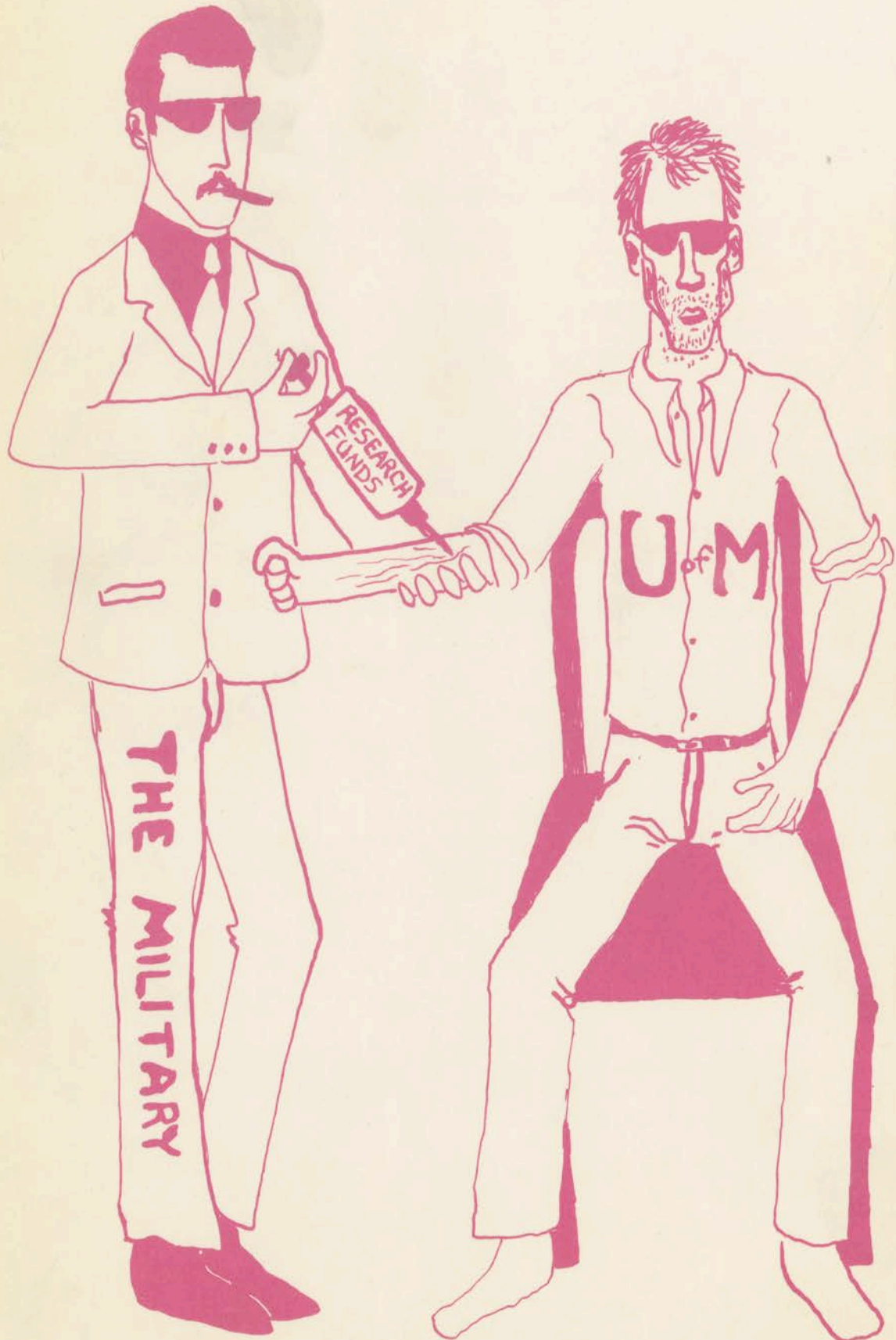


# STRUNG OUT



## A Report on the Relationship

## Between the University of

## Michigan and the Military

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## WILLOW RUN LABS: WAR CONTRACTING FOR \$\$\$

Willow Run Laboratories, a sprawling multi-million-dollar research complex, is operated by the University of Michigan under a long-standing reciprocal agreement between the college and the Pentagon.

In what was probably the best real estate deal since the Louisiana Purchase, the University acquired the entire Willow Run Airport area, east of Ypsilanti, as government surplus in 1946 for \$1.

But in the 24 years since its inception, Willow Run Labs, and the University of Michigan, have more than paid back their debt of gratitude for this apparent gift from the Department of Defense.

Each year on the average, WRL conducts more than \$10 million in government research, nearly all of which is funded by the Department of Defense, and much of which is classified as "top secret."

Few classes are taught there, even though WRL is as much a part of the University as Angell Hall. Dozens of military research projects are conducted simultaneously on subjects ranging from infra-red electronic battlefield surveillance to advanced radar techniques.

"Some of the people at Willow Run don't even know what the main campus looks like," explains one employee.

Life at Willow Run is not radically different from that at any other military base. Armed guards, locked files and required security checks give the unit the appearance of a midwest branch of the Pentagon.

Several years ago, an employee of WRL tells of opening up a box and finding a stack of aerial photographs taken in Vietnam which identify "enemy" troop concentrations, campfires, trucks, and the like. (WRL aids the government in reconnaissance work).

Like any office, the staff of Willow Run has its in-group jokes. "One of our favorite jokes is to talk about the non-military uses of the new observatory in Hawaii," explains one Willow Run worker. "Publically, the officials talk about the peaceful uses of the observatory. But everyone knows it's there for tracking ICBM's and satellites."

Thanks to Willow Run, the University of Michigan ranks fifth in the nation among colleges and universities in Defense Department financed research contracts.

WRL has also brought the University distinction in several other areas:

- as the only university in the nation to have a missile named after it (BOMARC: BOeing — Michigan Aeronautical Research Center).
- made the "University of Michigan the leading 'free world' authority in surveillance technology" according to the army.
- earned the University a world-wide reputation in the field of aerial reconnaissance, infra-red technology and sensing devices.
- made the school a national clearing house for ballistic missile radiation phenomena information, as well as infra-red and seismic information.

Willow Run is not the only military research unit attached to a major college campus. M.I.T., Cal Tech, Johns Hopkins, for example, all have military research laboratories associated with the schools. The University of Wisconsin at Madison had one until quite recently.

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The distinction at Michigan is that 'Willow Run is much more a part of the University than laboratories at other schools,' explains Vice President for Research A. Geoffrey Norman.

