

READY TO GO

On June 12 at 10:30 a.m. the Cage doors will open wide and over 1,000 seniors and graduate students will march from the Armory into MIT's 98th Commencement exercises. Following in the academic procession will be the faculty, and watching all, an audience of about 3,500 proud parents and friends.

Perhaps the busiest man there will be President Stratton. Not only will he continue, at the seniors' special request, an MIT tradition of presenting each diploma and shaking hands with the recipient, but this year he will give the commencement address, also.

Preceding the big day will be military commissioning ceremonies on Thursday morning and, in the afternoon, a panel discussion on "The Graduate's Role in Tomorrow's World," planned by the seniors and moderated by their class president. Panel members will be four eminent friends of the Institute: Edward J. Hanley, '24, president of Allegheny Ludlum Steel, representing industry; Robert H. Winters, '33, president of the Rio Tinto Mining Company of Canada and formerly of the Canadian Parliament, for government; Dr. Howard O. McMahon, '41, president of Arthur D. Little, Inc., research and Dean Jerome Wiesner, education.

To get things in order for June 12 is a good month-long job for Physical Plant people. They build a stage, bandstand, stairs, railings; put down rugs; hang up drapes, flags, special lights, canopies; install power lines, PA systems, fans, fire extinguishers; and paint and check a staggering list of items, including the speaker's rostrum and banners and signs for alumni reunion classes.



In Physical Plant paint shop, Arthur McLeish regilds standard holders.

THE MEN FROM LIS

At graduation exercises in Kresge recently, six MIT employees received certificates for completing two-year, tuition-free Lowell Institute School courses. Graduates of the electrical course were Victor Otero from Electrical Engineering, Matti Soikkeli (who last year completed the mechanical course, also) and Ivan Stokes of Instrumentation Lab, and Edward Weiner of the Lab for Nuclear Science. Mechanical course grads were William Buckley, Jr., of Instrumentation at Bedford and Walker Sloan, III, of the Nutrition Department.

This year, in addition to the regular subjects, there were three supplementary courses completed by a good percentage of MIT people. In "Transistor Electronics:" Henry Baldas-



(left to right) LIS grads Weiner, Otero, Buckley, Stokes & Soikkeli. Missing: Sloan.

sari, IL; Arthur Berg, RLE; Eugene Buchman, IL; Benjamin Dores, IL; Spiros Geotis, Meteorology; William Hedly, IL; Fred Jones, IL; Bruce MacDonald, IL; Edward McKay, Jr., ESL; John Majkut, Jr.,; Lincoln; Marion Munroe, Chemistry; Martin O'Connell, Lincoln; Domiano Papa, RLE; Harold Schofield, Lincoln; Manuel Silva, Aerophysics Lab; Richard Smith, IL.

"Probability and Random Variables" had two grads: Spiros Geotis, and Charles Greland, IL.

Completing "Digital Computer Program-ming" were George Catuna, Lincoln; John Mc-Kenzie, ESL; Walter McMurray, Chemistry; William Rabkin, RLE and Edward McKay, Jr., ESL.

ERRATUM

Missing from the May 20 story on tuition assistance was draftsman Paul Miller of Instrumentation Lab. He will graduate from Northeastern this June with the degree of Associate in Mechanical Engineering.



Following dinner in his honor at the Faculty Club recently, Sailing Master Jack Wood (left) got a present (ctr) from a long-time associate: master of foil and brush, Fencing Coach Sylvio Vitale (right).

HERE AND THERE

From MIT's Publications Office -- an awesome statistic: Paper for 65,000 copies of the new General Catalogue, due in August, will amount to 3,090,000 linear feet (nearly 600 miles) in rolls 31 inches wide.

Dr. Carvel Collins (Humanities), authority on the late William Faulkner, has been awarded a Bollingen Fellowship to further his work on a major critical biography of the novelist. It will be his fourth volume on Faulkner (who was his personal acquaintance) and a full-time project.

Filming around the Institute have been a crew from National Educational Television.

They were doing a program on Norbert Wiener for next season's "Pathfinder" series on famous Americans, including Ben Franklin and Henry Ford. Profs. Peter Elias (EE) and Walter Rosenblith (EE) were interviewed at the TX-0 computer and Dr. Killian in the Great Court by series host Benjamin De Mott of Amherst College. Last year he was visiting professor of humanities here.

