

STRAWS IN THE WIND

MIT has just cast 100,000 straws to the wind. Workmen at the Department of Aeronautics and Astronautics' Engineering Projects Laboratory have completed a small wind tunnel made from plywood, a surplus centrifugal fan, and 100,000 jumbo-size soda straws.

The laboratory, supported in part by the \$9 million grant the Ford Foundation made to MIT to improve undergraduate engineering education, is in the basement of Building 33 and is used by undergraduate and graduate students to conduct their own research projects in aeronautics. Professor Erik Mollo-Christensen designed the tunnel (at home last New Year's Day) and workmen built it to his specifications.

The straws, a foot long and 3/8ths inches in diameter, are stacked honeycomb fashion in a 6-foot-by-6-foot frame just downwind from the fan in what is called the tunnel's settling chamber. Six-by-6-foot sheets of screen of various meshes are also mounted cross wind in the chamber at one-foot intervals upwind and downwind from the straws.

The effect of the straws and screen is to give the column of wind blowing through the chamber uniform speed over virtually its entire cross section and to break up swirls, eddies and turbulences. By the time the wind reaches the narrowed nozzle end of the chamber, it is moving smoothly and evenly.

If it weren't, student experimenters wouldn't be able to tell if their results were due to wind variations or to the shapes of the structures under study.

Two features make the tunnel especially useful for the student researchers. First, not only can it blow up a wind simulating 60 mile-an-hour speeds, but it can also operate at very low speeds (two feet per second or lower). This means it can be used for wide variety of tests. Secondly, it has several interchangeable test sections mounted on four-wheel carts. Most of the time in tunnel work is spent mounting and arranging test models. With rollaway test chambers, students can do their mounting at their work benches and not tie up the tunnel. Result: more people get to use it.

Patternmaker Karl Fall of Dorchester, a veteran of 15 years with the Department, stacked the straws for the tunnel in two days. The straws (they cost \$85) were delivered in boxes. Fall stripped both ends off the boxes and used a wooden ram he built for the purpose to push them out into the form all at once. Stone & Forsyth Co., which supplied the straws, said it is the largest collection of unwrapped soda straws they have ever seen.

DR. KILLIAN IN HOSPITAL

MIT Corporation Chairman, Dr. J.R. Killian, is doing well following surgery at the New England Baptist Hospital. Dr. Killian had suffered from a urinary tract condition and was operated on a week ago. He is expected to remain at the hospital for another two weeks.



Kathy Palmer, Aeronautics and Astronautics secretary, poses with the mountain of soda straws used in new wind tunnel.

THE VENDING VENTURE

The automated snack and quick lunch has turned into big business at MIT. According to Jay Marden, Assistant to Philip A. Stoddard, Vice President for Operations and Personnel, MIT people pushed more than \$200,000 in small coins into the food and beverage vending machines located around the Institute during the last fiscal year.

"We now have more than 100 machines located at several centralized points and they offer everything from soup to nuts," says Marden, who supervises the vending operation.

There are four major vending installations where you can buy sandwiches and beverages and, in some cases, hot foods. Two are in the basements of Bldgs. 26 and 14N, another at the entrance of Bldg. 20 and a fourth on the second floor of Bldg. 20. By Thanksgiving it is expected that sandwich machines will be installed in two other areas--the basements of Bldgs. 7 and 10.

Largest and busiest area is in Bldg. 26. A person who makes change is stationed here during the noon-hour. Also these vending machines have an attractive blue facade which covers much of the neon lighting and is typical of the new look planned for other major areas. Marden also said that plans are in the making for special vending machine rooms for new buildings now being constructed.

The machines are being operated by several concessionaires under license from MIT.

THE EASY WAY TO GIVE

By this time, most of you have received the MIT United Fund chapter pledge cards. When completing your form, keep in mind that there are over 200 services and agencies in the Greater Boston Area which need your financial help.

The payroll deduction is the easy way to give to MIT's United Fund Drive. Just as we may not notice the loose change we put in the vending machines, deducting from our take-home-pay a little a month is a more painless way for MIT people to support the Greater Boston United Fund.

MIT's campaign opened October 15 and it is hoped that all pledges will be in by November 2. Heading the drive is Dr. F. Leroy Foster, Director of the Division of Sponsored Research and the Lowell Institute School.

