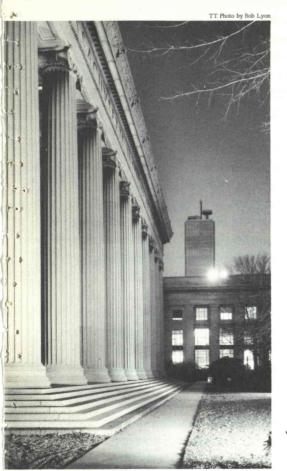
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PEOPLE AND

PROJECTS



THE YEAR IN REVIEW

We may have thought 1963 was exciting. But Anno Domini '64 eclipsed it in action. "Growth" was the word to characterize the passing year. You could stand on the top of the 20-story Green Building and in every direction see a new building at its peak, or the site of one to come. Completed and occupied were the Green Building and the Parking Garage on Vassar St. Renovation of E-19 was practically finished. Buildings for the Center for Materials Science and Engineering, the Center for the Life Sciences; and the Grover M. Hermann Building, the Student Center, and High Voltage Research Lab were well on the road to completion. Planning was underway for a Center for Space Research, Center for Advanced Engineering Study, new Boat House, additional married student housing, Chemistry building and Graduate Center. Already there were moves. The axe was soon to fall on old Bldg. 30 -- its shops gone to Daggett -- and in the main buildings more familiar spots were empty. A sign on the Registrar's former quarters read "Moved to E-19," and Summer Session, DSR, Records Processing, Institutional Studies, Placement, Accounting, Navy Audit, ONR rep., Institute Audit, Graphic Arts, Credit Union, MIT Press offices and Data Processing were there, too. Soon to be neighbors: Alumni, Personnel, 'Tech Review," Physical Plant, Student Personnel and Safety Offices.

Old and new

Many of the Institute family made news in 1964. President Stratton visited Colombia; was the first MIT president in 42 years to deliver the Commencement Address; gave the Penrose Memorial Lecture at the American Philosophical Society; became an eminent member of Eta Kappa Nu and a founding member of the National A cademy of Engineering. In Stockholm, Provost Townes received the Nobel Prize in Physics and in Milan -- in La Scala Opera House -- an honorary degree in electronics engineering from the Polytechnic Institute of Milan. Four MIT men were chosen to head colleges: Dr. H. Guyford Stever by Carnegie Institute



Alfred P. Sloan, Jr., established a \$15,000,000 fund for basic research in the physical sciences. From left to right: Dr. Killian, Mr. Sloan, and Dr. Stratton.



Out for blood

of Technology; alumni Albert Bowker,'41, City University of New York; Charles Hummel, '49, Barrington (R.I.) College and John Hrones, '34, Case Institute of Technology. On leave from the Experimental Astronomy Lab, Prof. Winston Markey, 35, became USAF Chief Scientist. Prof. Robert Dowben, whose research has produced promising treatment for muscular dystrophy, was honored by the Gotham Chapter of the National Foundation for Neuromuscular Diseases. Dr. John C. Sheehan received Philadelphia's John Scott Award in honor of "the inventions of the total synthesis of penicillin and certain analogues of penicillin."

Within MIT appointments were numerous. Warren Wells was named Registrar, and his predecessor, Robert Hewes, became head of the new Office of Institutional Studies. Dr. Robert Bishop was

named acting dean of the School of Humanities and Social Science. New director of Lincoln Lab was Prof. William Radford, and Prof. C.F.J. Overhage came to Cambridge to head a long-range program for application of computers to library science.

Our astronaut was still going strong: A picture story in "Aviation Week and Space Technology" showed Rusty Schweickart in space gear. The School of Engineering had its first alumna professor, Sheila Evans Widnall, '60, also our first woman Ford Post-doctoral Fellow. Five new members were welcomed to the Silver and Quarter Century Clubs -- 25-year service groups for employees -- and Dean Wadleigh's secretary, Alice Seelinger, was elected president of the new Cambridge Business and Professional Women's Club. For the third time, MIT was represented on an Olympic crew team.

