

# FINANCIAL CRISIS! FACT OR FICTION?

## the university of michigan **Today**

Vol. 3, No. 2, Spring 1971

*U-M TODAY is the only Michigan publication received regularly by 160,000 alumni, friends and faculty of The University*

*Last month the Governor of Michigan made his recommendation to the State Legislature on the 1971-72 budget for higher education.*

*Smaller-than-expected increases in state appropriations have caused serious concern on campuses state-wide.*

*At Michigan, spokesmen outlined implications for the well-being of the University if sufficient funds are not forthcoming.*

*What is the financial picture at Michigan—where are the priorities and why? What are the total sources of the University's budget? Will quality need to be sacrificed?*

*This edition of U-M Today explores these questions.*

### Summary of Governor's Budget Recommendation

**Recommended New Money for Total General Fund Operating Budget: \$4.9 million (4% increase)**

**Dollars of New Money from State Appropriations: \$2.8 million**

**Governor's Recommendations for Obtaining Remainder of Needed Funds:**

- increase tuition
- cut back faculty and staff, and
- increase faculty and staff workload
- cut back Ann Arbor campus enrollment
- cease payments to City of Ann Arbor for police—fire services.

#### STATE APPROPRIATIONS FOR GENERAL FUND OPERATING BUDGET ALL CAMPUSES

	U-M Request	Governor's Recommendation	Actual
1970-71	\$84.2 million	\$75.7 million	\$73.5 million
1971-72	\$95.6 million	\$76.3 million	?

#### STATE APPROPRIATIONS FOR CAPITAL OUTLAY

	U-M Request	Governor's Recommendation	Actual
1970-71	\$12.4 million	\$ 6.3 million	\$ 3.4 million
1971-72	\$14.0 million	\$ 4.2 million	?

### President Fleming Reports

## State Proposed U-M Budget Would Pose Quality Dilemma

By President R. W. Fleming



For reasons which I shall explain, I am highly critical of the budgetary analysis which the Bureau of the Budget has supplied to the Governor in preparing his recommendations for The University of Michigan. Those recommendations are noteworthy more for what they do not say, than for what they say.

Since I am critical, I wish to start by recognizing the magnitude of the problems which face the Governor and by reminding all of us that in a period of financial adversity we cannot expect preferred treatment. We can, however, expect a fair analysis of our problem and recommendations which are not illusory.

Governor Milliken is a man whom I have found to be possessed of complete personal integrity, and he has been a tower of strength in our troubles of the past two years. He has exhibited understanding, restraint, support and wise personal counsel. Nevertheless, his budget proposals for The University of Michigan do not portray anything like a complete analysis of the problems we face. Vital factors are either left out altogether, or pictured in a way which do not reveal the problem. Let me explain.

The total recommended increase in the general fund operating budget for The University of Michigan (including all campuses) for the next fiscal year is \$4,923,000 of new money. This is only a 4% increase, an increase well below the recommended increase of 12.8% in the total state budget and the 9+% increase for higher education. Of the new money, only \$2.8 million comes from state appropriations! All the rest comes from increased tuition (a function presumably left by the State Constitution to the Regents). To continue our operations with these inadequate resources, we are further told to cut back faculty and staff and increase their workload by \$3 million, cut back Ann Arbor enrollment by 294 students (\$715,000), and save \$641,000 by ceasing payments to the City of Ann Arbor for police and fire services.

#### Inflation Factor

The rate of inflation in this country last year was 6%. A very good argument can be made, and most professional analysts assert, that the inflationary rate in universities is considerably higher than 6%. Certainly we know that for much of the equipment which we

must purchase costs have increased far more than that. But even if one accepts the 6% figure it means that our present dollars are worth at least 6% less than they were when we first got them. The Governor's recommendation does not provide sufficient dollars to meet even this inflationary factor. We still have the problem of how to stretch last year's dollars to meet this deficiency. Rational analysis might have suggested that we could capture some of it by increased productivity, which serious students of productivity in universities have said may equal 1% a year. We are told to deduct 3% for increased workload with no mention being made of the fact that we have already lost 6% through inflation with insufficient dollars to make up for it!

