

## THE MOON AND RLE

The light that man bounced off the moon, for the first time, recently put a team of engineers and technicians from MIT's Research Laboratory of Electronics into a national spotlight, collectively, at least.

The group--headed by RLE's Professor Louis D. Smullin and Dr. Giorgio Fiocco--flashed bursts of red light from an optical maser to the moon and detected reflections back to earth three consecutive nights (May 9, 10, and 11). All told, they hit the moon with 83 different shots using such lunar landmarks as the craters of Tycho, Copernicus and Albategnius. Purpose of the project: demonstration of high power optical maser technology.

Telescopes for transmitting and receiving the bursts were loaned by MIT's Lincoln Lab (where the experiments were performed) and the optical maser (at 50 joules, the most powerful yet developed) came from Raytheon Co.

Technician Francis W. (Red) Barrows and Machinist Francis J. (Frank) Barnet of RLE were charged with the tricky task of machining intricate parts used in mating the maser to the transmitting telescope and in the optical receiver--a task that kept them after hours on several occasions. Barrows, an ex-Army radioman, has been at MIT since November, 1959; Barnet since 1951. Others who lent their skills to the project--dubbed "Luna See"--were RLE Instrument Maker John Sanroma (who joined Tech in 1942 as a member of the old Radiation Laboratory), Technician Harry Gay (who served with Lever Bros., in Cambridge for 28 years before joining the Institute in 1959), and Laboratory Assistant Kenneth MacDonald (a Nova Scotian who came here in 1959, also).

Pitching in at the time of the experiments were Assistant Professor Ward Getty and five graduate students--Hsien Hsieh of New York City, Peter Mandics of Denver, Colo., Dave Morse of Rochester, N. Y., Anthony Poeltinger of Vienna, Austria, and Garrett B. Stone of Riverside, R.I.

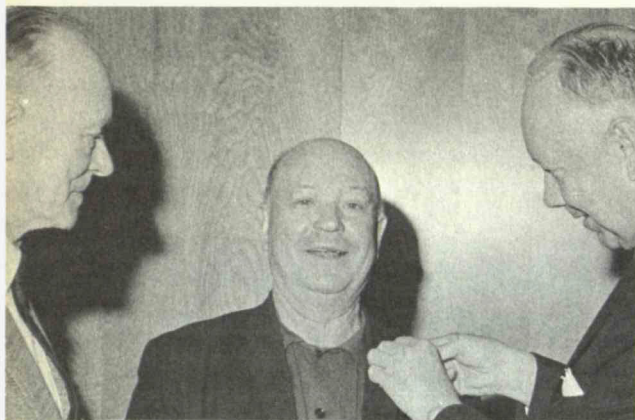
## MURPHY TO THE STAGE

MIT said thank you to a surprised Jim Murphy, Kresge Auditorium manager, at the Awards Convocation in Kresge, Wednesday (May 9). Murphy, as with all Kresge functions, had helped stage the convocation with the same spirit of assistance and accommodation that has saved many a day at the auditorium since he opened it in 1955. But one part of the program had been planned in secret and caught Murphy unaware. That was when President Julius Stratton called him to the stage, gave him a silver tray and a check, and said: "There is hardly anyone at MIT who has not been a beneficiary of your generous spirit." The MIT Brass Choir, a frequent Kresge user, gave Murphy a standing ovation.



(L. to r.), Barrows, Barnet and the moon.





(R. to l.) at Quarter Century Club dinner, Dr. Stratton honors two members, Samuel Saroka and Maurice Forbes.

## THE HONORED GUESTS

Retiring members and new 25-year employees were guests of honor at the annual dinner meeting of MIT's Quarter Century Club, Tuesday (May 8). Maurice Forbes, instrument maker at Instrumentation Lab, who joined MIT in 1930 (and a club member for six years), retires in June. Also retiring, but also rounding out 25 years' service, is Samuel Saroka, a Walker Memorial dining service employe. Other new members are Donald M. Fellows, a Department of Metallurgy technician, and Newman Evis, attendant at the Charles River boathouse. New club members received 25-year pins and MIT chairs from President Julius Stratton. Professor Roy Lamson of the Department of Humanities led a faculty ensemble in dinner music.

