

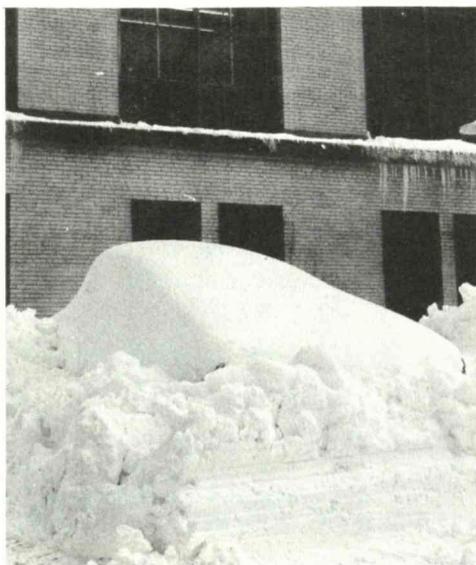
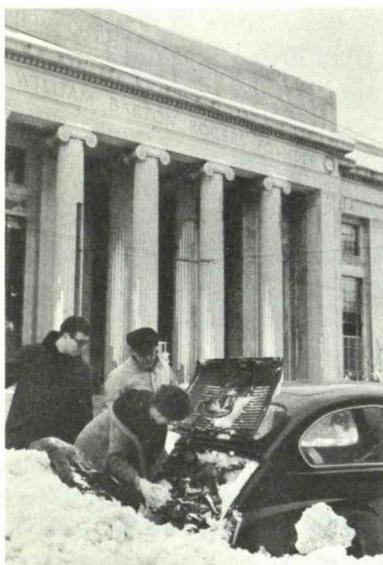
## LOW BLOW

It made an honest swine of the oft-slandered groundhog. But the furor was hardly worth it. March 4th's deluge left most people afoot, with cars barricaded in garages or completely submerged outside. The Institute parking lots held no exceptions.

With classes proceeding as usual, Physical Plant clearance crews worked round the clock and managed to scrape, dig and tunnel out both old and new routes. Circulation was remarkably easy for the sure-footed.

Mass. Avenue developed a country lane atmosphere as scores of Institute people slogged along through the blizzard and a few arrived on skis and snowshoes. As the weekend progressed, a variety of statuary appeared on dormitory lawns. Some of the most natural free-forms hid Detroit's finest automotive triumphs.

One of the crew in Photo Service energetically dug out his car bright and early on Saturday; lost it several hours later to a galumphing snowplow. He didn't find it for a good four days and then saw only the roof.



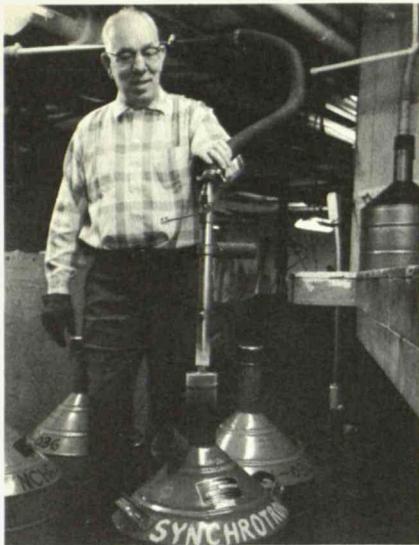
"Snow in drifts . . . as the season shifts" (Old Farmers Almanac, March 1960)

## COOL LAB

Every morning a B&P truck shoots around campus with the day's deliveries of liquid nitrogen in 25-liter thermos cans. A most useful commodity for MIT labs (especially in freezing out impurities in vacuum system gases), it's produced in the Mechanical Engineering Department's Cryogenic Engineering Lab in Bldg. 41.

Cost industrially would be a good deal more than what the lab charges its customers. And, with last-minute phone calls, service often stretches beyond the 5 p.m. limit.

Dr. Samuel Collins, director of the lab, created the liquid nitrogen plant in 1951. He decided there should be an MIT use for the product they were making while testing the new mach-



Bent fills thermos

ine. Since then the lab has pretty well paid its own way. Graduate students work on theses there and, with the Collins-created Cryostat, the lab also produces liquid helium.

Nitrogen is stored in a 1,800-liter, metal, spherical thermos flask and is drawn off by means of a vacuum-jacketed pipe -- very much like a gas pump. Temperature of the liquid is a chilly minus 320 degrees below zero Fahrenheit; if spilled, it evaporates from the "heat" of the floor.

In Bldg. 41 the fascinating process of making liquid nitrogen is anything but quiet. Machines rumble as the air is sucked in from outdoors and compressed at about 200 lbs pressure per square inch. Then it passes through a heat exchanger and into a cylinder where it drives a piston with 6,600 lbs pressure per wallop. As the gas expands it loses energy and cools. Resulting liquid air is distilled and its components other than nitrogen are vaporized. Liquid nitrogen is piped into its giant metal container, insulated to keep it cool.

