

MSU News-Bulletin

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Michigan State University

May 13, 1971

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A-Ps get report on proposals

Officers were elected for the Administrative - Professional Association at its spring meeting last week in the MSU University Club.

Elected were:

William Kenney, assistant director of financial aids, to his third term as president; Warren C. McAlvey, loan collection officer in the comptroller's office, as treasurer; and to the board of directors — Mrs. Josephine Wharton, assistant to the director of Equal Opportunity Programs, Carl Olson, news director of radio broadcasting, and Thomas Smith, manager of Mason - Abbot Halls. The terms begin Sept. 1.

Kenney reported for the executive board that the major activity for the past year has been summarizing the questionnaire on benefits and improvements, setting priorities among benefits desired, doing research, and presenting A-P benefit proposals to the University's executive vice president.

Those proposals include:

- * Continuation of current programs.
- * Long - term disability insurance for A-Ps, fully paid by the University. (This has been endorsed by Executive Vice President Jack Breslin, Kenney said.)
- * Increase in the base figure for computation of longevity pay (also endorsed by Breslin).
- * A three - part proposal including: Elimination of the ceiling on sick leave accrual; payment by the University of 50 per cent of an A-P's unused sick leave on retirement; and eligibility for A-Ps with five years' continuing service for extended sick leave in cases of total disability, not to exceed six months. (Kenney said Breslin will recommend adoption with two provisions: That an age limitation be set on retirement and that the University provide better record - keeping on A-Ps.)
- * Recommendation for a staff - benefit study of the life insurance program.
- * Acceleration of the vacation

(Continued on page 3)

AAUP chapter to hear report on bargaining

The MSU chapter of the American Association of University Professors will meet Monday (May 17) at 7:30 p.m. in Room 34 of the Union Building to elect new council members and to hear several reports.

The agenda includes:

- * Election of five members on the AAUP council. A slate will be presented from the nominations committee.
- * A report of results of the AAUP chapter's efforts to organize the faculty for collective bargaining. Sigmund



Former Pres. John A. Hannah . . .

. . . once introduced a book of Phil Frank's cartoons with the suggestion that "if he has a message, it must be that we should not take ourselves and the work we do too seriously." See a story on Frank, page 5. —Photo by Robert B. Brown

Elected Faculty Council, Senate slate final meetings next week

The agenda is brief for the Elected Faculty Council meeting Tuesday (May 18) at 3:15 in the Con Con Room of the Center for International Programs.

The Council will hear a report on the Association of Michigan Collegiate Faculties from Walter Johnson, professor of administration and higher education, (see related story, page 3), and a report on the status of the special ad hoc committee on collective bargaining. That report will be given by Herbert Jackson, professor of religion and chairman of the ad hoc committee.

Faculty who have other items to be presented to the Council can notify Gordon Guyer, professor of entomology and chairman of the Faculty Steering Committee. This is the last Elected Faculty Council meeting of the year.

THE ACADEMIC Senate will meet Wednesday (May 19) in 109 Anthony Hall at 3 p.m. to consider the following items:

- * The document on graduate rights and responsibilities. According to

faculty bylaws the Senate may either pass, reject or refer this back to the Academic Council but may not amend it from the floor.

* Bylaw amendments pertaining to student participation in academic governance. Since this is the third time the Senate has considered the student participation report, these bylaws may be amended from the floor.

* Changes in tenure regulations to allow giving written reasons for nonreappointment if reasons are

requested in writing. This may be approved, rejected or referred back to the Academic Council.

If either the graduate rights and responsibilities document or the tenure regulations are rejected by the Senate, they become "dead" issues unless they are reintroduced into the Academic Council.

The Senate will also hear the annual report of the Athletic Council and announcement of new members to that body.

Minority employment increases by 71 percent in five years

Minority employment at MSU has increased nearly 71 per cent in the past five years, according to data compiled by the Office of Equal Opportunity Programs.

The latest survey shows that minority employees number 1,119, or 10.2 per cent of the University's 10,984 full - time and graduate assistant employees. Of the total minority employees, 712 are Black, 278 Oriental, 122 Spanish - surnamed and seven American Indian.

The figures are contained in the latest Equal Employment Opportunity report which the University is required to submit annually to the federal government.

It shows continuation of the steady increase in minority employment over the past five years. In 1967, the minority percentage of total University employment was 6.6. It rose to 7.4 per cent in 1968, 8.2 per cent in 1969, 9.4 per cent in 1970 and now stands at 10.2 per cent.

During this period, the number of minority employees in the "professional" category, which includes faculty and graduate assistants, rose from 302 to 538. Minority individuals included in the "officials and managers" category climbed from 3 to 34. Another significant increase was in the office and clerical category where minority employment rose from 35 to 157. The total employment of minority females increased nearly 84 per cent during the five years (from 318 to 584).