## Increase But One-Tenth of That Requested By U-M

By Fedele Fauri, Vice President for State Relations and Planning

The Governor's Recommendation means erosion toward mediocrity. The net appropriation increase of \$2.8 million for the Ann Arbor, Flint and Dearborn campuses would be well below what is necessary simply to keep even with inflation. It's about one-tenth of what we requested. The Governor's expectation that we could provide salary increases of 6½ per cent is based on assumptions and internal manipulations which we consider very unrealistic—certainly not based on the recommended increase in state funds.

What is particularly painful

about the 3 per cent cut—and that's what it is—for the coming year is that it wipes out a plan the University initiated last November. At that time, we asked the deans and directors to figure out how they could reduce next year's operations by three per cent, so that money could be reallocated for salary increases. In other words, the effort which has been put into figuring out how three per cent could be saved in order to be able to reward deserving faculty and staff, under the Governor's recommendation, would become just a way of counter-balancing a three per cent cutback.

We are aware of the State's economic difficulties. But we are disturbed at the unrealistic assumptions in the Governor's recommendation. And it hurts, too, getting this kind of blow after working hard, and succeeding quite well thus far, in maintaining for the State of Michigan one of the top quality institutions of higher education in the country.

Anyone can squeeze the belt. But what happens when you get to the point where you can't get your breath? That's what has been happening. The Governor's recommendation, as I said, means erosion toward mediocrity.

(Continued Page 2)

# Budget Request Urged Top Priority For Salaries

Salary improvements had the top priority in the 1971-72 budget request sent to the State by U-M.

The \$95.6 million proposed budget, \$22.1 million greater than the current one, includes \$9.6 million to cover improvements in faculty and academic staff salaries and benefits.

The total is aimed at catching up to the increasing costs of living and return U-M to a more competitive salary level with comparable institutions. The Governor's budget allows only a 6.5 average increase for salaries.

U-M's average salary position has slipped when compared to the na-

tion's institutions of higher education and salary increases at U-M over the last five years have lagged below that of comparable universities.

The average pay increase at U-M this year was 5.5 per cent, while the Detroit Consumer Price Index went up 6.4 per cent. Michigan Civil Service Range Adjustments also went up 6.4 per cent. U-M compensation has fallen behind AAUP and Civil Service increases. National averages, as reported by AAUP, have exceeded U-M compensation increases for the years 1966-67 through 1969-70. Michigan Civil Service salary range adjustments

alone, excluding merit step and fringe benefit increases, have been greater than the U-M compensation increases. Since 1966-67 a percentage point gap of 8.8 has accumulated relative to AAUP (through 1969-70) and a 7.3 per cent gap has developed relative to Michigan Civil Service (through 1970-71).

According to Allan F. Smith, vice-president for academic affairs, the request for the salary increase was based on two parts: an amount to restore U-M to a ranking of approximately 20th in the national AAUP report and to make some movement toward parity with Civil Service and Detroit area prices and

an increase which will be needed in 1971-72 to keep abreast of the anticipated changes in AAUP compensation, the probable continued inflation and probably additions to be made in Civil Service salaries due to inflation.

According to the AAUP survey which ranks average full-time faculty compensation, U-M, at \$17,560, is listed 31st. U-M's ranking has slipped from 24th for the past two years and 17th in 1966-67.

When compared to the Big Ten, average compensation increases over the last five years places U-M at the bottom of the list.