NEW APPOINTMENTS

Idella (Del) Tapley was recently appointed Administrative Officer for the Department of Economics and Social Science. Formerly a Personnel Officer in the Office of Personnel Relations, Del worked both at the Lincoln Lab personnel office and on the MIT Campus for fourteen years. In her new position, Del will work directly with Dr. Robert L. Bishop, Professor of Economics and Head of the Dept. Del has a B.A. degree from Smith College and is also a graduate of the Harvard-Radcliffe program in Business Administration.

Taking Del's place in the Office of Personnel Relations is Dottie Blair--but with a new title. Dottie is Supervisor of Office Employment and Salary Administration. After graduating from Pembroke College in 1951, Dottie began in MIT's Office of Personnel Relations as a receptionist, then became an interviewer. She recently attended the convention of "Eastern College Personnel Officers" in Lake Placid, New York.



Lunch line in Bldg. 26

NEWTON, EINSTEIN AND YENA

MIT's Department of Physics--some like to say--is founded firmly on Newton's laws, Einstein's theories and Joe Yena's machines. The contributions of Newton and Einstein are obvious to all. But the contributions of Yena--and the six instrument makers who work in his Physics Machine Shop in the basement of Bldg. 6--are less apparent, except to the professors and students whose classes and research projects are enriched and advanced by Yena handiwork.

Primary job of the shop is to keep physics laboratories supplied with needed apparatus, equipment and instruments. The shop also makes some of the more complicated equipment used in physics lecture halls. In an age of exploding technology, this is no small assignment. It's a job, however, which Yena and his crew seem to meet with ease and skill to the delight of professors and students.

Recently, for instance, the shop turned out an Etch Pit Goniometer (an instrument used to study the properties of single crystals) built to designs supplied by Dr. John F. Cochran, Assistant Professor of Physics.

Yena and his crew are also responsible for keeping a sheet of glass six feet long and three feet wide almost perfectly flat (deviations of only five-ten thousandths of an inch per square inch), which is used in the Compton Physics Lecture Hall (26-100). Metal pucks supported on cushions of air (from dry ice fitted inside the pucks) are floated on the glass in demonstrations of motion under nearly frictionless conditions and flatness of the glass surface is of prime importance.

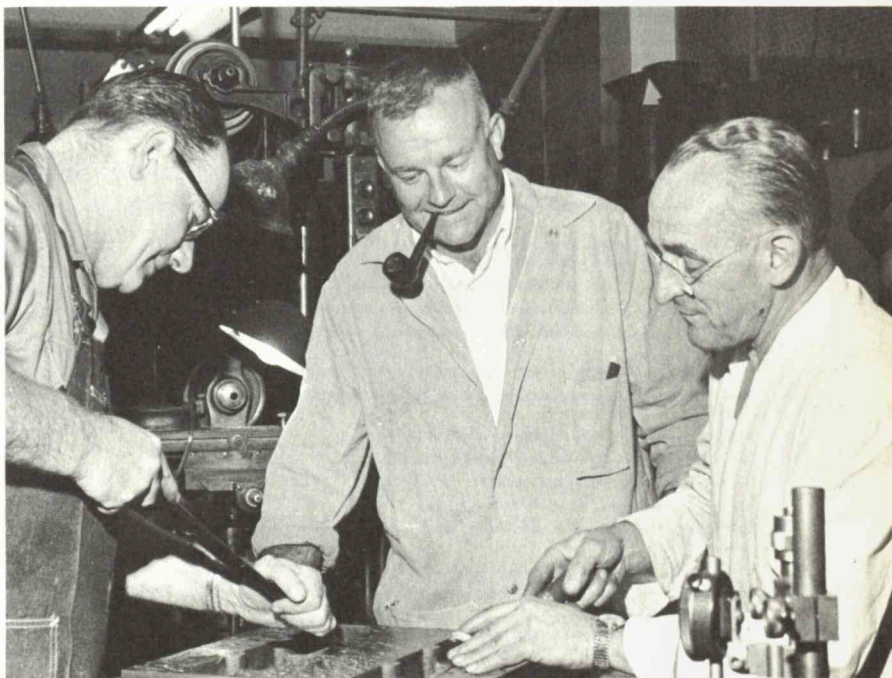
Joe has one attribute that makes him particularly useful. He keeps up on development of new materials. Not long ago, when teflon came on the market, Joe's knowledge of the material made it possible for him to suggest important changes in a machine Dr. Hans Mueller and his daughter, Agneta, are using to study the properties of light.

