



into the Charles she went.

SAILING, SAILING

MIT launched its 27th sailing season Monday (April 1). The fleet includes 39 Tech dinghies, five Finns, four Fireflys and four 110s.

Sailing is open to all MIT people, with the purchase of a membership card in Room 10-180 (students, \$6; others \$8) plus a certificate stating you have passed a 100 yard swimming test. Three shore classes, covering sailing basics, are held each year. The spring course started Monday, and summer and fall courses will follow. (The summer course is better for employes, as students tend to fill up the others.) Jack Wood, Jerry Reed and Joe Duplin, overseers at the Pavilion, say the best way to learn sailing is to come with a qualified friend.

BLOOD IS GIVEN

Last week, MIT people turned out at the Armory and gave 969 pints of blood to the MIT-Red Cross 1963 Blood Drive. More than 1160 came to give blood; however, due to colds, fevers, etc., only 969 were allowed to give. Lincoln Lab gave 223 pints of blood during its two-day drive (March 14 and 15).

While many worked hard--the committee, solicitors, volunteers including the MIT Dames and Matrons, donors and would-be donors--this year's giving did not match last year's record donation of 1168 pints.

Much of the blood donated during the drive was used--in whole blood form--within a day or two after donation for operations in various Boston-area hospitals. Whole blood keeps only 2l days. The blood that remains from the drive after 2l days is fractionated and the plasma and gamma globulin used for different operative purposes, for shots against measles and polio, and for research.

MIT's blood bank account is credited with all the donations, no matter when the blood is used or for what purpose. Members of the MIT community and their families can draw against this account through the MIT Medical Dept.



Mrs. Killian was one of many volunteers who helped out at the Armory during the Blood Drive.

THE WELCOME MAT IS OUT

Mark Saturday (April 27) on your calendar. That's the date of MIT's 22nd Open House and members of the MIT community are urged to come and bring families and friends.

More than 100 exhibits, experiments and do-it-yourself demonstrations will be shown by all MIT's 22 departments. Lasers will be demonstrated, a thumb-size ruby will be grown and you will see the uses of computers in traffic analysis. A Mercury space capsule will be on display in the lobby of Bldg. 7.

Facilities open include the Nuclear Reactor, the Synchrotron (Bldg. 24), the Supersonic Wind Tunnel (Bldg. 80), and the new National Magnet Laboratory. You will also have a chance to try to beat the TX-0 computer at tic-tac-toe in Room 26-248.

The MIT Open House is put on by the students, with help and advice of faculty and staff. Co-chairmen are Robert Blumberg of Scarsdale, N.Y., and Chester E. Knight, Jr., of Louisville, Kentucky, both juniors in chemical engineering.

Enjoying good spring weather early in the season are (1. to r.) Dottie Blair and Pat Spaberg, both from the Office of Personnel Relations, and Ellie Moushegian, of the Personnel group at Instrumentation Lab.



-TT photo by Bob L;

COMPTROLLER'S ACCOUNTING OFFICE MOVING

Immediate space needs for the School of Engineering necessitated the interim move of the Comptroller's Accounting Office (Room 5-330) and the Comptroller's Payroll Office (Room 24-211) to the second floor of Bldg. Alpha in Technology Square. Present plans call for this move to take place over the long weekend of April 19 through 21. Upon the completion of the alterations to the Daggett Bldg., the offices will then move from Technology Square to the fifth and sixth floors of the Daggett Bldg.

There will be a pick-up basket for regular messenger service to Technology Square located on the counter in the Bursar's Office (Room 4-103) for papers that need more expeditious handling than the use of Institute mail. In addition, there will be a direct tie line telephone from this counter to the Payroll receptionist to expedite tracing of salary checks of the Institute community. There will be no change in the telephone extensions for either office.

The new office will be known as the Comptroller's Accounting Office and the internal address will be simply Technology Square. For outside mail the office will continue to use the Institute's address of 77 Mass. Ave.

The clearance card which is required of all staff members before receiving final salary checks may be filed in the Bursar's Office (Room 4-103) who will effect clearance from the Accounting Office by telephone. The Bursar is also arranging to issue travel tickets as well as travel advances from the same location. With these changes and a greatly expanded messenger service, the inconveniences of this relocation should be reduced to a minimum.

