

69711-18

# MIT & IMPERIALISM



NOVEMBER ACTION COALITION

MIT is one of the foremost universities in the world. primarily an institution directed to serving the needs of American imperialism. In many ways MIT is a direct outpost of the Pentagon. It provides invaluable technical and strategic aid to a government seeking to extend and perpetuate American domination throughout the world. This pamphlet is a brief attempt at presenting just a few of MIT's services to the American Empire.

### M. I. T.

M.I.T. is officially governed by the M.I.T. Corporation, almost all of whose members are large corporation executives who benefit from imperialism. The chairman of the M.I.T. Corporation, James R. Killian, Jr., is a director of General Motors, the Cabot Corporation, Polaroid, A.T.&T., a trustee of the MITRE Corporation, and a trustee and member of the executive committee of the Institute for Defense Analyses. Other members of the 67-man Corporation include:

**David A. Shepard:** Chairman, RAND Corporation; Former Executive Vice President, Standard Oil Company of New Jersey; Trustee, Systems Development Corporation.

**Luis Ferre:** Governor of Puerto Rico; Former Member, Republican National Committee; Chairman, Ferre Industries, Ponce Hotel Corporation, Puerto Rico Cement Corporation, Ferre Development Corporation; President, Puerto Rico Glass Corporation, Editorial Ponce; Vice President, Puerto Rico Iron, Reparada Development Corporation, Ferre Export Corporation, Puerto Rico Paper & Pulp Corporation, Puerto Rico Clay Products Corporation.

**Lloyd D. Brace:** Chairman, First National Bank of Boston; Director, Gillette Company, A.T.&T., United Shoe Machinery Corporation, John Hancock Mutual Life Insurance



Company, General Motors; Executive Committee and Trustee, Mitre Corporation; Finance Committee and Trustee, Rockefeller Foundation.

**Robert A. Lovett:** General Partner, Brown Brothers, Harriman Company; Former Secretary of Defense; Former Assistant Secretary of State; Director, New York Life Insurance Company, CBS, North American Aviation, Freeport Sulphur Company, Union Pacific Railroad.

**George P. Gardner, Jr.:** Chairman of the Executive Committee and Director, United Fruit Company; Director, Kaman Aircraft, Arthur D. Little, Inc.; Trustee, IDA; General Partner, Paine Weber, Jackson and Curtis.

**Crawford H. Greenewalt:** Chairman of the Finance Committee, E. L. Dupont de Nemours & Co.; Director, Boeing Company, Christiana Securities Company, Morgan Guaranty Trust Company.

In addition the MIT Corporation includes five executives from A.T.&T. or its subsidiaries, the presidents of the Standard Oil Companies of Indiana and New Jersey, a director of Coca-Cola, the Chairman of the Board and a director of Kennecott Copper Company, a director of Lockheed Aircraft Corporation, the chairman of Rockefeller Bros., Inc., a director of Shell Oil Company, and two more directors of Arthur D. Little (a Cambridge Research & Development firm working on everything from chemical and biological warfare and counterinsurgency to underwater warfare.)

These men clearly have an interest in the continuation and expansion of American Imperialism. Imperialism requires research in engineering, science, and social science in such areas as weapons, CBW, and counter-insurgency to quell uprisings in foreign countries when they endanger American capital. Social scientists are needed to both "study" the present and future victims of imperialism in order to better control and manipulate them; and to provide the ideology, apologies, and lies for the existing order in the policies of the government. Economists and managers are needed to advise the corporations on how to make more profits.

In their positions of power at M.I.T. the imperialist executives on the M.I.T. Corporation insure that M.I.T. helps to fulfill these needs of American imperialism. While they do not decide on each individual war research project or course at M.I.T., they set the guidelines and appoint the people who do make these decisions. As long as M.I.T. functions the way they want, they are invisible; otherwise, they reveal themselves as the ultimate controllers of the University.