An important part of the shop's work is in the Spectroscopy Lab (next door) which houses MIT's ruling engine--the world's most precise light-controlled engraving machine. While parts of the original machine came to MIT from the University of Chicago, Joe's men have almost completely rebuilt it.

Joe is a craftsman in other ways. After work he goes home to a 10-year-old hobby of raising some 1,000 rhododendron, azaleas, orchids and lettuce plants in his cellar. His artificial sun: fluorescent lighting.

Joe began work in 1943 in MIT's Radiation Lab and was made foreman in the Physics Machine Shop in 1956. He has attended the Massachusetts Practical School of Art and Wentworth Institute. Last year Joe took the special course, "Principles of Supervisory Management" offered by the Office of Personnel Relations.

Instrument makers Helmer Anderson, William Conly, William Davis, Axel Erickson, Wallace Welch and expert watch repairman Albert "Teddy" Tetrault make up the shop. These men plus Joe have been serving MIT for a total of 100 years.



(L. to r.) Welch, Yena and Tetrault at work in the shop

FOR SALE ETC.

Jansen elec & dynamic speaker system. Lowest distortion & best transient response, \$110. For further information, call Charles Diamond, ext 5187 or GA7-6358 after 5pm.

'60 Sears model 9471 7-cycle clothes washer, corresponds to current model 6471, exc cond. \$110. VO2-4511.

Gonsett super six converter. Exc cond. 6 volts, \$20. Norman Lang, ext 5461.

AKC reg. dachshund puppies, champion blood. Call DE2-8251.

Conn flute, used less than one year, like new, cost \$150. Will sacrifice for best offer. R.A. Osborne, ext 2141 or 358-2813 (Wayland) evgs.

1 child's playpen (folding), 1 child's jumper chair, one carriage, 2 bureaus w/double drawers and folding doors, all like new. Also baby scale. Reasonable. VO2-1943.

K&E log duplex decitrig slide rule, \$15. 1 pair men's Hyde roller skates, size 10, \$8. Call Alice, ext 4861.

Evinrude 7 1/2 hp outboard motor, practically new, \$100. M18-6238 evgs.

American Flyer elec trains, rolling stock, switches, rails, etc., value over \$60. \$40 or best offer. Ext 3781 or IV4-6956.

Double Hollywood bed & table, curtain pairs Dacron priscilla, 8'x10' gray cotton rug, 2 desk chairs, other household items. DE2-7482.

View cameras, many sizes in nearly original condition. Spivack, 625-1495 evgs.

2 auto washers completely overhauled. 1-Maytag (\$55), 1-Whirlpool (\$65). 274-6238.

Renault radio & speaker unused. Call P. Sullivan, 444-5400.

40"x40" movie screen, \$5. 35mm slide projector, \$10. Baby tender, \$15. Basinette, \$5. And other baby items. ELMwood 8-2156.

'61 Tappan gas range, used only 6 mos, exc cond, \$100. Don Leslie, ext 3451.

Skis, 6'9" hickory, \$10. 2 typewriters, Royal port quiet delux, \$30 & \$40. And misc furn. Signer, ext 4117 or 708.

35mm reflex Miranda f 1.9 camera. 135mm Schneider-Kreuznach telephoto f 4.5 lens w/leather cases for both and UV filter. \$160. Call Jean, ext 3636 or 3610.

Alencon lace bridal mantilla originally \$40, will sell for \$20. Call 876-0652.

Bookcase headboard w/bed frame for able bed, limed oak, good cond, best offer. VO2-1921 after 6pm.

Twin bed, innerspring mattress, w/or without box spring. Also 1 dinette table w/an extension leaf & 4 chairs. M18-0563 evgs.

Formica K table, plus 4 chairs, exc cond. Eli Wassersterom, ext 2627.

Dux couch, gold wool upholstery, plus gold cotton slipcovers, \$150 or best reasonable offer. UN4-1512 after 6pm.