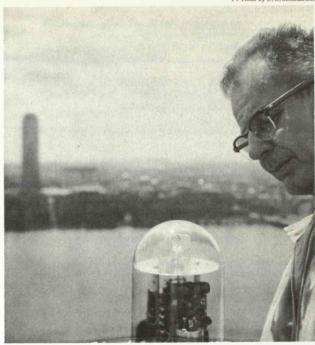
A FLASHY CAREER

Blinking down on Greater Boston for two months have been lights from Prof. Edgerton's Strobe Lab (EE). They're being used as experimental, airplane warning beacons on the Green Building, John Hancock, Museum of Science and the Blue Hill Observatory tower. The lights blink once a second; are controlled by photo conductive resistors to turn off during

daylight. The reliability test period may be a year and so far, kids "Doc," they've been effective: "Nothing's run into the Green Building yet."

The man who made the beacons, and installed several of them, is Bill MacRoberts, Strobe Lab project technician and '54 Lowell Institute graduate. He has worked with Dr. Edgerton since the early days of rapid-flash lights and high-speed photography. After 22 years at MIT, Bill has only been away once, to participate in A-bomb tests on Guam in 1958. His home (which he himself built) is in Whitman; he has four children.

Bill's work has always been varied. During the war, he did wiring on pioneering photo flash units developed for Air Force night reconnaissance. And he worked on the original undersea photographic equipment designed by Dr. Edgerton for bathyscaphs and for Comm. Jacques Y. Cousteau's expe-



Bill MacRoberts checks beacon at very top of 40-foot tower on the Green Building. At left: Prudential Center.

ditions for the National Geographic Society. Another area of Strobe Lab research has been sonar -- at first for the purpose of positioning cameras underwater. A later application is a side-scanning sonar device for searching the ocean bottom; last summer it was used to find the wreck of the Vineyard Lightship, sunk off New Bedford in 1944, and to attempt locating the submarine Thresher.

Bill has assisted countless students with their theses, and outside people who have come to the Lab for help. Most recently, he has helped Boston doctors who have come to use short-duration strobes for photographing blood circulation in the human eye.



With AOAO scale model, (left to right) students Ronald Rueckwald, James Nash-Webber, John Huguenin and Don Coulter, group's project manager.

STUDENTS' SATELLITE

In the interdepartmental systems engineering class this semester, 28 seniors and grad students did complete preliminary designs and analyses for a six-ton, unmanned satellite. Called Advanced Orbiting Astrophysical Observatory (AOAO), the vehicle would carry a 100-inch telescope to observe planets and stars, as it orbited far above the earth's atmosphere with electrical power from a volleyball-sized nuclear reactor.

Members of the task force were from Aero & Astro, Electrical, Mechanical, Civil and Nuclear Engineering.

When the course was introduced last year, students designed an equatorial weather satellite. It was so good that the group gave a briefing on it in Washington, D.C. at the invitation of the U.S. Weather Bureau.