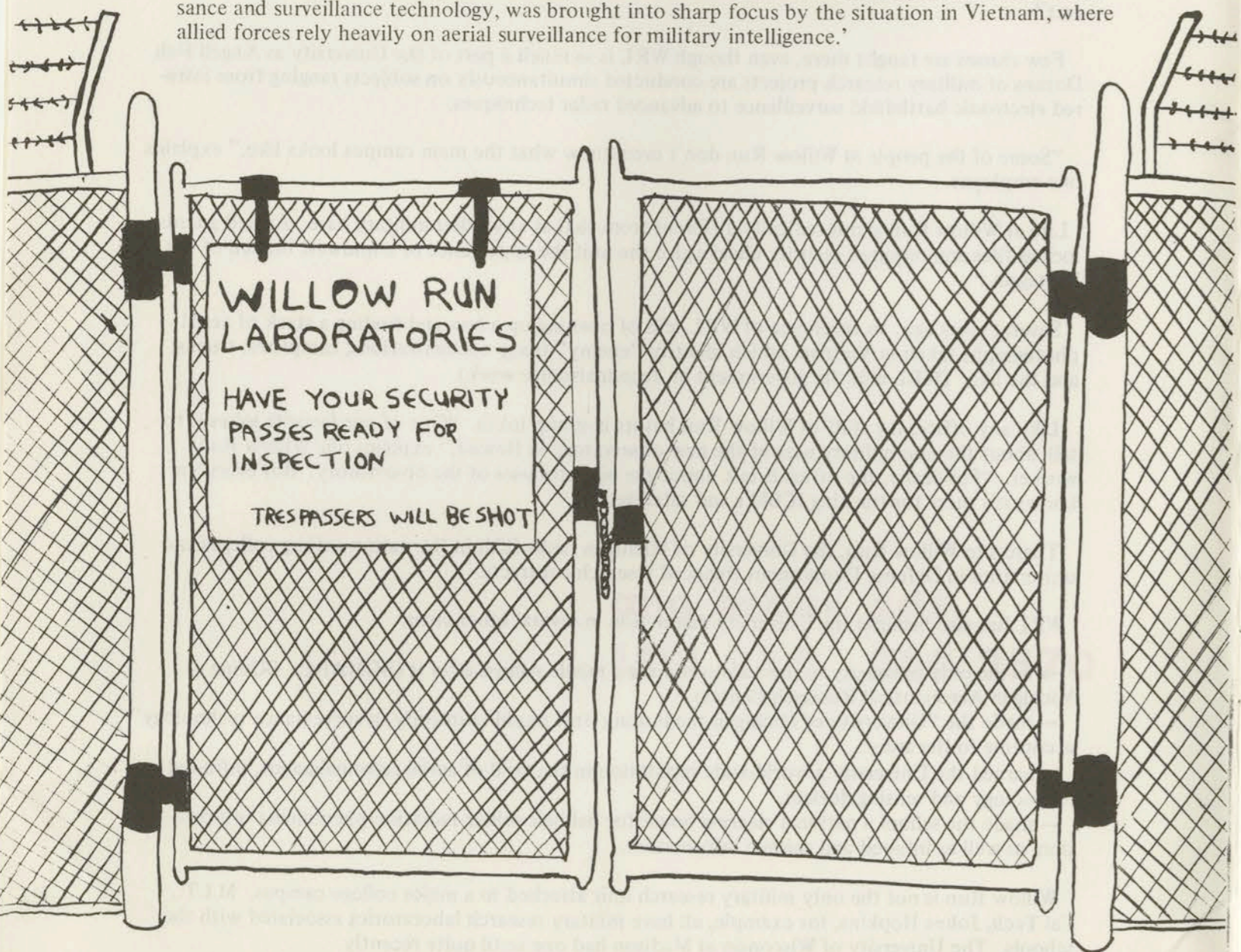
But you don't have to travel to Ypsilanti to find the Pentagon's presence at the University. Only a few steps from the Diag stands North Hall, home of the University's Reserve Officer Training Program (ROTC).

Each year the University provides the Pentagon with what amounts to a \$430,000 gift in the way of free rent and other direct subsidies to the ROTC program.

Symbolic of the hand-in-mouth mutual relationship between the University and the Pentagon, the ROTC subsidy is a small price to pay for some \$50 million federally-financed research received by the University each year.

For what purposes are these University research projects and the ROTC program employed? Recently, 'The New Republic', described how University of Michigan infrared sensing equipment was and techniques were used to first locate and later murder guerilla leader Che Guevara in Bolivia in October, 1967.

In the words of former University President Harlan Hatcher, 'The importance to national defense of some of the present and past research programs of the Willow Run staff, especially in reconnaissance and surveillance technology, was brought into sharp focus by the situation in Vietnam, where allied forces rely heavily on aerial surveillance for military intelligence.'



# HAND IN HAND

The University in particular has become, in America, a prime instrument of national purpose. This is new. This is the essence of the transformation now engulfing our Universities.

—Clark Kerr, ex-Pres., Univ. of Calif.

Our colleges and universities must be regarded as bastions of our defense, as essential to the preservation of our country and our way of life as supersonic bombers, nuclear-powered submarines and intercontinental ballistic missiles.

—John Hannah, ex-Pres., MSU (1961)

The U.S. military consists of four major services: the Army, Navy, Air Force, and the Universities. For the past twenty-five years, universities across the country and the research centers they maintain and staff have been as important to the war economy as the top 100 corporation that form the backbone of the military-industrial complex.

As a result the universities are becoming and in many cases have become heavily dependent on government research grants. The government's General Accounting Office recently released this report: 'The nation's universities....derive an average of 85% of their total research budgets from the government.' The same study specifically mentioned the U of M, which ranks third (after M.I.T and the Stanford Research Institute in federally-funded research: 'The U of M received a total of \$48.1 million for federal research. This amounts to 77% of the school's research budget and 21% of its total operating funds.' (Detroit Free Press, 9/30/70, p. 8)

So over one-fifth of the Michigan budget comes in the form of government research grants, and nearly one-half of these funds come from the three war related government agencies: Department of Defense (DoD), National Aeronautics and Space Administration (NASA), and Atomic Energy Commission (AEC). (See chart on Page )

The military-university complex is a product of World War II and the Cold War. During WWII, research laboratories for the war effort were hastily set up at universities on the basis of expediency and were not intended to outlast the war. However, the post-war U.S. position of "free world" policeman in the "fight to contain communism" in Europe, Asia, Africa, and Latin America, the Korean War, and the tensions of the Cold War all resulted in an expansion of the military and its research network.

Universities seemed, for the most part, rather eager to cooperate with the Pentagon in creating and administering permanent military research facilities on campuses. 'The causes of such cooperation are not hard to determine; for the first time in American history scientists and academicians had come to enjoy positions of considerable prestige and influence in Washington. Experiments that would have been prohibitively expensive before the war now enjoyed abundant government financing.' (NACLA, 'The University-Military-Police Complex'). Independent research institutes were established and funded almost solely through such agencies as the DoD, the Rand corporation "think tank" and the Institute for Defense Analyses (IDA).

The University was a part of the defense research boom from the beginning. This dates from 1946 and the bargain rate acquisition of Willow Run, now one of the largest defense research centers in the country. Willow Run Labs, under the administration of the North Campus-based Institute for Science and Technology (IST), operates on an annual budget of close to \$11 million and maintains a staff of 770 full-time research personnel, grad students, and some undergrads.

Why do universities take the trouble to set up these facilities at all? Why not have the government do it independently? If the answer is not already clear, it isn't hard to understand in this country where universities are a big business with products (research) to sell. The answer is: money. J. William Fulbright has said, "Disappointing as it is, the adherence of the professors (to the military-industrial complex) is not greatly surprising. No less than businessmen... professors like money and influence." (Congress. Record 12/13/67). Willis E. Groves, director of Project Michigan, and Army-sponsored, \$2.5 million-a-year project on battlefield surveillance research, said it much more bluntly, "Military research gives these guys [scientists and engineers] a chance to move and cash in." (Daily, 10/18/67).

Universities want federal money for a number of reasons. It is a prestige boon in that the high salaries and relative freedom of the research-oriented lifestyle attract the nation's scientific elite and also provide valuable support for Ph.D. programs. For example, the University of California system operates the Lawrence Radiation Laboratory, and the Los Alamos Scientific Lab, which have a combined staff of 11,850 and a 1968 operating budget of \$288 million: more than the total most states spend for higher education.

There is another equally important reason why universities want to attract federal defense research grants, and that is that the men who run the universities are very often the same men who control the war profiteering corporations which will reap huge profits applying the research data to the production of military hardware. Of the top 75 defense contractors in 1968, 19 of them were directly represented on the M.I.T. Corporation, the governing body of M.I.T. And when multiple directorships (one man representing the interests of more than one corporation) are considered, there were a total of 41 connections between the Corporation and major U.S. defense contractors.

The case of the U of M is basically analogous: a great proportion of University funds come from the automobile companies through contributions from alumni employed by the Big Three; the University owns stock in the auto firms and a number of corporations like Dow and Lockheed which are all heavily DoD supported companies.

Former U of M President Harlan Hatcher sits on the board of IDA, and reviews all University research proposals. Regent Otis Smith is a high-ranking GM employee (GM is the 10th-ranked war contractor in the nation, receiving \$584 million in defense contracts in 1969). Regent Gertrude Huebner is the wife of the director of research for Chrysler Corporation.

A. Geoffrey Norman, Vice President for Research, comes to the University with intimate ties to the military. From 1946-52, he was the division chief of biological labs at Camp Detrick, Maryland, the Army's principal center for chemical and biological warfare (CBW). (Who's Who in America).

