MASSACHUSETTS INSTITUTE OF TECHNOLOGY

May 20, 1964



In June, Michael Kelliher (left), Keith Hamilton (ctr) and Lewis Tedstone will receive degrees from Northeastern.

WITH TUITION ASSISTANCE

Twenty-two MIT employees expect to receive degrees this June for courses of study supported by MIT's tuition assistance program. Inaugurated in 1960, the Institute plan pays the first \$20 for jobrelated courses, plus half the remaining cost in each year up to a maximum \$200 per year.

Number of employees studying under the plan increased from 347 last year to 491 currently, about ten per cent of those eligible for tuition assistance. MIT contributed \$26,980; last year \$20,776. Northeastern University, where we had 211 people, was the most chosen school for study. Besides an increasing enroll-

ment in electronics and mechanical engineering, there were jumps this year in the fields of accounting, computer technology and air conditioning.

In all, about 235 people are studying toward degrees of associate, bachelor or master. (Where the entire degree program isn't closely job-related, assistance is given only to individual courses which are.)

Congratulations for many hours of hard work go to the following commencing employees: From Northeastern University -- Melvin Cabral (administrative assistant, National Magnet Laboratory), B.S. in Management; Michael Kelliher (technician, Occupational Medicine), Assoc. in Elec.; Instrumentation:technicians Donald Cleaves, Parker Davis, Walter Kmiec and Marco Marchi, Assoc. in Elec.; Lyman Zimmerman (administrative assistant), Assoc. in Mech.Eng.; Keith Hamilton (Instrumentation engineering assistant), B.S. in Industrial Tech.; Lincoln's Arthur Dockrey (engineering assistant), Assoc. Eng. in Elec.; Lewis Tedstone

(draftsman, layout), Assoc. in M.E.; and George Lee (technician), Cert. Control Sys. Eng. From Wentworth -- Paul Coluccio (technician, National Magnet Lab), Richard Sartanowicz (technician, Instrumentation) and Charles Doucette (draftsman, Lincoln), Assoc. in Mech.
Eng; Robert Fahey (engineering assistant, Lincoln), Assoc. in Elec.

From Boston University -- John Theriault (engineering assistant, Materials Center), B.A. in physics; Richard Montana (technician, Instrumentation), B.S. in Aero. Tech.; John Hero (engineering assistant, Instrumentation), Assoc. in Industrial Tech.

These colleges will graduate one MIT employee each -- Boston College, George Sherback (technical supervisor, Instrumentation), B.S. in Bus. Administration; Bentley College of Accounting and Finance, James Dalton (administrative assistant, Math. Dept.), ASA in accounting; Franklin Institute, Charles Fontaine (technician, RLE), Assoc. in Elec.; and from Lowell Technological Institute, Carl Anderson (chem. technician, Lincoln), Assoc. in Chem.



At play in Westgate Courtyard -young members of the MIT Family

OFF-PRICE AT PRESS

SLOAN FUND FOR BASIC RESEARCH

This week MIT's distinguished alumnus Alfred P. Sloan, Jr., gave a demonstration of one of his strong convictions. He established a \$15,000,000 private fund at the Institute for basic research, defining it as the "quest for knowledge for knowledge's sake."

Three administrators, guided by this definition, will manage the new Fund. They are Dr. Killian, President Stratton and Dr. Townes, who were chosen by the Corporation Executive Committee.

Said Mr. Sloan, " It has been my conviction that if the country is to keep ahead in the competitive race for survival there must be not only greatly increased funds for basic research made available, but also competent and imaginative management of such funds.... It is my hope that this Fund will stimulate other private sources to make support available for this purpose, at M. I. T. and elsewhere. "

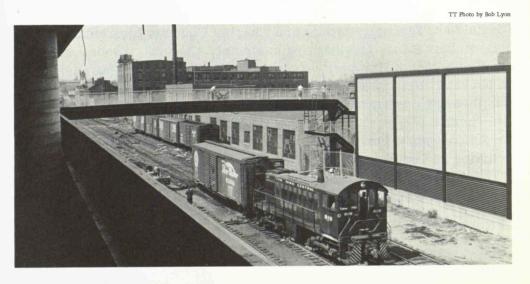
Both income and principal of the Fund are free and expendable, and although the Fund is primarily for research in the physical sciences, it may also be applied outside the Institute.