4 cute kittens free. M. Griffin, ext 717.

H.H. Scott 399 FM-AM tuner, preamplifier and 40 watt stereo amplifier, \$200. Call V. Sferrino, Lincoln ext 268.

LK-72 Scott amplifier, 80 watts, \$150. Call J. Dumanian, Lincoln ext 372.

4'x4' bookcase, \$8. Child's crib & mattress, \$12. UN4-3947.

Bolex 8mm camera, Model C-8, W/f 1.9, 12mm lens & f 2.8, 36mm telephoto lens. Incl. Eng. leather case, wrist strap, cable release. Exc cond. Original cost, \$225. A steal at \$110. Fred, Lincoln ext 279 or 275-8978.

Boxer, tan & white, AKC reg. Have papers, house-broken. JA2-0036.

VW backseat-free-take it away! Also National SW54 shortwave radio. Newly recondition, \$30. R. Levine, ext 617.

30' Alden Yawl, roomy, able, sleeps 4, new Hood dacron sails '61. New bottom, '60 and rebuilt engine '60. Depth sounder, binnacle compass, \$4300. N. Sullivan, Lincoln ext 7850 or VO2-0972.

Sherwood FM tuner, S 3000 w/case. \$65. Paul Augart, ext 4041.

1 Romer helmet w/viser. Size 7. AMA approved, New \$14. Also 1 shortwave radio RME-45 crystal filter, plays but needs a tube. \$45 or best offer. Call Gene, ext 142.

Fireplace wood for sale. 36-42" long, dry, seasoned hardwood. \$18 a full cord if you pick it up and haul it away yourself. Or we will deliver. Nottingham, ext 4815.

Self-defrosting refrigerator, \$60. Bendix gas dryer, \$100. Ext 4520 or 648-7194.

LaSalle stenotype machine w/instruction books & case. Exc cond. Original ribbon & tape still in machine. Originally \$150, will sell for \$60. CH2-2386.

Kenmore port washing machine, \$40. Sharpe, LY8-6392.

Crib w/Kantwet two-timer-mattress, \$25. Baby feeder table, \$5. Twin stroller, \$15. Set of bunk beds, \$25. Call Sid Sklar, ext 3494.

Black tweed studio couch, \$35. Also studio couch frame w/springs (no mattress), \$10. Call ext 2476.

Lady's white gold Wittnauer watch w/chord band. Exc cond, Call AS7-4195.

2 Smith-Corona manual typewriters, pica type. Also 1 wooden desk w/typewriter cabinet on right. Miss Deudrick, ext 770.

Children's pet dog, 5-month old black female, part Cocker & Labrador, housebroken. Free for good home. Call L. Small, Lincoln ext 5848 or EM9-3869.

Small Martin guitar & case, \$80. Also 14" Hotpoint port TV, \$40. UN4-2087.

Leica III-C camera, F-5 centimeters. 1:2. Good cond, \$80 or best offer. Call TR6-7834 evgs.

'50 Ford Tudor custom w/overdrive. It has flat head "6" engine in exc cond. \$50. E.R. Babcock, ext 2816.

'51 Mercedes-Benz 220 sedan, 5 band R. Joan, Lincoln ext 7404 or CL9-8911.

'52 MG-TD, young engine, exc running cond, very good body & interior. Asking \$850. Phil Clapp, 326-0931.

'53 Plymouth, exc mech cond. Bob Budny, ext 3227 or EL4-4694.

'53 Plymouth Suburban, \$50. Call Dennen, ext 3392 or 3397.

'54 Chevy, 50,000 mi, \$200, Hagen, ext 4823.

'54 Ford, 4 dr, auto trans, R&H. ST2-1844 or ext 791.

MG-TF classic black conv, sport coupe w/ww's. 1954 model in mint cond. Priced at \$1295. Mr. Walsh, DU9-9521.

'54 MG-TF red, ww's, good cond, must sell. Best offer over \$650. Jane Anderson, ext 3501.

'55 Studebaker President, R&H, 4-dr, V8 auto trans (rebuilt 7 mos. ago). 62,000 orig miles. Asking \$175. Call Nevins, ext 3584.

'56 Buick, sale due to death, one owner, looks & runs like new. \$450. Bill Baynes, 148 Brattle St., Arlington. M13-5947 or Lincoln ext 7176.