Other high-ranking University employees are tied to the war machine. Wilbur K. Pierpont, Vice President and Chief Financial Officer, was a director of Buhr Machine and Tool Company until it was purchased by Bendix Corporation. When a huge corporation buys a smaller one, the officers of the smaller firm trade their stock interest for shares in the larger firm. Thus, Pierpont now has holdings in Bendix, the 34th-ranked war contractor, with \$184 million in defense contracts.

U of M's new controller, Chandler W. Mathews, comes here directly from GM, where he had worked since 1966 as assistant comptroller for its operations in Venezuela. And Thaddeus M. Bonus, the University's new director of public relations, comes from KMS Industries, a conglomerate defense contractor, originally set up by ex-faculty members. (University News Service).

The facts of a profit-oriented interest in war research go even further. Scientific interests have political careers from war research have an interest in maintaining it. Weston Vivian, former Congressman from Michigan's 2nd district (which includes Ann Arbor), owes his career to war research. From 1949-53, Vivian worked on the BOMARC missile system, a joint project of the University and the Boeing Corporation, the nation's 9th-ranked war profiteer last year. From 1953-60, he was an electrical engineer for the Willow Run war research labs. Then in 1960, Vivian took a job with Conductron, a University war research spin-off corporation. This is how a spin-off works: people with access to research data form a company to develop commercial products from the results of that research. Conductron drew most of its staff from University faculty. It boomed into "the most successful defense research spin-off firm Michigan has ever seen." (Daily 12/67). Vivian's original investment of \$49 in Conductron stock was sold for \$100,000 in 1964, and he "was able to make a start in financing his Congressional campaign." While in Congress, he was a member of the House Committee on Science and Astronautics. He is now a vice president of KMS Industries, another Ann Arbor-based war research spin-off firm. (Daily, 12/67).

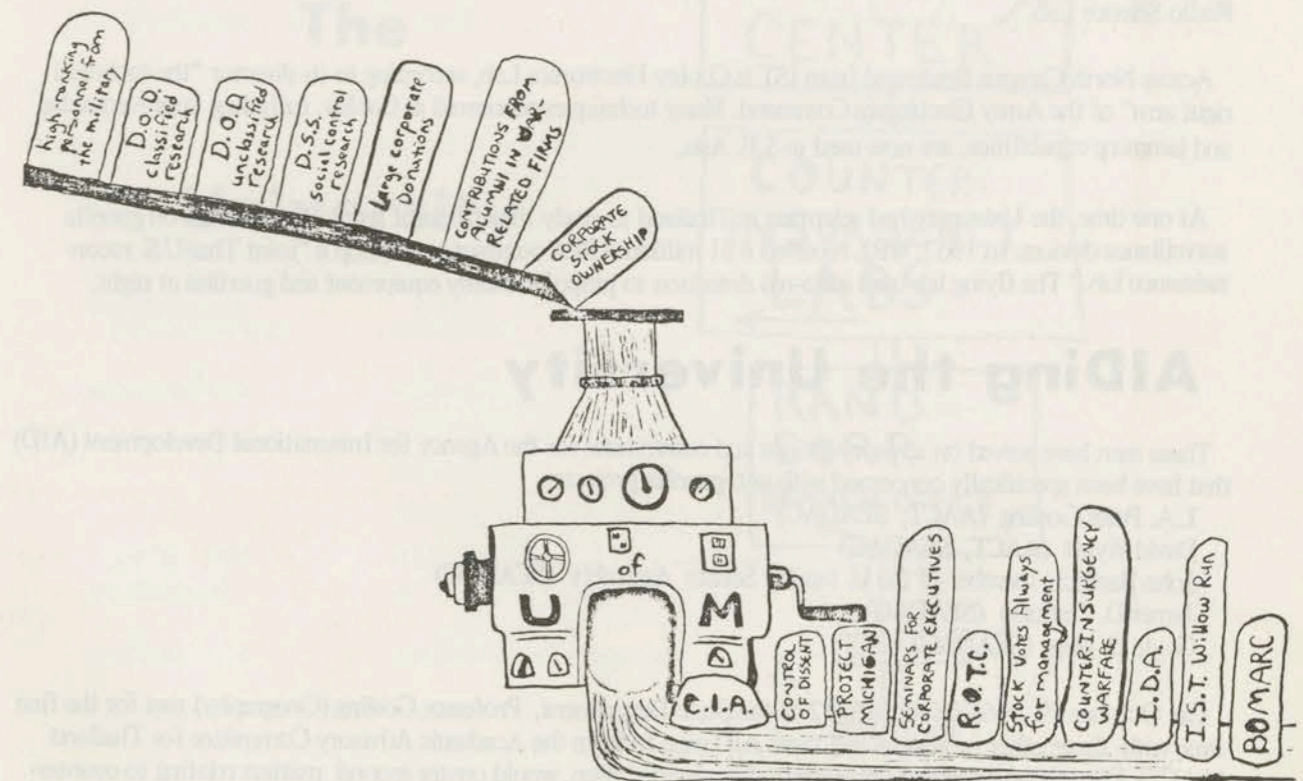
University professors also sit on government scientific advisory boards. Former University professor of physics Kenneth M. Case is a member of IDA's Jason Division. Jason is the division of IDA oversaw the Thailand counterinsurgency program in which the U of M was heavily involved. The 1967 Annual Report of IDA states: "Jason continued work on technical problems of counterinsurgency warfare and studies with relevance to Vietnam." Professor Marvin R. Holter sits on the Air Force Science Advisory Board along with a few generals.

In sum, the University is linked to the war machine financially through stock ownership, and a dependency for funding on war related industries and the alumni who work for them. It is also tied to the war machine through high ranking personnel and faculty who either work for or own interests in war related corporations, or who come to the University with intimate ties to the military.

What has "defense" research meant to universities as institutions of learning? In 1965, the House Committee on Government Operations issued a report on "The Conflicts Between the Federal research program on the one hand, and the Nation's goals for higher education share the common goals of extending scholarship and developing the intellectual resources of the nation, the immediate interests of one are not necessarily those of the other" (U.S. Government Printing Office, 1965). The Committee pointed to the conflict between non-teaching war researchers and the need for qualified professors of science and engineering. Also there is the point of the concentration of federal research funds. In 1967 the top 100 recipient universities received 88% of all federal research and development grants. Six states (New York, Pennsylvania, Michigan, Illinois, Massachusetts and California) received 43% of all federal funds that year.

The pattern of concentration of research funds has meant a similar concentration of research opportunities and incentives for scientists and engineers. Favored universities have been able to attract and keep the best scientists and graduate students. Institutions not so favored have lost many of their ablest professors, and are unable to compete on equal terms for replacements. Thus, federal research programs have not only made already strong institutions stronger, they have done so partly at the expense of the weak.

There is also an extremely important political consequence of university war research and war ties. Despite administration platitudes about a "neutral center for unbiased, non-ideological learning," this country's universities are intrinsically tied to American militarism and its permanent war economy. Universities may once have been neutral and objective, but today that is a distortion, a myth which must be exploded. It is a simple sociological fact that institutions act in their own self interest. It is in the interest of those who run universities to maintain and actively support war research for the funds that such research brings.



THE UNBIASED UNIVERSITY

## THE EXTENT OF COMPLICITY

Nearly a fourth of this University's federally-funded research is done DIRECTLY for the Department of Defense:

Fiscal year 1968-69:	DoD.....\$ .4 (millions)
	Air Force.....5.2
	Navy.....2.1
	Army.....6.3
	Total.....14.0

In addition, the University contracts research from the Atomic Energy Commission (2.7 million) and NASA (\$4.1 million), the results of which have military applications almost as certainly as DoD research does.

Furthermore, in the Social Sciences, a number of University professors are co-operating with the government in supplying certain "independent" organizations (actually under DoD or State Department control):

For Example- Defense Supply Service (DSS)  
 Institute for Defense Analysis (IDA)  
 RAND Corporation  
 Battelle Memorial Institute  
 Advanced Research Projects Agency (ARPA)  
 S.E. Asia Development Advisory Group (SEADAG)  
 Academic Advisory Committee for Thailand (AACT)

These are supplied with technical expertise in matters such as counter-insurgency (COIN) and military procurement (the draft), etc.

It is therefore understandable that the University is fifth ranked among Universities as a military research contractor. It is the 64th largest military contractor in the United States. As such, it has been active in the South East Asian war since the early sixties.