## HUMAN RESOURCES WORTH?—\$1.7 BILLION

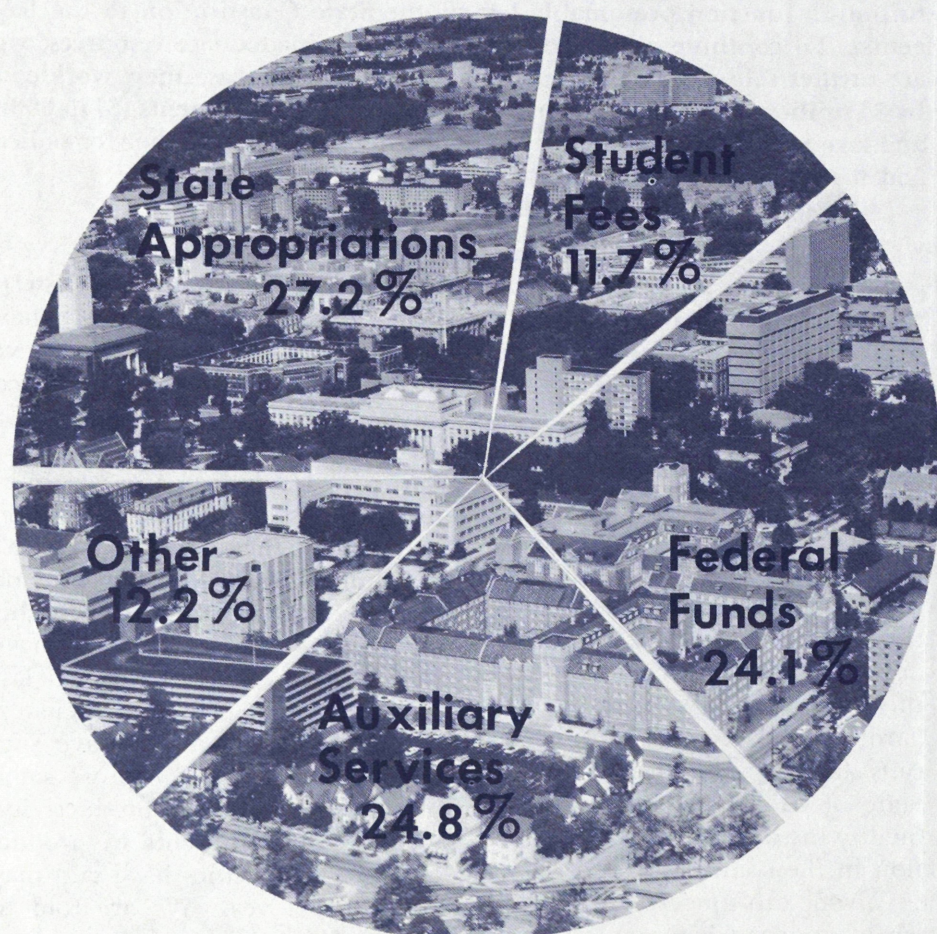
Suppose that U-M had to start over, that President Fleming had to rebuild the human organization of U-M back to where it is today, an effectively functioning human organization including faculty and non-academic staff, students and an international reputation. How much would it cost in terms of payroll?

Rensis Likert, recently retired director of the Institute of Social Research, posed this question to the executive officers and deans. Their responses agreed with responses to similar questions posed to leaders of technologically complex industrial firms.

The median response was that the cost would be equivalent to 10 times the annual payroll. For the University, last year's payroll was \$172 million; therefore, the estimated cost for replacement of the institution's human resources could be \$1.7 billion.

"If highly valuable scientists and scholars leave the university because of the pressure and constraints they feel from restricted budgets," Likert said, "the decrease in the value of the human organization may be so great as to make the year both costly and highly inefficient so far as the University's total operation is concerned. Such affects can be costly and be felt over extended periods of time."

## The Operating Budget: Relative Proportionate Income



Sources of Operating Revenue 1969-70

## Fleming Comments on Proposed Budget

(Continued from page 1)

In a nutshell, under the Governor's budget we will receive about \$2.8 million more state dollars next year. To this the Governor suggests we add about \$2.1 million more in tuition. This gives us about 4.9 million more dollars for next year, an increase of 4%. With this we are to offset a 6% inflation, a 1% for the Opportunity Programs designed to help the State and nation resolve its most complex social problem, a 1% inevitable pick-up factor because universities cannot effectively budget on a one-year basis, and a salary increase of 6.5%. Since these items total 14.5%, it is obvious that there is a 10.5% gap to be covered in other ways. For all practical purposes, no matter what label is applied to the methods of covering this gap, the difference must be made up by increasing the workload, dropping programs and people, and diluting the quality of our work.

### Budget Gap

I have been harsh in analyzing this budget, but, I think, accurate. If the State is in dire economic trouble I would have much preferred a message which said: "We know you have roughly a 14.5% problem and we can only give you 3.8% more in state dollars to solve it." This would have squarely posed for the people of the State the question of whether they preferred this solution to a tax increase. As it is, the case is presented in a way which does not reveal the true proportions of the dilemma.