POTLATCH ART

Gyorgy Kepes, professor of visual design at MIT, and his wife, Juliet Kepes, have contributed paintings to the Institute of Contemporary Art's Potlatch exhibit. Also exhibiting is Richard Filipowski, associate professor of visual design in the Dept. of Architecture.

Professor Kepes' gift is "Silver Dew," a large (5 feet square) canvas in silvery-gray with

muted rainbow colors at the top. Mrs. Kepes, who won an award for a children's book on birds, has donated "Two Birds in a Sweep of Flight," painted at the shore at Wellfleet. Filipowski has given a sculpture entitled, "Crown," which is two concentric cylinders of welded bronze, showing typical thorny forms with spring-like budding leaves.

The Potlatch exhibit, entitled "Contributions," will continue through April 21. All those who have contributed financially (tickets cost \$10) will be able to participate in a Potlatch drawing for the art works, April 22. (Potlatch derives from an ancient tribal custom of giftgiving among the Northwest Coast Indians.)

The Gallery at Soldiers Field Road, Boston, is open to the public, without charge. It is open Tuesdays through Thursdays from 11 a.m. to 6 p.m. and Thursday evenings from 6-9 p.m.

SEEING IS BELIEVING

Good demonstration means good communication, some like to say. In freshman and sophomore physics classes at MIT, much of this responsibility belongs to Harry Anderson, the man who prepares nearly all physics demonstrations used in Compton Lecture Hall (Room 26-100).

"What they see, they believe, " says Harry.

Harry's quarters (26-100A) abound with hundreds of homemade gadgets used to demonstrate physical laws, principles and theories. Also in stock are a small Van de Graaff generator, a projection type cathode-ray oscillograph, and optical equipment--just to name a few. Harry's job: Build the aids, see they are in good working order, and -- most importantly -- have them ready at lecture time.

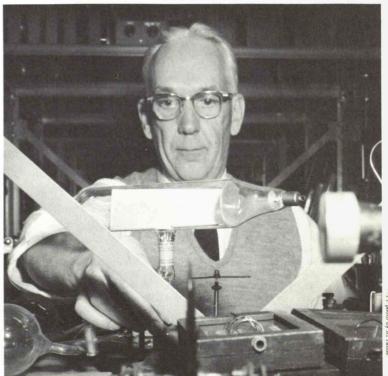
One of the more precise instruments Harry has built is a frictionless cart track, which is used to show elastic and inelastic collisions and motions under the influence of various types of forces. Professors can measure collision time to within 100th of a second.

Most of the demonstrations go off letter perfect, according to Harry. A particularly successful one is the 'phantom lamp." Here, the professor shows how the image of a light bulb will appear when a light bulb is reflected from a spherical mirror.

'We know we have communicated with the student when he goes to touch the light bulb and finds nothing there," says Harry.

There are times when the joke is on the professor. In one method used to show angular momentum, the professor stands on a relatively frictionless rotating turntable (built by Harry) and simultaneously moves dumbbell weights in different directions to rotate himself. All goes well until the "dizzy" professor steps off the rotating stool.

Harry has been at MIT since 1931, when he started in the freshman Physics Lab (Bldg. 4). From there he went to prepare demonstrations for lectures in Room 10-250. In 1957, he moved on to Compton Lecture Hall.



Harry inspects a cathode-ray tube.

FOR SALE ETC.

HiF1 speakers, new at approx 1/3 to 1/2 list price: Arion, Rockford, Jensen, Electro-voice. D. Hahn, UN4-5143 or East Campus.

Stereo pair of 8-Ohm speakers by Audionics, bkshelf sz on remov legs. J. Robinson, ext 3428.

Baby crib, good cond, \$20, GE refrig, \$35. 969-6174.

Baby carriage, canvas, incl mattress. Klein, ext 4536.

Upright plano, \$30; baby carriage, \$10. Call ext 4830 or 876-9660 evgs.

H.H. Scott stereo amp, Model 299, \$75. W. Webster, ext 4068.

Bicycle-Peugeot, road racer, 8 sp derailler, ctr pull, caliber brakes, like new, \$80 or best offer. Ext 2341 or 3896.

Diamond rings, matched set, mod settings, orig. case, \$85. GR9-8144.

