MASSACHUSETTS INSTITUTE OF TECHNOLOGY

January 29, 1964



## **RINKOMMENDATION**

One of the most popular noontime recreations at the Institute in winter is skating. Since November 14, sustained by background music, more than 5,000 skaters have used the rink. Anyone at MIT can go, whether learner or professional. Admission fee is an athletic card.

Occasionally, say operators in the Athletic Office, the rink's surface gets messy from melting, but they are looking forward to the day when a roof will prevent that.

General skating schedule is: Mon., Wed., Fri., 10 a.m. to 12:45; Tues, Thur, 1-2 p.m.; Fri., 8:15-ll p.m.; Sat., noon to 5 p.m., 7:15-ll p.m.; Sunday noon-4:45 p.m. (Between semesters, hours are more liberal -- 10 a.m.- 3 p.m. and 7 to ll p.m. everyday).

Skater at left is Jane Grace, department secretary in City Planning, who has won New England figure skating titles and passed both bronze dance and silver level of skating proficiency tests. She belongs to the Skating Club of Boston.

Photo by Bob Lyon

#### NEW FEE FOR FOOD

Grace on ice

Eating at MIT is a serious business. In-

volved in the operation of feeding MIT's population are about 100 full-time people and over 200 students, parttime. The Dining Service calculates that more than 7,000 meals are served here daily (plus several hundred more in the Buttery and snack bar), and the total yearly tab is well over \$1,000,000. Shortly, Institute diners will have to pay a bit more.

This month it was announced that there must be a rise of 15.9 per cent in prices of à la carte and commons meals, due to mounting costs of labor and maintenance, and a mounting deficit. Prices for meals at the Institute have stayed roughly the same for seven years. Figures from the Bureau of Labor Statistics show that during those years the cost of eating out has risen about 16.4 percent.

This change in a la carte prices will be made in July or September. Prices of every food item won't go up, but selective adjustments will be made for various things; for example, the daily special may not include so much for 99 cents as it did before. Says Jay Marden, Director



ON ROOF of Green Center for Earth Sciences goes equipment for Department of Meteorology. Mushroom-shaped mounts will support radar domes. Instrument tower in center will replace the windmill tower (lower right) on Bldg. 24 roof. All will have wider, clearer view of horizon.

of Auxiliary Services, it will still be possible to eat for a reasonable amount. Beverage prices will stay the same.

For students, the commons plan will increase next fall from its present \$12.50 to \$14.50 per week, or from \$412.50 to \$478.50 a year.

Announced at the same time was a 20 per cent rise in student dormitory rates. Average campus rate now is \$370, excluding McCormick or Bexley Halls, and will increase to \$445 per year.

Photo by Bob Lyon



Wallace Fleming in lab

# HYDRO DYNAMO

One of the most demanding and at the same time enjoyable things about the job Wallace Fleming (Civil Engineering) has done for the past eleven years, he says, is its variety. Wally is a project machinist in the Hydrodynamics Laboratory machine shop in Bldg. 48. Both undergrads and candidates for advanced degrees work on thesis and sponsored research projects there concerned with basic problems in the dynamics of water flow. Study topics arise from unknown phenomena in both natural and artificial channels and rivers and from all sorts of wave phenomena, from pollution in estuaries to sand drift along beaches. Working along with the students, on as many different applications as there are projects, is Wallace Fleming.

Working with two other men in the shop, Wally constructs components used in the experiments, often with no detailed drawings to follow, just a verbal description. In the Lab itself are several wave tanks in which wave motion is produced by machinery; also harbor wave basins and a water tunnel, like a wind tunnel, are available. Wally built many of their intricate components.

In one project students are studying the rate at which turbulence increases the absorption of oxygen in river water, quickening its purification. For a Navy study Wally worked on a model of the destroyer base at Codington Cove near Newport, R.I. The harbor was constructed in miniature right there in the lab to determine the exact location for a breakwater. For the MDC they built a mo-

del of the new flood control-dam, below the Charles River Dam, mainly reproducing the flow in and out of the large pumping station. These are just a few of the hydrodynamics projects in which Wallace Fleming has participated.

