

TT Photo by Bob Lyon



Ashdown (right) lunching with friends

LOTS IN A NAME

Since he first blew into residence during the '38 hurricane, Prof. Avery Ashdown (Chemistry, Emeritus) has been 'Mr. Graduate House." This June the synonym will become official. In a dedication ceremony planned for Alumni Day, Grad House will be renamed Ashdown House by request of the students.

In 1930 Princeton had the only campus residence for graduate students in the country. President Compton wanted to establish one here. Dr. Ashdown, a Greek scholar turned chemist, was then an instructor, and he was nominated as Master. He remembers that Dr. Compton told him about it the day before the Eastman Labs' dedication.

Dr. Ashdown himself lined up the first group of students -- 46 in all -- for Crafts, Nichols and Holman Houses, and in the fall of '33 graduate housing started on East Campus. By the following year, the buildings were filled. In the basement of Crafts, Dr. Ashdown found a room full of broken teapots and cast-offs which he got cleaned out and rigged with a kitchenette. He called it the "Buttery" after his grandmother's pantry in western New York state. Later a faculty visitor congratulated him on his apt choice of title; there was a Buttery at Oxford, also. Still presiding at Grad House Buttery hours, he serves snacks and -- witnesses say -- often does the dishes.

In 1937 MIT purchased the Riverbank Court Hotel, our present Grad House. Prof. Ashdown knew the manager pretty well, because grad students from the Chem. Eng. Practice School took rooms there yearly in January. He was instrumental in obtaining the building, and followed its renovation every step of the way. In particular he recalls the day when MIT took over. Everyone gathered down in the basement to watch the boilers gasp their last. The elevators weren trunning. And the last resident to leave was a white-haired lady whom the porters carried downstairs in an armchair.

Grad House got underway with new furniture and equipment and over 400 residents. As

Master, Dr. Ashdown guided beginnings of graduate student government, athletics and social functions which continue today. He retired in '62 and moved to Bexley Hall. Before he left, the students commissioned Gardner Cox of Boston to paint his portrait (he remembers the 14 sittings with pleasure); it hangs in the Grad House Ashdown Lounge.

Dr. Ashdown is still a part of Grad House life. He's there for the breakfast club each morning at 7:30, and usually for lunch and dinner, which he often eats late with the crew.

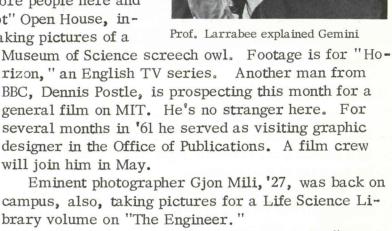
He carries with him a copy of Dr. Compton's statement to alumni in which he spoke of Graduate House as a place where students could live in a scholarly, cultured, friendly atmosphere. Thousands have, thanks to Avery Ashdown.

SELECTED SHORT SUBJECTS

Questionnaires were passed out at Open House. In the space for What did you miss that you wanted to see? one young lady wrote, " A boy named Mitch in the freshman class."

Certainly everyone else was here. Thousands swarmed through the buildings, perhaps the biggest crowd to date. A 4 1/2 year old boy toppled into the ship model towing tank, he was so fascinated. According to his MIT father, who scooped him out, most people working there take the plunge at one time or another.

Shortly MIT will be seen by many more people here and abroad. A film crew from the BBC "shot" Open House, including Strobe Lab, and Dr. Edgerton taking pictures of a



campus, also, taking pictures for a Life Science Library volume on "The Engineer."

And the fashion pages were represented. "Esquire" Magazine's fashion editor, with photographer, got material for a fall back to college issue. Models: MIT students in Esquire clothes. Finally, on Open House morning, "Boston" Magazine posed a young woman in summer dress on the Boat House dock.

On Green Bldg. roof: high style

SAILOR BEWARE

Shore School got underway on April 20. There will be summer and fall programs, also. All members of the Institute Community can belong; fee is \$6 for students, \$8 for others. Membership cards are available at the Cashier's Office, Room 10-180.

Don't forget your 100-yard swim test certificates from the Pool.





(Left to right) Turner, Griffiths, Radocchia, Goss

QUARTER CENTURY CREW

Altogether they've served MIT for 100 years. When they officially join the Quarter Century Club on April 29, there'll be a big welcome. This year's meeting of 25-year men will be held in the Grad House Campus Room. Speaker: Dean of Student Affairs Kenneth Wadleigh.

