talking about it, or if you would like a chance to improve your score (most were lower than many people care to admit), here's your chance.

The enclosed form is the official test that will be shown on TV. Additional copies for other drivers in your family are available in the Safety Office. We thought it might be interesting to see how MIT drivers compare with the rest of those taking the test. Please mark your anonymous score sheets (M)ale or (F)emale and send them by interdepartmental mail to the Safety Office (MIT, E19-251; Lincoln A 218). A later issue of Safe Talk will report the scores.

COLD BLAST

A recent incident illustrates the importance of using the proper materials and equipment for cryogenic operations.

An experimental dewar filled with liquid helium was being drained at the conclusion of the experiment by means of a metal tube with soft plastic tubing attached to it. When all the liquid helium was drained, the experimenter decided to flush the system with gas. When the gas at room temperature contacted the hose at liquid helium temperature (-453.8° F.), the hose violently disintegrated, sending sharp slivers flying all over the laboratory area. While the hose is normally soft and pliable, it becomes very much like glass when frozen solid by cryogenic fluids, presenting a considerable hazard



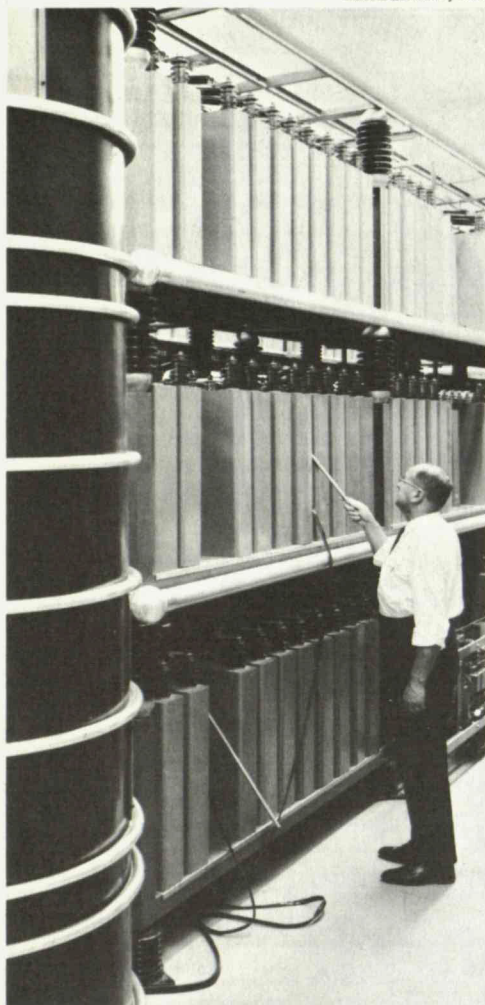
Shattered plastic tubing

LL Photo by Roy Mitchell

to personnel. It is believed that a thermal shock from the warm gas contacting the cold tubing caused it to react in this violent manner.

A preferred material for this use is gum rubber tubing which does not shatter as violently as plastic. It is also important to remember to wear eye protection when working with cryogenic fluids.

Lincoln Laboratory Photo



Mil Leavy, assistant in Lincoln Group 31, using hand held short-circuiting bar.

SHOCKING

All high-grade capacitors and, in particular, large-energy storage capacitors, as used in pulsed capacitor banks, will recover a considerable proportion of the original charging energy if left on open circuit after discharge. Experience at Culham Laboratory has shown that recovery may be as much as 10% of the original voltage, and a 30-kv capacitor may build up to 2 or 3 kv in 10 minutes. Further, dangerous voltages can build up on open-circuited high-voltage capacitors over a period of many months after they have been discharged.

This phenomena is known either as the "residual effect," "dielectric hysteresis," or "dielectric absorption" effect and a capacitor is said to have an "absorptive capacity." The mechanism of charge is complex.

It has been found that a discharge of energy exceeding 10 joules into the human body can be hazardous to life, while 1/4 joule gives a heavy shock. 10 joules would be obtained by complete discharge of a capacitor charged as in the following table:

Capacity (F)	0.002	0.2	20	80	320	2000
Charged to (KV)	100	10	1	0.5	0.25	0.1

It is essential that each spare or disconnected capacitor should be kept individually short-circuited by a robust connection when not in use.

It should also be remembered that "new" capacitors have already been energized for test purposes, and should also be kept short-circuited when stored. Capacitors built into equipment which is not in use must be similarly short-

circuited individually; otherwise, hazard may exist when they are connected in series, or if there is a circuit fault on a bank of parallel connected capacitors.