President Clifton R. Wharton Jr. pointed out that the current 10.2 per cent minority employment is already close to the 10.6 per cent goal which the University has projected for September.

He said, however, "while this is laudable progress, it is important that we do not relax our efforts. Among the areas where we must continue to concentrate even more vigorously is in full - time faculty positions."

In Brief...

A DYING SCIENCE? The kind of science described as privately supported and elite is "about to die out," a noted astronomer said at last weekend's dedication of the University's new observatory. The dying science, Jesse L. Greenstein of California Institute of Technology said, is that in which "small numbers of persons use large amounts of expensive equipment."

This situation is changing, he added, as more and more of the \$300 million spent annually on astronomy comes from government grants. "Now we look to the large state universities," he said, where applications to technology are sought.

Contrary to early days when astronomers struggled to get money because their science had almost no immediate application, Greenstein said, today's astronomy offers the development of nuclear fusion as an energy source and the potential discovery of intelligent life elsewhere in the universe.

* * *

MEDICAL TEAMWORK. Efforts by the deans of Michigan's four state medical schools to coordinate and cooperate have already resulted in changes of state licensure regulations to allow more flexibility in medical curriculum and admissions.

And other topics are being considered for united action by the four deans, including: Sharing of new audiovisual and other instructional programs; coordinated continuing education of doctors; a plan to work with the Michigan State Medical Society to raise funds for medical students scholarships and loans; the relationship of medical schools to community hospitals and other health institutions; exchange of students among the medical schools; coordinated long-range planning of enrollments, programs and facilities.

The four deans are Andrew D. Hunt, dean of MSU's College of Human Medicine; Myron S. Magen, dean of MSU's College of Osteopathic Medicine; T.N. Evans, acting dean of Wayne State University's School of Medicine; and John A. Gronvall, dean of the University of Michigan Medical School.

* * *

POSITIVE 'DEVIANCY.' The person who hears a different drummer need not be a nuisance to society, according to R. C. Trojanowicz, assistant professor of criminal justice. Speaking recently to Michigan's juvenile officers, he said that socially deviant behavior can have a positive effect on society when expressed in limited quantities.

He described "social deviancy" as actions contrary to established norms. He said that persons whose thoughts and actions do not always follow the established path can contribute to society by reducing red tape, acting as safety valves, clarifying rules, uniting the group and serving as warning signals.

* * *

FROM OTHER CAMPUSES. Faculty at Central Michigan University were scheduled to vote this week on a new three-year agreement between the university and the CMU Faculty Association. A new contract negotiated last week calls for direct salary increases from 6.7 percent plus \$66 for next year to 6.6 percent plus \$200 for 1973-74. The new proposal includes two major changes from the one rejected April 20 by CMU faculty: An option to reopen negotiations on economic matters for the third year of the pact, and an additional system to handle grievances regarding retention of nontenured faculty, tenure and promotion. . . J.J. Stockton, former professor and chairman of microbiology and public health at MSU, has been named dean of Purdue University's School of Veterinary Science and Medicine . . . The new president of Purdue is Arthur Gene Hansen, president of Georgia Institute of Technology. He succeeds Frederick L. Hovde on July 1.

Film depicts a community's housing effort

A film dramatizing the potential of local leadership to handle community problems has been produced by the Instructional Media Center (IMC).

The film is called "West Branch." Ali Issari, head of IMC's film production unit, said it "tells the story of the difficult but successful attempt by a group of West Branch citizens to work toward a solution of the community's housing problem."

The lack of housing caused many of the town's young people to move out of the area. The documentary film focuses on a young auto mechanic who was

about to leave for Detroit because he couldn't find suitable housing for his wife and child.

MSU's interest in the project came from the School of Packaging. William Lloyd, professor of packaging, "We were especially interested in West Branch because of the factory

Press series

WKAR-AM has initiated coverage of addresses delivered during meetings of the National Press Club in Washington, D.C. Each week, a prominent guest is invited to speak to the Press Club assembly. Today's broadcast, featuring Elliot Richardson, secretary of health, education and welfare, is at 1 p.m.

Another dialogue day on tap

The students planning SUNDAY II have expressed hope that attendance at this year's event will exceed the estimated 400 students and townspeople who participated in last spring's SUNDAY.

SUNDAY II will be from 11 a.m. to 4 p.m. this Sunday (May 16) in East Lansing's Valley Court Park, adjacent to the bus depot and People's Church.