The majority of DoD research done at this University is under the auspices of the Institute for Science and Technology (IST). IST directs all research carried out at Willow Run. Its military contracts are usually divided into four subsections: Geophysics (methods of seismic and acoustic detection, including underground nuclear explosions), Infrared and Optics Lab (counter-insurgency warfare), Radar and Optics Lab (surveillance), and the Radio Science Lab.

Across North Campus Boulevard from IST is Cooley Electronics Lab, according to its director "the technical right arm" of the Army Electronics Command. Many techniques pioneered at Cooley, including improved radar and jamming capabilities, are now used in S.E. Asia.

At one time, the University had scientists in Thailand to study the effects of tropical conditions on guerilla surveillance devices. In 1967, WRL received a \$1 million ARPA contract to develop a "joint Thai-U.S. reconnaissance lab." The flying lab used infra-red detection to pinpoint enemy equipment and guerillas at night.

## AIDing the University

These men have served on advisory groups and committees for the Agency for International Development (AID) that have been specifically concerned with anti-guerilla projects:

L.A. Peter Gosling (AACT, SEADAG)  
 David Wyatt (AACT, SEADAG)  
 John Bardach, member of the U. faculty Senate Assembly (SEADAG)  
 James D. Clarkson (SEADAG)  
 Gayle D. Ness (SEADAG)

On October 19, 1968, in room 5212 of the State Department, Professor Gosling (Geography) met for the first time with three other professors and three AID men to form the Academic Advisory Committee for Thailand (AACT). Future conferences and research, they decided then, would center around matters relating to counter-insurgency. At the next meeting (Jan. 24-25) and at subsequent meetings Professor Wyatt (History) accompanied him. Others later represented were the RAND Corporation and the National Security Council.

What does AACT do? According to the minutes of its Oct. 19 meeting: it coordinates the flow of information "both between its own members and the United States Operations Missions/Thailand Research Division (USOM/Thai). Its program priorities include finding ways to strengthen village security through aid to the Thai Police and methods of accelerating rural development. Gosling and Professor Clarkson (Geography) are working specifically on a project which calls for the precise mapping of the coastal areas (physiography that might effect military operations) of several South East Asia countries.

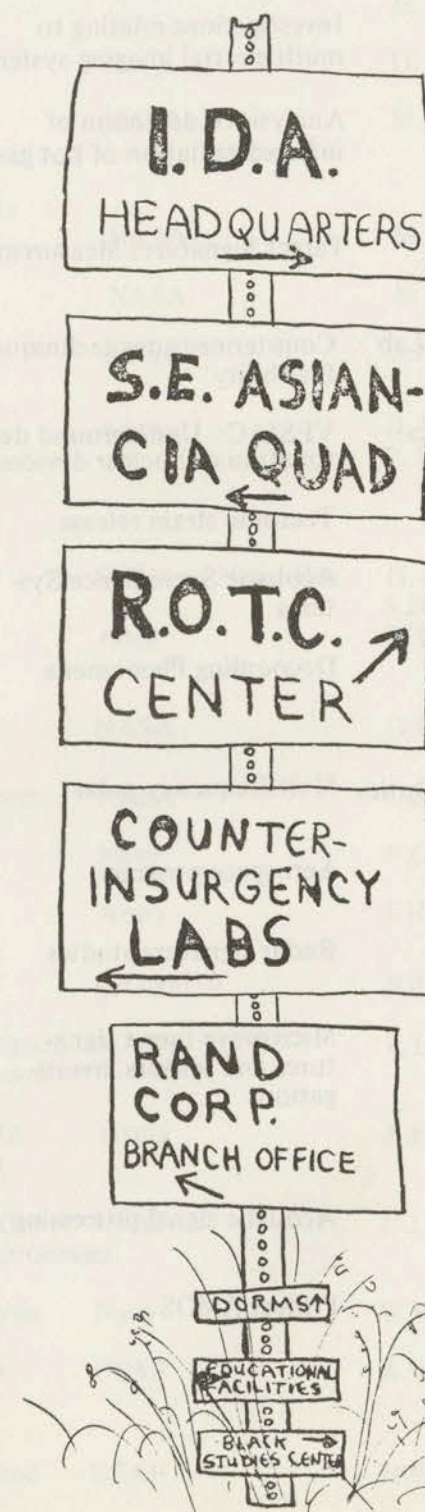
Both Gosling and Wyatt are members of another sub-division of AID: the Southeast Asia Development Advisory Group (SEADAG). Joining them in this organization from Geography is Professor Clarkson; from Natural Resource Professor Bardach; and from the Center for Southeast Asian Studies, Professor Ness. SEADAG is composed of S.E. Asia specialists who meet with State Department and AID people, offering themselves as resources from which can be drawn extensive knowledge of specific regions.

Welcome

To

The

University



## Current Classified University Research

LAB	PROJECT	SPONSOR	RESEARCHER
IST, Infrared and Optics	Ballistic Missiles Radiation Center (BAMIRAC)	ARPA	M.R. Holter
" "	Infrared warning systems studies	Navy	M.R. Holter
" "	Investigations relating to multispectral imaging systems	NASA	M.R. Holter
" "	Analysis of detection of infrared radiation of hot gases	Army	M.R. Holter
" "	Target Signatures Measurement	USAF	M.R. Holter
Radio Science Lab	Countermeasures technique feasibility	Army	R.W. Breymaier
IST, Geophysics Lab	VESIAC: Underground detonation of nuclear devices	ARPA	D.E. Willis
" "	Tectonic strain release	USAF	D.E. Willis
" "	Acoustic Surveillance Systems	Navy	D.E. Willis
" "	Decoupling Phenomena	USAF	D.E. Willis
IST, Radar & Optics Lab	Multifrequency radar	NASA	L.J. Porcello
" "	Aerospace program	USAF	L.J. Porcello
" "	Radar signature studies	Army	L.J. Porcello
" "	Microwave target signatures and sensors investigations	USAF	L.J. Porcello
Engineering, Electrical	Acoustic signal processing	Navy	T.W. Butler T.G. Birdsall
IST, Director's Office	Project AMOS	ARPA	R.L. Ohlsson