Throngs of people came to visit -- for many reasons. Summer students included 1, 500 representatives from industry, education and government, and over 1,000 Greater Boston high schoolers taking evening courses taught free by MIT students. Many were alumni. About 200 came to the '64 Alumni Seminar on "The Nature of Man," and 400 to the Fifth Alumni Officers Conference.

Distinguished foreign visitors toured labs and classrooms. And symposia abounded. Women in science and engineering discussed themselves. Many of the world's leading earth scientists were on deck for the dedication of Bldg. 54. In two large conferences, scientists and engineers discussed radar technology and engineering aspects of magnetohydrodynamics. Some visitors, like the contingent from the N.Y.C. Ballet, came to entertain us. Others, like Drew Pearson and Ralph McGill, were here to lecture.

Established, among other things in 1964, were a Department of Psychology; a lab at Downey, Calif. where MIT representatives would assist in checking and monitoring APOLLO guidance and navigation systems; the first endowed Chemistry chair, the Camille Dreyfus Professorship, and an MIT Gilbert & Sullivan Society. Acquired were two new police cruisers, a snow melter and new boilers for the Power Plant. Name changes weren't limited to the secretarial staff. The School of Industrial Management became the Alfred P. Sloan School of Management. The Clinical Research Center, first small-scale hospital of its kind outside medical school or a regular hospital, was opened. At Lincoln the giant Haystack radio communication and radar research facility was dedicated. Missing were the synchrotron from Bldg. 24 and 28 employees who retired from MIT and Lincoln. MIT people were also minus 1,325 pints of blood which in five days comprised the "largest peacetime bloodmobile collection, " according to the Cambridge Red Cross, and

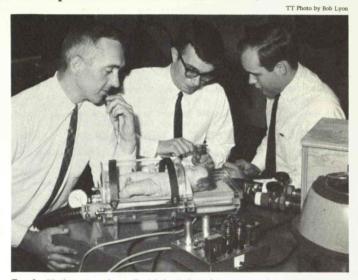
TT Photo by Bob Lyon



\$105,757 which they contributed to United Fund in a spectacular one-month drive.

RESEARCH AND GRANTS

Meanwhile, these research activities went on in the labs. The National Magnet Lab achieved the world's highest man-made magnetic field. In Civil Engineering, with assistance from physicians at the Boston Lying-In Hospital, an artificial respirator was developed for premature infants with breathing difficulties. Twenty-eight seniors and grad students in an interdepartmental class in systems engineering designed a 6-ton, unmanned satellite with telescope to observe planets and stars from above the earth's atmosphere. Project MAC's timesharing system was operated in an intercontinental setup. A scientist at the annual



Prof. Philip Drinker (left) led development of respirator

meeting of the British Computing Society in Edinburgh used a 7094 computer at MIT via telegraph printer and transoceanic cable. And MIT researchers reported on the way frogs "smell" by an electric process in their olfactory nerves.

To name a few, grants were received for expansion of the Alfred P. Sloan School of Management and related facilities, expansion of basic research in the physical sciences, exchange of faculty members between MIT and the Technical University of Berlin, further development of the Oral Science Program in the Department of Nutrition and Food Science, and continuing assistance from the Joint Center for Urban Studies to the largest new town development in the world, Santo Tomé de Guayana on the Orinoco River in Venezuela.

