

WINKIN, BLINKIN SATELLITE

Orion will probably take a second look; conclude it's just another explorer from Cape Canaveral. But no matter what the constellation-consternation, MIT's "Doc" Edgerton can set things straight.

According to a recent news item, Edgerton, Germeshausen & Grier, Inc., has a brand new contract with the Office of Naval Research. Project: making a satellite which twinkles. Hopefully to zoom aloft in 1961, this small sparkler will weigh approximately 200 pounds and measure three feet in diameter. And over its surface -- at 800 watts a second -- will flash lights very similar to strobes, charged by the sun and controlled by earth-bound scientists.

Reason for this glitter? Up to now, it seems, researchers haven't been able to see their spinning "children" except at dusk or dawn; but with the firefly model things will be different. Provided they look at night, watchers can track and photograph its orbit, get a great deal of information about the earth's shape, too.

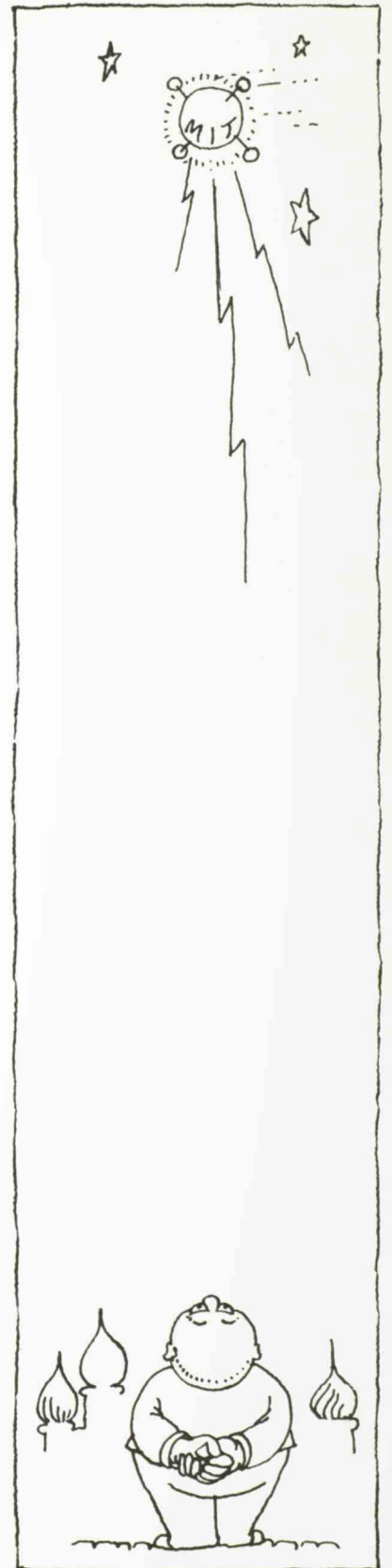
Meanwhile on the moon ---.

HERE AND THERE

The ringing in their ears will soon be louder, but the operators in Bldg. 10 are ready for it. On Sunday, Sept. 13 when the new, temporary phone book went into effect (consult before you dial), the Institute lines reached a grand total of 2,600 -- including two new series, 4000 (Instrumentation) and 4900 (Math, Athletics, Student Aid, Industrial Management and Aeronautical Engineering). Also streamlined: the MIT tielines, now numbered in the 80's, which include direct dialing to Harvard extensions -- bypassing their busy operators.

Fresh on the bookstands on September 10 were the first five issues of the Science Study Series. Produced by the Physical Science Study Committee, part of Educational Services, Inc., the series is designed to "provide a survey of physics within the grasp of the young student or the layman" and will include the writings of distinguished authors on basic and exciting aspects of physics. MIT entries in the first batch are "How Old Is the Earth?" by geologist George Hurley and "Magnets -- The Education of a Physicist" by Dean Francis Bitter of the School of Science.