## Sampling of Unclassified Projects

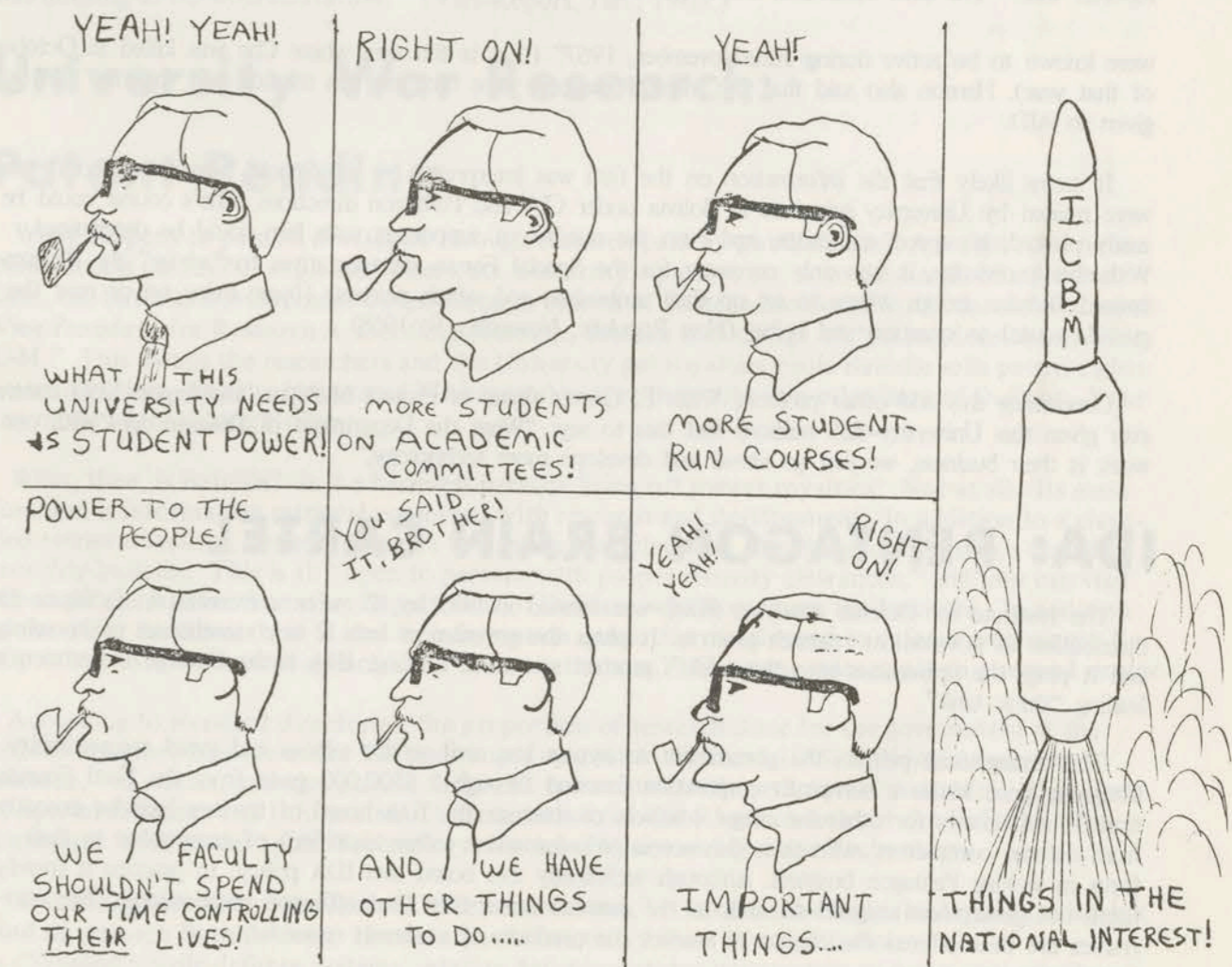
PROJECT	SPONSOR	RESEARCHER	
Vestibular research and neurophysiological studies of memory storage	NASA	R. van Baumgarten	
Parameter control and system optimization by man and man-computer systems	NASA	R.W. Pew R.M. Howe	
Problem statement language seminar	Navy	D. Teichroew E. Sibley	
Management requirements analyzer	Navy	D. Teichroew	
Temperature measurements	NASA	M.R. Holter	
Multispectral facility maintenance and data collection	NASA	M.R. Holter	
Atmosphere modeling	NASA	M.R. Holter	
Basic Combustion Research	Army	J.A. Bolt	
Applications of functional analysis and function theoretic methods in elementary particle physics	Army	D. Williams P. Federbush	
Hull propellor interaction	Office of Naval Res.	H. Nowacki S.D. Sharma W.E. Miller	
International Relations data archive and analysis coordination center	ONR		
Electrostatic probes	NASA	G.R. Caujar	
Empirical model of polar thermosphere storm	NASA	G.R. Caujar	
Rain erosion research	Navy	F.G. Hammitt	
New agents for parasitic infection	Army	J.H. Burckhalter	
DEPARTMENT	PROJECT	SPONSOR	RESEARCHER
Aero. Engin.	Research in high altitude radiation measurements	NASA	F.L. Bartman
" "	Boundary layers with large local gradients	Army	A.F. Messiter
" "	Theory and application of stationary point processes	USAF	F.J. Butler
" "	Subsonic wind analysis	Navy	W.W. Willmarth
Psychology	Human information handling processes	USAF	A.W. Melton
IST, Infrared and Optics	Target and background characteristics	USAF	H.W. Courtney

DEPARTMENT	PROJECT	SPONSOR	RESEARCHER
Engineering, Chemistry and Metallurgy	Materials Research Council	ARPA	M.J. Sinnott
ISR	Knowledge, plans and attitudes toward military service	DSS	J. Johnston
Engineering, Industrial	Problem statement language review	Navy	D. Teichroew E. Sibley
South and Southeast Asian Studies center	Summer intensive language and area program in S. Asian studies	U.S. Office of Education	R.L. Park
Medical School Postgraduate Medicine	Perspectives in infectious disease	Army	A.G. Johnson

## THE WAR PROFESSORS

Birdsall, Theodore G.	Associated Professor of Electrical Engineering 262 Cooley, 4512 East Engineering
Breymaier, Robert W.	Resident Engineer, Radio Science Lab, IST Building, 2215, Willow Run
Burkehalter, Joseph H.	Professor of Medical Chemistry 2521 Chemistry-Pharmacy
Butler, Thomas W.	Director of Cooley Electrics Lab 108 Cooley, 3517 East Engineering Publications of interest: "New concepts in Aircraft Electric Systems: Protection and Power Control"; "Industrial Research and Development, University Participation"
Holter, Marvin R.	Head, Infrared and Optics Lab, IST Defense research is "in the mainstream of historical science." (Holter in the DAILY, 10/18/68) Member, Air Force Science Advisory Board (includes RAND, IDA, officers, etc.)
Johnson, A.G.	Professor of Microbiology 6744A Medical Science II Publication: "Adjuvant Action of Bacterial Endotoxins on the Primary Antibody Response"
Park, Richard L.	Professor of Political Science 5633 Haven Hall
Johnston, Jerome	Assistant Study Director, ISR (not a professor) 4055 ISR

Bachmann, Jerald G.	Senior Study Director and Psychology lecturer, ISR 4053 ISR Publication: "Youth in Transition: Blueprint for a Longitudinal Study of Adolescent Boys"
Bardach, John E.	Professor of Fisheries, Natural Resources 128 Natural Resources
Clarkson, James D.	Assistant Professor of Geography and Research Associate, Center for Population Planning 4549 LSA
Gosling, Lee A. Peter	Associate Professor of Geography 4060 LSA
Ness, Gayle D.	Associate Professor of Sociology 3005 LSA
Wyatt, David	Department of History



## The University and the Death of Che

The equipment which George Zissis (head of the Infrared Physics Lab, IST) and his scientists developed measures the temperature radiation of an object. These techniques permit an aircraft flying over an area to photograph the heat produced on the ground below with infrared camera equipment. When experts study these photographs, armed with knowledge about the natural ground radiation, the human body at 98.6 degrees is easily identifiable.

The University's Willow Run Laboratories is the acknowledged center for research into infrared technology as it applies to aerial surveillance. This research was directly responsible for the capture and death of Che Guervara in Bolivia.

This is how it happened. CIA and Pentagon representatives were members of the "Che watch" (people assigned to study intelligence data related to Che Guervara's presence in Bolivia). They apparently knew the guerilla leader was in Bolivia although it is not certain when they learned this. It may have been mere

coincidence that Mark Hurd Aerial Surveys, Inc., of Minneapolis was awarded a contract in 1966 to provide "aerial photographs of approximately 23,500 sq. mi. of Southern Bolivia" (U.S. Department of State, Agency for International Development, Current Technical Services Contracts, June 30, 1966).

The "survey" was to take place during the summer of 1967, using techniques developed by U of M scientists. Coincidence or not, Dean Hanson, a vice-president of the Mark Hurd Aerial Surveys, Inc., told a reporter that: "The firm conducted aerial missions in the Rio Grande Valley area of Bolivia, where guerillas

were known to be active during June-November, 1967" (that is the area where Che was killed in October of that year). Hanson also said that the infrared cameras were used on this mission and that the film was given to AID.

It seems likely that the information on the film was interpreted by the Special Forces "advisors" who were trained by University scientists in Bolivia under CIA and Pentagon directions. Che's course could be easily plotted, his speed, campsites, and even the number of supporters with him could be determined. With this knowledge, it was only necessary for the Special Forces representatives to "advise" the Panama-trained Bolivian troops where to set up their ambushes, and which peasants (those living on or near the guerilla route) to question and bribe. (New Republic, November 9, 1968)

Concerning this and other projects, Willis E. Groves (head of Project Michigan, the largest DoD contract ever given this University—\$25 million) had this to say: "What the Department of Defense does with our work is their business, we just go ahead and develop more technology."

## IDA: PENTAGON BRAIN CARTEL

The Institute for Defense Analyses (IDA) was formed in 1955 by 12 major universities to facilitate the distribution of government research projects. It plugs the government into 12 key storehouses of knowledge and it plugs the universities into the world's greatest source of funding. IDA is the Defense Department's leading "think tank".