M.I.T. fulfills the needs of American imperialism in several ways:

**Training:** M.I.T. trains people who will do the kind of work desired by the ruling class.



M.I.T. helps to place people in such jobs by allowing recruiters to use campus facilities. Further, M.I.T. helps to channel students into these sort of jobs by giving credit for working at such places as the Naval Ordnance Laboratories, AVCO, Raytheon, and the Air Force Cambridge Research Laboratories. Many graduate and undergraduate students also work in the military-oriented laboratories at M.I.T.

M.I.T.'s Sloan School of Management trains the managers of military corporations. Of the 86 1966 graduates who took jobs in American industries, 44 took jobs with the top 500 DOD R&D Companies. Some of their jobs include: USAF liaison manager, Hughes Aircraft Company; Radar and airborne fire control system manager, General Dynamics Corporation, and director of Research & Development, U.S. Naval Ammunition Depot.

**Research:** M.I.T. does more research and development for the Department of Defense than any other University in the country, with over \$119 million in contracts in 1968. This figure makes M.I.T. the tenth largest DOD R&D contractor in the entire country and is ten times the amount all other Boston area Universities combined received from the DOD.

Most of M.I.T.'s "hard" imperialist research (i.e., weapons systems) goes on at its two Special Laboratories, the Lincoln Laboratory located on Hanscom Field Air Force Base in Lexington, Massachusetts and the Instrumentation Laboratories in Cambridge. Lincoln Laboratory was established in 1951 "for the purpose of creating effective solutions to urgent national defense problems" (President's Report 1968). Lincoln has helped develop the three major air defense and early warning systems now in use: SAGE, the DEW line, and the Ballistic Early Warning System. It continues to work on radar detection and surveillance, ballistic missile tracking, and military satellite communications. Some of the specific problems being worked on are:

**ABM (Anti-Ballistic Missile):** Project PRESS, which has been at Lincoln for seven years, is intended to improve detection systems for ballistic missile defense. PRESS is not only "defensive", but offensive as well, since it is intended to improve the penetration capabilities of U.S. ICBM's. PRESS and ABM in general, besides being a huge waste of resources, are designed to create a U.S. first strike capability (after all, if the U.S. can stop Soviet missiles, it can strike first without fear of being destroyed in retaliation). A first strike capability will strengthen American imperialism by making it easier for the U.S. government to impose its will throughout the world. As Senator Russell has said, "The first country to deploy an effective ABM system . . . is going to control this world militarily."

**MTI (Moving Target Indicator):** In 1967, Dr. John Foster, Deputy Director for Research



and Engineering in the Defense Department, asked the Director of Lincoln Laboratory if Lincoln would develop a foliage penetration radar to detect Vietcong and North Vietnamese soldiers in the jungles of Vietnam. Two years ago, three test models of the resultant radar system, called the MTI, are in use in Vietnam, and work on better MTI's is still being done at Lincoln. The Lab's MTI will permit a helicopter travelling at 200 miles per hour to spot a man moving through tall grass at two miles per hour three miles away, in all weather, day or night. The MTI can also be integrated directly into the artillery systems in the helicopter, thus making it an ideal counterinsurgency weapon.

M.I.T.'s other "Special Laboratory", the Instrumentation Laboratories, are located only a few blocks from the main campus. Their principal activity is the design and testing of inertial guidance systems and automatic control equipment for spacecraft (like the Apollo), aircraft, submarines, and ballistic missiles. They do the most reliable and sophisticated guidance work of any lab in the country. The director of the I-Labs, C. Stark Draper, conceived of the Polaris missile, and the guidance system for it was developed at the I-Labs. Present projects at the I-Labs are:

**MIRV (Multiple Independently-targeted Re-entry Vehicle):** MIRV represents a significant escalation of the arms race: each MIRV missile contains many warheads each of which can be aimed at a different target. There is little defense against it, and its successful development would give the U.S. a first-strike capability, the consequences of which were discussed earlier. The Russians have already threatened to boycott the latest disarmament talks because of the U.S. decision to proceed with MIRV. The heart of the MIRV, its guidance system, was developed at the I-Labs. While most of the research on MIRV at M.I.T. has been completed, M.I.T. is helping to make the MIRV operational and will do some work on improving its accuracy. So it is not too late to stop the MIRV at M.I.T.