Joining the ranks will be these 4:
 John Goss, administrative assistant in
purchasing for the Aerophysics Lab in Bldg.
W-91. Starting in Electrical Engineering,
John served for many years as a technician.
In the Naval Supersonic Lab, he worked on
instrumentation for models tested in the
wind tunnel. He's a former member of the
city council of his hometown, Peabody, Mass.

When Kenneth Griffiths came to MIT, he was a machinist; first in EE, then in the Dynamic Analysis Control Lab. Now he's an instrument maker in the Mech. Eng. shop in Bldg. 31. On summer weekends in Falmouth he's skipper of a Chris Craft, also reaching its 25-year spot.

Robert Radocchia, manager of Walker Memorial and its dining service, had chefs in his own family; his father-in-law was at Walker when he first came. He now gets letters from former student staffers all over the world. A past master of the Richard C. Maclaurin Masonic Lodge, he has worked often with MIT's DeMolay chapter.

As groundsman on Briggs Field, Al Turner says he never saw a meet. Later he was a night cleaner and janitor. Since 1942 he's been assigned to the swimming pool, responsible for checking its chlorine and pH content daily and keeping its pumps and fans shipshape.

BOOK SALE

The MIT Press is offering a limited number of books to the MIT Community at 60% off list price. For 4 days only, April 26-30, the collection will be available at Press new quarters in Daggett, E-19, Room 720. Bibliophiles who have questions may call Mary Swaney, ext. 5251, or just show up for the sale.

PLASMA à GO-GO

Prof. James W. Mar (Aero. & Astro), "past chairman" of the Blood Drive, thanks donors and workers alike for its success. As busy as medical personnel during the effort were the Matrons volunteers. Over 80 ladies, under the chairmanship of Mrs. Benjamin Averbach, registered and escorted donors and served refreshments. This year, also, there were many more student helpers than ever before.

CU ACCOUNTS AUDITED

The MIT Credit Union accounts ending in 4 and 5 have been audited and verified as of March 31, 1965. Joseph Cullinan, chairman of the CU Supervisory Committee, urges members to return the confirmation notices as soon as possible. If your account number ends in 4 or 5 and you have not received a confirmation notice, please contact Mr. Cullinan at the Payroll Office, Bldg. E-19, Room 515, or ext. 4491. Federal regulations require that CU accounts be audited periodically, and the Supervisory Committee does a group each quarter.