Record player, \$25; bkcases; card table; sultcase; gym bag; ice skates (sz 9 1/2) \$2; bicycle, \$20; crates; lg K cabinet, \$5; refrig avail June 1, \$25. H. Gertzman, 876-8083 evgs. or message ext 2871.

Pearson-Hawk 17' Fibergias sailboat, new, complete, list price \$1780, my price \$1480. Harlow, 30-310. Solid limed oak bkcase headbd for dbl bed w/spring & mattress; 1 Hedstrom conv baby carriage & 1 Storkline baby crib. All exc cond. VO2-1921 after 6pm.

Ropper gas stove, 4 burners & heater: RCA Whirlpool sink w/cabinets, Best offer, 729-2052.

New man's Italian 8-sp derailler, new elec shavers (Schick, Remington, Norelco). Mr. Conant, ext 765.

Aqua Lung regulator, carefully maintained, reasonably priced. Mr. Haven, ext 3870 or 235-8184 evgs. Tire & tube, good cond, sz 5.60-1.4, \$5 or best offer. Call ext 709.

H.H.Scott, model 355, FM Multiplex tuner & AM tuner plus model 208, dual, 40 watt, power amp, \$275. 1 mo. old. Contact Ralph MacKnight, Lincoln ext 187.

Infant's chair, exc cond, \$2; green & blue silk shirtwaist dress, sz 14, \$10. 275-6504.

Desk, dresser, 2-sp Kenmore washer, TR6-7939.

Bozak 12" Woofer, B-199A & B-200 X tweeters, new cond, \$50. Can be seen Rm 10-001. Adler, ext 2808.

Aqua Life, SS 50 gal non-magnetic tank, heat, 200 watt 15" supreme power filter & SS reflector, value \$110, will sell for \$75. Clown loaches, \$2.75 ea, & other tropical fish. G.Sprinsky, DU7-5345 after 6:30.

12' Chris-Craft w/Fibergias bottom & steering. Any offer pushing \$85, reasonably hard. CO7-7905 evgs.

Tennis instruction by European Ace. Beginners & advanced, \$4 an hr. Pandelis, ext 3770 or UN8-7504.

14.5 cuft Westinghse refrig, 11/2 yrs old. Lg bureau & lg chair (set), misc furn. WA6-1103.

Thor-O-Matic washing mach, \$40. Alex, Lincoln ext 7351 or MI3-9323.

38' cabin cruiser, sleeps 5 or more, ideal for family, equipped, \$3500 or best offer. Will guarantee boat & finance if desired. Dr. Mirarchi, ext 5465.

Lady's lightweight touring bicycle, \$30. Ext 4433 or 491-3844 evgs.

Men's ski boots, sz 9 1/2, \$7, Call Ted, ext 2658,

Have 2 brand new tires w/wheels, 8.50xl4. VO2-7043.

21' Cruiser Incorp. 50 hp evinrude engines, all elec, like new \$1800. GR2-3659 or ext 753.

18' Cape Cod knockabout, ctrbd day sailor, good cond, dacron salls, stainless steel rigging, \$500. Will mail details on request, R.S. Cooper 5 Granite St., Camb, TR6-8307 or ext 2598.

Hanson Gates elec hot water heater, 52 gal, good cond, \$35. Vander Schuur, Lincoln ext 5861.

22' Auxiliary sloop, cruising for 2, good cond, \$2900. D. Johnson, NE1-3775.

BR set, 2 9'xl2' Chinese rugs, RCA R bar, 4'x3'. Will sacrifice. Ben Steinberg, Lincoln ext 5849. Heath GC-lA receiver, \$85; Gonset Super 6 conv & Superceiver, \$55; T-22/Arc-5, 7-9 Mc, \$10; Elco 625 tube tester, \$25. All in exc cond. CE5-6589 evgs.

Mitre box, carrying case, used 3 times, owner disabled, orig price \$49, will sell for \$35. 256-5791 (Chelmsford), 8 am to 2 pm or Nancy Curley, ext 5657.

Hart skis, 6'3", Marker bindings, used 4 times, \$60. Kastinger boots, sz lady's 6xn, \$30, poles \$4. Woman's ice skates, sz 6, \$5. Bettye, ext 711 or K17-0589 after 6pm.