One final word remains to be said. This year the State of Michigan has invested \$73.5 million in The University of Michigan. For that investment it helped to finance an institution which brought into the State \$75 million in grants, contracts and gifts. Few institutions in the country, and none in the State, have that record. It does not happen accidentally. It is directly related to the quality which makes The University of Michigan one of the great

academic institutions of the world. The program on which the Governor is embarked with his budget cannot help but erode that quality. If the University were a business, its directors would ponder long and hard over whether this was a wise course to pursue. In a budgetary sense, the Governor and the members of the Legislature are in the place of business directors. I would argue that the policy is very shortsighted, not only for The University of Michigan but for higher education in general. We shall now have to make every effort to convince the Legislature and the people of Michigan that we are right.

"There are dangers in the kind of clumsy attempt to impose ceilings represented in the 1971-72 state budget. We must accept the verdict of President Fleming that "vital factors are either left out altogether, or pictured in ways that do not reveal the problem."

"Gold-plated or not, Michigan's public universities are a rare and valuable resource. We dare not dismantle them or clumsily undermine their effectiveness.

"Money decisions about universities are inevitably made by budget directors and governors; if they control the purse-strings, they also control large areas of policy. But if these decisions appear to be made on unrealistic bases, or to be made in a vacuum, or to reflect insensitivity to university problems, such decisions can be exceedingly damaging."

—Detroit Free Press  
Editorial, Feb. 21, 1971

"It takes a long time to get a reputation like ours, but only a short time for that reputation to go down the drain." . . . Roger W. Heyns, chancellor of the University of California and soon to return to the U-M faculty.

## 30,000 DONORS CAN'T BE WRONG

Alumni annual giving to The University of Michigan dropped by one-third in 1970 if measured by dollars, but declined by less than one per cent in the number of donors.

Michael Radock, vice-president for university relations and development, reports that corrected 1970 final figures of the Annual-Giving Fund total \$1,968,640 given by 29,832 donors. The previous year, \$2,900,776 was given by 30,107 donors.

The principal reason for the dollar decline was that the number of large gifts was fewer, largely because of the economic slump, he explained. Only 49 gifts of \$5,000 or more were made in 1970, compared to 78 gifts of more than \$5,000 during 1969. In 1969, the 15 largest gifts totaled more than \$1,000,000, but the 15 largest gifts during 1970 totaled \$385,024.

During January, however, gifts to the U-M nearly doubled those received in January 1970. Last month's gifts totaled \$300,048 from 3,286 donors, compared to \$153,220 from 1,891 donors in January 1970, Radock reported.

"These gifts are a vital part of the University's income," he said, "although they are but a small part of the total University budget." Total revenue from all sources during the 1969-70 fiscal year was \$252,263,172.

Unrestricted gifts to the University have dropped to the lowest level in 10 years of alumni giving at a time when the U-M's need for undesignated funds is greatest, Radock declared. He pointed to a steady decline in unrestricted gifts since 1961, dropping from about 40 per cent that year to 13.7 per cent in 1970. Fund raising efforts of professional schools and colleges and other campus units have encouraged alumni to earmark contributions, he added.

Radock noted that a recent survey of public universities which were most successful during 1968-69 in encouraging private support placed the U-M, along with the University of Texas and California systems, among the nation's pacesetters. The U-M has been on the "top 10" honor roll in five previous surveys of voluntary support.

Michigan ranked first in the number of alumni donors (30,625), second in total alumni support (\$4,275,036), and third in total private support (\$21,150,456).

## U-M Faces Lack of Building and Renovating Funds — Pierpont

The University of Michigan is one of 18 colleges and universities listed as "heading for trouble" in a report by the Carnegie Commission on Higher Education.

The report, "The New Depression in Higher Education," is an in-depth study of 41 institutions across

the nation. Based on this sampling, the study, released last December, says that some 1,000 institutions enrolling 56% of the nation's college students, are considered "heading for financial trouble."

Michigan's category was a middle-ground rating—two other categories

were "in financial trouble" and "not in trouble."

The "heading for trouble" category means that the schools have been able to meet current responsibilities without reducing quality but either cannot assure that they can much longer meet current program and quality standards or cannot plan support for evolving program growth.