FOR SALE ETC. '62 VW, very good cond. Also wanted: Jarge trunk. Achenbach, ext 2109 9 x 11" umbrella tent; Coleman lantern, \$40. Ext 3531. '62 Plymouth Fury convert, \$1,200 or best, R&H, p steer/brakes, new blk top. 698-2113. 200 lb mushroom anchor. Mimno, ext 30293. '63 Falcon, exc cond, 21,000 mi, blk, red interior, R&H, ww's, 2 snow tires, \$1,150. ext 5779. Free lovely, fluffy 2 yr old fem cat; also fluffy double-pawed kittens. Judy, ext 3126. '63 Austin Healey 3000 MK II, fully equipped, exc cond, best offer. Al, ext 5464 or 3402. '63 Impala super-sport conv, p brakes/steer, 250 hp eng, \$2,000. Ext 30269. Also 2 BR apt, W. Cedar St. White and gray Formica top K thle, 48 x 36", extra leaf, \$5. 489-1098. '63 KarmamGhia, yellow, blk int, exc cond, ww's, R, seat belts, aux H, 17,000 mi, \$1,965. Briggs, 235-7436. Westinghouse refrig. 6 cu ft. \$25:port stereo, auto chgr. \$35, 862-7444. Free: 4 kittens, 1 blk, 3 tigers. 868-6268. '64 VW, 18,000 mi, 266-3267 evgs. Perforated fiber pipe, 4" dia, 8 ft, cpling sleeve, sim to Sears 42A1337N,12 pieces, 50¢ ea. Ext 3432. '64 Karmann Ghia, blue, 4,000 mi, exc cond, best offer, Joseph Greenberg, ext 145 Linc. Alteration and dressmaking, by appointment. 729-1589. Federal enlarger, \$20. R. Carr, ext 3958. '64 VW, white, R, opening rear window, \$1,550, Ext,8029. Rock maple twin beds; box springs, matt, incl, \$75. CO5-9881. Swap: Sgle lens reflex 35 mm cam, like new for fm tuner, amp, spkr. Les Gediman, ext 30545. Summer sublet attrac air-cond furn apt for couple, Brighton. 734-9669. Motorola 14" screen, mahog TV, R, phono; Zenith Royal port R; Webcor hi fi; Sunbeam steam iron. 395-9159. Apt, Watertown, conv to MTA, 4 rms, unhtd, \$90/mo, avail July 1. WA4-8859. BSA, A-7, 500cc motorcycle, 20,000 mi, good cond, make offer. De Fazio, ext 4031. Collier carriage converts to stroller, car bed, good cond, reas, W:sgle stroller to hold 2, 876-0028. 3-rm mod apt, Burlington, air-cond, swimming pool, off-st pking, avail June 1, \$130/mo. Ext 3584 or 646-1889. Toy Poodle pups, 9 wks, avail now. W: fem rmmate to share mod apt, walk to MIT. Ext 30505 or 491-4359. Webcor port tape recorder, \$70. Steve, 354-7825. For rent, 3-rm apt, Brighton, Walingford Rd, parking. 782-7712. 7 1/2 hp Evinrude outboard, spring ret start, 2 cyl; sale or swap for 7 x 35 field glasses. Ext 6455 or 925-3024. GE disposal, used, not operable, make me an offer. John Laynor, ext 7202 Linc or 369-6436. Beacon Hill apt, June-Sept, furn, 2BRs, LR, K, B, \$175/mo. 742-1382 evgs. '64 Honda Sports C-1-10, 50cc, 3 mos, 1,200 mi, windshield, blue,exc cond, \$295 or best. Bill. ext 3988. Mod attrac air-cond apt for summer sublet, 734-9669. Lafayette turntble with GE stereo cart, \$30; guitar, \$10. Charlie Therrien, ext 5237. Reel power mower 18" Sears Craftsman, walk-n-start, 4 cycle, cost \$100, \$50, little used, Arthur, ext 2161, Summer rental, June 1-Aug 31, 3 BRs, sgle house, Waltham. 894-0788. Tble, piano, easy chr. ladder-back chr, child's desk, drapes, bedspreads, new set dishes. Ext 3220 or 864-0007. Johnson 18hp motor, 14 1/2 ft boat in good cond, both for \$250. 456-5665. All issues "Journal of Optical Society of America",63, '64, \$10/yr, \$20 total. Beth, ext 4550. Also; will do typing. Summer sub, spacious 5-rm apt, furn, 5 min from MIT, w/ garage, \$125 /mo. 783-0679 evgs. '60 Maytag wringer washmach, good working cond, best offer. Ext 4120 or 337-1785. Sharon unfurn apt, 5 lg mod rms, spacious vard, conv to train, lake, \$110/htd. Ext 5634. Used Bendix front-loading auto wshr, good running cond, a sking \$25. Ext 2551 or 648-2542. Sublet comp furn apt, BR, LR, K, B, Mass Ave conv to Hvd, MIT, April - Aug or Sept, \$135/mo. 354-6154. Sacrifice new custom-made Italian Prov mahog LR suite, turquoise, mattelaise, \$425 cost, \$325. WA3-1494 evgs. Sublet anytime, 3 1/2 rm Beacon St. apt, furn, 6 min walk to