A native Bostonian, he graduated from the Mechanic Arts High School and now lives in Milton. He held several jobs before coming to MIT; worked at the Navy Yard during the war. But no place has he enjoyed so much as here. 'Working with the students," he says, "gives me a great deal of satisfaction."

#### CU ACCOUNTS AUDITED

The MIT Credit Union accounts ending in 6 and 7 have been audited and verified as of Dec. 31, 1963. Confirmation notices have been mailed. If there are any discrepancies, CU urges that the notices be returned as soon as possible. If your account number ends in 6 or 7 and you have not received a confirmation notice, please contact Joseph Cullinan (Chairman of the CU Supervisory Committee) at 20C-222A or on Ext. 4495. Federal regulations require that CU accounts be audited periodically, and the Supervisory Committee does a group each quarter.

# NEW RESPONSIBILITIES

Dr. Carl F. J. Overhage, who has been director of Lincoln Laboratory for the past seven years, is coming to the campus in July to initiate and direct a program to establish the bases on which the technical library of the future may be modeled, applying principles and methods of information processing to library operation. Ultimate objective of the long-range program: design of a library of science and engineering which could go into operation at MIT between 1970 and 1975.

Starting in February, Prof. William H. Radford will be director of Lincoln Lab. He has served there since it began in 1951, and has been associate director for seven years. New associate director is Dr. Benjamin Lax who at present is head of the Lab's Solid State Division and also director of the National Magnet Lab, to which he will continue to devote a portion of his time.

Here at MIT, Dr. William N. Locke, who for eight years has served both as director of libraries and as head of the Department of Modern Languages, will devote his entire time to management and development of the libraries, starting this summer.

Dr. William F. Bottiglia will become head of the Department of Modern Languages. He has been at the Institute since 1956.

# KEEPING UP TO DATA

A good example of the kind of thing in which the MIT Libraries are interested is their Technical Information Project. For two years, physicist Dr. Myer Kessler, formerly of Lincoln, has been working with a staff of five, under an NSF grant, to develop a semi-automatic means of rapid access to scientific papers.

A system such as this may be a necessity, as the bulk of scientific literature increases. Just in the last decade the literature has doubled. The number of volumes in the MIT Libraries has increased from 70,000 at the turn of the century to 750,000; and probably this number, too, will double in the next ten years. More and more people need to find scientific information pertinent to their fields.

In Dr. Kessler's pilot system he is trying to match the information content of the literature "on file" to the information needs of one group, the physicists. Here's how his system works. Over in Project MAC (Tech.Sq.) on the disk memory



Dr. Kessler with Caroline Griffith (left) and Beverly Turner, keypunch operators for the Technical Information Project

of the 7094, is stored information about scientific articles -- titles, authors, volume and page numbers and bibliographies. Back at the Technical Information Project is a teletype machine connected by wire to the 7094. In just a few seconds, an operator can dial the computer, then type a request for information about any of the articles. Almost instantly, the answer comes back by teletype. For example, the operator can request that the computer search to find all the authors who are from MIT or from Cambridge, or all the titles concerned with one topic.

Now on punched cards, ready for computer storage, Dr. Kessler has information on 30,000 articles published in sixty volumes of "The Physical Review" during the past fifteen years; letters appearing in "The Physical Review" during the past five years; articles from the "Journal of Chemical Physics" for the past five years, and from fourteen other journals.

Dr. Kessler's system, although not yet ready for general use, will work with experimental users, and a dozen or so are lined up now to test it.

#### FAMILY SWIM CLUB

Swimming coach Charles Batterman is looking for families to join (for a modest fee) a swimming club, west of Boston, which is not yet built. They have eight acres of "beautiful" land and need about 100 families to sign up before March 15. If interested, call Mr. Batterman on Ext. 4918.