MIT hotshots -- the MIT Faculty Pistol and Rifle Club, Inc. -- are planning to start off another season. On Sept. 22 at 5:15



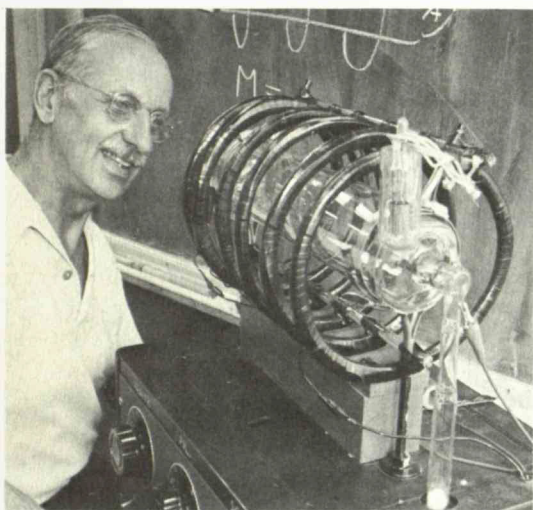
they will hold a rally at the rifle range; and cordially invite all interested people to shoot on over and join the group.

A new plan for patients is being inaugurated by the Medical Department. After October 10 all people who have business in those quarters are asked to make a specific appointment at the reception desk (Bldg. 11, first floor) or by calling Ext. 4481 from 8:30 to 5 p.m., Monday through Friday.

The system is designed to keep things running smoothly; will no doubt result in same day service for requests and make exception for emergencies. Folks unable to call ahead will be seen as soon as possible by the nurse and then given the first available appointments.

Examinations for the Lowell Institute School will be given Sept. 14, 16 and 18 from 7 to 9:15 p.m. Applications can be made in Room 5-111, and classes begin on Sept. 28.

It just depends on how you look at it. Describing in the "New York Herald Tribune" his Magic Circle Tour of Boston, columnist Edward Collier related: "Our next expedition across the Charles River was into Cambridge . . . in the heart of the Massachusetts Institute of Technology campus . . . Your eye will be caught by the new auditorium, all glass with curved dome roof, for all the world like a landed parachute."



Allis eyes cold, magnetic bottle

FUNDS FOR FUSION

For some years now MIT's RLE has been in hot pursuit of the secrets of electrical plasmas. Early this month the National Science Foundation announced it would lend a helping hand with \$500,000 for the Institute (\$300,000 to Harvard) to carry on extensive basic research in this new field of fusion power.

To be known as the Plasma Dynamics Program, headed by Dr. William P. Allis (Physics), the project will involve some 14 faculty members and 58 graduate students; will receive the attention of physicists, electrical, mechanical and nuclear engineers--all using different approaches to the problem.

No strange phenomena, according to the scientists, electric plasmas are simply ionized gases -- made up of atoms whose electrons have been driven off -- and exist always in space. The earth's atmosphere consists of several layers of ionized gases, called the ionosphere, plasmas exist in the sun and -- all over the Institute -- in the ever-present fluorescent light.

Plasmas of special interest to researchers are those made up from hydrogen atoms, which are relatively simple. One kind of hydrogen, called deuterium, is found in sea water; can give 24 million electron volts of energy from the fusion of two atoms or an equivalent of 300 gallons of gas per bucketful of deep, blue sea. If this fusion is achieved, the plasma will exist at a terrifically high temperature.

Among the problems still unsolved: how to contain these hot plasmas and keep their containers from popping. Here at MIT scientists will proceed using "magnetic bottles," glass tubes immersed in magnetic fields designed to keep hot plasma away from the sides of the bottle, and do extensive studies on shock tubes, and on the microwaves emitted by plasmas.

Neither Harvard nor MIT plans to build such spectacular gadgets as Princeton's stellerator.

But from the basic research in Cambridge will come information applicable to navigation through the ionized sea of space, communication by radio waves and the possibilities of direct conversion of plasma energy to electric current.

Right now in Bldg. 20 plasma research is far from quiet. When waves of ions are forced through the shock tube, they give an awful boom and shatter the nerves of engineers working quietly nearby. Latest cure for this shake-up: plasma scientists wait for the noisy moment -- then yell to their unsuspecting neighbors, "Here she goes!"

READY AND WAITING

The day is almost here when some 6,300 students will appear on the scene complete with fall verve and suntans. Members of the freshman class, arriving for orientation on September 17, will be greeted with tests, smokers and teas; be introduced to technology more formally by a series of speeches in Kresge. On the speakers' docket: Polaroid's Edwin Land and MIT's G. S. Brown, Draper, Greeley, Harrison, Rule and Wiener.