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Towle Old Colonial pattern silver, 29 pieces, incl 3 place set's, $175, value $304. Mrs. Edwardson, X669.
                                                                                                                         '61 VW, sunroof, 33,000 mi. Rader, ext 7494 Linc.
                                                                                                                         '62 Corvair Monza convert, 102 hp eng, 4 spd trans, 27,000 mi, $1,725. Fisher, ext 3986 or $03-432-7522.
Sale or trade, Phys. Rev. volumes 93-112. B. Edwards, ext 7308, Linc.
                                                                                                                         '62 Chevy II, exc cond, 17,000 mi, $1,500. Da Costa, Rm. 5-307. Ext 5317 or 924-0397 evgs.
National CO-77X 4-band rcvr, 4 mos old, never used, $50. DA2-6874.
                                                                                                                         '63 MGB, many extras, exc mech cond, $1,995. Dave DaVia, ext 5350 or 5355.
Sofa bed, dresser, thles, chrs, sm cabinet, pole lamp, rug, desk, etc. B. Ratonyi, X2816 or 491-0957.
Wing chair, 2 covers, good cond, $30; Walnut Singer sewing cab, $25, was $45. DE2-8251.
                                                                                                                        '63 VW sedan, 9,000 mi, asking $1,450; Revere tape rcdr, $60; R shack stero rcd plyr, $45; Hallicrafters shortwave rcvr, mod S108, $40. Fattah, ext 3726 or 868-6140 evgs.
BR set, thle & 4 chrs, 3 armchrs, refrig, desk & chr, sofa, must sell, lving country. ST2-302leve.
                                                                                                                         '63 Corvair convert, fully equipped, 4-spd trans, $2,195. Ext 4181 or IV9-1324.
Sekonic microlite meter L-88; Hoover stm iron 220v; Optima Hebrew typewriter. Phyllis, Ext 5809.
                                                                                                                         '63 Grey and white VW std Microbus, A-1 cond, 12, 000 mi, 1 driver, avail now, $1, 950. IV4-3814.
Kenmore gas dryer, exc cond, $75. 924-2127.
                                                                                                                         '63 Grand Prix Pontiac, p steering, brakes, antennas; tinted glass, auto trans. Ext 3530 or VI3-7859 evgs.
19' Lightning # 6111, comp gear, Dacron main & jib; Nylon spinnaker, ready to sail.OL8-3657.
                                                                                                                         Marlboro St near Mass, 3 BR apt, unfurn, new lg rms, lse req, $225/mo incl utils. 262-0640 after lpm.
14' Fiberglas ski boat, 40 hp outboard, $350. Terry Burnett, CI7-7717.
                                                                                                                         Avail Jn 15 near Radcliffe dorms, 1g BR, LR, off-st pking, priv ent, unfurn, $125/mo. 491-0899.
Japanese sewing mach, $15, Aristocrat, good cond. Kay Winters, 254-4827.
                                                                                                                         Sublet furn apt, 1se in Sept, 2 rms nr Hvd Sq, all utils, $90/mo, ideal for 1 or 2, EL4-1377 evgs.
Bunk beds, incl mattresses, good cond, $20. Ext 3459.
                                                                                                                         Sublet near Central Sq, mid-June-Sept, 1se option, LR, BR, study, K, $100/mo sum, then$110.KI7-8023 eve.
Air cond, exc cond, $95; wanted: ride to Chicago or vicin, will share expenses, 862-8771,
                                                                                                                         Rm for rent, $50/mo, share common K, gentleman only, 10 min wk to MIT, 149 Auburn, UN4-5817.
Frigidaire 30" electric oven, best offer, VO2-6132,
                                                                                                                         Newton 3rd fir apt. 3 rms, furn, utils incl. adults, $100/mo; '59 VW, 30, 000 mi, $400, DE2-3843 ams & eve,
Heathkit, DX-100B ham trans, unmod, incl 10m beam antenna, other access, $150. Ayres, X4031.
                                                                                                                         Summer sub or lease, near MIT, BR, LR, K, B. 491-8192.
35mm proj, auto proj 35 mm slides on 3 x 2' translucent screen; also elec cabs. Bailey, X546l or FV4-4662.
                                                                                                                         Summer sub, June 10-Aug 31, furn, BR, LR, K, 1039 Mass Ave. 491-8085 evgs, wkends.
Akai (same as Roberts) M-4 tapercdr, 4 track stereo, Hysteresis Synchronous motor, 2 spkrs, 2 speeds, semi-port, $200;Olympia port typewriter, $50. Sell all for $230. Jerry, EL4-7820.
