

TECH TALK TECH TALK TECH TALK TECH TALK

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

February 4, 1971

MOVIES TODAY

Two color films on the 1970 Clean Air Car Race—one with narrations by Orson Welles, the other by Alexander Scourby—will be shown starting at noon today (Thursday) in Kresge Auditorium. Admission is free.

The program, arranged by the CACR Committee (Bob McGregor '70, chairman), will include color slides and will run to 1:30 p.m.

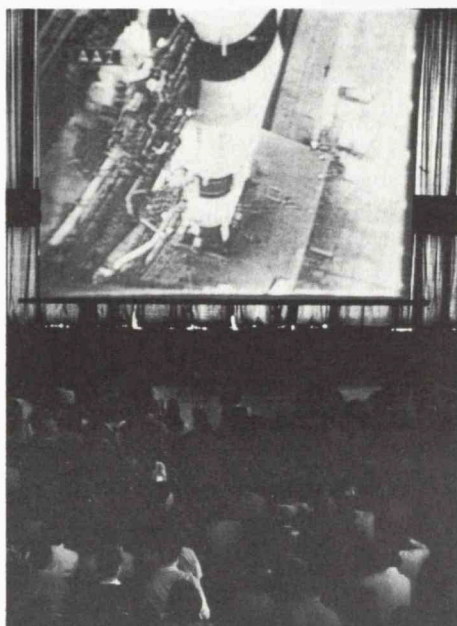
The films, made by independent producers, have just been completed and delivered. Today's showings mark their first public exhibition. The films record last summer's MIT-to-Caltech race in which some 40 cars from 30 colleges vied to find out if clean air automotive technology is practical now.

LARGE-SCREEN TV CANCELLED

Large-screen TV projection of the Apollo 14 mission in the MIT Student Center has been cancelled prematurely.

After a Sunday spectacular that drew more than 800 persons to the Sala de Puerto Rico for a large-screen view of launch, the company that manufactures the projector system—Display Sciences, Inc., of Upper Saddle River, N.J.—suddenly found it could not fulfill its commitment to leave the projector at MIT through the end of the flight next Tuesday (February 9).

Dr. C. Thomas Goldsmith, DSI president, with apologies, said unexpected demands for the equipment to meet commercial commitments elsewhere required him to pull the projector out of MIT immediately.



Just before liftoff, the Sala was jammed with eager Apollo watchers.

His operators had packed up and left by the end of the day Monday.

DSI originally offered MIT the equipment for large-screen display of the moon mission from beginning to end. The point was that DSI equipment would be used in closed circuit telecasting of the Muhammad Ali-Joe Frazier heavyweight fight in Boston March 8 and since it was to be in the area anyway, the projector could be used at MIT for Apollo 14. Later, a dispute arose over who holds the rights to the fight for New England, but DSI said this would not affect the commitment to MIT.

When he cancelled the demonstrations at MIT Sunday, Dr. Goldsmith said he was unable, for business reasons, to spell out in detail the difficulties he had encountered with the equipment scheduling.

Oh, well, back to the 21-inch screen.

RUTSTEIN LECTURES RESUME

"The Basic Structure—Regional Medical Care," the first lecture in a series called "A Proposed Plan," will be presented this afternoon (February 4) at 4:30 in Kresge. Others in the series are "Introductory Step—Emergency Medical Care," on Tuesday, February 9, "The Crucial Segment—Ambulatory Medical Care," on Thursday, February 18. The final three lectures will be held at 4:30 p.m. in Room 10-250.

This series is the second group of lectures presented by Dr. David D. Rutstein, Ridley Watts Professor of Preventive Medicine at Harvard Medical School and Visiting Institute Lecturer. The first series, "The Essential Elements," was presented last fall. Both series deal with Dr. Rutstein's plan to achieve an efficient and comprehensive system of medical care.

IIS FORMED

January 29, 1971

To the MIT Community:

I would like to announce some changes in the Institute's information area, aimed at improving services and lowering costs.