**The Helicopter Project:** The Army has been using helicopters for transportation, observation, and as a gunship in Vietnam and other counter-insurgency theaters. However, problems have arisen regarding flight control, guidance, and stability, particularly in rough weather. Such problems are of special concern on gunships where they increase the obstacles to accurate aim.

Accordingly, the Army has funded a project at M.I.T.'s I-Labs to develop an all-weather guidance and stabilization system for helicopters. M.I.T. can talk endlessly about the possible civilian uses of this project in the distant future, but it is clear that it is intended for and, unless stopped, will be used for suppressing revolutionary movements around the world.



There is, in addition to the Special Laboratories, at least one other laboratory involved in weapons research. This is the Aeroelastics and Structures Laboratory, located on the main campus. The Lab has been investigating the effects of nuclear explosions on incoming missiles and seems to be devising (for the Air Force Weapons Laboratory) ways to simulate this phenomenon since these effects clearly cannot be tested with real missiles and ABMs (yet).

The research at M.I.T. listed above by no means represents M.I.T.'s entire contribution to weapons research in the U.S. In addition to doing imperialist weapons research at M.I.T. facilities, M.I.T. makes significant contributions to this research in other ways. James Killian, then President of M.I.T., was instrumental in setting up the Institute for Defense Analyses in 1956. M.I.T. was a member of IDA, along with eleven other universities, until IDA's reorganization in 1968 allowed only "individual" instead of "university" membership. Now Killian and M.I.T. trustee George Gardner sit on IDA's Board of Trustees. Killian was President of IDA for a while, as was M.I.T. Vice President Jack Ruina. IDA's original function was to provide scientific and technical support to the Weapons systems Evaluation group of the DOD. Since the start of the Vietnam war, IDA has emphasized research on counterinsurgency and unconventional warfare (including CBW and tactical nuclear weapons in counterinsurgency).

M.I.T. further aids imperialist weapons research through the advisory, consulting, and executive roles of many M.I.T. administrators and faculty in private R&D companies and in the government. Two M.I.T. physicists, Henry Kendall and Steven Weinberg, are part of the Jason Division of IDA. As such, Kendall was sent to Vietnam in 1968 with two other physicists to appraise "the effectiveness of new weapons there" (specifically an "anti-infiltration barrier" between North and South Vietnam). In 1966 Weinberg and three others prepared a secret report for IDA on the possible use of tactical nuclear weapons in Southeast Asia.

M.I.T.'s Holt Ashley, C. S. Draper, Frank Heart, Winston Markey, and Rene Miller (the helicopter expert) all sit on the Air Force Scientific Advisory Board (USAFSAB). Miller also sits on the Army Scientific Advisory Committee and Draper consults for them. Milton Clauser, Director of Lincoln Laboratory, is a consultant to General Electric, Communication Satellite Corporation, the U.S. Navy, the assistant secretary of the army for R&D, and American Research and Development, Inc. (a venture capital corporation), a former member of the USAFSAB, former director of the research and engineering support division of IDA (1965-66), and a member of the advisory committee for Project Agile of the DOD's Advanced Research Projects Agency (ARPA: Agile is ARPA's main counterinsurgency project). Physics Professor Philip Morse is on the board of directors of Adage, Inc. and the Control Data Corporation, and has been



director of research for the Weapons Systems Evaluation Group of the DOD (1949-50), chairman of the NATO Advisory Panel on Operations Research (1960-65), and a member of the Army Scientific Advisory Committee(1965-67). Jack Ruina, Vice President for Special Laboratories, has been Director of ARPA(1961-63), President of IDA(1964-66), and a member of the USAFSAB(1964-67), and is now a director of the MITRE Corporation and General Research Corporation, and a member of the Institute for Strategic Studies and the Council on Foreign Relations. The head of the Mechanical Engineering Department, Ascher Shapiro, is a former member of the USAFSAB(1964-66) and is now a consultant to the Navy's operations evaluation group, United Aircraft Corporation, A. D. Little, Bendix Aviation, etc., and a member of the DOD's technical advisory panel on aeronautics. Provost Jerome Wiesner is a former member of the Army's Scientific Advisory Committee(1956-61), President Kennedy's main science advisor, and is now a director of Sprague Electric Company and the Celanese Corporation and a consultant to IBM and Kerr-McGee Oil Company. Frank Press, head of the Geology Department, has been a consultant to the USAF, the Navy, the Office of Science and Technology, the Arms Control and Disarmament Agency, and AID, and is a member of the board of directors of United Electrodynamics. Many other high-ranking M.I.T. professors and administrators have similar backgrounds and outside affiliations.