FOR SALE ETC. '59 Alfa Romeo Spider, body on driver side damaged, but repairable, see, make bid near \$400. Scott, x 2616. Graflex 3 1/4 x 4 1/4 single lens reflex with 135 mm, f 3.5 coated Schneider Xenar lens, roll and cut '59 VW exc mech cond, R. new tires, \$750, 742-0658. film backs, ektalite field lens, \$85;Kodak Retina III c, 35mm, w 50 mm f 2.0 S. Xenon, \$65. Turner, x 30-454. '59 MGA-1600, \$800 or best offer, 4 new tires, just painted. Bill, ext 441 Linc. Sepiece French Pr BR set ,dble bed, white and gold fin on mahog, will sacrifice. Lion-brand yarn, 2 shades rose, 32 ounces ea, best offer; 4 king-size TV tray thes, std, list \$10,88, æking \$8. 395-9159. '59 BMW R60 motorcycle, 15,000 mi, good cond, \$600. R. Kelly, ext 3755 or 523-7807 evgs. '60 TR 4-dr sedan, A-l cond, \$550, TR6-2741, Skates, men's fig, 8 1/2, \$12; guitars, Framus, Herminio. Salinas e Hijos, \$50, \$65. Don, x 5149 or EL4-6412. '61 Rambler American, beige, 2-dr sedan, std shift, exc cond, best offer. Ext 7786 Linc. Maternity wardrobe, 2 eleg dresses, skirts, blouses, shorts, 15-16. 275-0249. '62 Buick Special, R&H, power steering, auto trans, V-6, \$1,750. Betty Hunt, ext 2921. Heathkit, transistor-intercom, master, 3 remote stations, never used, state price offered. Ext 5630. '62 Rambler, am, deluxe 2-dr sedan, green, std shift, aprox 9,500 mi, exc cond. \$1,095 firm. New Polaroid 100 camera w case, \$115; Yashica 8 up movie cam with case, p zoom, \$115. LY8-6392. H. Pritchard, ext 4946. Wedding gown, peau de soie, size 10, match headpiece, \$50; port TV or stereo stand, \$5. VO2-6979. '63 Vespa motor scooter, 8 mos old, owned by girl, many extras, low mi, exc cond, \$295. Joan, ext 2775. Man's raccoon coat, size 34, good cond but vintage 1940, \$25. LA3-3731. '63 TR-4, low mi, Michelin X tires, R&H, 2 tonneau covers, white, \$2,300. Joan, ext 7112 or TW3-5036. 2 VW snow tires, good tread, \$12 for pair; 2 metal desks, 18 x 30 top, \$5 ea. Jones, ext 83-2817. '63 VW blue, 21,000 mi, sunroof, seat belts, R, 6 mos old, \$1,650. Singhal, ext 5045 or UN4-6418. Top breed miniature poddle with pedigree papers, \$75. EX5-7265. Apt, 3 lg rms, comp furn, porch, pking, Parker St., Camb, \$125/mo, avail now. 876-9335. Rieker ski boots and boot rack, size 14, used 1 wk, exc cond, paid \$35, sell for \$20. K. Sloat, ext 3264. 3 apts in Athens for summer, close to ctr of town: 3-rm apt, furn, utils, incl linen, dishes, Lady's ski boots, \$45, never used, Austrian hand-made, retail in U.S. for \$70, fits sizes 5-6, too small for owner. CA7-7572 evgs. phone, avail Jn-Sept, \$150/mo; 1-rm apt, K'ette and B, furn, all utils, linen, dishes, Jn-Sept, \$120/mo; 2 single rooms, furn, \$80/mo each. VO2-0524. Baby swing, seat converts to car seat, exc cond (due to a "nonswinging baby"), \$5. 491-2106. Sublet apt for 1 person, beginning February, reasonable. Ext 4196 or 266-2646 evgs. 4-rm apt to rent, mod 2-fam house, Brighton area, pking, unheated, avail now, \$100/mo. AL4-8341. Snow tires, used 10 wks, 6/70/15, FA3-3852, Polaroid Land camera, Highlander model 80A, used very little, \$40. BE2-0484. Rms, 3 clean furn rms between Harvard & MIT, gas, ht, \$100/mo. Marten, EL4-4875. Beacon St apt, 1g front LR with fp, BR, K'ette, tile B, furn or unfurn, 1 or 2 persons, married couple or grad student, 15 min walk from MIT. KE6-2325 or CO6-2226. Evenflo 9 bottle auto baby bottle sterilizer, used twice, \$5. 