MIT. Pat, ext 5671. White rotary drophead elec sewing mach, best offer; port Kenmore elec mach, best offer. UN4-6884. Rek-O-Kut turntble, \$45;600/15 snow tires, like new, \$14 ea. Buying old U.S., foreign coins. Alan, ext 5853 Linc. AM-FM R, Zenith, exc cond, will haggle. R. Goldberg, ext 2871. Also girl's bike, not racer, \$10. Hotpoint elec range, 4-burner, with oven, good cond, best offer. Ext 2536. Avail now, Watertown furn 5-rm lower, 2-fam hse, G, yard, no pets, \$140/mo. WA4-3987. Tutoring, French and Italian. Also wanted: Used thle saw. Paul, ext 30438 or MI6-1588. Sublet apt, Marlborough St, beg June 1, 3-rms, Cynthia, ext 3482 or 536-6313 evgs. 21" Westinghouse TV, good buy for \$35. 923-9044. '64 Honda motorcycle, mod 300, low mi, \$550. 471-9173 evgs. Apt sublet, newly remod, furn, Hvd Sq, June 1-Sept 1, 2 BRs, Norm Cohler, ext 7585 Linc or 491-0780. Mod apt to sublet June 1 or July 1-Sept 1, option to renew lease. 734-4013. Gas clothes drier, yr old, like new, moving to all elec home, \$100. WA4-7049. Maple half canopy bed, full-size, like new, best offer. Sheltie pups, AKC reg, \$65 and up. Ext 2741 or 293-6359. Would like to sell furn with apt, avail June 16. Ext 4994 or 547-3387. Watertown apt, 3-rms, tile B, panelled K, htd, cont hw, 3rd flr, \$80/mo. Bill Papia, ext 30466. Mod 2BR apt, furn, near Hvd Sq, air-cond. 876-5664. Danish sofa, chrs, tbles, lamp, rug, drapes, all \$58 or best offer. 484-4582. Furn apt avail June 1, BR, LR, full K, B, 83 Revere St. Ext 4159 or LA3-2391 evgs. Honda 150 cc, less than 1,500 mi, blk, w carrier, \$450. TR6-5354. Pair ski boots, Rieker, size II; also VW battery. Bob, ext 5993. 4 new ww's, Sears first, 800 x 14, used mo, guaranteed 27 mos, orig \$100, sell for \$70 or best. LA7-0120. Belmont, 4 BR garrison colonial, 21/2 Bs, mod K. 484-5976. Wilmington 6-rm ranch, LR, fp, w to w carpet, flagstone patio, barbecue pit. \$17,900. Owner, 658-8085. 12' plywood runabout with Fiberglas bottom, windowshield, accessories, \$75. VI3-7348. Nr Winchester Ctr in country setting, avail for summer rental, \$225, house, 20 min to MIT, nr lakes. 729-7235eve. 6 little kittens avail for adoption, free. Ext 2262. 3BR farm house, wooded lot, exc neighborhood, nr Lincoln Lab on Hvd Sq busline. VO2-6848. Hotpoint elec stove, 20", '64 model, \$85. John Rogers, ext 3348 or LY5-3187 evgs. 12' aluminum boat with 14 hp Scott motor, used only 5 times, reasonable. 491-0896 evgs. Belmont colonial, 3 k/2 BRs, mod K, playroom, 2-car G, not too low 30's. 484-5976. Lexington 7-rm Dutch colonial, quiet st, 1/3 acre, Franklin School area, G, mid-20's. VO2-9463. '63 blk Honda, 150 cc, ww's, windshield, 1,400 mi, exc cond, \$425. Hank, 361-5525. Conway, N. H. "A-frame", 2 Bs. furn, oil ht, hw. \$70/wk inclutils, avail to July 15 or \$600 for summer, LA7-7591. Stereo Roberts (akai) 4 track, 4-spd, tape rcdr, crossfield lead, never used, \$500, ask \$400. 227-4037. Also Phonola record player with diamond needle, dual spkrs, \$ 20. Furn house for rent, Needham, May 1-Sept 1, 9rms, 2 Bs, sound-proof study, elec app, \$225/mo. X5363Linc. Purebred female Siamese kitten, 4 mos, \$25. Prof. Wedlock, 648-6309. Summer hse, Swan's Island, Me., overlooks harbor, 2 lg 4 sm BRs, 1 1/2B, K, LR, DR, study, \$65wk & utils, X2983. Stereo set, dual spkr, \$25. MI8-8199. Ride wanted: Prov, R.I. to MIT, 9-5, Mon-Fri. Bob, ext 5158 or 351-4815, Providence, evgs. '49 Ford convert, best offer. Ext 3733 or 491-4680. Wanted to rent in June: 4 BR hse in southern or southwestern suburb. Paul Jolly, ext 5085. '51 Pontiac, good running cond, \$75 firm. Walter Crowe, ext 6350 or TA5-8602. Wanted: Rmmate for well furn apt, 5 min walk to MIT, \$40 now to anytime bef June 15.X 3717 or 547-5667. '53 Plymouth, 6 cyl, 4-dr, exc cond. Ext 3867. Wanted: hse, furn, for visit prof '65-'66. Prof. Achinstein, Dept of Philosophy, John Hopkins, Baltimore, Md.