"At Michigan, we have an especially serious lack of funds for new buildings and building renovations," says Wilbur K. Pierpont, vice president and chief financial officer. The University has been tightening its budgets internally over the past several years, and, at the same time, being unable to plan for any growth in educational programs.

According to the report, predictions made in 1967 foresaw that educational and general expenditures of selected universities would continue to rise at a rate of 7½ per cent per year per student for the decade ending in the mid-1970s. "From experience to date," says the Report, "the prediction may be conservative."

## Research Volume Holds at University

While the level of research support has dropped sharply at some universities, it has remained stable at The University of Michigan—only because of the "vitality and diversity" of its faculty, says A. Geoffrey Norman, U-M vice president for research.

The University's \$62.4 million of research during 1969-70 represented no growth in volume. And, with the exception of a substantial drop in funding from defense agencies, there has been little change in support pattern.

Although the University has fared much better than some other institutions, Dr. Norman said, "We have to recognize that some program attenuation has occurred." Inflation, a hidden cut which he placed at six to seven per cent annually, has been "distressingly real" to researchers, Dr. Norman said.

The U-M's research volume, after a period of steady expansion from \$30.5 million in 1961 to \$62.1 million in 1968, has now remained stationary for three years, Norman noted. "That it has not declined is, I believe, due to the vitality and diversity of our faculty. When funds are tight, capability and past performance are weighty factors in making awards."

Analyzing the 1969-70 research expenditures, Norman noted that there was "only a slight" decline in federal funding (0.6 per cent) over the previous year. Federal agencies provided 72.5 per cent of budgeted research, the lowest figure in the past decade.

Turning to non-governmental sources, Norman said "there was a gratifying further increase of 22 per cent in support from industry and industrial associations to a little over \$5 million."

## State Proposal No Help To Disadvantaged

The Financial Aid Office at The University of Michigan gives out roughly \$5 million a year in student aid, which includes loans, scholarships, and work-study programs.

This year, the office was overwhelmed in trying to arrange financial assistance for some 5,000 students—and there were several hundred students who received some aid but who still have unmet financial need.

"I think that we have done the best we could. But we haven't done as well as we would like," says Stephen H. Spurr, Vice President and Dean of the Graduate School.

Today's student needs are increasingly being influenced by the shift in the socio-economic background of the student population. "Ten years ago," says Spurr, "we were dealing primarily with middle class and upper class whites. Now we are working more and more with disadvantaged students."

"Considerable progress has been made during this past year in the University's Opportunity Program for minority and disadvantaged students," says Spurr.

During the last fiscal year, the University earmarked \$402,743 for undergraduate minority students through the Office of Financial Aids alone. But, Spurr notes, the University actually spent \$828,755 from general funds, along with \$1,402,105 from federal and state sources to aid minority students.

In the current fiscal year, the earmarked portion of general funds financial aid budget for this program was doubled.

"Last year, we undertook a major financial commitment to a great expanded financial aid program designed to make it possible for students from disadvantaged economic backgrounds to attend the U. of M. We hoped for material support from the State in meeting this obvious need.

"The state-proposed budget for the University for 1971-72 does not appear to take any recognition of our effort to fund this program nor to propose any alternative solution."

"It is obvious that the proposed state budget could seriously jeopardize this vital program," Spurr continued.

In this era of inflation and high tuition, substantial financial commitments must be made by the State and the federal government as well as by the University if we are to provide equal educational opportunities to all of our qualified citizens.

## Students Will Be Seriously Handicapped

There appears little doubt that during a time of budgetary problems at the University, it is the student who will suffer.

"The governor's recommendations for the 1971-72 budget," says Robert L. Knauss, vice president for student services, "tell the University to not only cut back enrollment at the Ann Arbor campus, but to increase tuition at the same time."

"It is a fact that increased tuition aggravates the problem of the low and middle income student in going to school at all. Our enrollment would hold up from more affluent students, but the opportunity to attend would be increasingly denied to those students who have financial problems," says Knauss.

In light of rising costs, the Office of Student Services has been attempting to work out solutions to benefit these students.

"For example," says Knauss, "costs for housing simply must be increased next year. But we are working out possible changes in some parts of the program—such as optional breakfasts and elimination of linen services—to keep that increased cost down.

