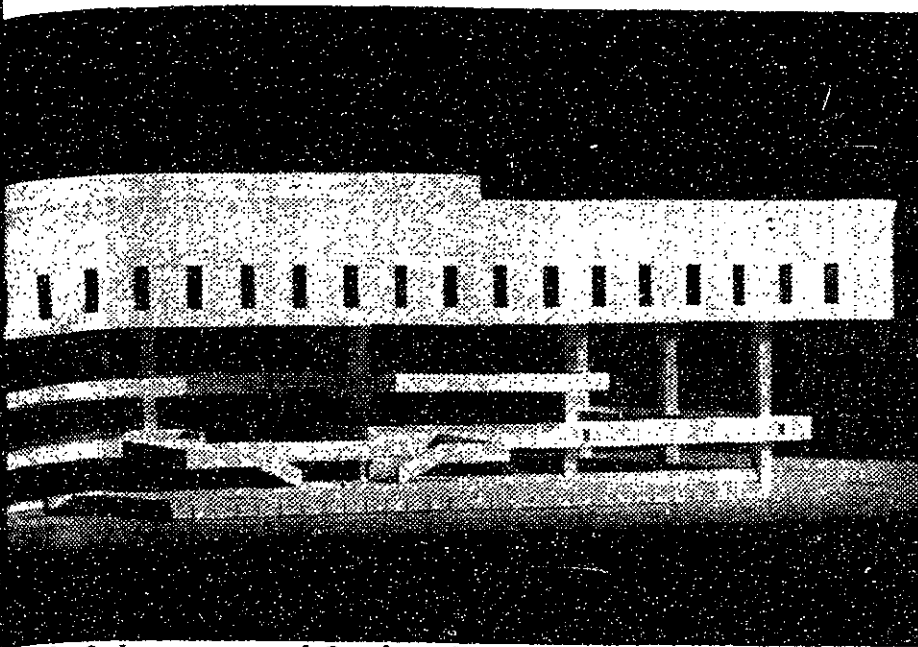
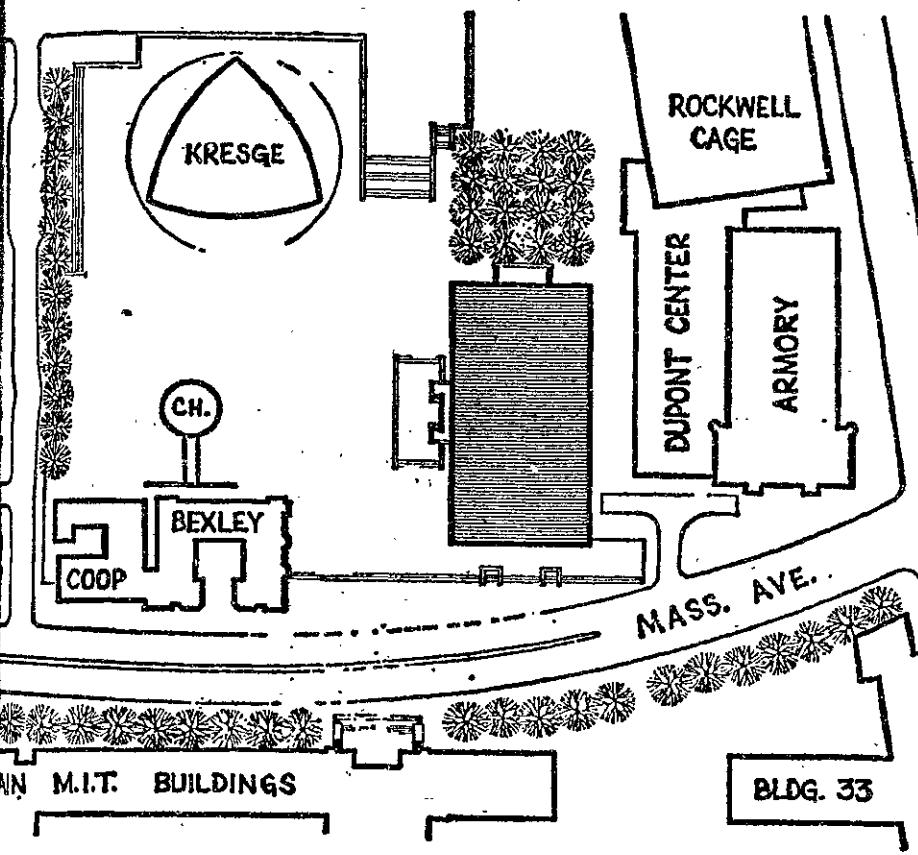


Building Committee



Model of the proposed Student Union.