'56 Ford Fairlane, 2 dr sedan, Thunderbird engine, motor & body exc cond. Asking \$530 or best offer. Jim McEwen, ext 3425.

'56 Mercury station wagon, good cond, std shift, R&H, 50,000 mi, \$395. Ext 3313.

'56 Austin-Healey, 4 cyl, 4 spd & overdrive. New engine, clutch, brakes, seat belts, etc. Outstanding condition. New paint job. \$950 final. Nancy Cunningham, ext 661 or 491-2810 evgs.

'57 Dodge Coronet, less than 50 mi since motor overhauled, rebuilt carburetor, new distributor. \$500. Roy Euzzard, ext 820.

'58 Vespa G.S. Very good cond, red & green, fully equipped. \$200, may be seen at 125 Manet Ave. Quincy, GR9-3102.

'58 Pontiac, 4 dr sedan, power steering, power brakes, Hydramatic, 31,000 mi, \$795 or best offer for quick sale. Call Joel Winnet, Lincoln ext 172 or RE4-8599 evgs.

'60 Ford Galaxy, exc cond, all power, new tires, leaving for Hawaii on Nov. 1. \$1550. O'Donnell, Lincoln ext 7669 or GL3-5200.

'60 Toyopot, 4 dr sedan, not presently in running cond. Best offer. Call Jerry Stephenson, ext 4811 or IV4-3903.

'60 Lambretta 150 LI, 9,000 mi, dual seats, spare tire, new windshield, lg basket mounted on rear, helmet, custom cover. Call M.H. Richman, ext 3315 or 288-0605 evgs.

'60 Ford Falcon, R&H, auto trans, 4 dr, very clean, well kept, one-owner car. Call LA3-6503 after 6pm.

'61 VW, "Gulf Blue" sedan, blaupunkt R, seat belts, shelf, windshield washer, 35,000 mi, complete service records avail, VW serviced, perf cond, \$1250 or best offer. Call D.Adler, TR6-7238 or EL4-8317.

'61 Black MGA 1600, red leather, R, ww's, 21,000 mi, exc cond, \$1500. Call CL9-8287 after 4pm.

'61 Alfa Romeo Giulietta, R&H, perf cond, ski rack, \$2,200. Call CA7-5376.

'61 BUW motorcycle, 250cc, \$250. Ralph Jacobs, GE6-5135 after 5pm.

Bedford oversize Cape, lg fireplaced LR, full family K, formal DR, den or BR & full bath downstairs, twin size and extra lg BR plus half bath upstairs. Full dry cellar. House is in exc cond. 275-9169.

2 apts for rent in single hse neighborhood of Melrose. 1st fl, 4 rms, \$75/mo. Upstairs \$80/mo. Ext 4494 or N05-2758.

Hanover \$18,500, 6 rm chalet front raised ranch, fp, LR, 3 big BRs, sliding glass doors to porch, elec K, full basement w/playroom area, garage 28,000 ft lot corner Myrtle & Ctrs, Call IV4-5727 or ext 5230.

Apt avail Nov. 1, 2 rms & bath w/shower, 1st floor, heated, \$80/mo. Sacramento St., Camb. Please call ext 600.

Camb., Austin St, 8 min from MIT, furn private rms avail for girls. Share K & bath in co-op apt. \$12 & \$10 per week. Jean, ext 3636 & 3610.

Beautiful new ranch hse in Florida. LR, DR, Formica cab.K w/elec range, 3 BRs, ceramic tile bath & shower, lg screened porch. Unfurn, \$95/mo. PR6-2045 evgs after 6:30 pm.

Newton, 8 rm ctr entrance white Colonial, 4 BRs, 1 1/2 baths, paneled family rm, A-1 cond, near MTA, \$29,900. DE2-9217 evgs.

Rooftop studio apt w/elevator, 212 Marlboro St., sublet, \$115/mo. Renovated bldg, parking, ideal for single student or professor. CO6-5259.

7 rm ranch, Sudbury, 3 BRs, 1 1/2 baths, basement, garage. Lincoln ext 429.

Small furn cottage w/garage in quiet, residential section of Waltham, centrally located, near bus, stores, churches, suitable for couple. 1 child considered. Call TW3-8162 from 5-9pm.