This arrangement permits the government to bypass low civil service salaries and avoid accountability to Congress, since Ida is a non-profit corporation founded through a \$500,000 grant from the Ford Foundation. It also allows for otherwise illegal conflicts of interest: the IDA board of trustees includes executives from defense contractors, who thus gain access to information (often classified) of great value to their firms in seeking Pentagon business. Although technically this board sets IDA policy, in practice it merely farms out government-assigned research to the member universities (and affiliated corporations). The universities are thus offered the chance to market the products of academic research.

In addition to the University, members include MIT, Cal Tech, Case Institute of Technology, Stanford, Tulane, Chicago, Illinois, California, Princeton, Penn State, and Columbia. Their original task was "weapons

system evaluation." Projects are undertaken for the Department of Defense, the National Security Agency, State Department, and several other agencies.

During the 1960's, the major foci for research were counterinsurgency, tactical nuclear weapons, chemical and biological weapons warfare, full-scale nuclear war, "flame weapons", and night spotting techniques (a U of M specialty).

Since the ghetto riots and campus unrest intensified, however, several new areas have been added: police methods, urban insurrection, the poverty programs and the draft. While the original focus was Southeast Asia, this has since been expanded to include India, Panama, Bolivia, and the United States.

Professors are placed in an awkward situation in regard to IDA. If they accept projects, they receive consulting fees and lucrative leaves of absence to work at Institute facilities at Arlington, Virginia, and Princeton. If they decline, they deny themselves access to government-controlled classified information which may be of vital importance to their own research. Of course, if they use such data, their own projects must then be cleared by the government. Also, their projects may require government funding.

At one time, professors were judged for their teaching ability. More recently, despite much criticism, publication began to surpass it as the primary focus of evaluation. Today, however, a professor is increasingly judged by the salability of his work in the knowledge market, and IDA is a key wholesaler. As Cathy McAfee expressed it, IDA "is government, but its activities are beyond the control of Congress. It is business, yet it is not concerned with profits. It is the university, but it has nothing to do with education." (Viet-Report, Jan., 1968.)

## University War Research: Patent Pending

What happens to patents developed through research paid by public funds? A recent Ann Arbor News article (8/23/70) explained where the University's patents go: into the hands of a private firm, the Battelle Development Corporation, a branch of Battelle Memorial Institute. According to Vice President for Research A. Geoffrey Norman, Battelle is in charge of "patent development for U-M." This means the researchers and the University get royalties while Battelle sells patent rights to corporation: like the hologram (3-D process) patent they sold to a subsidiary of DuPont. Your tax money is enriching DuPont.

What, then, is Battelle? Is it a harmless parasite living off patent royalties? Not at all. Its main function is information retrieval combined with research and development. In addition to a classified retrieval facility, Battelle operates five specialized classified libraries and publishes a classified monthly bulletin. This is all "open to persons with proper security clearances," and you can visit if you get permission from the Department of Defense, which sponsors the Institute. In addition to the other facilities, there is also an information center for metals used in defense weaponry: "open to U.S. government agencies and their contractors." The same rules apply to a second center.

According to standard directories, the proportion of research done for the government at the various branches is never under 5%, and ranges upward to 55% and 100%. "Non-government research," of course, includes private firms and universities with government contracts. (Directory of Special Libraries and Information Centers, Industrial and Research Labs of the United States, Aerospace Science and Space Technology, Nuclear Physics and Nuclear Technology)

"But the government does some GOOD research, too," it is said. The important question is what kind of research Battelle does. Here is a partial summary from the directories:

---"Guided missile defense systems, satellite defense systems, penetration systems, anti-missile missiles. . . nuclear effects."

---"Counterinsurgency, weapons, chemical and biological warfare, reconnaissance and surveillance."



--"Effects of nuclear weapons-burst radiation and space radiation. . ."  
 --and, oddly enough, "social and political economy."

Battelle is no simple patent firm.

In view of these connections, it is not surprising that our own Institute of Science and Technology (IST) on North Campus operates the Ballistic Missile Radiation Analysis Center. Visiting privileges are "available to Department of Defense contractors and perspective contractors" only. Anyone desiring to use the facility must obtain a security clearance, make no attempt to copy or remove anything from the building, get permission from the DOD, and clear with them all resulting work (both research and any publications resulting therefrom): if the researcher can also prove a "need to know."

## Part-time Agents of the CIA

Unlike military research contracts, the relationship between the University and the Central Intelligence Agency (CIA) tends to be covert and unacknowledged. No written agreements are required and, in fact, the CIA and University professors are often scrupulously careful to camouflage their associations.

Thus, CIA activity at the University is like an iceberg--the vast majority of it remains invisible--despite the fact that several cases of CIA activity have been well documented. It is clear from what has already been exposed that CIA activity at the University is quite widespread--contacts between University personnel and the CIA are practically a routine matter.

The following, a typical example of such contacts, appeared in the "Daily" (2/8/68):

Some time ago, a "transient scientist" from a country which does not maintain normal diplomatic relations with the United States" came to see Stanley Seashore, Assistant Director of the Institute for Social Research (ISR).

The visitor was clearly of interest to the U.S. Government, for shortly before the visit, agents of the CIA dropped by to talk with Seashore and asked him to find out whether the scientist "was doing anything that might arouse interest." In addition, they asked Seashore to evaluate the visitor's capabilities and attempt to determine in what areas he was doing research.

Because he believes that "citizens have an obligation to be of help to government agencies if they are asked," Seashore willingly cooperated with the CIA.

Some "academic" liberals in ISR were concerned about the nature and frequency of CIA contacts in the Institute because they felt that such activity might jeopardize "legitimate" scholarly research of others in ISR.

They feared that certain "imprudent" members of the ISR were too eager to help the CIA and that as a result ANY ISR researcher traveling overseas would be in danger of being isolated and mistrusted by "locals" who would fear he was an agent himself.

The ISR liberals also argued that a researcher who was suspected of being a CIA agent might be in danger of arrest and imprisonment if he traveled to a Communist bloc country where intelligence officials knew that some ISR staffers had been used as CIA agents.

One official who opposed CIA activity on "academic" grounds documented six specific cases of CIA contacts with ISR personnel. The information requested of ISR personnel fell into four main categories:

--Requests for information from researchers concerning their observations abroad.

--Obtaining information about foreign visitors to ISR.  
 --Eliciting cooperation to observe and report in the future about a particular foreign visitor.  
 --Obtaining information about former ISR employees.

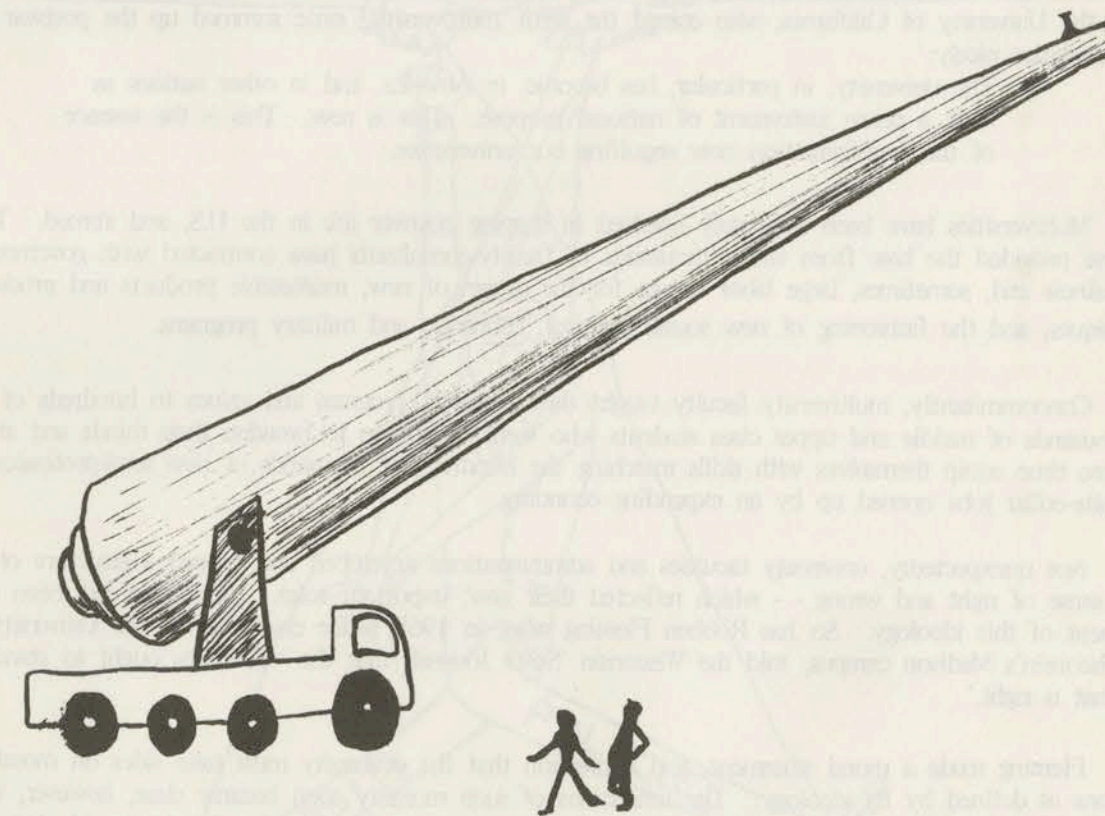
Later, the executive committee of ISR considered formulating a policy on CIA activity, but the committee's deliberations and its resulting decision were never made public. Nevertheless, it is safe to assume that CIA contacts have continued unabated.