Location of the proposed Student Union (crosshatched).

Arms Control Conference Trip

d) Measures to prevent the spread of nuclear weapons to other nations, including both members of the Communist bloc and NATO countries.

e) Limitations or complete moratorium on production of fissionable materials and weapons delivery systems, again with adequate inspection.

The report goes on to discuss the principles we should use in framing arms control proposals, the role of inspection, the role of international bodies, the shortcomings of the deterrent and the need for taking risks. A large majority voted for a statement indicating that acceptance of a major, inspected disarmament plan might well be sufficient grounds for recognition of Red China if this were necessary to obtain the inclusiveness needed.

If there was one characteristic that was most noticeable throughout it might have been the honest, frank attempt of all present to meet Reinhold Niebuhr's challenge not to flee from difficult problems by recourse to impossible solutions. I have some disagreements with the final report, but these, too, were honest differences fairly arrived at. I welcome discussion of these stands, and I will consider my job as MIT representative well done if debate in the form of letters or informal discussion, coupled with a concern for the essential problems, is aroused on both sides.

Summer Project

Seek To Bounce Signals Off Satellite

American amateur radio operators will attempt to bounce signals off a communications satellite this summer, in an effort to substantially increase the reliable communications range of certain types of "ham" equipment.

Operators with special equipment will attempt to relay signals via the Echo A-12 communications satellite, a 135-foot reflecting sphere to be placed in orbit later this year for structural tests and for independent communications experiments.

The radio operators expect that satellite relay techniques, if successful, may eventually double the range of amateur radio communications in the very-high-frequency region of the radio spectrum. At

Communications Research

present, the reliable range is approximately 500 miles.

The satellite-bounce experiment will be carried out by members of the Office for Satellite Coordination (OSSC), assisted by the nationwide American Radio Relay League and by the National Aeronautics and Space Administration.

Raphael Soifer '63, director of OSSC, described plans for the experiment in a talk Sunday at the convention of the ARRL in Swampscott.

Radio amateurs working with OSSC on the Echo A-12 project will track the satellite by means of radio beacons attached to it and by orbital data sent out by the federal agencies.

Although Echo A-12 will offer

Change Course!

Space Battles Fought With Computer

By Jeff Levinger

Spiraling near the sun for added acceleration, the thin silver ship swiveled slowly, firing its space torpedoes steadily, creating a spiral wave of death ahead of it. As it swept past the sun, a hail of answering rockets flashed by, barely missing, and the sudden explosion of another ship lit the space behind. The scope flickered, and the two ships appeared again at diagonally opposed points with the sun as a center. The controls for each changed hands, and the game began anew.

The game is Space War, played on the display screen of the PDP-1 computer in 26-260, with the aid of a program written mainly by Steve Russell of the Harvard Computation Center. Two former MIT students presently working for the Electronic Systems Laboratory, Shag Graetz and Pete Samson, also worked on the program and supplementary software.

Each person controls his ship with an acceleration button and a rotation switch, acceleration and orientation being constant while the proper control is on.



Two spaceships circle the sun on the 'scope display of the PDP-1 Computer.

—Photo by Curtiss Wiler

The central sun (there is an entire background of stars, accurate to fifth magnitude on the equatorial plane) is the only one with gravity . . . and if you fall in, you reappear at the corner from which you are accelerating. Losing (exploding) is a large luminescent square where your ship was, which appears if your ship is hit by a torpedo or the other ship.

Fire Torpedoes!

around the sun without falling in, and then to destroy the other ship with a limited number of torpedoes and a long reload time between shots. One danger (since reprogrammed) which destroyed many a hopeful skipper was due to the fact that torpedoes ignored the sun: and running into your own torpedo as you orbit is a rather humiliating defeat.

It is possible to go beyond the space pictured, in which case you wind up coming out of a new corner to begin again. This is known as the curvature of space. Torpedo number, duration, and reload speed (no machine-gunning) are variable, easily adjusted for beginners or experts.