Rest of the Techmen will return for registration on the 21st; start classes the next day. Not all parts of the Institute have stayed the same during this summer. What used to be 100 housing units in Westgate is now a smooth, new athletic field, all set to sprout green; and the Duane Wrecking Co., with permission from local firemen, did away with some barracks in spectacular bonfire style. Classrooms all over the lot have been changed and repaired; the Cage adorned with a new track and the walls of Bldg. 3 given a fine masonry facial.

Also among things rejuvenated: 2,700 sq. ft. of MIT slate, scraped down to a glowing surface by a galumphing machine which rolls itself along the blackboards. One of six in the country, the machine takes off calcium deposits and makes a fine profit of 5¢ per foot for its wily inventor.

TIME AND TIME AGAIN

When he came in 1943 it was for a few months, or at most a year. And Paul Shaffer has been here ever since, plying sapphires and rubies in the Instrumentation Lab on projects from telemetry to inertial guidance.

Back in Vandergrift, Pa., engineer Shaffer once spent a high school summer as handyman in a jewelry store; was so impressed by his dynamic boss that he decided to try the trade himself. Next stop was Bowman Technical School in Lancaster, where he became a watchmaker. And then -- for the heart of the works -- he jaunted to Switzerland, visiting the world's best watch factories and climbing slopes.

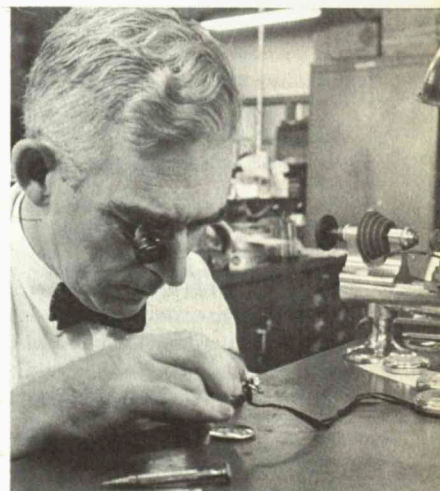
It was through the purchase of his elegant Swiss pocketwatch that Paul joined forces with watch-expert Major Paul M. Chamberlain in Newark, N.J. The watch (a Pattek-Phillipe, Rolls Royce of timepieces) was the second in America and enthusiast Shaffer bought it from the salesman who imported No. 1 for a Hollywood



A real glow . . .



. . . for the complexion



Shaffer watches

magnate, by name of Fox. As the Major's assistant, Paul spent some fascinating months in a basement apartment "filled with tray after tray of beautiful watches."

After a brief stint with industry, and Wiss Sons, Inc., Paul got wind of a Curtis-Wright project in Cambridge. The Institute had been selected to do their telemetry research, but refused to move without a watchmaker. "Of course, the only reason they hired me was that I had watchmaking tools and was willing to bring them along," chuckles Paul.

Since then he has seen Instrumentation mushroom from a handful of 20; has had a hand in the design and creation of countless jeweled mechanisms. And, when he's not busy with this work, he's like as not repairing watches. There are always a stack of them on his desk--stopwatches from many corners of the Lab (including "Doc" Draper's) and countless others sent in from Institute friends now in other parts.

"I can't take as many as people bring," says Paul who is definitely not looking for business. But on weekends and evenings, he repairs clocks and watches with zest; loves every minute of it. Other hobbies? Well down in his Marlborough St. basement sits a gleaming Rolls Royce (vintage '22) which he bought some years back and drove right in through the garage. "I've never moved it," laughs he, "but there's room for two or three more."

FOR SALE ETC.

3 piece kid mohair LR suite. Sofa, chair in deep. plush red with tufted cushioned backs, odd barrel chair in royal blue with ribbed back. All trimmed with mahog on arms, legs, exc cond. \$125, will haggle. Tony Ferola, Ext. 241 (Lincoln) or PR6-2045 (after 6 p.m.)

2 w w snow tires, wheels, 7.50 x 15, nearly new, fit Olds or Pontiac. Best offer. Joe, Ext. 3118.

Lively, 6-wk old, housebroken kittens avail. AL4-6553.

Gray audograph dictaphone and Remington elec typewriter, new, reasonable. Also desk, bookcases, dining room set, rug, etc. IV4-6688.

Lady's American bike, red. \$15. Mrs. Verma, Ext. 4241.