## LIS COMMENCEMENT

John H. Mains of A.C. Lawrence Leather Co., Peabody, Mass., will be the principal speaker at the Lowell Institute School commencement in Kresge Auditorium at 8:30 p.m., Thursday (May 24). Mains, a development engineer, is a graduate of both LIS and MIT.

Tuition-free LIS, conducted by the Lowell Institute Foundation and MIT, offers two-year mechanical and electrical courses with classes meeting evenings at MIT. MIT employes make up 10 pct. of this year's LIS enrollment.

## HOWARD F. TAYLOR FUND

A memorial scholarship has been established at MIT in the name of Professor Howard F. Taylor who passed away last January. Professor Taylor was American Brake Shoe Company Professor of Foundry Metallurgy, in the Department of Metallurgy. Donations to the fund may be sent to the Treasurer's Office, Room 4-110.

## DAME OF THE YEAR

Mary Lou Nummela's busy life has brought her honor among MIT student wives. Mary Lou (her husband, Walter, is a metallurgy graduate student) holds down a regular job as an assistant in the MIT Foreign Students Office.

In addition, she has served the last two years as chairman of the MIT Dames' Housing Committee. Besides doing volunteer work for the MIT Housing Office in the fall helping married students find apartments, the committee--under Mary Lou's direction--also helped the Institute design the new Married Students Housing Project now going up on West Campus. The committee polled 10 other universities about married student housing designs and came up with suggestions that were incorporated into the building ("make the elevators large enough for furniture moving," "be sure the refrigerators are family size," etc.).

At the MIT Dames annual banquet recently, Mary Lou's service was recognized. She was presented with the Mrs. James R. Jack Award--a silver bowl--as the Dame who contributed most to the organization during the past year. The award is named for one of the Dames' founders.



Mary Lou gives help on house hunting.



## GO SEE TINY

In the new MIT Engineering Projects Laboratory not long ago, a student turned up in need of a steel tank strong enough to take 200 pounds pressure per square inch. Such tanks are not uncommon. But the student had no immediate access to one and, for him, the tank was akin to the missing horseshoe that cost someone a kingdom; his year's thesis--an experiment in hydraulics--was riding on it. Full of confidence, the student solved the problem--like scores before him this year--by following a piece of advice that is becoming tradition at the still-young interdepartmental lab: "Go see Tiny."

"Tiny," in this case, is Joseph Anthony Caloggero, a man of mighty girth (250 pounds and then some) who has served as foreman of the EPL maintenance crew since the lab was started a year ago. EPL, occupying space in the basement and first floor of Bldg. 3, was set up a year ago by Engineering Dean Gordon Brown to give Tech students a first-class facility to carry out their own research projects. EPL, made possible under a \$9 million Ford Foundation grant in October 1959, to help enrich engineering education, was formed out of a merger of the old Steam Laboratory, Dynamic Analysis and Control Laboratory, the Heat Measurement Laboratory, and part of the Automotive Laboratory.

Caloggero and his three-man crew--Chester Babcock, Ed Clark and Roy Andrew--are charged with keeping the myriad of EPL facilities, utility lines (high and low pressure air, supplies, gas, steam plus a vacuum line) and equipment test cells operating smoothly. In addition, they serve the students as jacks-of-all-trades, running down needed equipment, helping set up apparatus, and tying experiments into the main utility lines. Hence the EPL saying: "Go see Tiny."

"Tiny never says he can't get something for a student," says Clark. "He'll scrounge all over Boston until he finds it."

For the hydraulics student, Tiny and friends ran down a surplus tank, welded legs on it and set it in place, saving the day and a well-conceived experiment.

"We have to be careful not to help too much, however," says Tiny. "The students must do as much as they can themselves. Most of the time we don't even know what the experiments are about. But we can explain the available machinery, tie them into utility lines, find pieces of equipment and do such chores as welding."

Tiny, who lives with his wife and three children in Nahant, has been serving MIT men for 20 years. He joined MIT as a technician in the wartime Radiation Laboratory. After Army service, he spent two years at the Nuclear Engineering Laboratory and, in 1948, joined the Automotive Laboratory (Bldg. 31) where he remained until EPL was set up. Babcock (of Holbrook), Andrew and Clark (both of Everett) came from the old Steam Laboratory.

Is EPL paying off in a richer engineering experience for students? Only time and the faculty can give a final answer. But to Tiny and his crew, the improvement seems obvious.