Stroller, \$5; Taylor stroller, \$3; Baby scale, \$5; wood jumping horse, \$5; doll hse, \$2. TR6-9116, or

Easy spindryer wash mach, pump needs repair, free for anyone to take away, M.Patch, Lincoln ext 225 or VO2-5206 evgs.

1 pr navy blue calf, high heeled shoes, hardly worn, sz 5 1/2 B, \$8 or best offer. Nan Hamilton, ext 733 or Rm 1-173.

Desks, \$15, \$30; Bkcases \$7, \$12; record rack, \$9. Paul Brayton, ext 5685.

Telescopes: 6"F5 reflector w/2.4" F15 refractor on port pipe-mounted equatorial w/slow motion, circles & clock drive, accessories, exc visually or astrophotographically. M.Berstein, E.Campus.

About 15 ip records, mostly contemp classical rarely recorded. Any offers considered. J. Campbell, ext 5257.

Webcor tape recorder, 2-direction, 2-speed, dual record-playback heads, '57 model, will sell at 1/2 price:\$70. Tapes, etc., incl. Call Rich Merrill, CO6-6576 or ext 3215.

EMW R-27, 8 mos. old, 2500 mi, exc, best offer between \$500-600. D. Wallace, ext 3116.

Will sacrifice Mercedes 220 SE6, AM-FM, leather interior, many extras, only 14,000 mi, like new, Price \$6500, will sell for best offer over \$3400. Call 926-2275 8-9 am or 10-12 pm.

'49 Willy's jeepster, very gd cond, R, new tires, Collector's item. Asking \$1000. Ext 4921.

'52 MG-TD, old classic w/new eng, red w/red leather upholstery. Ext 637 or 326-0931.

'53 Olds 88, 2dr sedan, good running, new tires, battery & brakes, best offer. Hans, ext 2183, BE 2-7377 evgs.

'54 Chevy, only 53,000 mi. \$175 or best offer. Hagen, EL4-8317.

'54 Chrysler New Yorker, 4 dr, extras, orig owner, exc cond, reasonably priced. Ext 30-317, VO2-8558.

'55 Olds, 4 dr, 6 good tires, 1 driver, best offer. A. Foster, ext 3882.

'56 Rambler, 4 dr, auto shift, exc cond, reasonably priced. S. Skolnick, CY8-3347.

'57 Rambler sta wagon, V8, auto shift, exc body & motor cond, \$650. Ext 3644.

'57 Plymouth sta wagon, power steering, auto trans, H, new tires. \$400 or best offer. L. Ricardi, Lincoln ext 7331 or CE7-9282.

'57 Buick, 4 dr, hardtop, power steering&brakes, pb R, good cond, mech, WA6-1103.

'58 Sprite, new top, side curtains, extras. Dave DaVia, ext 2941 (9-3).

'58 Vespa, 125 cc, 3800 mi, 1 gal/mo. travel Beacon Hill to MIT. \$150 or best offer. CA7-9224 evgs.

'59 Dodge Coronet, 4 dr., 8 cyl, exc cond, \$1,050 or best offer. J. Roddy, Lincoln ext 7898 or 251-3292 after 6 (Chelmsford).

'59 MGA Roadster, good cond, '57 Hillman, good cond. Lincoln ext 5737.

'60 Valiant, \$1150. Call KI7-4466 after 6 pm, 26,000 mi.

'60 Peugeot, R&H, sunroof, 5 Michelin x tires, extras, \$800. 876-3567 after 6 pm.

'60 Chevy Bel Air, stand 6 cyl, R&H, \$1365. Andrew Lofgren, ext 3448.

'60 Morris Minor, exc cond, 30,000 mi, \$400 or best offer. H. Fields, ext 2553 or 354-7274 evgs.

'60 VW, 32,000 mi, exc cond, \$1100 will haggle. TR6-3854.

'60 Simca-Aronde, 4 dr, R&H, elec fuel pump. \$500 or best offer. 262-9468 (6-9pm) or 267-7829.

'61 Buick Special, 4 dr, auto trans, ww's, R&H, 14,000 mi, must sell. Ext 5155 or KI7-2576 evgs. Vespa scooter, '62, 2,000 mi, not used for 5 mos. 776-4713 after 5, \$265.