2 rmfuls tools, stock and misc small equip left after closing of machine shop. Must sell by Oct. Good buys on individ items or whole lot. N. Nelson, VO2-4246.

Whirlpool auto washer, \$65. J. E. DeLisle, MI3-0758.

Will do typing: theses etc. Ext. 2856 or CO7-8632 (evgs).

Accordian, 2 yrs old, 120 bass, 7 shift stops, orig \$850, asking \$195. Diane Toothill, LO6-0901 (evgs).

Offer art lessons in exchange for Japanese lessons. Bert. Towle, VO2-3370, Ext. 7317.

Lady's bicycle, \$20. Santosh, Ext. 4241 (9 a.m. to 1 p.m.) or KI7-1431 (after 2 p.m.)

Sofa, single red, very good cond. Best offer. D. Malik, HU2-1333 (days), EL4-9769 (evgs).

Roll-away bed with mattress, newly-painted frame, \$20. TR2-8615 (evgs).

Maytag fully auto washing machine, good cond, \$65. Also 12 x 15 gray, broadloom rug, \$300 new, yours for \$40. VO2-6384.

20" girl's bike, blue and white, good cond, \$12. DE2-6862.

Large Frigidaire, \$25. A. Larrabee, Ext. 3703.

Superior tube tester, mod TVII, \$35; Raco battery eliminator, mod B-10, \$35; IRC resistor chest, \$25; RacoVTVM, mod V-70, \$39; assorted condensers and buffers, \$5; TV radio tube caddy with complete stock of tubes, \$75; picture tube charger, \$7; assorted lit TCL, characteristic book, \$7; CBS hytron TV, \$25; 3 spd symphonic record player, \$25. Red Murphy, Rm 10-044 (12 to 1) or DA4-3177 (after 6 p.m.)

Crib, \$10; 2 desks, \$7 each. Keith Oddson, AL4-7413 (after 6 p.m.)

'26 Model T Ford in good running order. CE7-0572.

'41 Ford coupe, exc cond, new battery, R&H, engine recently rebuilt, \$175. Jane, Ext. 2846.

'50 Dodge 4-dr sedan, R&H. A. R. Rosenfield, Ext. 3315.

'54 Plymouth Hy-Drive. R&H, good rubber, \$545. A. G. Lafgren, Ext. 3448 or HI3-6540 (evgs).

'54 Austin A-40 grey 4-dr sedan. Driven 25,000 mi, always taken good care of, beautiful cond, \$700. John Connell, Ext. 2396 or UN8-7259.

'54 MG-TD, black, 42,000 mi only. Owner returning to England, must reluctantly dispose of much loved sports classis. Wire wheels, brakes just relined, new startor motor, \$900. J. Lewins, 22 Buffum St, Salem. PI5-1160.

'54 Chevrolet, R&H, \$490. Car in exc cond. E. Parthe, Ext. 3317, Rm 4-115A.

'54 Ford coupe, blue and cream. Std shift, R&H, exc cond. Ext. 2101 or MI3-5880 (evgs).

'55 Plymouth Savoy, 4-dr-2 tone, exc cond, low mileage, std shift, R&H, ww's, Ext. 3528.

'57 MGA white roadster, blk top, extremely clean, w wheels, heater. \$1,850. Dave McAvinn, Ext. 655 or NO5-4871 (evgs).

'58 English Ford, 20,000 mi, heater, undercoated, WSWT, 28-30 mpg. Too small for me, the wife and my 2 8/9 children. Ext. 4197.

'59 Borgward station wagon. Roofrack, radio, carefully driven in Europe, arrival mid-Oct, 6,000 mi, \$2,600. R. Faulkner, Ext. 713.

'59 VW sedan, lt green with radio. \$1,475. Jim Mayo, Ext. 7194 (Lincoln).

'59 VW convert, exc cond, \$1,890 or best offer. Fred Hermann, Ext. 214 (Lincoln).

Lg single rm with plenty of storage space in priv home of MIT grad student near Central Sq, Mass. Ave. Linens, towels furn. Maid service, \$12.50/wk, boarding and rough laundry arranged. EL4-2757, Mrs. Williams.

On Belmont-Watertown line, rm with adjoining B. Clcse to trans, 15 min from Hvd Sq. \$8/wk, R. Leacy, Ext. 695 or WA4-7730 (evgs).