It is recommended that all such capacitors should carry a label adjacent to their terminals, e. g.: "WARNING: Keep short-circuited when not in use."*

At Lincoln Laboratory's Haystack Hill Site, the energy storage bank is composed of three decks, each consisting of 124 capacitors rated at $1.68\mu\text{F}$ each at 40 kv, which may be connected in various configurations. Thus $625\mu\text{F}$ at 40 kv may be obtained with all decks in parallel, $70\mu\text{F}$ at 120 kv with all decks in series, and $156\mu\text{F}$ with a series-parallel combination of decks. The capacitor bank is designed with mechanical short-circuiting bars, which discharge the capacitors whenever the system is de-energized. In addition, there are hand held shorting bars which are used before anyone works on the system.

*"Health and Safety Information," U.S. Atomic Energy Commission, Issue No. 213, June 28, 1965. Reproduced from United Kingdom Atomic Energy Authority Accident Prevention Issue #57, June 1965.

FIND OUT HOW GOOD A DRIVER YOU REALLY ARE

Because of unprecedented public response Shell Oil Company is sponsoring a repeat showing of

THE NATIONAL DRIVERS TEST

Monday, August 30, 10-11 PM EDT
over the CBS Network.

Over 32 million people tuned in for this revealing Test when the first home audience participation show in TV history ran before last Memorial Day.

Millions more missed it. And many want to try to improve their first-time scores, and, more importantly, their driving skills. For them—and for you—the Test will be run again before the Labor Day weekend.

See high-speed, head-on collisions develop (*you* are the driver!) and judge how best to avoid them.

Drive down a village street filled with potential traffic hazards—how many can you spot?

Compare your answers with those of a studio audience of motorists, with friends' and family scores, and with correct answers provided by law and expert drivers.

Use this Official Test Form to find out how good a driver you really are—right in your own living room on August 30!

THE NATIONAL DRIVERS TEST

OFFICIAL TEST FORM

A. JUDGMENT

Defensive Driving Techniques

circle correct letter

- SCORE
1. a. b. c. d.
2. a. b. c. d.
3. a. b. c. d.

B. KNOWLEDGE

Rules of the Road: circle T [true] or F [false]

- | | | |
|---|--|--|
| SCORE | SCORE | SCORE |
| 1. T. F. . . . <input type="checkbox"/> | 6. T. F. . . . <input type="checkbox"/> | 11. T. F. . . . <input type="checkbox"/> |
| 2. T. F. . . . <input type="checkbox"/> | 7. T. F. . . . <input type="checkbox"/> | 12. T. F. . . . <input type="checkbox"/> |
| 3. T. F. . . . <input type="checkbox"/> | 8. T. F. . . . <input type="checkbox"/> | 13. T. F. . . . <input type="checkbox"/> |
| 4. T. F. . . . <input type="checkbox"/> | 9. T. F. . . . <input type="checkbox"/> | 14. T. F. . . . <input type="checkbox"/> |
| 5. T. F. . . . <input type="checkbox"/> | 10. T. F. . . . <input type="checkbox"/> | 15. T. F. . . . <input type="checkbox"/> |

C. PERCEPTION

Hazards Alertness

List one key word for each driving hazard you see and total number between brackets below.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

NUMBER () SCORE

D. SPECIAL

circle correct letter

- SCORE
1. a. b. c. d.
2. a. b. c. d.

TOTAL SCORE

This test form is printed for your convenience in marking your answers, totaling your score and comparing it with those of your family and your friends.

"The National Drivers Test" is produced by CBS News in cooperation with the National Safety Council and sponsored by Shell Oil Company.



A. JUDGMENT

B. KNOWLEDGE

<input type="checkbox"/>	1. A car is approaching from the rear. You should:	<input type="checkbox"/>	1. Turn on your headlights.
<input type="checkbox"/>	2. A car is approaching from the rear. You should:	<input type="checkbox"/>	2. Turn on your horn.
<input type="checkbox"/>	3. A car is approaching from the rear. You should:	<input type="checkbox"/>	3. Turn on your wipers.
<input type="checkbox"/>	4. A car is approaching from the rear. You should:	<input type="checkbox"/>	4. Turn on your radio.
<input type="checkbox"/>	5. A car is approaching from the rear. You should:	<input type="checkbox"/>	5. Turn on your door lock.
<input type="checkbox"/>	6. A car is approaching from the rear. You should:	<input type="checkbox"/>	6. Turn on your window.
<input type="checkbox"/>	7. A car is approaching from the rear. You should:	<input type="checkbox"/>	7. Turn on your seat belt.
<input type="checkbox"/>	8. A car is approaching from the rear. You should:	<input type="checkbox"/>	8. Turn on your air conditioner.
<input type="checkbox"/>	9. A car is approaching from the rear. You should:	<input type="checkbox"/>	9. Turn on your power windows.
<input type="checkbox"/>	10. A car is approaching from the rear. You should:	<input type="checkbox"/>	10. Turn on your power locks.

C. PERCEPTION

Be sure to save this Official Test Form. You'll want it when you watch "The National Drivers Test" on Monday, August 30, 10-11 PM EDT, on the CBS Television Network. Check local listings for exact time and station.



TOTAL SCORE