Several other examples of cooperation between the University and the CIA outside of ISR have also been well documented.

In 1966, four University professors met with six CIA agents to discuss the possibility of using University programs and resources to train CIA agents. According to Prof. Alexander Eckstein (DAILY, 2/9/68), this was a meeting with members of the staff of the Center for Chinese Studies concerning possible enrollment of CIA personnel in the regular study program of the Center.

Eckstein and Prof. Charles O. Huckler, chairman of the Far Eastern Languages Department, vehemently defended the CIA engages in "painstaking scholarly research on the economic, social, and political problems of many areas," Eckstein wrote in a letter to the editor of the Daily. (2/9/68) What Eckstein failed to mention is what the CIA happens to do with that research. His own article, published at that time, for example, is entitled "Arms Control and the Vulnerability of Communist China's Economy to External Pressures and Inducements."

It is also worth noting that the University operates several other area study centers including a South-east Asia Study Center and a Russian Studies Center. It all makes one wonder what kind of "painstaking scholarly research" they do there.



"What I like about it is its amazing potential for peaceful uses..."

## EXPLODING THE MYTH OF NEUTRALITY

According to the Nuremberg Tribunal (1946); "complicity in the commission of a crime against peace, a war crime, or a crime against humanity...is a crime under international law."

The Tribunal added: 'Therefore, people who CONTRIBUTE to these forms of murder, exploitation and devastation are CRIMINALS and should be stopped.' (emphasis added)

### The Politics of Complicity

As the economic and military need for advanced technology and educated labor expanded during and after World War II, U.S. universities grew enormously. Research and development spending, which may be used as a proxy measure for this need, rose from \$3.4 billion in 1950 to \$20.5 billion in 1965. Much of this spending was done in or around universities; virtually all of it was done under the direction of university-trained people. Education, university education in particular, has for the last 25 years been one of the economy's growth industries. The University of Michigan has been no exception, expanding from a moderately small elite university at the beginning of World War II to the present large, elite mass-education and research facility.

The point is that multiversities such as U of M have important present-day social and economic functions. They are not neutral ivory towers. Certainly university administrators, business leaders and the legislators who decide appropriations do not see them in that context, otherwise they would not be so worried over 'the alienation of the young' or so upset about campus unrest. Clark Kerr, the ex-president of the University of California, who coined the term 'multiversity,' once summed up the postwar role of universities nicely:

The university, in particular, has become, in America, and in other nations as well, a prime instrument of national purpose. This is new. This is the essence of the transformation now engulfing our universities.

Multiversities have been intimately involved in shaping postwar life in the U.S. and abroad. They have provided the base from which thousands of faculty-consultants have contracted with government, business and, sometimes, large labor unions for the design of new, marketable products and production techniques, and the fashioning of new social, political, economic and military programs.

Concomitantly, multiversity faculty taught their research, program and values to hundreds of thousands of middle and upper class students who went to college to broaden their minds and at the same time equip themselves with skills matching the hundreds of thousands of new semi-professional and white-collar jobs opened up by an expanding economy.

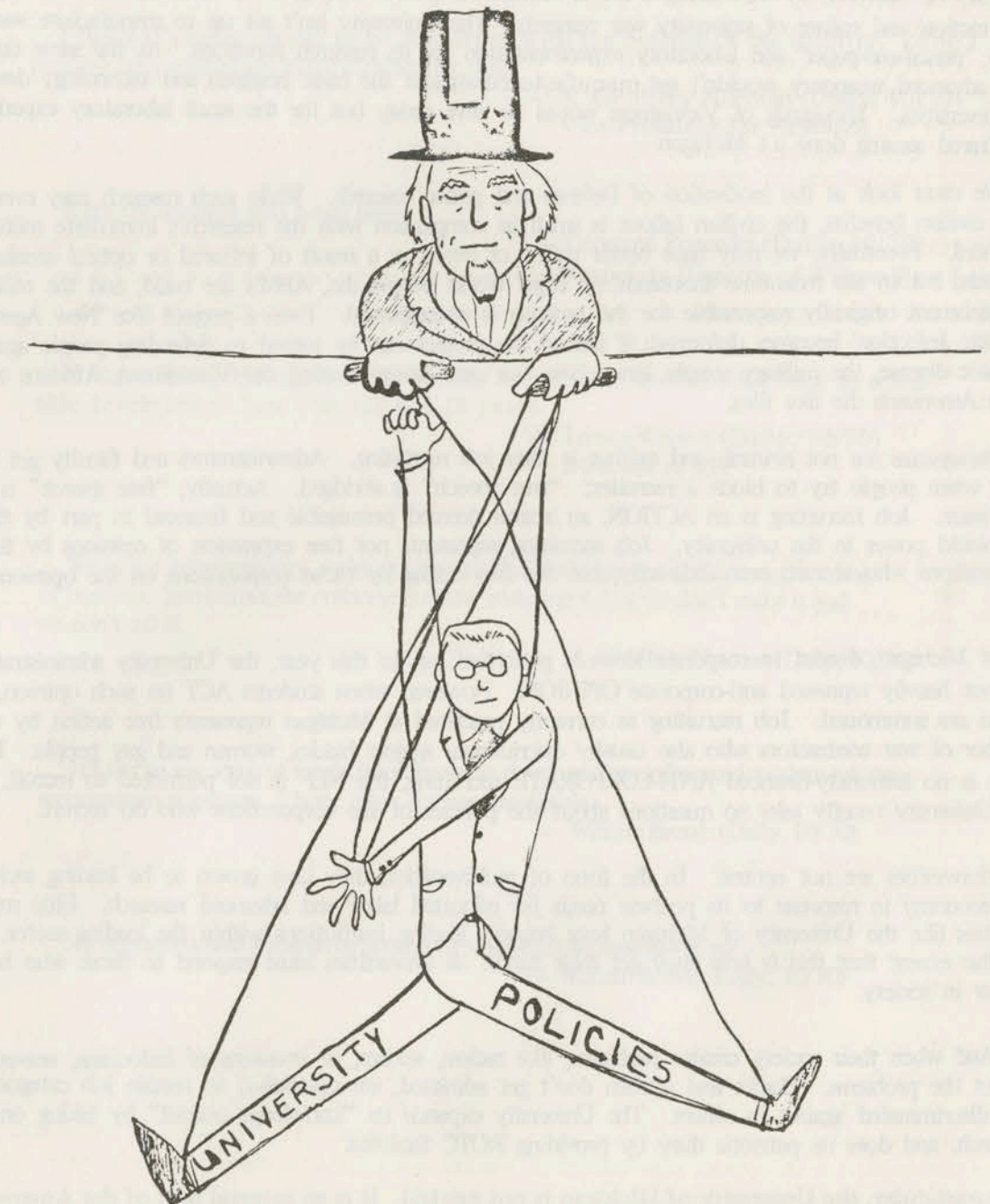
Not unexpectedly, university faculties and administrations developed and refined a structure of beliefs - a sense of right and wrong - which reflected their new, important roles. Clark Kerr has been one exponent of this ideology. So has Robben Fleming who, in 1965, while chancellor at the University of Wisconsin's Madison campus, told the Wisconsin 'State Journal' that the 'university ought to stand up for what is right.'