When passing through the heat exchanger air impurities will freeze in the tubes. Then the machine reverses the air stream, warms it and blows it out with a staggering boom. Not even the big muffler can deaden the sound. The story is told of some visiting firemen who, at the request of a watchman, visited the lab during a motor failure. About the time they got indoors, an air reversal took place. The blast sent them running for the exit and down Vassar Street. Says Manson Bent, who keeps watch on the machine, "When it isn't noisy, something's wrong."

This machine is one of the few in the country producing liquid nitrogen at such low pressure. It can make as many as 45 cans a day and last year supplied the Institute and Lincoln Lab with 190,000 liters, or 175 tons. Helium production was in the 10,000-liter range; which, if placed in milk bottles, would make a row from here to Central Square.



Angler Peterson set to strike



The Caravan

### NO SHEIK SO SLEEK

The Caravan is resting between Bldgs 41 and 42 -- special equipment of some very game MIT hunters who've been braving the wilds together for ten years now. Last fall Carl Peterson (Physical Plant) dreamed up a hunting vehicle for these northern jaunts and, with Dick Collins, Stan Palmer (Physical Plant) and Dan Webster (Photo Service), proceeded to construct it.

Starting with a '49 Dodge pick-up they added a plywood body, reinforced with used aluminum printing plates. To date, after

judicious "design revisions" its decor includes: four bunks, wall-to-wall red carpeting, safety-glass windows, screens, storage compartments, intercom system, radio, gun rack, deer rack, Penn Yan car-top boat, toboggan (for lugging supplies), duck boat, duck blind and tent. The latter, measuring a good 7 x 8' just pulls out from the end of the truck and, with a wooden floor, serves as mess hall and ice-fishing shack. Grins Dan Webster, "It takes us three hours to get packed."

Prohibitive size of heaters for The Caravan was solved by a stove, artfully hitched to the back door. When the door is opened the stove just swings outside and out of the way. Next improvement anticipated is a gas-driven ice-auger, to simplify winter fishing.

So far this outfit has been on some six fishing trips and a hunting expedition to Cape Breton, Nova Scotia, where, among other attractions, live the Micmac Indian tribe. A name, claims Dick Collins, taken from their ancestral "Micks from Ireland and Macs from Scotland."

In Nova Scotia the hunters are guided by two Syrians; booty has ranged from oysters to eels, rabbit, deer and crow. The hunters even load their own shells.

Occupants of the Caravan aren't always the same; many guests have taken safaris. As one puts it, "It's an adventure. We spend six months planning a trip -- and six months talking about it afterward."

### RETURN OF THE NATIVE

Dr. and Mrs. Killian are back from their world tour. Last stop before the States was Hawaii where they were lavishly greeted by alumni with leis. On March 2 Dr. Killian spoke at a Hawaii Technology Club dinner meeting. His first public address here will be on March 17th before the Boston Stein Club at the Faculty Club.



Honolulu Star Bulletin

Aloha

### HERE AND THERE

Recommended for this Sunday is the MIT Choral Society presentation of J.S. Bach's St. Matthew Passion. The pre-Easter concert will be held in Kresge Auditorium and will be conducted by Prof. Klaus Liepmann.

Soloists for the major spring performance of the Choral Society include Phyllis Curtin, soprano; Eunice Albert, alto; Blake Stern, tenor; Donald Sullivan, tenor; Aksel Schiøtz, bass-baritone; Paul Matthen, bass; and Alvarez Bulos, bass.

The performance will begin at 3 p.m. Tickets (\$3.50, reserved and \$2.50 unreserved) can be obtained from the Music Office, Ext. 3210.

As soon as they can dig their way out, the up and coming MIT Rockets will be off to another baseball season. Member of the top league of Cambridge this team plays a schedule of 24 games; is waiting to hear from prospective members. All interested members of the MIT Community are invited to call Joe Souza, Ext. 461 (Lincoln) or Bob Cavileer, Ext. 2215, for particulars. Pitchers and catchers, they say, can arrange to start working out now and practice sessions in the Cage will begin anon.

MIT makes news. The Worcester Telegram commented on the recent installation of an IBM 650 computer in the Civil Engineering Department. MIT, they said, can help you out, if you want to build a highway with a minimum of engineering red tape.

How? According to them we have installed "650 electronic data processing machines that promise to work modern miracles in highway building." Continued the enthusiastic editors, "Let's feed them some aerial photos of the proposed Massachusetts highways and find out for sure."