Public Relations, publications and campus information will be brought together as the Institute Information Services (IIS), to emphasize the function of information dissemination and service, both external and internal to the campus. Since the retirement last October of Mr. Francis E. Wylie, Director of Public Relations, Mr. Robert M. Byers, Associate Director, has been acting director, and he will continue as

acting director of Institute Information Services.

In addition, Mr. Byers will hold the position of News Director. The MIT News Office will be a subdivision of IIS, responsible for the release of information relating to educational and research developments and activities of faculty, staff and students. Miss Joanne Miller and Mr. John G. N. Rushbrook will be Assistant News Directors and will serve as staff writers to develop background material and news stories and to respond to the public media. Miss Miller will continue as editor of *Tech Talk*.

The Publications Office, under the direction of Mr. William T. Struble, will continue to publish the official Institute bulletins and to provide graphic design and editorial services for other Institute reports and activities, as a subdivision of IIS.

A third area, the Campus Information Office, will include the information center, headed by Miss Mary Morrissey, Administrative Assistant for Information, and the *Institute Calendar* and other special reports and mailings handled by Mrs. Alice Tripp, Administrative Assistant for Information.

Mr. Paul Johnson, who is now director of management and development for Massachusetts Half Way Houses, Inc., has agreed to return to the Institute on February 1 in the post of Associate Director of IIS. He will be concerned with administrative support of the entire operation and will assist each of the three subdivisions in matters of personnel, budgeting and overall improvement of services consistent with a need to cut expenses and to make effective use of staff and facilities. One of Mr. Johnson's first assignments will be the coordination of the *MIT Catalogue*. The complicated process of gathering information for the 1971 issue is well underway; questions or suggestions you may have should be addressed to Mr. Johnson at extension 2706.

By the initiative of Mr. Stephen Ehrmann, former President of the Undergraduate Association, a task group was set up this fall, consisting of graduate and undergraduate students, including members of the

campus newspapers, and staff members. The objective of this group is to think of creative means of improving the information process and the quality and availability of news and commentary on the Institute campus. Among other tasks this group is exploring the feasibility of a campus bulletin and/or other means of bringing out quick and accurate reporting of news and developments of community interest. *Institute Report*, *Tech Talk*, the *Calendar* and letters of appointment and special announcements might be included in such a bulletin. We are especially fortunate that Mr. Edwin Diamond, former senior editor of *Newsweek* and Senior Fellow in the Department of Political Science this year, is assisting this study.

We welcome your reactions, ideas and suggestions in improving information services at the Institute.

Constantine B. Simonides
Vice President and Assistant
to the President

MAIN STREET, MIT

"The old grey mare, she ain't what she used to be..." goes the old song. Neither are the old grey corridors we've lived with for so many years. The transformation program began nearly three years ago with the student-sponsored gripe week which identified the internal environment as the source of the greatest community concern. Since then, in gradual steps, MIT's Main Street—and certain other experimental areas—have undergone a light and bright rejuvenation.

According to the MIT Planning Office, the main corridor is a natural public gallery for the MIT community and visitors. Its walls and windows provide a superb means of communication for all areas of the Institute. Four simple and low-cost means of communication have been developed: wall-mounted cork boards for posters, handbills and messages; free-standing cylinders for the same purposes but affording greater space for large posters; slide projectors for announcements and general interest slides of nearly any kind; and hanging panels depicting the tools and activities of faculty,

students and administrative offices, capturing the rich variety of life at the Institute.

Using the general theme, "Environments," the first displays in the main corridor have been developed by the Departments of Metallurgy, Chemical Engineering and Earth and Planetary Sciences. Other exhibits are being planned. The plan for the main corridor was developed by the Planning Office with advice and assistance from many other groups, including the Student Committee on Environment and the Committee on the Visual Arts.

The Planning Office offers technical aid in developing slide and panel material for future display, and will happily receive suggestions from members of the community.