"If the student must suffer because of a reduced University budget, it is our obligation to make that situation as easy on him as possible."

SOURCES OF FINANCIAL SUPPORT FOR EDUCATIONAL AND GENERAL OPERATIONS

	1950	%	1960	%	1970	%
Student Fees	\$ 6,068,381	25	\$ 9,466,303	13	\$ 29,562,357	16
State Appropriations	11,436,315	47	33,687,275	45	68,577,606	36
Federal Agencies	2,735,781	11	23,022,292	31	60,754,154	32
Gifts and Grants	1,101,840	5	5,043,799	7	16,875,044	9
Departmental	2,184,085	9	1,151,191	1	7,965,884	4
Investment Income	744,078	3	2,195,864	3	6,081,187	3
Total Education and General	\$24,270,480	100%	\$74,566,724	100%	\$189,816,232	100%

## "GO BLUE!"

There will be an alumni meeting on the moon in July. Unfortunately, reservations are closed.

Apollo XV, the next exploration of the moon, will be conducted by an all University of Michigan cast.

Commander: Col. David R. Scott, '49-'50

Command Pilot: Maj. Alfred M. Worden, MSE Aerospace, '63

Lunar Pilot: Lt. Col. James B. Irwin, MSE Aerospace Instrumentation, '57

Alan B. Shepard may have driven the first golf ball on the moon, but Scott is scheduled to drive the first "car" and create the first highway 'out of this world', with Irwin as co-driver.

Two other Michigan alumni contributed to vital steps in space which make today's successes possible. Lt. Col. Edward H. White II, MSE-Aero, '59, Hon. '65, lost his life in the Apollo I tragic fire, and Col. James A. McDivitt, BSE, Aero, '59, Hon. '65, was a member of the crew that completed a critical lunar-orbit rendezvous simulation and docking. Col. McDivitt is now Director of the Apollo Lunar Landing Program.

### "Michigan" Craters

Three craters on the far side of the moon, discovered by American and Russian lunar satellites, have been named after former University of Michigan astronomers.

The International Astronomical Union has named them for Professor Dean B. McLaughlin, Francis McMath and his son, Robert McMath, and Robert M. Petrie, all deceased. The craters vary in size from 20 to 50 miles across.

## Pharaohs X-rayed By U-M Scientists

Gold, jewelry and priceless artifacts, which were hidden in and on the bodies of Egyptian pharaohs over 3,000 years ago, have been found by a team of U-M scientists through three dimensional x-rays.

The team, headed by Dr. James E. Harris, D.D.S., U-M orthodontist-geneticist-anthropologist, completed the first head-to-toe three dimension x-ray examination of the 29 mummified pharaohs and their queens. The discoveries, described as "positively invaluable" by Cairo museum officials, reveal gold arm bands and Sacred Eye amulets covered only by a thin layer of linen or black preservative resin. They are the first personal artifacts absolutely connected to these pharaohs. The others had been stolen by ancient and modern grave robbers.

The x-rays are being studied from the viewpoint of archeology, ancient disease, and physical anthropology by the joint staffs of the Cairo Museum, the University of Alexandria, and The University of Michigan.

## Alexander G. Ruthven 1882-1971



Alexander G. Ruthven, who served The University of Michigan as president from 1929 to 1951, died January 19 at the age of 88 in his home in Ann Arbor.

After earning the doctor of philosophy degree in 1906, Dr. Ruthven joined the faculty as instructor in zoology, and taught in that field and directed the U-M Museum of Zoology until being named the seventh president of The University.

He is generally acknowledged as the man most responsible for the emergence of Michigan as one of the world's leading universities.

He knew countless Michigan alumni personally and was named Dean of Alumni upon his retirement.

President R. W. Fleming paid tribute to his predecessor with these words: "All of us at the University feel a distinct personal loss in his death.

He held office for 22 years during which The University experienced great growth despite a depression, a world war, and a great post-war surge in enrollment.

Despite the multitude of problems he faced during his administration, he left the presidency with a record of establishing a highly democratic administration within the University and a well-deserved reputation of paying great attention to human values."

A Memorial Fund has been established in honor of Dr. Ruthven. Contributions may be sent to the Alexander G. Ruthven Museums in care of The University of Michigan Development Office.