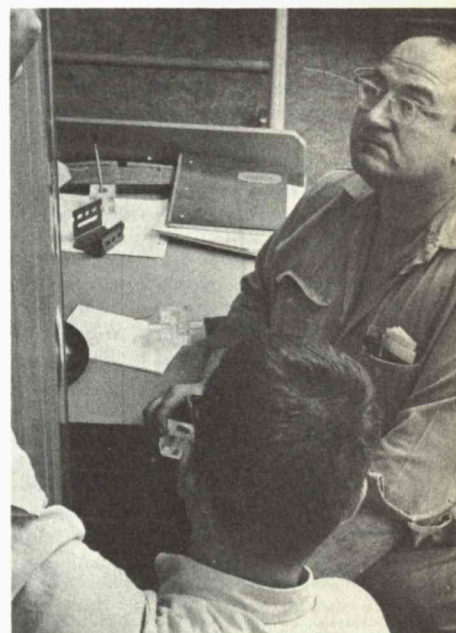
"The students seem a lot more enthusiastic about what they are doing," says Clark. "They're down here nights, Saturdays and Sundays working. They are doing finer, more careful experiments."

Tiny attributes this to the facilities available.

"They can do almost anything here that they themselves are capable of doing," he says.

Tiny has one fetish on which he won't relent in which he is supported by Dean Brown.

"When a student comes to me for something, I tell him to make me a drawing of it. It helps me to know what he's talking about and I know it helps him."



Tiny (right) helps a student set up his experiment.



FOR SALE ETC.

DON'T throw away any stamps. Send them to G. Nagle, Room 26-270.

2 full length hoops. Wedding gown (\$10) & Bridesmaid's (\$4). K17-5489.

Flute lessons, reasonable, college sr. w/4 yrs experience. 491-1776.

Guitar lessons, folk music & rock and roll. \$2.50/hr. Peter, M18-9326.

Air conditioner, 3 yrs old. DE2-8154.

Grandfather clocks imported from Eng., 8 styles, \$100-\$800. CA7-4247.

26" girl's bike (new). Has head light, hand brake, 3-position gear. \$29. CE7-0067.

Kodak 828 Pony Camera w/case & flash, \$15. 40"x40" screen, \$6, tripod; \$4. Lincoln ext 5489.

Easy Spin Dry Washer, \$30. J. Komsa, ext 3439.

Shower ring, \$1. Desk, \$8. Dresser, \$5. 300 Model Phone, \$5.50. R. Levine, ext 617 or EL4-5054.

Estey Upright piano, recently refinished & overhauled. Tuned. \$55 or best offer. UN8-6954, or Langridge, RE4-6000, ext 482.

Best offer. College girl, sz 16 wardrobe, winter & summer things, TR6-2523.

4 Poster mahogany bed, dresser, box spring & mattress. Reasonable. VO2-7780 or VO2-2628 after 7 pm.

Musical instruments, Banjo, Guitar, Violin, HI-Hat, W. Jones, 83-2814.

16' Gaff-rigged sloop. Good cond. \$250 firm. Lincoln ext 7496.

VW roof rack and canvas cover, like new. \$12. Lincoln ext 5745 or VO2-6748. Fritsch.

Four kittens. (1/2 Persian and 1/2 Siamese) and a black cat. Lisa, ext 4411 or TR6-9320 after 6 pm. Tubeless tires. Goodrich (5.90x15), 2 for \$10. Firestone (8.20x15), 2 for \$20. U.S. Royal (8.20x15), 1 for \$10. Mr. Haven, CE5-8184 evgs.

Eng. collapsible baby carriage, \$16. Port-a-crib, \$12. Exc cond. Ext 4433 or M16-8431.

14" Delta hand saw complete. Cost over \$300. Will sell for \$125. Call ext 2837.

Sz 8 wedding gown organdy w/lace & pearl trim, \$50. TW4-5715.

Gun type oil burner and controls, new cond. Asking \$45. EMI-7436.

Will care for any size lawns at low monthly rate. Fred Swartz, ext 2779 or LO6-5418.

4 new Ford hubcaps, \$10. "Market Forge" car top rack, 6' long. F. Hopewell, ext 3407.

HIFI speaker & cabinet, \$40. J. Powers, ext 4542.