Left to Right: Bob Radocchia of Walker, president of Quarter Century, Peggy Norton of Electrical Engineering, president of the Silver Club and Institute Professor Emeritus Jerrold Zacharias.

NOSTALGIA NIGHT

The Quarter Century Club was host last week to the Silver Club for the annual combined dinner of the two groups. The occasion was really special this year because it marked the silver anniversary of the Silver Club itself. More than 120 of the Institute's senior employees were on hand for the social hour and dinner at the Faculty Club. Featured speaker was Professor Emeritus Jerrold Zacharias.

VISITING PROFESSORS

Author and playwright Lillian Hellman (*The Little Foxes*, *An Unfinished Woman*, and others) and Dr. William Arrowsmith, a noted classical scholar, will be visiting professors in the Humanities Department during the spring semester.

Miss Hellman, who has been here twice before, will be on campus starting shortly after the spring vacation to lead graduate and undergraduate seminars. Dr. Arrowsmith, formerly at the University of Texas, will teach an undergraduate course on Sophocles, Euripides and Aristophanes, lead graduate seminars and—since he also is an advocate of educational reform and innovation—serve as a consultant to the MIT Commission.

ARTIFICIAL INTELLIGENCE

Project MAC's artificial intelligence group, headed by Professor Marvin Minsky (Electrical Engineering) and Seymour Papert (Mathematics) has become a separate entity, the Artificial Intelligence Laboratory. The group, active in artificial intelligence and heuristic programming since 1958, was first a part of the Research Laboratory of Electronics and then the Computation Center, and in 1963, it became a part of Project MAC.

Present Artificial Intelligence Laboratory research is focused on experimental systems useful in dealing with natural language, robotics, machine vision, learning and elementary education, and, also, with theoretical studies intended to develop parts of the theory of computation that can help in understanding why some things seem harder to compute, in practice, than others.

REVIEW OUT

Articles on technological and social change are featured in the February Technology Review, out this week. Included, among others, are: "Toward New Initiatives" by Edward E. David, Jr., science advisor to President Nixon, "Science Policy in Canada" by Leonard Bertin of the University of Toronto and "The New Politics of Science" by Daniel S. Greenberg, editor of *Science and Government Report*.



Harry McOuat in the communications center at the Draper Lab.

APOLLO SUPPORT

Draper Lab people are working around the clock in Cambridge, Cape Kennedy and at the Manned Spacecraft Center in Houston this week supporting NASA's Mission Control Center and the Apollo 14 astronauts in the use of the MIT guidance systems in the command and lunar modules. Draper Lab scientists and engineers developed the guidance systems (each has an optical unit, an inertial measurement unit and a computer unit with display and keyboard) and, in addition, write and verify the flight programs for the on-board computer for each mission. Then, during a flight, D-Lab people are on duty to help as needed. (They were in the troubled Apollo 13 mission and helped the astronauts back to earth after an explosion aborted the flight.)

One D-Lab crew from Cambridge was at Cape Kennedy for the Apollo 14 launch. It included David Hoag, D-Lab's Apollo director, along with George Silver, Glen Ogletree, Robert Maselek, Robert Filene and John Mills who re-inforced D-Lab's permanent personnel at the Cape, Robert O'Donnell and Romille Gilbert.

After launch, Hoag and Silver flew to Houston to join Philip Felleman, Russel Larson, Stephen Copps, Richard Sheridan and Kenneth Goodwin in MIT's support room near Mission Control. The permanent MIT technical operations director at Houston is Thomas Law-

ton. Felleman, working from Houston, has overall charge of MIT's support work.

In Cambridge, a classroom in the Apollo building at 75 Cambridge Parkway, serves as a communications and support center, which remains in continuous communications with launch and mission controllers at Cape Kennedy and Houston throughout the mission. Cambridge also receives guidance telemetry from the spacecraft so engineers here can monitor progress. Shift leaders in Cambridge include John Suomala, Robert Werner, Harry McOuat, Peter Heinemann, Peter Canepa and William Woolsey.