'62 Austin Healy MK3000. \$2450, overdrive, white, blk interior. HU6-4616 after 6 (Littleton).

'62 VW, sunroof, exc cond, want to sell early July, \$1395 if arranged now. Schade, ext 4986, 926-1825 evgs. Fully furn house, Lexington, for rent June 15-Sept. 15. VO2-8278.

3-rm apt sublet, May 1 or June 1 until Aug. 31. Comm. Ave., Brighton, \$115/mo. J. Karp, ext 3961. House Winchester, 1g, 5-6 BRs, 2 LRs, DR, K, low \$30's. Ext 5765.

Summer cottage for rent, mod, completely equipped, Higgins Beach, Maine. \$600 season, \$300 mo. Call 762-6981.

Burlington ranch, 3 BRs, garage, 1/2 acre, \$18,100. C. Werner, ext 30-232, BR2-2587.

Mod efficiency apt, avail sublet w/lease until Aug., \$95/mo. K, bath, pking. Ext 4412 or 354-7701 aft 5.

Concord, 3 yr old Cape, 5 rms 1st fl. Unfin upstairs, 21,000 sq ft, avail mid-June. \$21,500, EM9-2113.

Lexington, 3BR ranch, garage, 15,000 sq ft, asking \$23,900. W. Tanner, VO2-2054 evgs.

Sublet Pk Dr. apt, 3 rms, K, bath, furn, June 1-Sept. 1, \$95/mo. B. Wilson, ext 4188.

Apt., LR, BR, recept. hall, porch, \$77.50/mo. Allston off Comm. Ave. AS7-8156.

Apt., new furn, 2-3 men, avail June 1, call Dave Sabo, ext 2942.

Unfurn apt, LR, BR, K, bath, \$80/mo, 1309 Comm. Ave. Avail June 1 or May 1. 254-0673.

2BR apt availMay lor June 1, 23 Chauncy St., \$140/mo. Cambridge. 491-3847. Lincoln ext 5812.

Furn apt for rent, near Charles R, util incl, \$90/mo. Sublet until Sept. 742-2379 after 7pm.

7-rm Colonial, Medfield, about 45 yrs old, asking \$16,500. HI4-1877.

Cambridge 4-rm apt unfurn, \$100 sublet May 1-Aug. 1, may be renewed. Ext 2663 or KI7-8020. 8-rm Watertown apt, furn, heated w/garage, sublet April 15, \$110/mo. Renewable lease, no

children. WA3-0898.

Suite of rms in Winchester, 37 Calumet Rd., near bus, \$100/mo, W.K, Ver Planck, PA9-2557,

3-BR Colonial Lexington, Follen Hill area, garage, \$22,500. VO2-9045 or ext 3322.

Summer sublet, Somerville apt, 4 rms, near Porter Sq. \$75/mo, 776-7190 evgs.

Mod apt sublet, June l-Aug. 31, BR, Knette, Broadway between Harvard & Central Sqs. A. Shu, ext 3446 or K17-3030 evgs.

Furn 3 BR house for rent, 230 Brattle St., Camb., April 1-Labor Day. Mrs. Newbegin, KI7-0887.

Newton Ctr, 4 BR Colonial, 2 car garage, low assessment, middle \$20's. Bi4-7124.

Beacon Hill apt for rent, beautiful furn, 2 BRs, LR, Knette, bath, Avail June 1. \$195/mo. 227-0123

beacon Hit apt for rent, beautiful furn, 2 bks, LK, knette, bath, Avail june 1. \$155/mo. 227-0125 after 6 pm.

Arlington, 6rm house for sale, yard and garage. \$23,500. Owner at MIS-3260 (Immediate occupancy). Cambridge 4-rm apt unfurn for rent. 10 min to MIT, \$70/mo. Avail, GE6-6000, ext 384.

5-rm summer cottage, Newfound Lake, N.H., for rent by week or mo. 3 BRs. DA2-5949.

Royal Barry Wills Colonial, Sudbury, 6 rms & basement, 1 acre. Avail June, low \$20's. Ext 4934. Beautiful apt, unfurn, \$80/mo., 5 min from Central Sq. MTA, avail July 1. Mr. Martin, 876-4420.

Sublet June-Aug., lease is renewable, LR, BR, foyer, K, bath, \$125/mo. unfurn, Camb., KI7-0629.