332-5458. Ham R receiver, transmitter and other testing equipment, HI4-2685 evgs. Cheery apt for rent, LR, BR, K, B, partially furn, \$95/mo, 299 Newbury St, #8. KE6-8567. Holton collegiate slide trombone with case, Harmon and plunger mutes, sm dents, good slide action. Brookline-Allston area, mod spacious 3-rm apt, conv to MTA, shopping area, \$125. Judy, ext 7450 Linc. Evans or Dillon, ext 4831. Beacon Hill apt, 33 Andrews St, 4R, avail Feb l, flexible lease, walking dist to MIT, \$120/mo, furn. VO2-2079. Comp set Collier's Encylopedia plus set of Junior Classics, best offer. D. Nicoll, ext 2363, Rm 26-529. Boys' hockey skates, size 9 and 6, very good cond. Miss Ahearn, ext 2497. Sublet 3-rm apt, spring or summer, Hvd Sq. Prof. Kampf, ext 4443 or UN8-7204. Sublet, mod semi-furn 5-rm apt, 2 BRs, lg LR, Feb-Aug 31, '64. 547-7183. Gibson tenor banjo and hard case, good cond, \$95; twin bed headboard, McCobb design, \$20. 665-5860. Four lots of land, Buzzard's Bay, mile from Bay Beach: 130 x 100, 65 x 150, 65 x 210, 89 x 240; \$1,500 Furn apt, Arlington, 6 rms, suit for children, avail Jan. 29-Jn 5, \$170/mo, ext 2667 or 643-8690. for all, or will accept offer. TR6-7106. Furn apt to sublet. Newbury St. Ext 3379. Smith 8x Wesson M1917 service revolver cal. 45, good cond, \$30. J.H. Burbo, 82-294 or 275-6295. Apt near Hvd Sq, 5 rms, unfurn, \$150/mo, incl heat. Pat Taylor, ext 3894. Silvertone 19" port TV with stand, as new, still under orig 1 year service contract, \$80. Bishop, ext 2517. Lg sunny 2-rm apt overlooking Park Drive, conv to stores, trans, free pking, \$85/mo. 267-5343. Pair women's figure skates, size 7 1/2, very good cond. Ext 4585. Apt 13 Ellery St., Camb, \$75/mo, ht and water incl, unfurn, 3 rms, B. Ext 5106 or KI7-6528 evgs. Lady's Timex watch, phosphorescent, waterproof. Ext 156. Sublet apt, BR, LR, B, K, \$90/ mo, unfurn, Comm Ave, avail Feb 15-Sept 1. Ext 2531 or 267-9896. Man's Italian quilted ski parka, size 40, practically new. Pete Bennett, ext 4031 or RE4-3408 evgs. Lexington, avail approx May-Aug '64, 7-rm furn hse, comp equip, incl baby furn, carriage, air cond BR, plsnt shady yd, garage, \$200/mo. VO2-9463 Complete set of Harvard Classics, in new condition, \$150, ext 2776. Polaroid 1800 camera, fully equipped, perf cond, best offer, Mrs. Silva, ext 2642. 3-BR Techbilt house, over 3/4 acre wooded lot, membership avail in community pool, \$26, 900. 862-4042. W Peabody 8-rm home, split entry, 30 min from MIT. 535-2605, Peabody. 100% wool, light brown broadloom, 12 x 16, also small pieces never used, sacrifice. Ziggy, ext 2921 or MI8-8047 evgs. Wanted: car pool to join between Somerville and Linc Lab, 8:45 a.m. -5:30 p.m. Mary, ext 5753 Linc. Pair CCM hockey skates, size 11 foot, \$13. 395-0589. Wanted: thesis typing or tech typing, fast serv. 277-2191. Five tubes and tires, 6-70-15, good cond, \$20; one 6-volt heavy duty battery, almost new, \$10. 