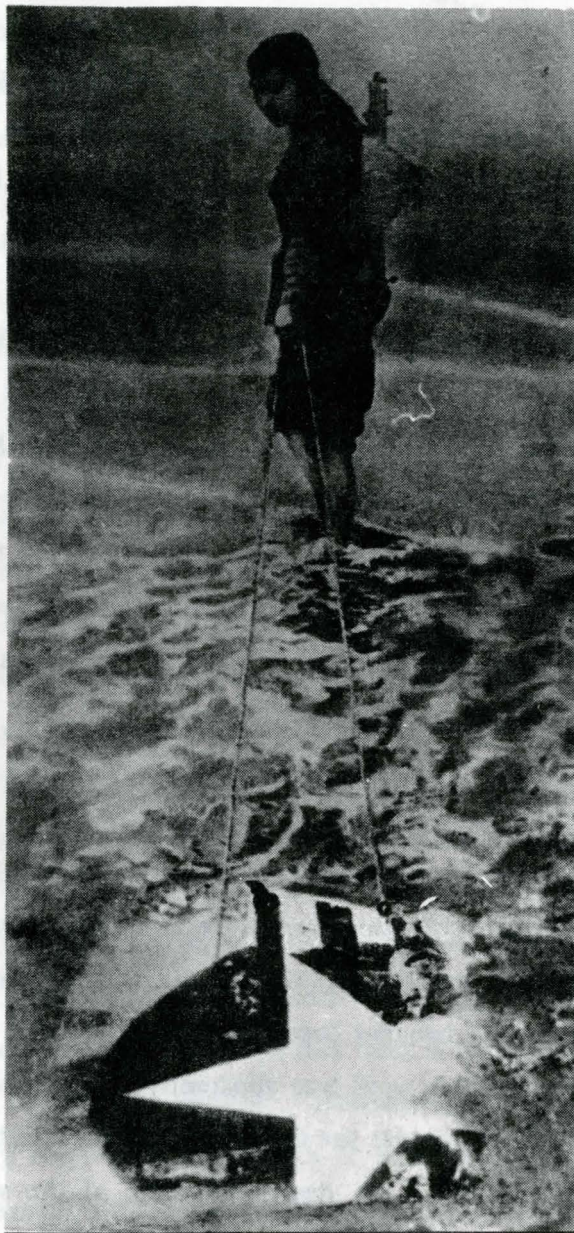
### Spin-offs

M.I.T. also plays a crucial role in founding new military corporations, especially in the Boston area. When certain research is deemed "inappropriate" for M.I.T. to be doing, or enterprising M.I.T. researchers get ideas as to how they might make some money, spin-off companies are formed to do this research and development. There are over 200 M.I.T. spin-off companies in the Boston area alone. Some of the more interesting ones include:

**MITRE Corporation:** A Lincoln Laboratory spin-off created in 1958 "to provide technical advice and support to such government agencies as the Electronics Systems Division of the Air Force Systems Command, as well as the DOD" (the Boston Globe) concerning air defense systems. It is the 30th largest DOD R&D contractor. Four M.I.T. Corporation members and two M.I.T. administrators are trustees of MITRE, one of them chairman of the board of trustees.

**General Research Corporation:** A Lincoln Laboratory spin-off involved in ABM and counterinsurgency (Project Agile) research. Ruina is presently a director.







**Bolt, Beranek, & Newman, Inc.:** These three men all hold faculty appointments at M.I.T., as does another one of B.B.&N.'s directors. B.B.&N. was the 125th largest DOD R&D contractor in 1968, doing mostly acoustical studies such as "Measurement of Acoustic & Vibration Response of Atlas Titan Guidance Computer."