## Diagonalis et Circumferentia

There will be Michigan music in much of Europe this spring. The Symphony Band has scheduled a concert tour during May, with an appearance in Carnegie Hall and a performance in Washington for the President before returning to the campus.

The Chamber Choir will tour Russia under the 1970-71 U.S.-U.S.S.R. Exchange agreement, and the Mens Glee Club will give concerts in nine countries.

M

The University of Michigan, first in the nation to award a "Candidate in Philosophy" certificate, to recognize students who have completed all the work for a doctorate except the writing of a dissertation, now will grant the Doctor of Arts degree, with emphasis on a more broad academic training in contrast to specialized research.

M

Cigarettes are no longer purchasable at the University Hospital. One doctor stated "It will demonstrate to our guests, our students and the public that, in the opinion of our staff, the cigarette smoking habit is a serious health hazard which should not be encouraged in any way by a health-oriented community hospital. Some 900 persons voted two to one in favor of the ban.

M

There is at least one U-M class that can be conducted entirely under water. All 22 members of a geology course, who have just completed, at their own expense, a 10 day field trip in Florida and the Bahamas, are qualified divers. They did underwater exploration of reef tracts and did studies related to modern carbonate rock environments.

Vice President Stephen H. Spurr, a member of The University of Michigan faculty for 19 years and dean of the Graduate School since 1964, will become president of the University of Texas July 1. The internationally known ecologist will be the 14th president of the Austin institution.

M

A new Sports Service building will be constructed on the southeast corner of Ferry Field. To be financed entirely from Athletic Department revenues, the unit will include medical facilities, classrooms for physical education, complete varsity and freshman football locker rooms, and meeting and storage space for intramurals. The move of football locker rooms and training facilities to the new building, expected to be ready in August, will free more space in Yost Fieldhouse for men and women's intramural activities.

M

Two recent rocket launchings from the University's rocket launch site radioed back valuable information on the effects on the ionosphere of a geomagnetic storm. Thirty U-M and National Aeronautics and Space Administration scientists conducted the tests, held two days apart at the site, which is on Lake Superior midway between the equator and the north pole.

M

Separate departments of chemical engineering, and materials and metallurgical engineering have been established within the College of Engineering. They had been divisions under the one heading. The departments within the College now number 12.

## 'the Vital Margin'

Five new members were elected to the Development Council Board of Directors at its recent annual meeting during which plans for obtaining additional private funds for The University were outlined. A. P. Fontaine, Chairman, Bendix Corporation; R. C. Gerstenberg, Vice-Chairman, General Motors Corporation, and Regent Emeritus Paul G. Goebel were named to three year terms; William E. Schiller, Chairman, Hershey Foods Corporation, two years; and John E. Riecker, Gillespie and Riecker, attorneys, for a one year term. Continuing as Chairman of the Development Council Board is H. Glenn Bixby, President, Ex-Cell-O Corporation.

The Esso Education Foundation and the Humble Companies Foundation have made grants totaling \$19,500 to the University, including \$5,000 to the Department of Naval Architecture and Marine Engineering, the first received by that department.

A year-long study of water quality in the southern part of Lake Michigan will be conducted by the Great Lakes Research Division of The University's Institute for Science and Technology under a \$90,000 grant from the Indiana and Michigan Electric Company.

An unrestricted \$5,000 grant for studies into the prevention of eye diseases has been renewed for the department of ophthalmology by Research to Prevent Blindness. This brings to \$51,000 the unrestricted grants it has made to the U-M.

A three-year study on the pathological basis of deafness is underway at the U-M Kresge Hearing Research Institute under the direction of Dr. Merle Lawrence. The research is funded by a \$165,812 grant from the John A. Hartford Foundation, Inc.

The foundation has also made a research grant of \$49,866 to the U-M Medical Center for a two-year study of thyroid hormone action and synthesis control.

A Summer Institute for College Teachers in Engineering to be held on the campus has received a grant of \$39,680 from the National Science Foundation. The program is for instructors in basic engineering mechanics courses at junior colleges.

The Ford Foundation has awarded the University a three-year, \$650,000 grant for transitional support for international studies. The grant covers such topics as Russia and East Europe, Japan, Near East and North Africa, foreign and comparative law, international business and organizations and history.