3-rm furn apt in residential neighborhood (Pt of Plines, Revere). Cab K, BR, LR, B. \$85/mo incl heat (thermostat controlled by tenant), gas, elec and cont hot water. RE8-6165.

2 rms, furn or unfurn, 3rd floor of private home. B, refrig, hot plate, air cond, heat, elec, parking. Avail Sept 15. KI7-4188 (9:30 a.m. to 5:30 p.m.), MI3-9192 (after 7 p.m.)

Mod, furn apt, Back Bay, sublet mid-Sept. Lg LR, BR, K'ette, B. \$115/mo. Barbara, Ext. 3146 or KE6-7967 (after 5 p.m.)

3-rm newly furn apt for 2 or 3 in North Cambridge for immed occupancy. Garbage disposal, heat and hot water, incl. 1 block from bus line to Hvd Sq, near good shopping ctr, parking and storage space. \$135-\$150/mo. Jane, Ext. 3201 or EL4-7828 (after 6 p.m.)

3BR house in Natick. Garrison colonial, exc neighborhood, town sewage, conv to Mass turnpike, Rtes 9, 16. Immed occupancy. Asking \$18,800. OL3-3172.

2 BR furn house in Lexington, avail around Sept. 20. Year's lease. VO2-0588.

6-rm house in Billerica Ctr. Lg enc porch, fp, alum storm windows and doors, ceramic tile B. \$15,500. Bob, Ext. 231.

6-rm Colonial with attached garage, Arlington. Near MTA, schools, churches. Ctr entrance with lg closeted vestibule, fp in LR, DR, K on 1st flr, 3 BRs, B on 2nd. Alum comb windows, doors. Stair carpeting, DR rug, Venetian blinds incl. Basement laundry, newly painted outside. Patio and fp. \$20,000. MI3-6465.

Attrac 5-yr-old Cape, Lexington. Full dormer, 18,000 ft tree-studded lot with flagstone patio, 4 rms, B down, 1 finished rm up -- facilities extended for comp B, BR to be finished, LR has fp, built-in bookcases, fully finished tiled basement, knotty pine rm, fp, laundry area, forced hw heat, enc tiled breezeway, attached oversized 2-car garage. VO2-0103, 10 Grove St, Lexington.

Charming ranch home, East Lexington. On secluded landscaped lot amid towering oak trees, end of dead-end street. 5 rms, full basement. Fully insulated, comb windows and forced hot air gas heat. Conv to rtes 2, 4, 25. 30 min from MIT. \$16,900. Owner, VO2-3496.

8-rm house, furnace, elec, B with barn on 30 acres, 25 mi from Dartmouth College, 3/4 mi from Bradford, Vt. Ideal for retirement or summer home. \$7,000. AS7-4195.

Furn apt in house needed urgently for post-doctoral arriving end Sept. for 1 or 2 yrs. Suitable for 2 children under 3. Ext. 3706 (afternoons).

Wanted: home for the "Great Pete Bittner Cat" -- 3 mos, affectionate, trained to sleep, play, eat and etc. KE6-5498.

Secretary desires baby sitting jobs for weekends and weeknights. Must provide trans. Delores, CO7-8928 (6-11 p.m.)

Wanted: Gov. Winthrop type desk, chair. Also 9 x 12 rug, blue preferred. Mrs. Hartman, VO2-2597 (evgs).

Wanted: baby carriage in good cond. Knill, Ext. 2420 or EL4-0842.

Wanted: 2nd hand woman's English bike, good cond, reasonable. Jane, Ext. 2846.

16 1/2 yr old girl attending Cambridge School, Weston would like rm and board with MIT prof and family in Cambridge. Trans no problem, self-reliant, exc student. Will be paid adequately, start on Sept 20. Ext. 3533.

Wanted: Girl to share attrac, conv 3-rm apt, 280 Beacon St. BR, LR, K, B, pantry, doorman, heat, hot water. Share \$85/mo rent, other expenses. Dot, Ext. 535.

2 girls looking for 2 roommates for furn 4 BR apt, 17 Highgate St, Allston. LR, fp, K, D, sunny, lg, conv to shopping, MTA, 25 min walk to MIT. Avail now. \$32.50/mo each. Edith Wolf or Meg Lavelle, Ext. 2613.