Telegimar conv. telephoto lens w/case, 4 filters & hood. \$135. Peters, ext 3310.

Francaise. Experimentee dans l'enseignement, aimerait vous aider avec vos lecons, lectures, conversations francaises. CA7-1281.

Piano, \$50 or best offer. TR6-6794.

Dining room set. \$45 or best offer. NO5-4172 between 6:30 & 8pm.

Hallet & Davis Grand piano, 4'8", very good cond. Mr. Benton, ext 2691.

Frigidaire Refrig-freezer, 1960. 2/3 lowest discount price. WA6-1368.

Used 16" hand lawn mower. Sears best. \$10. VO2-1935 or ext 5344.

5 small kitty cats. 5 weeks old. M. Griffin, ext 717.

Misc. furn incl. beds, table-desk, Victorian settee, grandfather's chair, & chairs. PA9-3369 evgs.

'49 Ford V8, R&H, white 2 dr coupe, good cond. \$75. A. Kessler, Lincoln ext 322.

'49 Plymouth, blk, 4 dr sedan, R&H, 4 new tires, \$65. AS7-9854 evgs.

'53 Chevy, 2 dr sedan, exc cond. \$190. S. Patra, ext 2258 or TR6-8631.

'54 Mercury, 2 dr hardtop, auto trans, R&H. \$175. EM9-5405 Tues, Thurs or evgs. H. Brennan.

'54 Mercury, 2 dr, auto trans, power steering & brakes. \$250 or best offer. VO2-1355 after 5.

'54 Ford Victoria V8, auto trans, R, mech perf. \$150. Ext 2531, T. Gobllick.

'54 Plymouth, 6 cyl, Hy-drive, 4 dr. \$150. P. Lim, ext 3115.

'56 Ford Thunderbird, 2 passenger, grey. 2 tops. David Ellis, ext 2384.

'56 Plymouth, V8, auto trans, exc cond, \$350. Ext 3528.

'56 Pontiac, 2 dr, hardtop. Call Jean, ext 3744 before 5 pm.

'57 Ford V8, 4 dr, largest Thunderbird eng. std shift & overdrive. EL4-1371.

'57 Ford Station Wagon, auto trans, R&H, 34,000 mi (orig.). 2 snow tires. J. Magliozzi, ext 3567.

'58 VW, sunroof, R, gas heat. New tires, DA2-9791.

'58 Austin Healey, deluxe model, fully equipped, good cond. Lincoln ext 7429.

'58 Plymouth station wagon, 22,000 mi, exc cond, best offer. Ext 3366 or DE2-1857.

'58 Pontiac, green & white, hardtop, conv, good cond. \$900. Ext 3560.

'59 Austin Healey, 100-6 model, overdrive, good tires, low mileage. \$1750. S. Sawick, Lincoln 276.

'59 Plymouth Station Wagon, asking \$1300. '60 VW, asking \$1225. Lambretta TV 175 motor scooter, asking \$325. Owner leaving country. All good cond. Lincoln ext 7545 or EM9-4865 evgs.

'59 Renault 4CV, 4 dr, 4 new tires, avail June 15. \$275. R. K. Sullivan, ext 3726.

'59 Plymouth, Belvedere hardtop, exc cond. Highest offer. Lincoln ext 238 or GL3-7398 after 6.

'59 Lambretta, exc cond, windshield, luggage box, extra tires, \$250. LA7-2172.

'60 VW sedan, full reclining seats, 13,000 mi. Best offer worth \$1150. LO6-4876.

'60 Fiat 1100 Delux, exc cond, 16,000 mi, asking \$1300. C. Fuchs, ext 2367.

'60 VW sedan, exc cond, 19,000 mi, \$1300. Jim Houk, ext 655 or TR6-8996 evgs.

'60 Lark wagon, 4 dr, \$1200 or trade for older conv, VO2-0312.

'60 Topper scooter, auto trans, recently overhauled. M. J., K17-3409 evgs.

'61 Corvair, 4 dr, 18,000 mi, auto trans, deluxe equip. Exc cond, \$1800 or best offer. Khoushy, ext 138.

'61 Lambretta, (LI-125), exc cond, will trade for car. Will discuss. CA7-5428 after 7 pm.