The MIT Press, once again, is offering a limited number of publications at a sixty percent discount to the Institute community. The books -- slightly damaged through shipping -cover a wide range of subjects including: planning, engineering, humanities, system theory, science and social science. If you are interested, you may call Fred Bentley, Ext. 5251, or go over to the offices of the Press in the Kendall Square Building, 238 Main Street, Room 307.

FIRST AID FOR SUPERS

To learn basic first aid techniques, some MIT supervisors are taking a Red Cross course on campus. The nineteen volunteers are from the Institute's supervisory management course; instructor is alumnus Thomas Kinraide '37, sent by the Cambridge Red Cross. Sessions, on five Mondays in May and June, are free to MIT.

VIEW OF THE BRIDGE which leads from the new M(T parking garage on Vassar Street over the railroad tracks to Albany Street. Building at right is the National Magnet Laboratory. Some 90 feet long, the pedestrian footbridge runs from the third deck of the five-level garage, and is scheduled for completion shortly. Garage 2 will hold over 500 cars.





Jack with view camera on Boston side of the river

PHOTO BY JACKMAN

Thousands of MIT photos have been taken by lanky, soft-spoken Ralph Jackman (Graphic Arts), who will retire this June at the age of 70. Though his father was a photographer, Jack never intended to be one. Down near Brewer, Me., his birthplace, he spent many hours camping and hunting in the Rangeley Lake District; had a canoe which was a veteran of the Peary expedition to the North Pole. His great-uncle had been the original settler of Jackman, Me. And Jack planned to study civil engineering at the University.

After taking an art course one summer, he ended up at the Museum School in Boston. World War I and the Army sent Jack to the Colt firearms plant in Hartford as a production engineer. Not long after, he went to Bethlehem Shipbuilding Co.

in Squantum to do

the same. Then the war was over, and Jack, back in Maine, found a job as photographer's assistant in Augusta. Before long he had his own studio and was doing portraits and graphic design. The Depression ended business; Jack came to Boston and in 1936 to MIT.

Though he started here doing portraits, Jack eventually was roving photographer for the whole campus. He photographed Churchill at Mid-Century Convocation and Mac-Millan at Centennial. The French organist André Marchal still orders pictures from Jack's negatives. He has been in every corner of the Institute, quietly recording the beauty and force which he sees here. Countless student photographers have sought his advice.

When Jack leaves, he'll spend time with his seven grandchildren and caring for his home in Roslindale. But he'll still take pictures, like the ones which MIT has enjoyed for the past 28 years.



One of Jackman's latest: Organist Nomeika (left), composer Kacinskas (ctr) and MIT's John Corley, conductor, studying a score in Kresge.

SUMMER SOFTBALL

MIT's Evening Summer Softball League is looking for enthusiasts. Teams from any department, dorm or project at MIT are invited to join. When the season gets underway (aim is mid-June) each team will play an average two nights a week. If you have an interested group, please contact Tom Harley (Instrumentation), Ext. 3494.

THE TENNIS GAME

On June 1 the Athletic Department will start its second summer tennis program. Planned are four groups (intermediate and novice) for adults and one for children of the MIT Family. The classes will be limited in size and meet twice weekly in June. Instructors: George Davies, freshman tennis coach, and new freshman squash coach, James Taylor.

All participants need an Athletic Card, and \$10 will be charged for the course. You can get application forms at du Pont Athletic Center, W32-109, and additional information from Coach Davies, Ext. 4971.