Fleming made a moral statement, and expression that the university must take sides on moral questions as defined by its ideology. The limitations of such morality soon became clear, however, when Fleming in February 1967 ordered the arrest of 17 people who had been attempting to block a recruiter from Dow Chemical Company, which then was responding to amoral market forces by manufacturing napalm for profit for use against huge sectors of the civilian population of Vietnam who were sympathetic to the National Liberation Front.

Universities are NOT neutral institutions. They reflect the relations of power within society. Neither legislators, the Federal government nor corporations would fund them if universities were inimical to their interests. When, in fact, universities do revolt, legislatures threaten to cut funds, and administrators, whose status depends on running a big-budget institution smoothly, clamp down.

Thus, the heavy legislative and Regental criticism of the U of M administration's handling of the BAM strike, when the administration thought that, by ignoring it, BAM and its strike would just go away. Thus, the Regents' Interim Disciplinary Rules, with their 'impartial' hearing officers appointed by Fleming. Thus, in 1965, when some faculty and students wanted to set up the first Vietnam teach-ins, the university administration fought back hard, rightly claiming that such dissent would endanger U of M's funding and its close relationship to the Johnson administration.

Universities are not neutral, and neither is their teaching nor their research. Clark Kerr hasn't overstated the case much when he said that universities are prime instruments of national purpose. When that national purpose means conducting a genocidal war in Indo-China, and preparing for future ones in



Africa, the Near West and South America, when much of the research money in the U.S. goes for such military programs, campaigns must be mounted to change that purpose.

The argument is frequently made that most research funded by the Defense Department and police agencies is not necessarily bad because it can also be turned to peaceful and life-giving purposes. To this end, the University administration two years ago set up a committee to screen out the most genocidal kinds of military research from the University.

The administration argues that the research the University accepts is all right because of its small-scale nature and its widespread civilian usage. Thus, a military contract like 'New Agents for Parasitic Infection' can be turned around to 'New Agents Against Parasitic Infection.' And projects on battlefield simulation, besides being relatively innocuous pencil-and-paper operations, also can yield valuable linear programming and game theory techniques for civilian use.

There are several problems with such arguments. First, they ignore 'classified' research. Such research, funded by the Defense Department, can have no peaceful civilian applications because civilians can't see it. Second, by minimizing a lot of research a 'pencil-and-paper' or trivial operations, it ignores the function and nature of university war research. The University isn't set up to manufacture war weaponry; 'pencil-and-paper' and laboratory experimentation are its research functions. At the same time, most advanced weaponry wouldn't get manufactured without the basic research and technology developed by universities. Thousands of Vietnamese would be alive today but for the small laboratory experiments in infrared sensing done at Michigan.

We must look at the motivation of Defense and police research. While such research may eventually have civilian benefits, the civilian fallout is small in comparison with the research's immediate military potential. Eventually, we may have better radios or ovens as a result of infrared or optical sensing research, but in the meantime thousands of Third World people die, ABM's are build, and the military establishment originally responsible for the projects is strengthened. Even a project like 'New Agents for Parasitic Infection' becomes deformed; if indeed the project can be turned to defending people against parasitic disease, the military simply inoculates our own troops, letting the Vietnamese, Africans and Latin Americans die like flies.

Universities are not neutral, and neither is their job recruiting. Administrators and faculty get very upset when people try to block a recruiter; "free speech" is abridged. Actually, "free speech" is a false issue. Job recruiting is an ACTION, an action deemed permissible and financed in part by those who wield power in the university. Job recruiting represents not free expression of opinions by the corporations who recruit, even indirectly, but the free acting by those corporations on the opinions they hold.

At Michigan, dissent to corporate views is permitted; up to this year, the University administration has not heavily repressed anti-corporate OPINION. However, when students ACT on such opinion, the police are summoned. Job recruiting as currently practiced at Michigan represents free action by a large number of war contractors who also usually discriminate against blacks, women and gay people. But there is no university-financed ANTI-CORPORATE recruiting, the NLF is not permitted to recruit, and the University usually asks no questions about the policies of the corporations who do recruit.

Universities are not neutral. In the form of multiversities, they have grown to be leading sectors of the economy in response to its postwar needs for educated labor and advanced research. Elite multiversities like the University of Michigan have become leading institutions within the leading sector. To the extent that this is how they get their funds, all universities must respond to those who hold power in society.

And when their society creates problems, like racism, sexism, or invasions of Indochina, universities reflect the problems. Blacks and women don't get admitted, are counselled to certain job categories, and discriminated against in others. The University expands its "knowledge output" by taking on war research, and does its patriotic duty by providing ROTC facilities.

In particular, the University of Michigan is not neutral. It is an integral part of the American economic and social system. When that system conducts genocidal wars, it must be stopped. When universities like Michigan support such genocidal wars, they must be stopped.

## The War Profs Speak for Themselves

Sixty to seventy per cent of Willow Run's projects are military. We do it and we're proud of it.

— William Brown (Daily, 10/70)  
Director of Willow Run Labs

We have a very fine relationship with the military. They are interested in understanding the problems of universities.

— Thomas Butler (Daily, 10/70)  
Head of Cooley Electronics Lab

I think it's quite proper to be concerned with the defense of the country. I don't require any elaborate justification for this.

— A. Geoffrey Norman (Daily, 10/70)  
Vice-President for Research

Remote sensing was born here.

— Leonard Porcello (Daily, 10/70)  
Associate Director of Willow Run Labs

If the military is using remote sensing in Vietnam, it must root back to scientific development here over the last 15 years.

— James Wilson (Daily, 10/70)  
Director of IST

We're not into weaponry, we're not into tactical development— this is not our line of business. Sometimes the outcome is a new instrument, but we don't make it and we don't sell it.

— A. Geoffrey Norman (Daily, 10/70)

It's fair to say some of the technology we've developed has influenced modern military reconnaissance systems. I hope it has not been negligible.

— William Brown (Daily, 10/70)

My concern is that research be good, not whether it is classified or not.

— William Brown (Daily, 10/70)

## Can You Rely on the Faculty ?

Who has the power to eliminate war research from university campuses? At most schools the question of changing policies that govern DoD funded research falls into the hands of the faculty.

Recent experiences at a number of schools suggest that this approach has been less than effective. Probably the best example is the State University of New York at Stony Brook.

Last May, amidst the turmoil of the Cambodia and Kent demonstrations, the faculty at Stony Brook voted overwhelmingly to ban all DoD-financed research.

Then, over the summer, the university accepted two more DoD contracts, and indicated that it would accept two more. In response to a faculty member who questioned the administrations behavior with regard to this, the school's executive Vice-President, T.A. Pond, replied that he "could not, in his judgement, support this resolution and thus disregarded it."

Meeting again recently, the SUNY faculty hemmed and hawed and finally decided to re-consider the matter-- this time by mail vote to insure that all of the conservative faculty members who hadn't attended the first meeting would have a chance to vote. The outcome is, nominally, still at issue, but since the administration is going to ignore the decision anyway, the entire matter is hardly relevant anymore.

Here at the University of Michigan, another example of the faculty's inability to act happened two years ago in a controversy over military research. After months of debate and dialog about the University's moral role in dealing with the Pentagon, the faculty voted to ban all classified research which was "primarily designed to develop new methods to destroy human life."

In practice this policy has meant practically nothing. Since the faculty report, only one small research contract has been refused by the watchdog committee which the faculty appointed to enforce it's ruling.

In the meantime dozens of other contracts which clearly are concerned with developing new methods for destroying human life have been approved and are continuing unabated-- many of which have been detailed in this booklet.

In view of these experiences it seems unrealistic to rely upon the faculty-- even when they agree-- to end military research. The power to make it happen lies solely in the collective power of the Ann Arbor community to FORCE the University to stop its support for the military.