Herb Kavet of Charter Flight fame says, " More professors are flying with us than any other people." Whatever the case there are more planes to be filled. At \$305 round trip there's a second plane set for the 5-week tour (July 11-Aug. 15) and considerable room on the 2nd 3-week venture (July 12-Aug. 3). Also on the agenda are inclusive tours. For details: Herb, RE4-0391.

FOR SALE ETC.

- National elec adding mach # 79ELS. Mint cond, 3 yrs old, \$275. Ext. 3833.
- Zenith AM-FM table radio, model #H725, Fisher pre-amp equalizer, Garrard RC-80 3 spd record changer with GE cartridge and brand new diamond stylus. Good radio-record player comb for \$90, will also sell sep. Reason for selling: going stereo. Ext. 2342 or VO2-4443 (evgs).
- Florence comb gas and oil range, 4 x 4. Comp with tank and auto pump. Exc cond. \$75. Doris Shelley, Ext. 412 (Lincoln).
- Bausch and Lomb monocular microscope, 16 mm oil immersion, 4 mm objectives, rather antiquated but in exc cond. Best offer. Alan Hershdsorfer, UN8-7856.
- Dragon Class sloop, 29'2" x 6'5" x 3' 11". Sleeps 2, sitting headroom, built 1952. Dacron sails, new '58, Evinrude 3 hp fully equipped for day sailing, racing, limited cruising. Exc cond. \$3,500. Al Schwartz, CR4-8750, Ext. 67 (days) or TW9-1729 (evgs).
- 12' runabout with 15hp Evinrude motor, '57 Mastercraft trailer, model CU750. \$350. J. Leach, Ext. 2213.
- Winged chair, 28" wide, 44" high in perf cond. Difficult but not impossible to move from present location. Come and get it. Ext. 4444.
- Typing theses and term papers. Margaret, Ext. 4850 or TW3-6011.
- On sale squash racket, used once. Usha Nand, Ext. 3636.
- Whirlpool ringer washing machine, Exc cond, \$35. M. Granese, Ext. 7198 (Linc).
- Baby carriage, good cond, \$15. H. R. Hirsch, TR6-6554.
- Chains for 15" wheels, \$6; also golf cart, \$8, desk, \$15. Keith Oddson, Ext. 2548.
- Electronic flash Ultrablitz Expert IVA semi-prof model with adjustable angle of illumination (50° and 80°) and dual power selection (80, 40 w<sub>t</sub> seconds). Uses 4 D cells or AC. Compact, ltwt with high color guide number. New \$70, selling for \$35. D. Regillo, Ext. 7425 (Lincoln) or VO2-1943 (evgs).
- Ski boots, woman's Henke, for reg size 8½ or 9B shoe, worn twice, \$25 (orig \$45). Mrs. B. R. Hopkins, Ext. 4934.
- Furn, used by serviceable: roll-away bed, mattress, \$20; maple DR table, \$20; kneehole desk (maple finish), \$22; captain's chair (blk), \$6; end table, \$5; commode, \$5; small window fan, \$6; bridge lamp, \$3. Avakian, UN4-8628 (evgs).
- Fine Martin tenor sax, exc cond, incl case and stand. Ext. 4411.
- Men's Henke "Sport" ski boots, size 10. Cost \$40 new. Used one season, now too small. Best offer takes them. Doug East, Ext. 2235 or Rm 3-264.
- Bathinet in good cond, \$7. Ext. 2205 or KI7-0604.
- K set, table, 6 chairs; LR set, divan, 2 chairs; den set, studio couch, 2 chairs, 9 x 14 beige carpet with pad, 10 x 22 fiber wool carpet. Best offer. Ext. 7153 (Lincoln) or CE7-9282 (evgs).
- Man's Rodex self-winding, officially certified chronometer wristwatch. \$140 new, best offer takes it. Ralph Gootner, Ext. 7288 (Lincoln).
- 10 cu ft GE refrig, exc cond. Maurice Forbes, Ext. 4261.
- Underwood Finger-Flyte champion port typewriter, comp with variable touch control, auto key-set tab, elite type. Perf cond, recently cleaned. Must sell. \$40. Bob Strich, FI4-3837 or leave a note at Music Libe desk.
- Pedigreed Samoyed puppies. AKC reg, white with blk points. D. Avery, Ext. 3246 or PA9-4992.
- Standard poodle puppies. Phi Beta Kappa type, apricot and cream. Fine blood lines, AKC reg. TW4-9205.
- '54 Britannica plus comp set of year books. Perf cond. \$200. UN8-7949 (evgs).
- '37 Ford 2-dr sedan, good cond. Quick sale, \$100.50. UN4-4468.