                                                                                                                         Sublet 3 lg rms, B, furn, 1st flr, 3 blks from Hvd Yd, $130/mo, incl utils. 491-0805 evgs.
New World-Wide postage stamp album through '63, used l wk, cost $8.50, offer. Al, Ext 149 Linc.
Honda 300 cc motorcycle, new cond, 2,000 mi, $450. Barry Holmes, ext 3229 or 547-3435 evgs.
Floor lamp, $5; lavender bedspread, $10, matching cafe curtains, $10. WA4-4574.
Bausch & Lomb binocular microscope, all std equip, $300, orig purch in 1960. 566-7538 evgs.
Fedders air cond, used I 1/2 mos, 7500 BTU, 110V, 7 1/2 amps, new$240, ask $175.Mrs.Manning, X2697.
200mm Auto-Nikkos telephoto lens, brand new, carrying case, caps, $125, never used. Schildkraut, X 5415.
Gibson 5-string banjor, RBI70, new perf cond, was $210, sell for $150. Cal Owen, Ext 2537 or KE6-1300.
LR set; couch, 2 chrs (1 rocking), maple. Cindy, ext 2234.
Brand new Eico model 460 AC-DC wideband oscilloscope, asking $75. Al Bower, ext 4083.
Bkcase boards, assorted prices, lengths. X 407, Tues. Thurs or 267-0042 evgs.
Dble bed and matt for sale, $30. EM9-6878.
'59 Lambretta motor scooter, 150 cc, exc running cond. Joe, ext 5059 or WA4-1759.
Oriental rug, stnless steel flatware; Wedgewood china; drapes, ironstone plates, zither. 864-0007, notWed's.
Man's full dress suit, 40 long, $10; misc baby equip, carriage, cribs, etc. UN4-0616 evgs or X2642.
Lamps, chairs, dbie bed, desk, baby furn, Philco refrig, Ken wshr, porch glider; children's toys; avail Aug 1, Camb 5-rm apt, 1st fir, spacious, yard, $120/heated. 491-7087.
21" RCA Victor TV, $25; '61 Renault Caravelle convert, 4-spd box, 2 tops, $800. B. Johnson, ext 3226.
9 x 9' cottage-type tent, poles, screens; house lot, ocean view, Marblehead, $15,500. Joe, ext 5392.
Car top carrier, alum, frame with zippered cover, 14 cu ft capac, fits all cars, $15. Ext 5139 or 244-5109.
                                                                                                                         Cottage lots for sale at Newfound Lake, New Hampshire. 322-5949.
Elec lawn mower, 18" swath, orig $72, asking $35, runs like new. Helen Morgan, ext 3501 or 444-9565.
Polaroid camera, attach, case, like new, UN4-1683,
17" Zenith port TV, aqua, white, very clean, exc working order, $60. Zuber, ext 3895 or 277-9848.
BR, K curtains; thlecloths, K utensils, all for $20; also 2 qt Revere copper kettle, $5. Ext 2816 or 625-7405 eve.
39' cabin cruiser, newly built, exc for family. Mirarchi, ext 30352.
Kodacolor film, 8 rolls, unexpired, size 127, half-price. ST2-7569.
Will tutor French and/or Latin for summer. Sandra Hall, MI3-2404.
Any German student/staff from Munster, Marburg or Iserlola? 354-6808.
                                                                                                                         Elderly woman to room and board. LA7-0551.
Lullaby crib, Kantwet mattress, bedding, $28. 484-4950 evgs.
Golf clubs: 4 matched woods, 2-9 irons, putter, bag, cart, access, $110; squash racket, $3.50. Mike, X 3472.
Sm Sears umbrella tent, hardly used; wanted: cabin trunk; medium sized tent. Hearle, ext 2258.
Motorola color TV, $200; assorted rugs; air cond, $150; chrs; Zenith rcd chgr, $30; Levine, x 617 or ELA 5954.
Man's bicycle for sale, $12. UN4-9480 evgs.
Sofa, rug, chest, bkcase, 2 tble lamps, foot lamp. WA4-6485 after 4 p.m.
'52 MG-TD, fine shape, $700. Philip Clapp, 326-0931.
                                                                                                                         Wanted: used air cond, will pay fair price. 354-7191 evgs.
'55 Olds, auto trans, blk, body and eng in exc cond, $295 or best. Ext 4997 or 868-7594.
'55 VW, $450, Ext 4986.
'55 Mercury convert, rebuilt eng and front end, $250. Jim Ussailis, ext 7866 Linc.
'55 Chevy, good cond, $75. Gary, ext 3555.
                                                                                                                         Wanted: dog house. Sylvia Elliott, ext 394.
'56 Buick Special, runs like new, $300. Ext 4518.
'56 Thunderbird, blk convert, std trans, perf cond, $1,750. VO2-6818.
                                                                                                                         Wanted: ride to and from W. Acton daily. Jeanne, ext 2391,
'57 Corvette, exc cond, 2 tops, power glide, R&H, $1,550. Bill Fontana, 872-5617 evgs.
                                                                                                                         Wanted: used trunks. Michael Jaffrin, ext 2627 or 277-1258.
'57 Ford sedan, blue, gd driving cond, $150 or best offer. Ext 4996 or UN4-8684.
'57 Pontiac 4-dr big car, $500, 1/2 and 1/2 guarantee. Simon, ext 5841.
57 Plymouth sta wagon, std, overdrive, comp for use as parts, exc cond, fact-rebuilt eng, springs, shocks, carburetor, clutch, etc. Interior only is fire damaged. Zwerdling, X 5639or 484-8131.
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⁵⁸ Olds, 2-dr, powerglide, power steering, white and gray, runs very well, 2 snow tires, \$250; refrig, \$10, sofa bed, \$13; baby high chair, \$9, rugs, \$3. Dayr, 354-2589 evgs.