'55 Desoto, 4-dr sedan; p steering, brakes; R&H, good tires, good cond, \$195. Ext 6408 or 665-4794.

'56 Olds convert, all power, R&H, \$150. Danni, ext 4031.

'57 Olds, eng and body, very good cond, \$275, or best offer. Joe, ext 6540.

'57 Mercedes 190SL convert, low mi, very good cond. 491-8729.

'58 Ford convert, auto, R&H; new top, tires, battery, \$250, Dave, ext 2482,

'58 Olds Super 88, hdtop, 4-dr, exc cond, only 55,000 mi, must sacrifice. 648-7551. '58 Chevy 2-dr, auto trans, V-8, R&H, \$250. Ext 2180.

'58 Plymouth V8 auto, R&H, \$325, 894-6842.

'58 Ford Convert, exc cond, priced to sell, \$495. Ext 4121 or 623-0465 evgs.

'59 Chevy Impala hdtop sport coupe, std trans, V8, new ww's, R&H, 52,000 mi, exc cond. Pete, ext 3486. '59 Ford Galaxy convert, white, best offer. Sublet: mod 2BR apt, off-st pking, furn or unfurn. 354-7825.

'59 Vauxhall station wag, good cond, H, seat belts, new battery, \$250. A. Sen, ext 4133 or 354-2681.

'60 TR-3, new paint, \$1,000. Donna, ext 3879 or 284-6914.

'60 Chevrolet 4-dr sedan, std trans, \$895. S. R. Mitchell, ext 5273.

'60Charolet Biscayne, 2-dr, green, seat belts, new brakes, recent tune-up, \$600, 52,000 mi. 491-7913 evgs.

'61 Karmann Ghia, good cond, best offer, ext 5451.

'61 Valiant station wagon, V-200, very good cond, \$1,095. 926-1732.

'61 Buick convert, 29,000 mi, \$1,500 or best. Also free kittens. BI4-3088.

'61 Corvair Monza coupe, blk, 4-spd, 98 hp, exc cond, must sell, \$1,050 or best. Ext 2152 or 491-7416.

'62 VW, exc cond. seagreen, asking \$1,075 or best offer. Ext 8043 or 665-4847 evgs.

'62 Rambler 6 cyl, 4-dr sedan, std shift, R&H, reclining seats, \$750. A. Spiegel, ext 714 or 734-6613.

'62 VW Microbus, new motor and tires, \$999. MI8-7757.

'63 1/2 Ford SM, V8, 3-spd auto, p windows/steer, many extras, \$1,795. Chuck, ext 646 Linc.

'64 VW sedan, Java green, exc cond, to sell lst wk in June, \$1,500. Andre Willner, ext 3884 or 864-0259.

'64 Chevelle super sport, V-8, fully equipped, factory guarantee to July '66. Sarolo, ext 2765 or 648-9018.

Sublet Ig Beacon Hill apt. June 27-Aug 31, furn. 3 BRs. LR. K. study, \$170, Prof. Millon, ext 4405 or LA3-6914. Unfurn 1st flr apt, Brookline, 1 BR, plenty closet space, newly renovated, no children, \$130/mo. 566-7351.

Apt avail June 1, 1st fir, 1 BR, fp, bet Radcliffe & Hvd Law. Wanted: 2 BR apt, Brighton-Brookline, 8/1. 868-5404 eve.

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3-rm apt, 3rd flr Camb home, priv ent, unfurn, ht, \$130/mo, 1 or 2 men pref, nr Hvd Law and Divinity. KI7-5717.

Sublet 3 BR duplex, June-Aug or any part, B'line off Beacon St, furn, dishwshr, wash mach. Ext 5757 or BE2-9725 eve. 3-rm apt, Cambridge nr Porter Sq, unfurn, htd, lst flr, \$90/mo. Art Sutherland, ext 2461 or 491-7775 evgs.

Sublet June 1, renew Sept, 3-rm apt, freshly painted, new furn, on bus line, \$135/mo. Ext 2588 or 547-7324 eve.

Belmont, avail May 1, 6-rm apt, 2nd fir, cont hw, dishwshr, screened porch, G, exc location. IV4-6343.

Apt, sublet to Sept 1, Comm Ave near Mass, 1 BR, panelled LR, K, B, \$145/mo. L. Brekka, 266-5180 evgs.