491-0899. Wanted blk male Kitten, Bonnie, ext 652 Linc or 438-0745. FM-AM tuner, 12 tubes, Lafayette LT-500, orig price, \$129.50, exc cond, now \$65. Freedman, ext 401 Linc. Wanted: used piano, upright, spinet or console. Cosie, ext 797. Kodak Retina IIIC with built-in exposure meter and rangefinder, 50mm f. 2, 80 mm f. 4 and 35mm5.6 lenses, sportsfinder, case, close-up adapter, perf cond, \$85. 491-0947. Wanted: riders from Malden and vicinity to MIT, 9 to 5. 322-5949. Wanted: male to share 6-rm apt in Camb with 2 other rmmates, \$50/mo from Feb. John, ext 3854 Priv piano lessons, \$2. Mrs. Parker, EX5-0662. or UN4-5845. Admiral 17" TV console, \$30. TR6-6665 after 6 p.m. Wanted: 3/4 size violin in reas good cond. Mrs. Chao, 862-8242 evgs. New H1-F1, 2-AR2a spkrs, oiled walnut, \$96 ea; Fisher 500-C, \$280; AR 2 sp turntble, \$51, Garrard Wanted: youth size bunk beds. VO2-9463. AT-6, autoturnthie w walnut base, \$40, ADC 2a cart, \$20. D. Hamilton, ext 30-326. Wanted: hardtop for '59 Corvette. John, ext 7767 Linc. Dynakit amp, 50 watts, \$50; tble TV, new picture tube, yr guar, \$59. Carl, CO7-1307. Ride wanted: Hvd Sq to Linc Lab, 8:45 to 5:30. Ext 7220 Linc. Keystone mod K -12 8 mm movie camera, reflex power zoom elec eye, exc cond, \$100, lists \$215. Wanted: ride to and from Revere to MIT, 9-5. Elaine, ext 4103. Dobkin, ext 2371. Roberts 990 stereo tape rodr, record/playback, stereo/monaural quarter track, 2 1/2 yrs old, \$400 Rmmate wanted, fem, share attrac Comm Ave. apt. CO6-5528 evgs new, sell for \$250; two 12" coax spkrs in encs, \$40 for both. Dick Elden, ext 4512 or 227-2674(6:30-7:30). Wanted: bkcase, piano, in exc cond, any type. Jemma Murphy, ext 3547. Maple dresser, maple chest, good cond, \$50 total. MI8-2596 after 5:30. Wanted: 1 or 2 young women to share with 2 others attrac 4 BR hse nr Arlington Ctr. Betty Lee, ext 5812 Linc. '51 Chev 2-dr, tair cond, \$75. TR6-5565 evgs. Fem rmmate wanted for 6-rm apt with 3 other girls, own BR, furn, except for own rm, near MTA shopping facils, Brookline-Boston area, pking, avail,Feb 1, rent \$40 per girl. 262-1523. '54 Chevy 2-dr, auto, exc cond, \$150. Olinto, Ext 4836 or 876-4643. Wanted: 9 ft pool tble, any condition. SO6-5826. '55 Ford, must sell, 2-dr custom sedan, 6 cyl, R&H, \$125 or best offer. 864-8347. '55 Dodge Coronet, clean, 4-dr sedam, auto trans, R&H, exc cond, asking \$200 or best offer. Wanted: rider, vicinity of 3A in Billerica, Burlington, or Woburn. Ext 3674. Dick Heavern, ext 5785 Linc. Wanted: Franklin stove in working cond. MI6-8474 evgs. '56 Olds, \$400 or best offer. Hugh France, ext 5556 or GR9-5427after 6. Wanted to buy: upright plano. Dr. Kain, ext 614 or Mrs. Kain, 862-8229. '57 Olds, rebuilt, 43,000 mi, snow tires, exc running cond, \$550. Mrs. Bloom, ext 2744, DU7-6619. Wanted; radial or table saw. MI8-1199. '57 Olds, 4-dr sedan, all power, good cond, \$300 or best offer. I. Blumenthal, ext 3584. We invite your family to "travel light" to a summer camp vacation on idyllic island. AL4-1214. '57 Buick sedan, R&H, power steering, brakes, snow tires, seat belts, exc cond, \$350.HI4-3509. Wanted: apt-size refrig with cross-top freezer. 868-7498 '58 VW new uphol, good tires, sunroof sedan. Dudley Shepard, ext 30-364. Found: keys on Mass. Ave. bus, Jan 15. Mrs. Ginn, ext 2476.