'59 VW, 35,000 mi, \$900; Zeiss microscope, \$350; Keystone movie proj, \$80. Ext 2233 or KE6-8600.

'60 Saab, good cond, 58,000 mi, H, ski rack, stbelts, 34 mpg, spare parts kit, \$550. 245-6527 evgs.

'60 Caravelle, white, 4-spd, 2 top, convert and hd, exc cond, new tires, must sell, reas. KI7-1545.

'61 VW sedan, green, sunroof, diag stbelts, ski racks, exc cond, \$1, 275, 24, 000mi. 266-5142 evgs.

'61 Porsche super-90 roadster, Blaupunkt AM-SW R, white, blue, int exc cond. 232-8466 evgs.

'61 VW, blue, sunroof, R, \$1,100; snow tires on rims, 8.50 and 14 ww's, 2 for \$60. 648-3788.

'60 VW sedan, 50,000 mi, first owner, new tires, \$850. Weater, ext 4546 or RE4-0648.

'61 Chevy 2-dr Bel Air, R&H, std, I owner, \$1,100 or best offer. Ext 4541.

'61 Dodge Polaro station wagon, exc cond. Bob Cormier, JUI-0354 evgs.

*58 VW. exc cond. 2 new tires, eng rebuilt Jan., must sell. Also rmmate wanted for lg, furn

Bay State Rd apt, 2 girls, 23-27, reas rent. CO2-1217 evgs.

'60 Ford 6 cyl, auto trans, 18,000 mi, exc cond, \$850. BR2-9869.

'59 Austin Healy, perf cond, red, 4 seater. RE4-6126.

'59 Peugot, exc cond, \$625. WO9-8172.