IN BRIEF

These were sums for '64. The Institute population swelled to more than 15,000; including approximately 6, 837 employees (counting Lincoln), 1, 371 teaching staff and 7, 151 students. There were 913 foreign students from 69 countries and 352 foreign staff members. June grads numbered 1,180, and they received 1,248 degrees -- largest number for a single MIT commencement; 386 were awarded in Sept. From Lowell Institute School, 6 MIT people graduated; 23 received certificates for completing supplementary courses. Under the Institute's tuition assistance plan, 479 people studied; reimbursement totaled \$32,040.98. We consumed the following staples: 215, 930, 000 cu. ft. of gas, 3, 068, 212 gals. of oil, 39, 414, 400 kilowatt hours of electricity, and -- in the line of office duty -1,250,000 paper clips, 129,600 lead pencils, 10,800 china marking pencils, and 31,392 indelible pencils. The Purchasing Office ordered its usual variety of items, including Texan squirrels. Activities of the Industrial Liaison Office established record highs; over 2,100 industrial representatives attended symposia arranged for them as one of the services of the MIT Industrial Liaison Program. Two new participants were welcomed into the Program: Celanese Corp. of America and Xerox Corp. The Medical Department recorded 57,088 clinic visits, gave 21,171 lab tests, 8,171 x-rays and 947 electrocardiograms. Keeping in touch with the outside world, we used 2,509,004 telephone message units which cost \$124,492.80, and -- for UN4-6900 -- the entire service with toll calls came to \$732,158.61. The Credit Union passed the \$25 million mark in loans. Active MIT Clubs around the world totaled 94; circulation of 'Technology Review''was nearing 20,000. Going out of the Cryogenic Lab in '64 were 460,000 liters of liquid helium; coming into Admissions, 162,622 pieces of mail from hopeful high schoolers. The Chapel's record included 64 weddings and a christening. And just for July-Nov .: 4, 898 Athletic cards out.

FOR SALE ETC.

Free: 2 white Angora kittens. Ext. 5744 or KI7-0655.

Toy silver poodle for sale, female, 6 wks old, AKC registered. Diamond, Ext 7441, Linc.

Underwood port typewriter, pica, \$15. 566-6199.

Hallicrafters HT-37 trans, 144w input, ssb am cw, \$295;sx-lll rcvr, \$165. Bill duPont, ext 56811, Linc.

Port dishwasher, \$60;Kenmore washer, \$40; gas stove, \$20; playpen, \$5;buggy, \$5;2 tricycles; spring rocking horse, \$9;convert high chair, \$4. VO2-6376.

2 pairs 14k gold pierced looped earrings. Paula, ext 5442 or 262-1663 evgs.

Tape rcdr, Pentron Pacemaker, exc cond, asking \$100. B. Bardes, ext 3235 or TR6-9841. Give away: Darling kitten, 7 wks old. Ext 30314.

Alpa 35mm cam, 28mm, 50, and 90mm lenses, just calibrated. Parker, X 240 Linc. Typing, non-tech, reas rates. TW9-8525.

TV ant , motorized rotator; misc toys and furniture. Best offer. BI4-3088.

Excelsior accordion, 120 bass; rotissimat; dble bed, matt; 9 x 12 rug. 277-8435. Elec automatic saw sharpener, best offer. Ext 30527.

Mod LR set, couch, 2 chrs, coffee tble, exc cond, \$120.Harmon, X5058 or RI2-4261. Babysitting, translating, French & Italian lessons, cooking, etc.A. Merolla, WA4-7875.

Alpha self-winding watch, 17 jewel, yr guarantee, \$40. Herron, 2862 or864-2491 evgs.

Kneissl skis, 6'3", exc cond, bindings, \$45. Don McCade, ext 7478 Linc.

Men's hockey skates, Hyde, size 8, tendon guard, blade covers, \$10. Ext 3407.

2 snow tires, exc cond, Goodrich super grip tubeless, 5.90 x 15. Campbell, X7168 Linc. Pair of ski boots, size 5, used, \$7. RE4-1349 evgs.

Short wave R, reg plus 3 short w bands, \$45;prof bongo drums plus cowbell for Latin American music, \$35;new Sylvania stereo, \$60. Susan Mouhajar, X6220 or 354-6154 eve.

7 5.60 x 15 tires (5 Continentals, 2 Dunlops), all sidewalls good. Delaney, X7126 Linc.
 Zenith Transoceanic mod 3000 transistor sw port, 9 band, fm, \$145. 489-1848.
 HO gauge mod RR equip, exc cond. 245-5296.

Metal skis, 2 Blizzards, Kofix bottoms, comp binding, \$80. Pat Searles, ext 5495. 2 used snow tires, Allstate 4-ply 8.00 x 14 ww's, \$8/pr;5 ww's 8.00 x 14, \$1.50/ea; Collier baby carriage with basket, mattress, \$15. A1, ext 149 Linc.

2 ww snow tires on wheels, 7.60 x 15, \$20. Ext 3163.

AKC reg bassett hounds, \$110. Walpole 668-9495.