Scores of D-Lab people not assigned to crews must keep the office informed where they are at all times during the flight so—as happened in Apollo 13—they can be summoned in case of crisis.

Dr. Charles S. Draper, president of the Laboratory, and Dr. Walter Wrigley, Lab educational director, were on hand at Cape Kennedy for the launch, as were MIT President Howard W. Johnson and Dr. Albert G. Hill, MIT vice president for research and chairman of the board of the Draper Lab. Dr. Draper then went to Houston where he was joined by Ralph R. Ragan, Lab deputy director for NASA programs.

During the early portions of the Apollo 14 flight, guidance system performance was called "nominal." That's the engineering term for vir-

tually letter perfect. (Sunday/Monday docking troubles did not relate to guidance.)

MIT is also receiving Apollo 14 attention in another regard this week. Edgar D. Mitchell, the lunar module pilot, holds a doctor's degree in aeronautics and astronautics from the Institute. He studied here (and lived with his family in West Newton) from 1961 to 1964 when he was picked as an astronaut. TV commentators have made much of Mitchell being the "Ph.D." member of the crew, notwithstanding the fact that his degree is technically an Sc.D.

HERE AND THERE

The bus shelters on Massachusetts Avenue should be taking shape by now. Built in England, the shelters arrived in Boston a month ago but didn't have proper documentation for clearing customs. They are here now and will be assembled as quickly as weather permits.

A five-week course in basic pistol marksmanship will begin Thursday, February 11, from 6:30 to 8:30 p.m. in the Pistol Range in duPont Gymnasium. There is a \$10 fee which covers pistols, ammunition

and targets used. Those interested should call Herald Sulahian of the MIT Pistol and Rifle club at Ext. 3989.

The Planning Office has published a prodigious work entitled "Building Data: Academic Facilities." It gives vital statistics on all buildings used by the Institute. The book is part of a comprehensive data collecting program called Insite II. In loose leaf form, the book can be kept up to date as modifications to buildings are made. Copies are available in the MIT Libraries.

FOR SALE, ETC.