Sub June 15-Sept 15, furn 4-rm apt, bk yd, pking, wash mach, etc, \$100/mo, Brighton. 782-9349 evgs. Attrac 3-rm apt, Back Bay, furn, sub summer, avail to lse, \$125-150/mo. B. Thomas, 266-0185. Beacon Hill apt to sublet, June 5-Sept, 2 BRs, LR, K, B, pine paneled, \$125. Dave or Joel, 523-2587. Near Pk Circle, Arlington 2-story LR, DR, fam rm, B, all elec K, porches, G, 1/4 acre. MI8-0518 evgs. Mod col 2-fam duplex, Arlington, 5 rms each side, gas-hw ht, good income, \$31,500. MI8-7265. Air cond, ultra mod 2 BR garden apt in Watertown, for summer or longer. 926-0563. Will swap cott in Canton, elec, wtr, l acre land near lake for sm. cottage nr salt wtr. Nick, ext 4565. 3 BR hse with G, quiet res neighborhood, avail June 15, \$175/mo. 655-1603, Natick. Summer rent, fully furn hse, Concord, 3 BR, study, 2 Bs, tennis courts, \$200/mo. Domar, X3369orEM9-4427. Cape Cod summer cott's Long Pond, Harwich, one sleeps 6, ht, hw, 2 BRs, K, LR, porch, priv beach, rowboat; the other sleeps 7, BR,1/2B, LR, porch, beach, rowboat, \$65/wk. X 2140 or 699-7i61 evgs. Jamaica, July-Sept'64, University of West Indies prof (Eng.) and fam will exchange charm campus hse, 3 BRs, pool, car, for home of prof in Boston area. UN8-8954. Cottage, Gloucester, lg LR with fp, K, BR, big porch, comp furn, wooded area, \$4,000. Pratt, 283-0409. Lexington contemp hse, 3/4 acre wooded area, 3 or 4 BRs, 11/2 Bs, low 30's. VO2-7347. Wayland split level, 3 BRs, 1 1/2 Ds, Daymond Farms, 1/2 acre, G, nr schools, low 20's. 653-7734. Higgins Beach, Scarboro, Me. 2 hrs away, 4 BR cott ocean blew, \$450/mo, \$125/wk; 3 BR cott, \$300/mo, half-price June, Sept, clean, sandy beach. 762-6981. Mod lakeside summ cott near Augusta; 4 BRs, all conveniences, priv beach, boat. 267-5195. Back Bay townhse , rent June-Sept or less, garden, pking, etc. CO7-3843. Bedford contemp hae, 2 3Rs, fp, built-in hi fi, beimed ceilings, low 20's, landscaped lot. 275-0263 Furn cott, LR, DR, BR, K, B, lg yd, Wellesley Hills, rent June-Sept, \$115/mo. 235-0798 evgs. Hse, 6-rm furn, 3 dble BRs, playrm, 1 1/2 Bs, \$250/mo, all utils exc linen and tel, 798 VFW Parkway, West Roxbury, rent for summer. Mrs. Farry, FA5-9814. Unfurn hse, Newton Centre Cape, 3 BRs, LR, DR, K, 11/2B, lse yr from Jn, \$210/mo; '60 Rambler classic wag, 4-dr, std shift, exc cond, \$595; Eng. baby carriage; Exacta II; Ext 7322 Linc or DE2-8216 eve, Wanted: furn hse or apt, 3 BRs, July. Dr. Foner, Ext 5572 or IV9-0748. Wanted: extra commencement tickets -- 4 -- by graduating senior. Ext 2304. Wanted: car pool from Belmont and School Sts. to Linc Lab, 8:45 -5:30. L. Michelove, ext 5520 Linc. Mother of I would like to babysit in her home on Marlboro St. for children of working mother, 262-3064. Interested in forming a numismatic group? Alan Kessler, ext 5853 Linc. Wanted for cash: flat back mandolin in good cond. R. Murray, ext 5451. Wanted: ride to and from Revere daily, 8:30 or 9-4:30 or 5. Elaine, ext 4103. Wanted: 6-rm apt in duplex, Newtons-Belmont, new fac member w kids, Aug l. Ext 444l. Wanted: numismatic bks, catalogues or foreign, ancient & U.S. coins, etc. Wallace, X 5556 or AL4-1332. Student (male) wants to share Back Bay apt for summer near Berklee School. Scott, 625-1459. 3rd working girl wanted to share attrac suburban apt w 2 others, sept BR, ride to work, X2587 or IV4-5015 eve. Wanted: 2 AR-3 spkrs, Dynakit 70w stereo amp, preamp. Yagiv, ext 2229 or RE4-3743. Wanted: room, reas, or in exch for babysitting or other work, preferarea close to Boston, CO2-1627. Grad student wants tickets for Commencement to acomm overseas relatives, will buy. ST2-2465 evgs. Wanted: babysitter immed, pref in my home. Mrs. Johnson, ext 5661 or 262-4252 evgs. Wanted: rmmates for next year to share attrac 7-rm apt near MIT, \$50/mo. Larry, X 153 or 876-1825. Wanted: fem rmmate to share reas, mod apt, Beacon at St. Mary's St. Lauri Rosser, ext 5252. Wanted: fem rmmate to share furn 4-rm apt, Coolidge Corner, \$55/ea/mo. RE4-1798 evgs. Ride wanted to N.Y.C. any wkend this summer, will share expenses. Frank Yin, CI7-8275 evgs.

Wanted: hse or apt, Watertown or Belmont, st Aug 15. Ext 5596 or 923-8807.

Ride wanted: Hanson Rte 27 to MIT or vicinity. Ext 5981 or 447-2157 evgs.

Wanted: lake or seashore cottage for vacation, July or Aug. A.F. Standing, ext 7248 Linc.

Fem rmmate wanted to share 5-rm apt in Brookline. Jane, ext 3428 or BE2-9606 evgs.

Wanted: rmmate for 1st flr of hse, 291 Marlborough, \$50/mo. Don Kenagy, ext 2173 or KE6-5546 after 11 pm.

Who was mean enough to leave 1,dark brown,man's fur-lined glove in Compt. Ctr Doc. Rm? Rm. 26-270.

Wanted: upright, inex piano, playable. AS7-9565, afts and evgs.

Wanted: baby sitter, full-time, 8-hr day. Mrs. Ostrea, 354-3749.

Wanted: bicycle, 20" or smaller. Len Sudenfield, ext 2176.

Wanted: thle tennis table. Ann Browning, ext 5809.