FOR SALE ETC. Hide-a-bed, chest of drawers, sm K tble, desk, etc. 547-9141 evgs. Sofa, crib, sgle bed, youth bed, chest. IV4-0370. '58 Vespa scooter mod 150, very good running cond, \$75. L.W.Slocomb, VO2-1166. 17" TV with spkr, \$30; baby stroller, \$10. 926-1892 evgs. Miracord chgr with Shure cart, \$60. T. Hackett, ext 650. Drawings prepared for theses, tech illustrations. Wayne, ext 5495. Sherwood S3000 FM tuner, exc cond, \$49. 861-0247. Dennis Mitchell car seat, \$2. MI6-7765. '57 Vespa scooter, very poor cond, \$25. R. Kezar, ext 2921. Free: pure white kittens, part Angora. Elaine, ext 2751 or 547-2059 evgs & wkends. 100 mm telephoto and 35mm wide angle; f 4.5 German made with case, crew finder for Argus C3 \$65; Molliton ski boots, 8 1/2D, \$10. Ext 4028 or WA4-8005 evgs. Two 7.60 x 15 auto tires, 4 ply, tube type, less than 1,000 mi. 438-4675 evgs. Wedding gown, court train, silk taffeta with imported applique, size ll, best offer. LO6-1874. Germ Shepherd pups, champ stock, AKC reg, from \$35; wanted: port typewriter. X30202 or 256-7582. Crosley Shelvador refrig, 4 yrs old, very good cond, \$100. 275-9337. Argus C-3, case and flash, used, \$10. A. Donovan, ext 4067. SX-100 Gen. Cov. ham recvr with spkr, good cond, \$140. F. Fraim, ext 2816 or 227-9692. 9 1/2 cu ft Coldspot refrig, good cond. 862-5584. ATR converter, 6 v DC to 110v AC, 100-125 w. Eric Edman, ext 297 Linc. Ringer washing machine, \$15. LO6-7439. Full sized bed, spring and mattress, reas. WA4-7914. Royal Futura port typewriter, almost new, will haggle. Robert Goldberg, E. Campus, ext 2871. Shepsmith Mark V, comp. \$295. Mr. Hopkins, ext 5762 Linc. 11/2 acre lot, Conant Road, Weston. Ext 2143 or 259-8560. Six tickets to BSO for fall '64. Second balcony on right, \$15. Mrs. Warren, R12-059levgs. RCA port stereo, exc cond. Ext 3494 or 491-4680. '59 Lambretta, 150 LD, must sell; wanted: graduation tickets, will pay. 776-7190. 2 mahog step end thles, match coffee thle, good cond, \$15. 923-1462 evgs. L.C.Smith typewriter, rebuilt stand, exc cond, \$35. J. Drake, ext 2691. Two 6v group 1 batteries, \$5 ea; 2v auto Rs, \$8-\$15. UN4-4298 breakfast time or evgs. Dacron and wool summer suit; jacket 43, slacks, 36. Ext 617 or 491-8928.

19" TV, Westinghouse, new picture tube, \$45. Dr. Camps, ext 4536 or 876-1913. Free kittens, half Siamese, M&F. 868-0869 evgs.

Ham R equip and transmitters, SX-100, \$130. David Osborne, Ext 3617 or 536-8454. Dble bed, box spring, Beautyrest mattress, \$30. Ext 2956.

Playpen, pad, \$12;portacrib, matt, \$10;jumpseat, \$3;infant seat, \$1;stroller, \$1.50. Keith, K17-6471. Refrig: comp DR set; K cabs;studio couch;desk;beds;chairs, TV set, lamps, Ext 3235 or 825-4578eve. 10' Fibergias sailboat, Sailfish type, exc cond, best offer. Barbara, OX6-3757 after 9 p.m. Jacobsen lawn Queen, \$60; Contax II with Sonnar f2, \$60. Ext 3870 or 235-8184 evgs. Payne elevette (elevator carries 2 adults), exc cond, rarely used, ask \$1,500, haggle.Weiner, Ext 3127 or 566-5089.

Norge refrig, 9 cu ft, exc cond, \$35. Neil or Jim, ext 2384.

Port elec refrig, 22 x 22 x 22, new motor, \$50;misc chairs, lounge, \$4 ea. DA4-1276. Will do typing at home. IV4-6532.

Microcycle'61 4 cycle 3 hp, 85 lbs, can do 35 mph, carries 1 1/2 persons,\$130. Mort, X2147 (1-5). FM tuners, \$40, \$20;2 amps w/preamps, \$50, \$35;Rek-O-Kut turnble, Grado arm, stero cart, \$35;GE 12" coax spir, cab,\$40; Lafayette 8" spir, tweeter, cab,\$15. Wagner, ext 2286,491-363 eve. New 2-piece den sectional, vinyl covering, corner ble, \$35. VO2-8743 evgs. 12" Chris Graf runabout, never used, \$100. D. Duston, VO2-1577 evgs.

Round Travertine marble table top, 1" thick, beige, cream and tan, was \$60, \$28. 876-3014. Stroller, \$12; "nglish coach carriage, \$35, slightly used, see to appreciate. "xt 3485. Pdarold Land camera, mod 1108, all access, prac new, value \$200, sell for \$95.X5461 or TW30426. Baby bathinette in exc cond, \$9. DE2-7482.