2 BR furn hse for rent. Mid Aug. '62-June '63. Waltham on Charles Ri. \$175/mo. Chase, TW4-9043.

"A" frame hse, Conway, N. H., 4 double BRs, 2 baths, oil heat. \$240 +util, June 18-July 27. Dr. Hermann, ext 2341, 655 or DE2-4232.

Furn studio apt, LR-BR, K, bath, exc for 1 or 2. 15 min walk to MIT, avail June 15. \$85/mo. J. Solomon, ext 3837.

3 1/2 rm partly furn apt. Sublet June-Sept., \$85/mo. \$5 for parking. 190 Prospect St., Camb. E. Warms, EL4-6616.

Furn or unfurn house, 3 BR ranch, 1/2 acre Topsfield, \$16,500. Ferguson, ext 2171 or 887-2737.

4 BR Cape, Lexington, 2 baths, DR, LR w/fireplace, mod K and rec room. Attach garage. Mid 20's. Northrop, Lincoln ext 434.

3 BR Cape, Arlington, LR w/fireplace, lg mod K, DR, 1 1/2 baths, basement, garage, M18-2801 evgs.

3 rm unfurn apt sublet. Near Mass. Sta. \$100/mo. M. Pearlman, ext 3681.

3 rm heated apt. Renovated. Suitable for 2. No children. \$60/mo. Mr. Klavei, EL4-2498.

Apt to let. BR, LR, K, dinette. Near Harvard Sq. Avail June 10. Ext 2276 or 491-0661.

1 rm apt w/kitchenette, furn, parking, Newton, Brighton, Watertown line. \$85/mo. B14-5128.

3 BR ranch, Bedford. Many extras. View of Concord River. CR4-9143.

Summer sublet, 1/2 rent, mod bach apt, Beacon & Exeter. G. Zames, ext 2445 or CO6-1192 evgs.

6 rm mod apt in Brighton. 3 BRs, LR, DR, lg K, 10 min from MIT. Avail June 1. Ext. 678 or ST2-0766.

Newton, 4 rm 3rd floor apt, LR w/fireplace, incl util. Parking. \$150/mo. DE2-6142.

House, Stoneham to rent 1 yr. 6 rms, 3BRs, 1 1/2 baths, references. NO5-9096.

12 yr old ranch, Belmont. LR w/fireplace, DR, mod K w/dishwasher. 3 BRs, garage. Mid \$30s. IV4-3987.

Camb. furn apt near BU bridge. LR, BR, K, bath. \$120/mo incl util. Hoffman, ext 2739 or Fisher, CO7-7946.

Sublet 4 1/2 rm Duplex, Arlington. June 4-Sept. 7, \$110/mo or \$300 for season. R. J. Gurski, ext 2336 or M13-1139.

Maine coast farmhouse July rental for 2 or 4 wks. Christmas Cove area. S. Palmer, ext 2850 or ED4-5471 evgs.

Unfurn 3 rm apt, Beacon Hill. Sublet to Sept 1. w/option to renew lease. Avail June 9. N. Cunningham, LA3-6005 after 6 pm.

Furn sublet. 6/1-9/31 w/option to renew lease. 2nd floor w/K, BR, bath, LR & util incl. \$15 extra for private parking. \$155/mo. Carol Graves, CO7-4156 after 6 pm.

Unfurn 6 rm apt for rent, Belmont. \$120/mo. Avail June 1. IV4-1957 after 5 pm.

Summer sublet, Camb. LR, K & 4 BRs, \$100/mo. 491-0241.

4BR apt for rent, West Concord. LR, K, bath, \$100/mo. Ted Blaschke, ext 2461 or IV4-5619 evgs.

Newtonville apt for rent, 6 rms, back yard. WO9-7377.

Brookline summer sublet. Mod 3-4 rms. BE2-0709 evgs.

Furn house, Arlington, rent for summer. 3BRs, LR, DR, K, bath. M18-4630 or ext 2940.

6rm Cape, Wilmington. \$17,000. Call ext 3404.

Village Home, Glen, N. H. For more information, Carl ext 2363.

Furn summer sublet, near Harvard Sq. \$90/mo incl util. Piano & HIFI. 491-1971 evgs.

Sublet furn efficiency apt near Harvard Sq. July-Aug. w/option to renew lease. \$110/mo or best offer for summer only. Includes parking. Ext 614.