**American Science and Engineering:** Its chairman is M.I.T. Physics Professor Bruno Rossi and one of its directors is another professor (G. W. Clark). It is the 394th largest DOD R&D contractor and worked on such projects as "Design and Development of a Hardened Nike-Hercules Nose-Cone System."

**Teledyne, Inc.:** A spin-off from M.I.T.'s Research Laboratory for Electronics. Its chairman is on the M.I.T. Corporation. It is the 38th largest DOD R&D contractor and is a major ABM contractor.

**Edgerton, Germeshausen & Grier (EG&G):** A spin-off from M.I.T.'s Electrical Engineering Department. M.I.T. Professor Edgerton is its honorary chairman, and Dean Pounds of the M.I.T. Sloan School of Management is a director. It is the 82nd largest DOD R&D contractor and does research on satellite spying and nuclear device testing equipment.

**Dynamics Research Corporation:** An I-Lab spin-off which does Polaris guidance work.

### **Social science**

Helicopters and missiles, however, are not all that are needed to run the American empire. Some twenty years ago, the U.S. Government realized it required social science research on communications to carry on psychological warfare against the Soviet Union and Eastern Europe. M.I.T. was happy to help, and brought together a group of social scientists from the Cambridge area to tackle the problem. Their work was apparently useful (one doesn't know for sure, since it has never been declassified) because the CIA and other organizations decided to fund a Center for International Studies at M.I.T. to deal with some of the social science problems facing American policy-makers.

When the U.S. Government establishes and funds a center to solve its problems, the research personnel are likely to be people who have worked directly for the Government. M.I.T.'s Walt Rostow, later to become famous as the architect of the Vietnam war, was a key figure in getting the center started. ~~Director Max Millikan came to the CIS directly from the CIA,~~ Max Millikan's other activities have included working for the Department of State and advising AID and the Air Force. Other staff members include a McNamara speech writer and a Defense Department think-tank specialist, a political advisor and policy director of



the CIA-funded Radio Free Europe, and a ten-year veteran of the State Department. Ties to the U.S. Government have not been incidental to the Center's work, as Millikan explained in one of the CIS's later annual reports:

It has been a tenet of the Center not only that much of the research should be oriented toward national policy but also that the special skills and resources of the members should, where possible and useful, be made available to the government. In keeping with this philosophy, individuals have served as consultants, lecturers, advisors to a number of government and international organizations both here and abroad, particularly in regard to development planning and national security affairs.

The students the Center trains also end up serving the government. For example, graduates of the first year-long course in international communications "are working in USIA (U.S. Information Agency) and similar activities." A look at the ideology of Center members shows the political orientation these graduates will bring to their governmental work.

Ithiel Pool, for example, writes that not only is the inclusion of the Vietcong in a coalition government "unacceptable," but so is "the persistence of the Vietcong as a legal organization in South Vietnam." And Pool is no empty talker; aside from his position on the Defense Science Advisory Board, he does a few hundred thousand dollars worth of research on Vietnam for the DOD, through his computer simulation corporation, Simulmatics. Or consider Lucien Pye's advice on American policy towards China. Even though China is following a policy of "isolationist fanaticism," he argues that, to avert a major war, it is essential that the U.S. "deter, restrain, and counterbalance Chinese power." William Kaufman writes that in the immediate post-war period "the U.S. experienced [guerilla] aggression in the Philippines, Greece, and parts of Korea." (How were indigneous radical movements in Greece and the Philippines an aggression against the U.S.?) Lincoln Bloomfield, another Center member, had done a study on controlling local conflict. It specifies two methods of avoiding violence: allowing guerilla dissidents to achieve a "quick victory" or "suppressing them with a minimum of violence". The latter option, the study tells us, is "obviously" preferable. Furthermore, the study explains that "if the United States could be certain that it would not run an intolerably high risk of bringing China or the Soviet Union more directly into the Vietnam war, it can be speculated that less resistance would be offered to pressures to intensify toward more severe punishment of North Vietnam."