Nearly new white semi-auto zig-zag port sewing mach, w/attach, \$85. Robinson, X2691 or 875-1497. Dble bed, matt, \$20; sofa bed, \$15; '63 Kelvinator frig, \$125; '63 Zeaith 19'' TV. 484-4313 evgs. LR set; BR set, lamps, rugs. Kravetz, RE4-7980 evgs.

Silvertone port TV, \$75;doortble, \$7;dresser,17" x 36", \$8. Roderberg, ext 3603 or 868-8149. Alum screens; also new ceiling it fixture, glass bowl, maple trim, \$7; pole lamp, \$10; thle lamp, \$6; man's suit, 38-40, London custom-made, raincoat;misses short formals, etc.7-9, prac new M13-0094. Gibson guirar, rich tone, exc cond, bought for \$95, sell for \$65. Joan Steck, ext 5253. Lady : Schick elec razor, \$2, 95. VO2=1943.

Chain saw, drive for Gravely tractor, also snow plow blade; '62 Microbus mod 221, 40 hp, 22,000 ml, \$1300, buying new abroad; will care for cat for summer or summer & fall.Nottingham, X 4815, 4822. Mod 60" fin plywood K cupboards, wheat color, plnk Formica tops, cost \$100 to build. EL4-3753. Wonderland of Knowledge encylopedia, exc cond, plus '62 yrbk,78 records, offer over \$150.X 3472. MIT Student Furn Exchange will buy 'furn, May 15-June 19, Tues, Thurs 10am-3 pm,224 Albany or Mrs. Wm. Kaufmann, treasurer, 491-3803. Desks and biccases wanted.

Expert alterations on women's clothing, reas, formerly with Milgrim's, N.Y. WA3-1395.

Lilac floor length empire style evg/cocktail dress. Nancy, ext 4523.

Austin-Healey 100-6 roadster, ww's, overdrive, \$950. Jacoby, ext 4972 or 262-3677.

'55 Olds, R&H; body, eng, tires in good cond, \$300. John, ext 4818.

'56 Chevy 2-dr, good tires, good running cond, \$175. LO6-8566.

'56 Buick convert, good top, exc mech, reas. Al Teich, 547-9101.

'58 Rambier American 2-dr, blk, 4 new tires, new rebuilt motor, new radiator. KI7-6917 evgs.

'58 XK 150 Jaguar coupe new paint and tires, \$1,000 or best offer.Mr. Bergstrom, ext 2961.

'58 VW', R, gas H, sun roof, white walls, \$750, Ext 4271 or 267-0372 after 7 p.m.

'58 Plymouth 4-dr hdtop, \$175. Ext 414 Linc, or 484-8695 evgs.'59 Corvette, 3-spd box. J. Walsh, ext 4025.

'59 Chevy Impala, white, hdtop, 4-dr, 6 cyl, auto trans, R&H, 42,700 mi, \$895. J. Silva, X 174. '60 MG, exc cond, 1 owner, 33,000 mi, R&H, ww's, lugg rack, stbelts, \$1195or best.625-2784 eve. '60 Ford wagon, 45,000 mi, 1 owner, exc cond, std shift, \$995 or best. Dick, X 30530 or 329-9599eve. '60 Alfa Romeo G. Spider, blue, R, 32,000 mi, \$1,200. Art Sutherland, ext 2461 or 491-7775 eve. '61 VW, blk, sunroof, seat belts, exc cond. IV4-3082. '61 BMW, R27, 250cc, exc cond, 9,000 mi, \$450. 491-0330. '61 Ford Fairlane sedan, 6 cyl, auto trans, lving country. Ext 5307 or 923-8866. '6l Corvette, 2 tops, fuel injection, 4 spd trans, blk/silver, 18,000 mi, NO5-4604, NO5-6929. '62 VW, sunroof, stbelts, R, 25,000 mi, \$1,250. Laurie, ext 7394 Linc. '62 Comet 4-dr sedan, 14,500 mi, auto trans, ww's, stbelts, many extras. J. Elkon, ext 3679. '62 TR3, exc mech & body, \$1,595 or best offer. BR2-4225. '62 VW, sunroof, exc cond, R, best offer; VW luggage carrier w/cover, best offer. 923-9761 evgs, Brighton 4-rms, 2 BRs, mod K, avail June 1, near shops, MTA, schools, \$125. LO6-4014. Camb apt sublet, 3 lg rms, furn, 3 blks from Hvd Yd, avail July 1-Aug 31, \$130. X 3647, 491-0805 eve. Apt sublet June 1-Sept, furn, BR, LR, K, B, Trowbridge St, lease renew, \$130/mo. 864-3953 evgs. Air cond 2 BR mod apt, on-st pking, Watertown, avail June 1, \$145 /mo, inc ht. X 3705, 926-1895 eve. Furn apt to share with scholar, 2 air-cond studies, lg fp LR, 2 BRs, \$125/mo, incl utils. 491-3136. Furn air cond apt, 2 BRs, D'ette, LR, B, new furn, June 1-Aug 30, piano. Chan, X2348, MI8-7637eve. Spacious 5 BR house, Newton Centre, \$25, 500, fenced yd, 2 1/2 Bs. DE2-8718. Sublet NY furn 3-rms, air cond, utils, linen, June 12-Sept 12, Columbia area. N. Y; MO6-8897. 4-rms in New York City avail for same in Cambridge. LO6-4899.