Ski rack, trunk lid mnt, \$7.50; dry iron \$2; 'cycle helmet, 7/8 Bell Shorty, \$12. 266-0882.
Polaroid film, color pk, 108, \$3.25/ea. x7398.
C flute, Boosey & Hawkes, gd cond. 387-9043.
Minox B camera, w/binocular clamp, used only 10 times, \$130. Don x7333.
Fisher 85w, mono amp, pre-amp, Garrard chngr, FM tuner, electro voice spkr, separate or together, make offer. Tony x3631.
Royal typwrtr, \$25. 491-2177.
Head 720 skis, 208 cm, w or w/o Tyrolia step-in bndgs, exc cond, v reas. Morry x177 Draper 7.
Lrg refrig, \$15. x3788.
Htplate, nvr used, stepless ht control, gd price. Dave x1453.
Bdsprad, full-sz, Geo Wash Bates, antiq white, lk new, \$15. G. Levine x288 Draper 7.
Ampex 641 tape, 1800 ft mylar, \$3/reel. Jack x4560 or 623-6028.
Refrig, 4 1/2 cu ft, yr old, \$130 new, \$75 now. x1827.
Slide proj, auto-timer, cold light, 6 spare magazines, album for 1000 slides, \$75. Mr. Dennis x 2961 or 232-3291.
GE port stereo, \$35; Royal typwrtr, \$15, Linda x5673.
300 gals of mixture of 510 & 200, 1000 cs, Dow Corning silicon fluid, dyed blue, may buy all or part. Kevin or Paul x1638.
Boots, ideal for Wht Mts, sz 8 1/2-9, \$25. Lou x2018.
Antiq DR tbl, square, solid cherry seats 6, drop leaf, exc cond, \$225, w/ haggle. 484-9591.
Hvy duty snowblower, exc cond, many xtras, \$175. Walter x2458 or x2459.
Snows, 5.60x15, \$25; chains for VW & roofrack, gd buy, 734-4902 evgs.
Stereo; recliner chr; LR set; BR set; misc hsehold items: moving. H. Matczak x4765.
Ping Pong tbl, 3/4" top, lk new, legs nd repair, best offer. Penny 876-6763.
Nikkormat FT w/ 50 mm f2 Auto-Nikkor lens, lightly used, selling lens only, make offer. Willy Shih x3161 lv message.
LR set (3 piece), sofa \$15, 2 chrs \$5 ea, gd cond. 666-9415 evgs.
Blck persian lamb coat, 3/4 length, sz 16, picture frame blck mink collar, exc cond, \$150. 327-8532 evgs.
Ladies' ski boots, Henke buckle dbl boot, sz 8 1/2, \$30. Jerry x2092.
Fall, wig \$15; hrpice \$6, 100% human hair, diff colors. Suzanna x6068.
Nght tbls (2), blwndwd, \$10; 2 sml crys lamps, \$10; folding screen \$5. Laurie x6003.
Spdway sled, 54", exc cond, \$6. x6840.
Nikon F camera w/ 50 mm (f1.4) lens, hood, filter & case \$295; Nikkor 135 mm (f3.5) lens w/hood & case \$99; new w/warranty card. Akira X6020.
Rcrd player, Brand X, \$30. x3539.
Atlas zigzag sew mach, \$50. 729-8561 evgs.
Scout mini-bike, 2 1/2 hp, \$80; 23" Zenith VHF console, \$25; 19" Admir port TV, UHF/VHF, \$50. Al x5371 Linc.
14" VW rims. Larry Kornfield x376 Draper 7.
Wdn dblbed frame; china set for 8; wdn bkcase; tbl lamp; elec blanket. Jeff 491-1770 evgs.
Ladies' sz 7 Lange buckle ski boots, exc cond, \$75. Sue x7511 Linc.
Minox B, lk new, complete w/cube flasher, lthr case, best offer. Marianne x2310.
Eico mod 2510 classic series stereo rcvr, all new tubes, cus modifications, \$50. x6116.
Tiffany type lampshade, grapes & vine pattern, perf, \$350. Jerilyn x2789.
Pr 14" x 5" Ford wheel rims, 5 bolt holes, \$10/pr. Paul Menadier x4212 or 698-8581 evgs.
Wht french sheer wed gwn, train, veil & hdpiece, sz 9p, \$150; 2 mtching brdsmid fr blue dresses, styl sim to wed gwn, sz 9, \$25 ea. Barbara x4476.
Bkcase \$8; dsk \$15; bed \$15; tape cassette \$15; rcrd plyr \$25; W ski boots, sz 7 1/2N, \$20; elec curlers \$8; elec hairbrush \$8; chr \$6; rugs \$5. 492-1282 evgs.
Intrchngrl stroller chr, makes 14 units, used 1 1/2 yrs, crib & matt, \$25, all exc cond. Barbara 924-6577.
Pups: Gldn Retriever, AKC, champ bloodlines, exc companions, for home or hunting. Craig Work x570 Draper 7.
Sohler skis, Cubco bndgs, boots & poles, \$70. 267-1960.

Worn snows for use as spares, 7.50x14, 1/8" tread, 2 for \$2. 395-6061.
Queen sz bd (Slmbrland), matt, bx sprng, frame, \$80. Miss Huerta x5656.
Chest type freez, 17.2 cu ft, \$75. 933-3160.
Mini refrig, 3 cu ft; Man's 10 spd bike; unfin bkcase; misc hsehold items & framed prints. George Slusher x4324 or 646-1385.
Wed gwn, sz 10-11, Venice lace & satin peau de soie, 3 tier silk illus veil, pearl & lace Juliet cap, by A. Angelo, \$80. 648-8199 or 322-3579.
'68 Honda 50, 500 miles, \$100. Jim Hand x533 Draper 7.
Olds Classic gd running cond, must sell, \$300. 862-5473.