A few years ago, the fact that the Center was being supported by the CIA became public knowledge. CIS Director Millikan then announced that "for practical and not moral reasons"—i.e. difficulties in doing overseas research—the CIS was cutting its ties with the Intelligence Agency.



But it should be clear that the same people are working on the same projects. The only difference is that the funds do not come from the CIA any longer. They now come from the Ford Foundation, headed by McGeorge Bundy, former presidential advisor for National Security Affairs. Two of these projects, COMCOM and International Communism are particularly useful for furthering America's counter-revolutionary policies around the world.

### **COMCOM**

One of the earliest fields of research at the CIS was that of International Communication and its relation to "international security problems," that is, to U.S. strategic interests. Scheduled to go on until December under the direction of Ithiel Pool, the work has been funded by the Advanced Research Projects Agency (ARPA) of the DOD. "In the language of psychological warfare," states one Center document, "we felt that much more study of the target was needed." Accordingly, computer simulations of communications patterns within the Soviet Union and China are being developed. A CIS report explains: "It should be possible to predict, for example, approximately how many and what types of people in the USSR might be reached by a particular kind of message sent over a certain medium." A second emphasis of the project has been the development of communications models for Third World nations, "particularly Southeast Asia." The aim is to help America conduct more effective psychological warfare against "specific Southeast Asian societies." "We are able to estimate," Pool has written, "what kind of effort is necessary to saturate what segments of the population." The intention of this work is to help suppress revolutionary movements, not as crudely as with napalm, but just as efficiently.

### **International communism**

**(or studies in communism, revisionism, and revolution)**

Originally funded by the CIA, the International Communism project began under William E. Griffith in the early 1960's. Since then the scope of the work has been expanded to include "radical movements around the world." One aspect of the project is an extensive documentary collection on Communist affairs, probably the largest non-governmental collection in the world. Included are key publications of many Communist parties, and translations of Communist radio broadcasts and newspaper and journal articles as well as documents on radical movements within the U.S. The CIA's purpose in having this collection established was primarily to provide an



independent check on the reports of its operatives in the field.

The project also provides topical open intelligence report on developments within and among radical movements and "the implications of these developments for United States foreign policy." Recent titles have included "Vietnam: Communication Factors of Revolutionary Guerrilla War" and "Summary of the Development of the Indonesian Communist Party and Its Relations with the Soviet Union and the Chinese Peoples' Republic."

"The philosophy of the Center for International Studies," one CIS report has stated, "does not distinguish sharply between applied and pure research." It is clear that the International Communism project is applied towards the goal of defeating radical movements around the world. This past year, a project has been established which will link behavioral scientists and computer time-sharing specialists. This is CAM.

### CAM (or the Cambridge Project)

Project CAM was conceived by Ithiel de Sola Pool, J. C. R. Licklider (who spent two years with ARPA), and ARPA official Bob Taylor. It is funded by ARPA and will receive \$7.69 million over the next five years. The first few paragraphs of the proposal to ARPA spell out Project CAM's main intention.

"The proposal is based on a straightforward line of reasoning:

1. The U.S. Government and the Department of Defense face many problems that are in large part behavioral-science problems, and they need pertinent behavioral-science knowledge for use in solving those problems.
2. There are, in their employ and associated with them, people experienced in dealing with such problems who could use applicable knowledge effectively in determining specific solutions if powerful behavioral-science methods, principles, and data were available to them."

Pool himself has said "The research now done by the CIA is sometimes well done and sometimes not very well done. I can think of no greater contribution a social scientist could make to the intelligence of the U.S. Government than to help improve this effort at knowledge of the outside world."

The project proposal lists 24 examples "of the kinds of data collections with which CAM will work." (p. 52) Among these are:

Human Relations Area Files. These are data on "cultural patterns of all the tribes and the



peoples of the world . . . " (p. 53)

U.S. Selective Service data. "It is useful for analysis of manpower requirements and resources for the armed forces, and through the training given by the armed forces, for the civil economy." (p. 55)

Data on youth movements. No comment is given. (p. 56)

International communications. A central focus of interest is the extent to which attitudes and information originating in one country can influence the behavior of another." (p. 57)

Peasant attitudes and behavior. This data, the proposal explains elsewhere (p. 46), studies questions such as "what are the conditions under which peasants are strongly patriotic as in Turkey, and the conditions under which they are purely local in their orientation as in Vietnam? Under what conditions do peasants' protests become violent?"