Brookline sub, June-mid-Sept, 5 rms, furn, linens, silver, etc, pref couple, \$135/mo.BE2-2588. Furn apt, sub can renew, Ware St nr Hvd Sq, 2 BRs, lg LR, B,K, \$200/mo. Rormey, X2281. 3 BR cottage, beach, boats, Little Deer Isle, Me, on Penebscot Bay, June, July. Bloy, ext 2326, \$65/wk. Sublet July, lse in Sept, BR, LR, etc, furn near Hvd Sq, Mass. Ave. Ext 2707, 864-5588 evgs. Sub, unfurn apt, LR, BR, K, B, Back Bay, option to lease in Sept. 266-5895. Apt avail June I-Aug, Ise, LR, DR, K, 2 BRs, 2 Bs. Ext 3821 or 770 or CO2-9223.

Lg studio apt to sub, avail now, mod, cin, quiet, can lse, near Ovd eq. mm6-3808. Studio apt, sub summer or more, htd, semi-furn, 2 Ware, Camb, \$90. Rosenfeld, 847-2030 evgs. Sub June 1-Sept 1, 1g duplex, 3 BRs, quaint furnishings, 40 Otis Place, Bcn Hill, \$200/mo.742-0658eve. Sum sublet, clean, well furn, 4 rm apt, June-Sept 15, \$100. 776-1440 evgs. Rm for rent, \$10/wk, near Hvd Sq. EL4-4235 evgs.