'51 Kaiser Vagabond, R&H, 60K, Collector's model, price open. x3866 or 1-744-3565, evgs.
'63 Ford Consul, R, disc brks, 4 spd trans, reliable, 60K, \$285. 547-0950.
'63 Chevy II wgn, exc running cond, \$250. Mr. Singal x7738.
'64 Ford Galax, gd running cond auto, pwr st, for students, \$150. x2796.
'65 Mustang, 8 cyl, standard, 63K, 6 gd tires, new batt, gen, volt regulator, brk linings, exc cond, \$600. Marcelo x6786 or 868-5166.
'65 VW, clean, R&H, all customized, nds new paint, exc mech record of maintainance. Bruce x6567.
'66 MGB, gd running cond, 43K, \$1000 or best. Philip Lambe x3203 or 734-0648 evgs.
'67 VW fastbk, gd transport, \$900. 731-0690 afternoons & evgs.
'68 Datsun Sports Rdstr, convert, 4 spd sync, fully equip, 1 owner, 25K, exc cond, best offer. Mr. Perlis 862-7994.
'68 Camaro hdtop, 6 cyl, auto, v gd cond, \$1425. x7235.
'68 Mustang convert, 55K, 8 cyl, 4 spd trans, R&H, \$1000. Art Ross x7867 Linc.
'68 VW sedan, 22K, perf cond, \$1350, lving country must sell. 323-0005.
'70 VW bug, 8K, perf cond, \$1700. Barbara x3716.
'70 Maverick, standard, snows, perf cond, lvng country, \$1700 or best. Judy x7631 Linc.
'70 Porsche Targa, 911E, AM/FM radio, Q.I. lghts, burg alarm, ski rack, warranty. 868-7070.

Camb (Harv Sq) sublet, 1 BR, mid Feb to mid Aug, furn, air cond in BR, piano \$170. Miss Mather 547-5818.
Camb sublet, 2BR, LR, K, furn, inc all util, \$250. Subriya 547-4941 before 9 am.
Sublet nr Cent Sq, mod 2BR, ww carp, disp, prking inc, avail 2/1, \$250/mo; Wanted: copy of *Greening of America*, Charles Reich. Rick x4654.
Camb apt, 2BR, LR, K, B, heated, no util, jst renovated, avail now, \$150. 876-1885.
Concord rental, 3BR, wash & dry, nr Ctr, gd for kids, avail Mar-Dec. x5219 or 369-6547 (Concord).

WANTED & MISC.

Rd to & from Stoneham Ctr. Rosemary x7173.
Volunteers nded to donate 1 lunch hr a month to del surplus food to senior citizens. Kay Mansfield 868-2900.
Old mantel clock, nd not be wrking. Joe x6646 or 661-0916.
Steinway used piano, studio mod or profes upright, in gd cond, w/ pay. John Osborn x6551.
For foreign students: I correct Eng gram, improve styl & prfread papers, theses, etc. 492-2141.
Singer port sew mach, featherwght mod preferred. Ellen x6633.
Daily rd from Randolph to Draper Labs, 8-5. Dan x6583.
Used guitar. Mike x6948.
Garage space for preparation of SCCA race car. Paul x6948.
Htplate, var temp, \$5. J. Keenan x332 Draper 7.
Inexp used blender. Joyce x1891.
Daily rd (7am) from nr Rindge Ave, Camb, to MIT. Dellie 491-4012 evgs.
Used Harv classics series (50 vol). Boyce x6250 or 491-7418.
Going abroad next summer? Vsting fac fam w/ rent your sta wgn, June, July, mid-Aug. x7140.
Upright piano & sngl bed. 536-5584 evgs.
Crew for Internat Tempest, avg 1 race/week, May-Aug at Marblhead. Jim Morency 369-1147 evgs.
Fem rmmate, apt off car-line in Brighton, avail now. Carolyn x2407 or 787-3622 evgs.
Wl do thesis typing, technical secy. x4829.