Beacon Hill 4rm basement apt unfurn. Avail about June 1. \$80-\$85/mo. RI2-0012.

Beacon Hill apt summer sublet. \$135/mo. Avail 6/1-Labor Day. Ext 780.

7 rm house, Waltham, near Brandeis. \$22,000. Ext 4825 or TW3-2224.

Copley Sq. apt. Lease or tenant at will. Avail May 15. \$105/mo. CO6-1208 after 7 pm.

Sublet furn 3rm apt, Cambridge. 6/15/62-9/15/62. \$100/mo. UN8-6524 or ext 4487, Mrs. Bushman.

Summer cottage for rent in Orange, HI3-9170.

New 6rm ranch, Cotuit for summer rental. Avail from July 15 on. \$150/wk, \$600/mo. Will haggle, OX8-6411.

7rm apt immed. occupancy. Harvard Sq. \$125/mo. UN4-6529 or ext 2501.

Unfurn mod apt, lg LR, elec K, BR, bath. Near MIT. Option to renew lease. F. Minks, ext 2160.

8rm Cape, West Concord for rent for 1 yr. Avail July 15. Unfurn. Lincoln ext 7545 or EM9-4865 evgs.

Sublet furn apt. \$100/mo incl util. Option to renew lease. Cambridge. Ext 3646.

Furn efficiency apt summer sublet. Cambridge. \$97/mo. Sept. lease optional. Lincoln ext 125 or 491-1012 evgs.

Furn farm in No. Vermont avail for rent now until 8/20. Beds for 7, swimming, hiking. \$150. Elly Terlingen, ext 3124.

Sublet mod furn 1BR apt near MIT w/option to renew lease. 868-7955 or ext 684.

Lexington tri-level, 3BRs, 2 bath, LR w/fireplace, DR, mod K, \$27,500. Avail 9/1. VO2-6120.

9rm hse for sale Lexington. 2 1/2 baths, 4 BRs, study. VO2-5872.

Sublet 2 BR furn apt or hse from 7/1-8/10. Visiting Prof. w/3 teenage children for \$75-\$150/mo. CE7-0067.

Furn apt, Harvard area for summer sublet w/option to renew lease. Avail June 1. \$135/mo incl heat & util. Ellen, ext 4850, K17-6857.

Beacon Hill summer sublet. 6/24-9/1 w/option to renew lease. \$95/mo. Bundschuh, ext 2553.

Wanted: Rmmate (female) wanted to share 3rm apt furn. Gabrielle Neuman, CO2-9567.

Wanted: Jib sail approximately 20' luff x 7 1/2' x 19' or larger. UN8-6123.

Wanted: Return flight from London anytime end July or later. R.A. Briggs, ext 771 or RI2-1741.

Wanted: Thesis typing. Prefer Chemistry. Gert O'Connell, B.S. Chemistry, ext 2817.

Wanted: 2 wheel util trailer. Bob Koffsky, ext 3510.

Wanted: Small furn apt in residential area for wking couple. Prefer owner on premises. Ext 30-269, Ann.

Wanted: Reliable person to live in hse in Back Bay for summer. Rent free in return for occasional handy work. CO7-3843.

Wanted: Miniature 7" or 9" port. TV receiver in any cond. B. Schildkraut, ext 629.

Wanted: Used camping equipment, tents, sleeping bags, stoves, etc. H. Winick, 83-2817.

Wanted: Secondhand Soprano Recorder. Kung or comparable quality. Stackpole, ext 4850.

Wanted: Furn apt, 1 BR for summer. Harvard Sq. area. B. Morris, ext 3284 or 491-1752.

Wanted: House or 2 BR apt (furn or unfurn) for fall term '62 or shorter period beginning in Sept. Dr. W. Gilbert Strang, 10 Parks Rd., Oxford Eng. or call Math. Dept., ext 2680.

Wanted: To rent 4 BR furn home, June-Sept. '62. Prefer Lincoln, Lexington area. K17-9284.

Wanted: Used port. long-playing phonograph. J. Rhodes, ext 4128 or H. Rhodes, ext 655.

Wanted: Riders from Attleboro to MIT. 9-5. Call Castle 2-4889 after 7 pm.

Lost: Gold link bracelet w/gold heart locket & monkey wrench charms between pking lot & Faculty Club. REWARD. Mrs. Robert B. Hull, LA7-7363.