Army EM dress blues, 37 reg,\$10; khaki pants, 30x31; carcoat w/liner, 38,\$12; girl's boots, 5 1/2, free. Gayle, ext 3505 or 782-6781 evgs.

Royal port typewriter, like new, \$25. CO7-2691, leave message.

Lady's fig skates, never worn, lthr lined, 6, foam ankle support.BE2-0070. Boy's hockey skates, 4, ;girl's fig dble runner, l;girl's fig skates, 4.Al, X 149 Linc. Bolsey cam, exc cond, cost \$50, sell for \$20. Ext 5377 Linc.

Lady's fig skates, 10, \$10; Universal Std. Encyclopedia, 25-vol, \$10. 395-9159. Labrador Retriever puppies, AKC registered, \$100. 484-0471.

6'3" skis w/bindings, poles; Austria ski boots, 7 1/2N; roller skates, 7. 274-0954.
5.90 x 15 Eng goodyear narrow ww tire, less than 500 mi, \$10. Ext 5884,
Retina IIIc cam, 50mm f 2.0 lens, telephoto, wide angle lenses, \$100; EXA I

f2.9 lens, \$20. All exc cond. VO2-6979. Low chest; iron stone, white porcelain antique chr;shoji screen, desk.864-0007 evgs.

Rent a spot for your car during day near Charterhouse lot. BE2-9736.

'49 Ford convert, best offer over \$100. Ext 3494 or 491-4680 evgs.

'52 Mercedes 220 sunroof sedan, extra block, clutch, 7 wheels, \$250.X 7410 Linc. '52 Dodge, exc cond, best offer. Salant, ext 5358.

'55 Ford convert V-8, good motor, new tires, \$125. 524-6892.

'56 Ford auto trans, p steering, 3 new tires, 4-dr, \$150. 625-8642 evgs after Jan 1.
'56 Chevy hdtop 2-dr, std shift, st belts, R&H, \$200. Sue, ext 4251 or 266-7058 evgs.

'56 VW sedan; apt in Hvd Sq from February 1. 354-4853 evgs.

'57 Ford 6 cyl, std shift, new batt, good mech cond, owner lving. Maftoon, X5668.

'58 VW, 67,000 mi, \$450. Ext 5808 Linc.

'58 Renault Dauphine, new carb, \$85. M. Hazel, ext 3432.

'60 VW, red, conv. leaving for Hawaii, must sell, \$875. KI7-6913.

'60 VW sedan, rebuilt engine, & new tires, \$595. TW4-0848,

'60 Rambler American, 36,000 mi, good cond, owner lving cntry.X 6076 or876-0754.
'61 Ford Galaxy 4-dr sedan, immaculate, sell this wk for best offer. BE2-9736.
'60 Rover 100, ww's, R&H, 4 spd, overdrive, \$1,250. John Leech, ext 2420.
'62 Ford conv Galaxy 500, R&H, ww's, padded dash, quick sale. \$1,595. 444-6993.

'62 MG blk convert, exc cond, ww's, R&H, red lthr bucket seats, spoke wheels. DU7-6910.

'62 Chevy Impala convert, white. PI4-7143 (Salem) evgs.

'63 Chevy Impala 2-dr hdtop, 8 cyl, std trans, good cond, must sell, best offer. Larry, LA7-5240.

'63 Comet 2-dr hdtop V-8, fully equipped, 10,000 mi, exc cond. Mariel, Ext 3345. '64 Impala Super Sports, hydramatic, ww's snow tires, 327 eng, 4 BBL carb, red w/blk int, bucket seats, \$2,200 or best. Dick Solomon, ext 5280 or Herb, 436-9349.

'64 T-Bird, exc cond. Betty, ext 2752 or MI3-9682 evgs. '64 XKE hdtop, 2,200 mi, best offer. Ext 5759.

'64 Chevy sta wag, V-8, low mi, all p, all extras, \$2,650. J. Kent, X30323 or 729-7089.
'64 International Scout, 4-wheel drive, access, ideal for skiers. UN4-5221 evgs.
Want torent our E. Lexington home, Jan 25-end July, 4 BRs, 1 1/2 Bs, mod K, near schools, stores, MTA. Prof. Smith, ext 4679 or 862-8771.