Derivative files. Work on other data will produce new data. "For example, gross national product, and arms-expenditure figures may yield indices of military potential."

According to Licklider, the eventual hope is that there will be a nation-wide computer network, to which the Pentagon, among others, would be tied in.

It is clear from these examples that the major goal of Project CAM is to provide the U.S. Government with sophisticated counter-insurgency techniques. It will try to develop effective propaganda methods, suggest ways to suppress revolutions and local insurrections if propaganda fails, suggest more effective ways of channeling manpower in both the armed services and civilian life, and provide more detailed data about the weak spots of underdeveloped countries. Pool has explicitly corroborated this conclusion. In a recent interview he said, "[Some students] are under the impression that the Project will deal with counter-insurgency problems of peasant attitudes. These topics of research are nothing new. They have been going on all the time in various sectors of the community. These areas would be strengthened by the project . . . "

## CONCLUSION

The M.I.T. administration has formed countless committees to pretend to deal with some of the issues raised here. But the helicopter project goes on. MIRV goes on. MTI goes on. ABM goes on. CAM goes on. COMCOM goes on. And the International Communism project goes on. And as the meaningless committees meet, the war in Vietnam goes on. Vietnamese die and victims of U.S. imperialism around the world suffer in part through the effort of M.I.T.

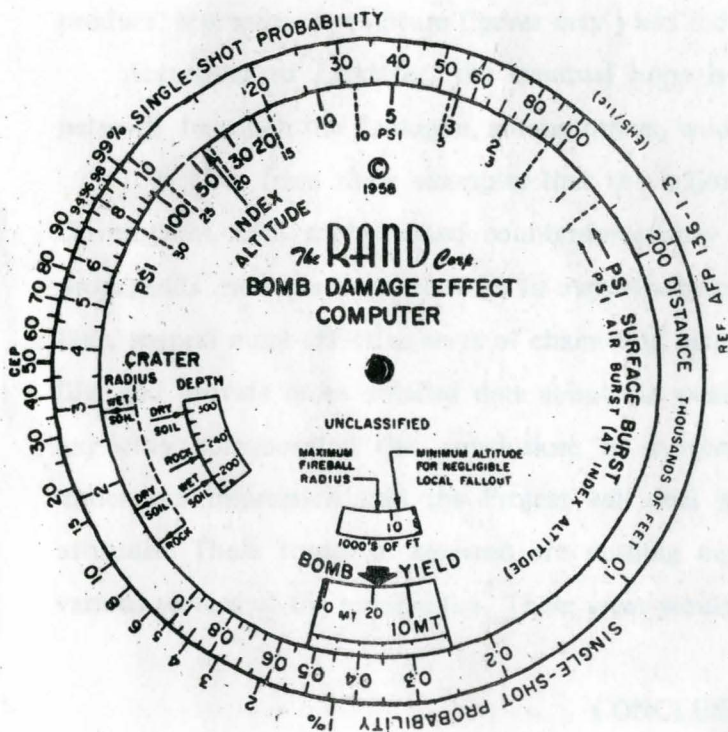
On November 4, we will come to M.I.T. to stop these projects. Through militant action we will start a struggle to ultimately destroy imperialism.

Join us.



# COME TO M.I.T.

## MIT: Research for DEATH



## NOVEMBER

NOV 1: Women's rally, Fenway.

NOV 1 - 3: Local rallies, teach-ins, campus demonstrations

NOV 4: Beginning of mass action at MIT,  
calling for an end to war research such as MIRV,  
helicopter project, counter-insurgency research, etc.

NOV 6: Local Demonstrations (Fall River, New Bedford,  
Lowell, etc.)

NOV 7: High school students will leaflet, hold rallies and  
demonstrations.

NOV 8: Massive march and rally. March ending up at a  
Selective Service office.

For more info call

November Action

739-1165

# NOVEMBER 4TH