For Parents' Weekend the PDP-1 will run this game for parents and their Techmen between 12 p. m. and 6 p. m., with a special version designed for this purpose. As an example of the whimsical uses of computers this is something parents shouldn't miss. As a simplistic preview of future war games, it might well be classified were this report to fall into the wrong hands.

1200 Walkers Rally For Peace

By Dave Ecklein

Students, professors, housewives, children, and others converged on the Massachusetts Civil Defense Headquarters in Natick last Friday afternoon to begin a Peace Walk to the Boston Common. The walk, sponsored by the New England Turn Toward Peace, got underway with 88 initial participants, and grew to over 1200 by the time it reached the culminating TTP Rally at the Common Saturday afternoon. Balmly spring weather and a generally friendly and open-minded reception by citizens along the designated route contributed to the high morale and enthusiasm of the walkers.



Peace marchers on their way to Boston pass the Institute on Mass. Ave. last Saturday afternoon.

After resting at a Unitarian Church in Wellesley Hills, where the walkers were provided with a snack, the group hiked on until 9 p. m., when the procession stopped for the night at the Woodland MTA station. Some footsore marchers enjoyed overnight hospitality at the homes of local residents, while others temporarily left the area.

Saturday morning the Walk resumed, and the ranks swelled while it passed through Cambridge. As the procession passed by MIT, about 15 persons from Rational Approach to Disarmament and Peace, an MIT student organization, joined them.

Walkers, some of them 21 miles weary, gladly rested on benches in the Common while Harvard Prof. H. Stuart Hughes spoke about the necessity for peaceful American initiatives and intelligent political debate on foreign policy. He is currently campaigning as independent candidate for

the US Senate from Massachusetts, for the same seat that President Kennedy vacated two years ago. Mrs. Elizabeth Boardman, Republican primary candidate for the third congressional district of Massachusetts, reminded the women of their responsibilities in furthering peace.

Hiroshima Visitors Speak

Other speakers included two young Hiroshima pilgrims, survivors of the first atomic bombing. One was a 26-year-old woman, still scarred from radiation burns suffered during the blast, and the other was an eloquent 18-year-old boy who lost his parents in the disaster. As they addressed the crowd, a band of eight self-styled "freedom fighters," who, throughout the rally, had been picketing with misspelled placards ("Pacifist Menace," "Anti-Communist Literature Here"), yelled "Remember Pearl Harbor in an attempt to drown out their remarks.

—Photo by Conrad Grundlehner

ular support for peaceful alternatives to the arms race.

RADP of MIT is one of the local student organizations assisting Turn Toward Peace. TTP also sponsored demonstrations similar to the Boston one in other major cities last weekend.

The direct and personal motivation and appeal of Turn Toward Peace and the Peace Walk were summed in the closing paragraph of the officially distributed leaflet entitled: "Why We Walk."

"Please think about what you have just read. We want to close by asking you two questions: If the arms race is not stopped now, when will it be stopped? If you do not help to stop it, who will?"

5 Activities Council Seats To Be Elected Next Month

Elections for five rotating seats on the Activities Council will be held in May. The Activities Council, the legislative and managing body of the Association of Student Activities, is composed of fourteen permanent member activities and five rotating members who are elected annually.

IFC Officers Announced

The Inter-Fraternity Council has announced its new officers. Jim Champy '63, Phi Kappa Sigma, is Chairman; Jack Downie '64, Delta Tau Delta, is vice-chairman; Jim Allen '64, Delta Upsilon, is treasurer.

Jim Holcroft '63, Sigma Nu, and Steve Colburn '63, Sigma Chi, are IFC representatives to Incomm; Bob Gray '64, Sigma Alpha Epsilon, is Rushing Chairman; Mary Friedman '64, Phi Kappa Sigma, is dance chairman.

The two Japanese visitors appealed to Americans and all others to oppose new atmospheric nuclear testing, pointing out that every test killed or diseased more Japanese survivors of Hiroshima or Nagasaki who had received some radiation already.

In spite of small disturbances created by the few picketers, the walk and rally were marked by decorum and dignity. Onlookers and passers-by generally accepted and read Turn Toward Peace literature explaining the Walk and TTP.

Other Demonstrations Held

Turn Toward Peace is a joint effort by national and regional peace, student, religious, labor, veterans', women's, and businessmen's organizations to build pop-