Wanted: Gold coins, 1, 21/2, 3, 4 & 5. Don Leslie, ext 3451 or MU6-4684.

Wanted: Used conv sofa-bed. L. Swain, ext 2140.

2 Rmmates (male) wanted for summer to share comp equipped, furn 4-rm-2 bath apt, Comm. Ave. \$68/mo per man, parking. Call E. VanHorn, ext 3895 or M. Wiederhold, ext 2595.

Wanted: Tape recorder in good cond. George Steiman, ext 3453 or BE2-8931.

Wanted: Trailer w/winch for 14'boat. John, Lincoln ext 461.

Ride wanted from Dedham to MIT, 8-5, Ivan Stokes, ext 30-376. Wanted: Steamer trunk, 923-9497 after 7pm.

Wanted: Used office or port typewriter in good cond, reas. price. 536-8786 after 6 pm.

Wanted: Used 3-sp phonograph for child. S. Borison, Lincoln ext 7638.

Wanted: Small gas stove for use on bottled gas. Stan, Lincoln ext 5422.

Wanted: Post-doctoral physics associate w/private pilot's license & over 100 hrs flying time would like to find flying club or person w/flying time avail. Call Galen, ext 4200.

Wanted: Auto washing mach. Gene, ext 2440.

Couple wants to rent apt or small house in suburbs from late May through summer or longer. Ext. 3588. Wanted: 2nd hand playpen. Call 547-7551.

Ride wanted to and from Somerville (Winter Hill area) to MIT. Josie, ext 3727.

Babysitter wanted Wed. & Thurs., 2:30-7:00, 75¢/hr. May bring own child, must provide own trans. Call ext 2ll7 or UN4-0437.

Wanted: Ride from Pembroke to MIT daily, 8-5. Call Barbara, ext 3570

Wanted: LR, BR, K, bath apt for MIT stu & wking wife, 1 yr starting May 25. Mr. Tyler, ext 3264.
Wanted: Rider or ride to No. W. N. Y. (Rochester) on Patriots Day wkend (Apr.18-21). Betty, Lincoln ext 5812.

Wanted: Girl to share apt w/3 other girls, Fairfield St., Boston. \$53.75/mo. Ext 5281, CO2-0055 after 6.853.75/mo.

Anyone interested in sharing car expenses from Paris to Rome, possibly to Greece? Leaving Paris in early May. Call Harvey, ext 2553 or 354-7274 evgs.

Wanted: Student (preferably male) to stay w/bright 9-yr old girl, take her to museums, field trips, etc. 2 or 3 afternoons a week, 3:30-5:00. Call Mary, ext 797.

Summer sublet wanted: June 16-Sept. 1. Responsible young couple, no children, no pets. Olav Redi,

Summer subjet wanted: June 10-Sept. 1. Responsible young couple, no children, no pets. Olav Redi ext 4859.

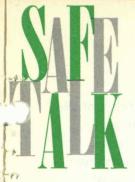
Wanted: Prof. & family (2 children) want to rent furn hise in Lincoln, Lexington, Concord for June-

Aug. Call Nancy Dunbar, Lincoln ext 5451.

Prof. & wife want house or apt furn or unfurn beginning Sept. '63. Details from Humanities Dept.,

Visiting Prof. wants apt for yr beginning Sept. '63. Will exchange for apt on High St., Oxford, Eng. Details from Humanities Dept., ext 4441.

Wanted: Twin bed, table, lamp, chair, rm divider, spinet piano, mirror, shelves for books. P. Kovich, CO2-1100 wkdays before 4:30, or ext 321.



ON DUPLICATING MACHINES

The Industrial Hygiene Office of the Occupational Medical Service is re-issuing its bulletin, "Exposure to Methyl Alcohol from Duplicating Machines," which will be distributed in the near future.

It is generally recommended that a person not be exposed to concentrations of methanol vapor above 200 parts per million parts of air on a continuous basis. At this concentration methanol vapor is odorless. Experience has shown that persons operating duplicating machines using the methanol fluid process can be exposed to air concentrations of methanol vapor as high as 1,000 parts per million parts of air when working in confined areas with no ventilation.