Unfurn apt, Hvd Sq, 2 rms, K'ette, avail Jan, \$105. See Supt, 48 Boylston St, Camb. 3BR duplex, avail Feb, fenced yd, full base, 5 min from Linc Lab, \$125/mo.274-1281. Sublet 2-rm apt, K'ette, B, just off Hvd Sq, avail Jan. Ext 5583 or 491-8077.

Sublet lg 5-rm furn apt, remod, Jan 15-Sept 25 or part, \$140 incl ht, KI7-6913. Beacon Hill apt for 3 or 4, sublet Feb, conv location; wanted: 2 girls to share Beacon Hill apt beg Feb. Lisa, ext 3143.

3 BR oversized Cape in Wayland, low \$30's. EL8-2261 Wayland.

Lexington 5-rm ranch, 3 BRs, G, 13, 569 sq ft lot, betterments paid, \$18, 900. Also, '62 Chevy II 4-dr sedan sta wag, 29,000 mi, \$1, 200. Ext 7709 Linc or VO2-5234 evgs. Camp to rent for skiers accomodates 8, bet Mt. Snow and Stratton. G. Ford, Ext 7147 Linc or Don Mailloux, ext 7161 Linc.

Belmont 3 BR lower, mod K, fp, near MBTA. Mr. Shore, IV4-9017.

 $7\,{\rm rrm}$ farmhouse, acre land, adjc to Rte. 93, price incl sm variety store with liquor license. Ext 30245 or 926-0573 evgs.

Hyde Park unfurn duplex, 3-rm apt, \$85. D. Mack, ext 5011.

Wanted: ride to and from Medford-Somerville line. Ginny, ext 4954.

Wanted: house to rent by visiting prof from Cyprus '65-66. Prof. Gordon, RE4-3046. Wanted: 2 or 3 BR furn apt for MIT couple w 4 sm children, Jan '65.Cooper, X 6304.

Wanted: ski rack for VW sedan. Mrs. Foss, ext 3167.

Wanted: Southern Baptists & others are invited to attend Metropolitan Baptist chapel, Cambridge. S. Dean, ext 30469.

Wanted: 10" Post log log slide rule. Richard Carlton, ext 2461.

Riders or car pool to and from Nashua, N.H. Call Bob Mills, ext 4681. Wanted: fem rmmate to share apt in Allston w/l girl, nicely furn, conv to MTA and bus. Linda.254-3709 evgs.

Wanted: big girl's ice skates, 8-10. Ray Battistelli, ext 461 Linc.

Wanted: to buy used set of Book of Knowledge or comparable dictionary. 861-0247. Want riders from Tewksbury, Wilmington and Woburn to MIT, 8-5. 851-2957 evgs.

Wanted: Siamese fem Sealpoint 16 to 18 wks old. Tony Bell, ext 30466.

Wanted: ride, Wellesley to MIT, 8 a.m. Doug Owens, 868-0435,CE5-6548. Young married couple looking for reas furn or unfurn apt or sm home, avail

bet Jan 1 and Feb 1. Jane Fallon, ext 3921 or 696-3461.

Wanted: ski cottage for 10, week of Feb. 22. Ext 774 or 861-0326 evgs.

Will swap or buy ski rack for convert for hdtop ski rack. Ext 30306.

Wanted: 2 Pirelli Invernos, belted construction, 1 65 x 15. S. Dean, ext 30469.

A sense of humor may be needed to drive my car to Los Angeles, Calif. in mid-Jan, expenses paid. Ext 4989.

Wanted: used drum for teen-age beginner. 383-1360 Cohasset.

Wanted: ride from Ball Sq, Somerville to Daggett, 9-5, wkdays.Elaine,Ext 2751.

Wanted: ski and/or luggage rack for Porsche. Mrs. MacGregor, ext 3703.

Wanted: envelopes with cancelled stamps. Fleeto the Clown, 48 Sudbury, Maynard.

Tech Talk is published every two weeks. Send news and ads to Mrs. Linde, Room 3-339, Ext. 2701. Next Deadline: Jan. 4.