Lg rm, K priv, 1 Aberdeen Court, avail June 1, \$15/wk, Camb, offMt. Auburn St. KI7-7698. Unfurn 4 1/2 rms, sub, option to lse, avail July 1, pking, fp, Hvd Sq. Pollack, X 3602; 547-1319. Sum sub, 2 BR furn apt, 1g LR, K, B, nr Hvd Sq, overlks river, Jne-Sept, \$200/mo. 868-6157 evgs. Mod apt, ct yard, pine panelled, part furn, conv to Hvd Sq, \$110, option to lse in fall. 547-8361 evgs. Watertown sub, June-Sept, furn, 2 BR, K, LR-DR, study, \$300/season, 926-0386, Baby stroller, \$3. Bcn St, entire top flr, BR, LR, fp, K, roof, tile B, \$130, avail Aug 1. CO7-7143 evgs. Apt sub, In or July-Aug, furn, LR w/hide-a-bed, lg K, 3/4 mi to Hyd Sq, conv. 491-0856. 3 BR ranch, air cond, tile B, all elec K, patio, yd, conv to schooks, W. Concord, \$18, 900. EM9-3320. Rent June, hse on Swan's Island, Me., sleeps 14, skiff w/motor, \$250/mo or\$70/wk.Holtzapple, 2983. Conantum, Concord, contemphse, 1 acre, 4 BRs, study, 2 Bs, 1gK, mid \$30's.X 651 or 369-9238. Compact sunny hse, historic Beacon Hill, 6 rms, 2 Bs, \$39,500. Ext 2652 or CA7-5376. K. Cooke contemp 3 BR home, Concord, lse st Aug or Sept 1, \$350/mo. EM9-4430. 3 BR hse avail sub st July 28 up to 4 wks, 20 min drive to MIT. WO9-8127. Wilmington conv to Rte 93,6-rm brick frt Cape, 3 BRs, 1 1/2 Bs, 1/2acre wooded lot, \$19, 900.658-8804. Sudbury 6 yr old 4 level split, 4 BRs, 11/2 Bs, dead end st, low 20's. L. Gardner, Jr. X 7475 Linc. 2 camps, Ashburnham, Mass, 45 min to Linc, \$10,000 both, 1, 4-rm, 16-rm. Burns, X 311 Linc. Cottage, Lake Winnepesaukee, Guilford, N.H. June 14-Sept 7, all mod, boats. Paterno, X3777. Lexington 5-rm ranch, wooded lot, gas ht, occup July, basement den. 491-0912. Furn contemp, Lincoln, 2 BRs, LR, DR, study, \$250/mo, yr lse from Sept 15. Mrs. Johnson, 259-9345aft. Pembroke mod cott, 2 BRs, screened porch, furn, priv lake, K w/ cabs. DU7-0844 before 4 & wkends. Weston furn contemp, 4 1/2 BR, 1 1/2 acres woods, den, fam rm, Sept-Feb, \$250/mo. TW3-5086. Lincoln quaint 100 vr old sm hse, 2 acres of woods, 2 BRs, \$18, 900, 1, Mallov, ext 3967, Rockport secluded 4-rm seaside cottage, priv swimming, long season, \$1,100.99 Granite St. KI6-6173. Nantucket Island mod cottage, 2 BRs, 2 Bs, fp, htr, near village, beaches. PA9-1917. Brewster, Cape Cod, 3 BR new furn cottage, near Bay and pond beaches, July 4-25. 653-2995 evgs. Sublet 4-rm furn apt, June 18-Sept 8, Cambridge, \$100/mo. TR6-1291 evgs. Wanted: to rent st Sept 1, apt or hse, mod price, Arlington, Belmont nr Arl Ctr. Fill, ext 4937. Wanted: fem rmmate to share apt w 2 others, 5 rms, nr Hvd Sq, June-Aug. 876-5144. Used Citizen Band unit wanted:w defect rcvr acceptable. Manders, ext 2531 or 864-3294 evgs. Piano wanted, Dick Murray, UN8-6438. W:Theory of Elas. Stability, Timoshenko; Applied Elasticity, Wang; Buck. Strength of Met. Structures, Bleich; and lg traveling trunks, reas price. Da Costa, Rm. 5-307, Ext 5317 or 924-0397 evgs. Wanted: 3 BR hse, good cond, G, yd, near pub trans, \$175/mo, 926-1793. Wanted: Kodak Ektra camera body. Chuck, 876-8586. Wanted: rider to Seattle, Wash, June 8, share costs. H. L. Morton, ext 5097. Wanted: ride from Trapelo Rd, Waltham to Lincoln Lab, 8:45 a.m., 5:30 p.m. Dot Cropper, X7289. Wanted: girl to share attrac Comm. Ave. apt w 2 others, own BR. Sandy, X220(9-5)or CA7-5020. Wanted: ride to Chicago for couple, next week. Mahendra, 868-5083 evgs. Anyone driving to Baltimore/Washington on June 29 or 30 please call Sam, Ext 711. Wanted: furn apt beginning fall term for 2-4. Sam J. Ext 3197 or 868-0261 evgs. Secretary needs ride to and from MIT from Needham. Susan, ext 2202 or HI4-9317 evgs.

Wanted: ride anytime in June to New Orleans, or as far South as possible. UN4-3162 evgs. Wanted: accordion homer from 72-120 hass, used. Miss Carrera, 354-8641evgs. Wanted: amateur converter, 330 mc, Gonset or equiv. G. Valcourt, Ext 7662 Linc. Lost: 2 wks ago, long silver necklace, reward for return. Ellie, ext 2516.

Lost: silver cuff link with jade stone, sm reward, Ext 4185,

Tech Talk is published every two weeks. Send news and ads to Mrs. Linde, Ext. 270l, Room 3-339. NOTE: Ads which didn't appear in this issue will be included in Tech Talk, June 3, which is completely filled. Next Deadline: June 8.