Apt for rent, sublet until 8/1/63. \$90/mo. heated, unfurn,util not incl. BR,LR,K & baths, 86 Glenville Ave., Allston. Call ext 4839 or 259-9345 evgs.

3 acre estate, 10rm white colonial home with 2 car garage, lg barn, kennel bldgs, exc cond. Mod K, lg dining rm, double LRs, family rm or office w/separate entrance, 4 BRs, den 1 1/2 baths. Exc neighborhood, just over Wellesley line. Priced at only \$29,000 for quick sale. Mrs. Tyrrell, OL3-3480.

Bedford, Pleasant rm avail for business woman, near ctr. 275-6179 after 6pm.

Arlington, 6 rm Colonial, conv to MTA & schools on 1/4 acre. LR w/fp, DR, lg K w/picture window, 3 twin size BRs, dry cellar. Mid-twenties. M13-2492.

Porter Maine, 4 rm furn hse, in hunting country w/30 acres, electricity,driven well on yr-round road. \$4200. Richard McKay, ext 2838 or 653-9306.

Arlington, 6 rm Colonial, newly painted, 3 BRs, 1 1/2 baths, 2 fps, sunporch, finished basement, laundry, garage, lovely landscaped yard, near schools and hospital, \$25,000. M18-3260 or CA7-8337.

Furn hse in Watertown for rent, 10 rms, 4 BRs, washer, dryer, dishwasher. Attractive garden and patio. \$250/mo. Mrs. Fortune, WA3-9168.

Apt for rent, Newton Ctr, 6 rms & finished attic. Near MTA, avail Nov. 15. 322-8084.

Wanted: Child's playpen, baby carriage, ext 620.

Wanted: Furn 3 BR hse to rent for period Feb-Aug ('63) inclusive. \$175-\$200/mo. Professor B.W. Martin, Room 31-266, ext 2486.

Wanted: 2nd hand baby crib. Phone 547-7551.

Ride wanted from Wellesley Hills to MIT. 8-5. Jim Kuiper, ext 3711.

Wanted: Room & board Camb. Call Jean Fordyce, UN8-7457 evgs.

Needed desperately: 30-or-24 cup percolator. Call ext 2703.

Wanted: Man to share 6 rm Watertown apt w/2 other men. Separate BR, \$45/mo. WA6-0486 evgs.

Wanted: Rmmate (male) to share 5 rm completely renovated apt. 17 Highgate St., Allston. With 2 other men. 254-3507.

Wanted: Good used elec stove, please contact Larry ext 30-417.

Wanted: Rmmate (female) for apt on Bay State Rd. Call Sue Finkelstein, 266-2646 after 7pm.

Rmmate wanted to share 3 BR apt in Brookline w/2 grad students. (Male), \$42/mo., util incl. Don Arinstein or Dave Chase, LO6-7973.

Wanted: Completely furn apt for Visiting Prof. & wife. 12/62-2/63. LR, BR, K & bath. Call Mrs. Simpson, ext 5149 or AS7-7756.

Wanted: Vacuum cleaner w/attachments, kitchenware, ste pladder, toaster, shower & shower curtains, bath accessories, lamps, rugs (rm-size). Call

I have a lovely apt in Cambridge. Do you wish to share it with me (female)? DE2-8257 after 6pm.

Female wanted to live in mod apt, Marlboro St. Contact Doris, ext 2210.

Wanted: A young woman to share and help find a mod 2 BR apt in Arlington or Cambridge. Betty Lee, Lincoln ext 5812.

Rider/driver needed for carpool from Andover (or vicinity) to Cambridge and return daily. Contact J. Colby, ext 5150.

Have apt, need female rmmate, age 23-30. Nancy, UN4-7163 evgs.

Wanted: Ride from Somerville to MIT daily & return, 9-5. Call Kathy Tiltsley, ext 737.

Wanted: Girl to share 5-rm apt w/2 others. Own BR. Beacon St. area, Brookline. RE4-0634 after 6pm.

Private home in Newton. Desire married couple, K privileges. Parking. B14-7881.

FOUND: Vassar St. Tissot gold self-winding watch, expansion band. Blk face w/inscription on back. Owner please contact R.K. Breen, Room 3-439, ext 617.