Sublet unfurn apt, BR, LR, K, B, 4th fir, Allston, \$90/mo, In 15-Sept 15, option to renew w furn. Y 2334;254-2191 eve.

Sale or rent Lakeside summer cott, 4 BRs, all conv, 3-hr drive, Maine. W. Bryant, ext 2461.

Wanted: Used sewing mach for \$30 or less. M. Chang, ext 5737.

Wanted: Twin baby carriage. Bill, ext 4834.

Wanted: Rmmate with or without apt to share in Washington, D. C. this summer. Al, 547-9101.

Wanted: Fem rmmate, 21-25, share pleasant 3 BR apt nr Tech Sq, \$52/mo incl ht. 354-1466 evgs.

Wanted: Elec hedge clippers in good cond. Tom. ext 5189 or 30376.

Wanted: Summer sub for 3, Camb area, approx \$165/mo. Judy, ext 6187, Mon, Wed, Fri p.m.

Wanted: Girl, 23-26, to share with 2 others, 4-rm furn apt in Porter Sq area. 864-6866 evgs.

Wanted: Used Spinet piano, will look at upright. Ext 6572.

3 females looking for girls to share cottage at Cape for summer. 254-7316 evgs.

Cornell prof, fam need hie or apt '65-'66, 3 BRs, decent pub prim school. W. Pintner, 630Snyder HillRd, Ithaca, NY.

Wanted: 1 or 2 male rmmates to share Beacon Hill apt for summer, \$50/mo. Joel Michael, ext 5235.

Wanted: Used tricycle, any size. Mrs. Parker, 395-0662.

Wanted: Driving lessons, std trans. Also used inexp 35 mm camera. Susan, ext 2735 or HI4-9317 evgs. Wanted: Cello. Ext 2525.

Riders wanted from Hyde Pk, Dedham, Readville, Roslindale areas to Linc Lab, lv 7:30 a.m. Chuck, X646 Linc.

Wanted: Congenial rmmate over 25 to share luxurious w to w carpet, apt, Brighton. Marge, ST2-4891 evgs.

Wanted: Rider vicin Salem, N.H. or enroute, Rte 93, 8-5. Larry, ext 30417.

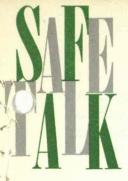
Wanted: To buy new Mercedes brought back from Europe at end of summer. 354-7191.

Wanted: Child or adult easel and inexp drafting table. Ext 5888 or 4614 or 862-8229.

Wanted: 1 to 3 fem rmmate(s) own BR (s), mod 7-rm apt near Hvd Sq, avail now or by 6/1. EL4-2003.

Anyone flying to Athens end May, beg June who will care for 2 girls (1 and 3 1/2) on plane? Ext 3360 or 484-857leve. Wanted: 45 rpm 6" record in the slot, repairable. Sale: Hallicrafters SX-62A rcvr, spkr, 550kc-108 mgc. X 7175 Linc.

Tech Talk is published every two weeks. Send news and ads to Mrs. Linde, Room 3-339, Ext. 2701. NOTE: Ads which didnot appear in this issue will be included in Tech Talk, May 5. That ad page is completely filled. Next Deadline: May 11.



PLEASE DON'T EAT THE RHUBARB BLADES

Who'd suspect lily of the valley, poinsettia, larkspur, foxglove, rhododendron, azalea, buttercup or even the lowly jimson weed of being dangerous? They can be, if eaten.

According to John J. Kingsbury, in his book, "Poisonous Plants of the United States and Canada," over 700 species of plants are known to have caused death or illness. If you're a plant and flower fancier, chances are that some of your prize possessions are poisonous.

Since they'll chew most anything, children seem to be especially susceptible to plant poisoning. (12,000 a year is the U.S. Public Health statistic.) Many adults, also, have a habit of chewing innocuous looking blades of grass or leaves of common plants.

The National Safety Council has prepared a list of 38 common, poisonous plants. If you'd like a copy, call the Safety Office, exts. 736, 5246 or 7886 at Lincoln and leave your name and room number.

PERISHABLE

Ordinary household refrigerators should not be used to store flammable liquids such as ether, acetone, alcohols, etc. Refrigerators have various electrically-operated devices within their cooling chambers which create electrical arcs.