- '50 2-dr blk Chevy sedan, new battery. Good cond. Owner leaving. Usha Nand, Ext. 3636.
- '50 Chevrolet 4-dr. Blk, std shift, good running cond. \$125. Mario, Ext. 2364.
- '52 Mercedes 4-dr sedan. New engine, trans, clutch, shocks, tires. R&H, std shift. Asking \$300. Ed McDevitt, Ext. 4430.
- '53 Dodge. Good tires, new battery, good running cond. \$320 or best offer. Saito, WA4-5910, Ext. 26 or AS7-1329 (after 7 p.m.)
- '53 Ford 2-dr customline V-8. Shift with overdrive, 60,000 mi, good cond. \$250. Dick Schwend, Ext. 2487 or Grad House (evgs).
- '57 Ford convert. Exc cond, 20,000 mi, R&H, power steering, safety equip. Owner leaving country. AS7-6587.
- '58 Rambler 4-dr sedan. 6 cyl, super model. Mrs. Bishop, KI7-1259 (evgs, weekends).
- XX-120 Jaguar forest green coupe. Good tires, R&H, exc cond, \$1,250. D. Schonting, Ext. 2288 or CO2-1353 (evgs).
- Room for rent in priv home. K, LR facils. Only 5 min from Lincoln Lab. Mrs. Kuchinsky, EM9-4376 (after 3 p.m.)
- Furn apt in Cambridge. lg LR, K, BR, priv B and entrance on 1st flr of 2-fam home. Everything supplied except bed linen. UN4-8565.
- Unfurn apt, just off Pleasant St, Arlington Ctr. 2nd flr, 8 rms. 4 BRs, 2 Bs, sep DR, 2 LRs, fp, glassed porch, comb screen-storm windows, ht wtr, oil ht, comp redecorated, sep ent, pking in yd. \$185/mo. MI8-6238 (evgs).
- Cambridge 3 rm unfurn apt opp Hvd Law School. Tiled B, fp, \$125/mo, avail April 1. KI7-7581 (5:30 - 7:30 p.m.)
- Unfurn 1st flr apt, Cambridge between Hvd and MIT. 2 BRs, lg fp'd LR, garage. Ext. 2921 or UN4-1033.
- Six-rm furn apt, garage near bus. \$125/mo. Near schools and Belmont Center. IV4-2332.
- Apt for summer sublet. 4 lg rms near Hvd fully equipped, nicely furn. TV, hi-fi, washing machine, drier in basement. Close to shopping, trans. Mrs. Pollak, UN4-2108.
- New Watertown apt. 3 lg rms, all elec tile K, colored tile B, heated -- own thermostat, ample pking, \$100/mo. BI4-9025.
- Watertown 4-BR Colonial, near Cushing Sq., Belmont. LR with fp, DR, finished attic, den, scr porch, cab K with dishwasher, basement work shop with benches, air cond's, garage. S. H. Caldwell, Ext. 636 or WA4-2910.
- Wanted: for home workshop, 10" circular saw, drill press and joiner-planer. W. Herntz, Jr., Ext. 3561 or RM W5-147.
- Land court registered surveyor wanted to survey 13 acres in Cohasset. Contact George, Ext. 2398 or EV3-9442 (evgs).
- Wanted: furn house or apt for visiting prof, wife and 3 children, academic yr 1960-61. Mrs. Regnier, Ext. 2207.
- Wanted: 2nd hand, man's English bike. Ext. 154.
- Wanted: 3 to 5 hp air-cooled gas motor, any cond. Lawn mower motor will do. Don Willy, Ext. 2326.
- Wanted: single drawer file cab. Schmidt, Ext. 3235.
- Wanted: used duplicating machine. Ralph Gray, DU7-9155.
- Wanted: wool or pieces of coats, etc. for braided rugs. Ferriss, Ext. 3230 or MI3-7987.
- Wanted: 2nd hand bike, girl's. TR6-0203 (after 6 p.m.)
- Wanted: skis, boots, binders and poles. Don, WA4-9039.
- Piano wanted, Reas price. VO2-6445.
- Wanted: guitar. Murray Mackay, Ext. 119.
- Wanted: girl to share apt with 3 others in Camb between Central and Hvd Sqs, conv to MIT. Helen, Ext. 195 or KI7-9052.
- Princess Mocha Kooling Siamese seal point desires trip down primrose path with pedigreed tom. Dowry includes pick of the litter. UN4-2332.
- Wanted: old, battered vacuum cleaner for shop use. Doug East, Ext. 2235.
- Wanted: flute in fairly good cond. Also boy's small bike. IV4-7681.
- Wanted: soccer shoes, 12 or more pairs. New or used. ST2-1717 (evgs).
- Girl would like to share living expenses, apt or house, with interesting persons. Connie, KE6-5434 (evgs).
- Wanted: outboard motor, 5 hp or under. Spivack, Ext. 3580.
- Wanted: boy's bike, 24" wheels, English type preferred. Jerry Ouellette, Ext. 2461.