IHO suggests a survey of any duplicating machine that is:

- 1. Operated for more than 1-1/2 hours per day by one person.
- 2. Operated for more than 1-1/2 hours per day within ten feet of anyone's desk.

If the use of the duplicator presents a potential health hazard to any employe, the IHO will be happy to cooperate with the department or laboratory in eliminating the hazard by location change, ventilation or other means.



Josephine Lambiase of the Radioactivity Ctr. (Bldg. 6) recently had her duplicating machine checked.

SAFETY SHOES POLICY

The MIT Safety Committee recently amended the Institute's policy regarding safety shoes. The new policy, which will appear in the next edition of the Safety Manual, provides that when a supervisor and the Safety Engineer feel it is necessary that an employe wear safety shoes while on the job, the department or project will pay the cost (up to \$12 per pair) of two pairs of safety shoes during the first year and one pair each year after, if needed. From now on, those employes who previously received only partial payment for safety shoes, will be eligible for the maximum \$12.

KIDS AND KITES

Spring is a time for kite flying. If your child is an enthusiast, be sure he understands the potential hazards of the sport. The string used should not be a metallic wire nor should there be any tinsel running through the string. For, should the kite become entangled in high voltage lines, the person flying the kite can be electrocuted. Wet string on a kite will also conduct electricity, and people should not climb poles or trees to retrieve kites caught in or near wires. A good rule to abide is never fly a kite near electric wires.

DRY ICE-ACETONE COOLING BATHS

Dry ice-acetone cooling baths can be dangerous.

Solid CO₂ (dry ice) sinks to the bottom of the acetone bath, cooling the lower portion of the solvent, while the upper level warms up. The CO₂ gas evolved agitates the solution and acetone may boil over, creating a fire hazard should its vapors find a source of ignition.

One substitute for acetone--trichlorofluoromethane (Freon-II)--has a higher density than acetone. Dry ice will float on it and the cooled solvent will circulate down instead of up, and create a more uniform temperature. Freon-II, which is non-flammable and non-toxic, in solution with dry ice, can give temperatures as low as 116°F (-83°C). At atmospheric pressure the boiling point of Freon-II is 74.8°F, but in the bath, the vapor pressure is only 1.7mm Hg, so boiling does not occur.

Some additional evaporation losses occur, but the elimination of the fire hazard when Freon-II is used more than compensates for these losses. Any ice formed will float and may be easily skimmed off.

AN EASY WAY TO GET A JOLT

On the market now in increasing numbers is a hazardous water heater. This heater consists of a cord with a coiled water heating element on one end. You put the coil in the water, plug it in and it heats the water. The heaters cost from 98 cents to \$5 and come in various sizes. They are most frequently used in coffee cups.

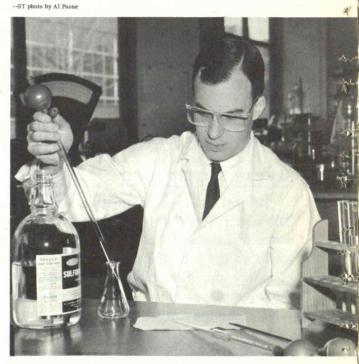
The water and its metal container can become electrically charged if the heater is immersed up to the cord or if there is a current leakage. Touching the water or the metal container while it is heating at the same time you are touching the ground could give you a shock. The hot coil can also cause a severe burn or start a fire should the water boil away and the container break.

PIPETTING SAFELY

Graham Lusk, a graduate student in the Dept. of Nutrition and Food Science, has firm ideas on how to use a pipette safely in transferring or measuring harmful liquids. Graham feels the mechanical methods—not mouth suction—should be used. Using mouth suction, even though the pipette contains a cotton plug at the upper end, is hazardous, uncertain and unscientific. Above all, mouth suction offers no protection to the researcher from the reagent.

Available are various types of pipette fillers which insure that the researcher does not "get a mouthful," and will allow accurately measured transfers to be made. Among the most popular of these is the bulb or syringe type which is squeezed manually and resultant air pressure forces liquid up a tube into the pipette.

Other safe methods include using a suction bottle or suction pump.



Graham uses a sophisticated variation of the bulb type, available from the Office of Lab Supplies. This bulb retains its suction until a small valve is operated which, in turn, allows the liquid to be drawn up the pipette. Still another valve allows you to empty the pipette in any desired amounts.