Wary gardeners. Lillian Giuliana (left), Genevieve O'Hehir (Biology).

When arcing takes place, confined vapors of the flammable liquids, if mixed with air in proper proportions, may explode violently. Specific ignition sources are automatic temperature controls, defrosters, butter compartment controls and electric lights. Some mechanical types of door latches may spark when doors are opened or closed.

This hazard can increase if electrical power is lost for any length of time. Temperature may rise, causing flammable vapors to be more readily emitted. When power returns, an explosive vapor-air mixture may be present.

If you are thinking of purchasing a refrigerator for storing flammable liquids, either consider one that's explosion-proof and listed by the Underwriters Laboratories, or arrange to have a household type altered by Physical Plant personnel. They will run the capillary tube from the cooling compartment to thermostatic controls mounted on the outside, then disconnect and remove all live wires and switches inside which control lights, butter chambers, etc.

Chemicals and food should not be stored in the same refrigerator.

An added note for people who are abandoning or storing refrigerators or freezers: the U.S. Department of Health, Education and Welfare has prepared a booklet on how to prevent child entrapment in household refrigerators. It is available for five cents by writing for Public Health Service Publication No. 1258, U.S. Government Printing Office, Washington, D.C. 20402.



DOUBLE OR NOTHING

Supplying portable electrical tools for home and industrial use has become a large and vigorous business. In the maze of metal-cased portable drills, circular saws, sanding machines, reciprocating tools and "what-nots," there's a relatively recent innovation -- the so-called, double-insulated, "shock-proof" portable tool. Realizing that many portable tool users neglect to attach ground wires anyway, some manufacturers have been pushing double-insulated tools as a substitute. Their stand, and it may have some merit, is that extra insulation will reduce shock potential if regular insulation fails. But this may only delay the need for a ground wire. It seems that ground wire is a must so long as insulation deteriorates and tools are subject to mishandling, and conductive metal parts can come in contact with the person using them.

Here are some hazards: Drilling or cutting into a live wire concealed in a wall, or into extension cords; failure or deterioration of motor insulation or of component insulation such as switches, lead wires, power cord and brush holders; coating of insulation material with conductive dusts or moisture.

The big question is, "How long will it be before a double-insulated tool requires a ground wire?" Before you reach into your pocket to pay a premium price for one, you may wish to read "Double Insulation for Portable Tools -- Safe or Lethal, "written by David N. Summerfield and published in the February 1965 issue of "Insulation."

PERCHLORIC ACID

Perchloric acid, HClO₄ -- of which reagent grade 70-72% is the most common -- acts as a strong non-oxidizing acid at ordinary temperatures. In contact with ordinary combustibles and most organics, this material is rendered highly flammable when dried out and is susceptible to spontaneous ignition and explosion upon heating, impact or friction. It may also react with a variety of chemicals, such as metallic bismuth, acetic acid, diethyl ether, hydriodic acid, sodium iodide, wood charcoal, etc. to cause fires or explosions. At elevated temperatures (320°F), perchloric acid acts as a strong dehydrating and oxidizing agent which, in contact with combustibles, can cause fire or explosion.

Anhydrous perchloric acid, formed by reaction between perchloric acid and dehydrating agents such as concentrated sulfuric acid and phosphorous pentoxide, is extremely unstable at room temperatures. It will undergo violent spontaneous combustion. And in contact with oxidizable materials, it will explode at once.

If perchloric acid is to be evaporated, the operation should be carried out in a special fume hood equipped with a water spray in the exhaust duct to scrub out vapor. Heating should be done in heat-resistant beakers, flasks or test tubes utilizing hot plates, electrical mantles, steam baths or sand bath heat transmitters, never oil baths. Unions in apparatus should be glass to glass, not rubber; and stopcock greases, including silicone types, should not be used. Perchloric acid reactions should be run behind lab safety shields, and rubber gloves, aprons and safety glasses worn for personal protection. Transfer from one container to another should be done over a sink, and spills should be washed immediately with water, not picked up with sawdust or other combustible absorbents.

Perchloric acid should be stored in glass, stone or ceramic containers with screw caps, separate from combustibles. Small amounts kept in fume hoods should be placed in glass trays big enough to catch spillage. In bulk, original bottles should be stored in glass containers padded with glass wool and kept away from excessive heat. Don't allow the acid to freeze (4°F).