Students Belinda Novik and Doug

Phi Beta Kappa will initiate more than 160 students

More than 160 students are scheduled to be initiated into Phi Beta Kappa in ceremonies tonight in the Big 10 Room of Kellogg Center.

The total includes students from the Colleges of Natural Science, Social Science and Arts and Letters, and Justin Morrill, James Madison and Lyman Briggs Colleges.

Seventy-six of the new initiates are from Michigan, and more than a third are enrolled in the Honors College. Forty-six percent of them report plans to go to graduate school, 12 percent will enter teaching, 10 percent will go to law school and 7 percent plan to enroll in medical school.

An honorary membership will go to Russell B. Nye, distinguished professor of English, who will deliver the Phi Beta Kappa Oration.

Chamber series set

The Lecture-Concert Series will add a dimension with a new Chamber Music Series for the 1971-72 season.

The chamber series, to be held in Fairchild Theatre on five Tuesday evenings, will open Oct. 26 with a trio of young accomplished artists — violinist James Buswell, cellist Lynn Harrell, and pianist Seth Carlin.

Harpsichordist Ralph Kirkpatrick will be heard Nov. 23. The Guarneri Quartet, noted for its recordings of the complete Beethoven quartets, will perform Feb. 8.

Holland's young recorder virtuoso, Frans Bruggen, and the young Italian guitarist, Oscar Ghiglia, will present a duo recital Feb. 22.

Soprano Benita, a master of the German song repertoire, will close the series April 18.

Season tickets can be purchased now at the Union Ticket Office. There will be no reserved seats.

Newly elected officers of the MSU chapter are: President — James D. Rust, ombudsman and professor of English; vice president — John F. A. Taylor, professor of philosophy; secretary — C. L. Schloemer, professor of natural science; and treasurer — George R. Price, professor of English. The executive committee includes the officers, and Karl F. Thompson, professor and chairman of humanities, and Milton E. Muelder, vice president for research development and dean of the graduate school.

More than 225 persons are expected for the initiation and preceding banquet. They include students initiated during fall term, faculty PBK members and members of the Lansing-East Lansing Association of PBK.

The MSU chapter was chartered in 1968. The society recognizes academic achievement in the liberal arts and sciences.

WKAR

FRIDAY, MAY 14

1 p.m. (AM) — Former Attorney General Ramsey Clark discusses "Crime in American Society."

SATURDAY, MAY 15

1:30 p.m. (AM) — "Urban Confrontation" features tennis star Arthur Ashe on "The Dilemma of the Black Athlete." 7 p.m. (FM) — "Listener's Choice" has classics by request at 355-6540.

SUNDAY, MAY 16

2 p.m. (AM-FM) — The Cleveland Orchestra features *Romeo and Juliet Fantasy - Overture* by Tchaikovsky; Violin Concerto in A by Glazounov; Symphony No. 2 by Scriabin. 8 p.m. (FM) — Busoni's *Dr. Faustus: Sarabunde and Cortege*; Mendelssohn's Violin Concerto and Mahler's Symphony No. 1 are performed by the Los Angeles Philharmonic.

WEDNESDAY, MAY 19

1 p.m. (AM) — Representatives of the U.S. State Department and college students discuss foreign affairs on "Students and Diplomats."

THURSDAY, MAY 20

1 p.m. (AM) — Walter Palmer of Children's Television Workshop speaks on "The Development of Sesame Street."

WMSB

FRIDAY, MAY 14

7 p.m. — Miriam Duckwall and Michael Oberfield star in "Joseph and Josephine," an original drama written and produced for WMSB.

SUNDAY, MAY 15

1 p.m. — Elizabeth Drew interviews Golda Meir, Israel's prime minister, in a segment filmed in Tel Aviv. 4 p.m. — "The Riddle of Heredity" is a look at the past and future of genetics. 4:30 p.m. — Spokesmen for the Nixon Administration and newsmen discuss the "credibility gap" of the war in Vietnam in a one-hour special, "Homefront '71: The President, the Press and the Public." 10 p.m. — Problems of the Chicano in Lansing are featured on "Assignment 10." 11 p.m. — The playhouse biographical subject is Ludwig Van Beethoven.

MONDAY, MAY 17

7 p.m. — "Spartan Sportlite" reviews the Green-White spring football game and has an interview with the Detroit Tigers' Al Kaline.

ATL sets festival

The Department of American Thought and Language's first Counter Culture Festival continues next week.

A lecture on "The Underground Scene" by a noted underground publisher will be next Wednesday (May 19) at 8 p.m. in Room 38 of the Union. Richard Morris is secretary of the Committee of Small Magazine Editors and Presses (COSMEP), editor of Camels Coming Press, and author of several volumes of poetry.

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Editor: Gene Rietfors

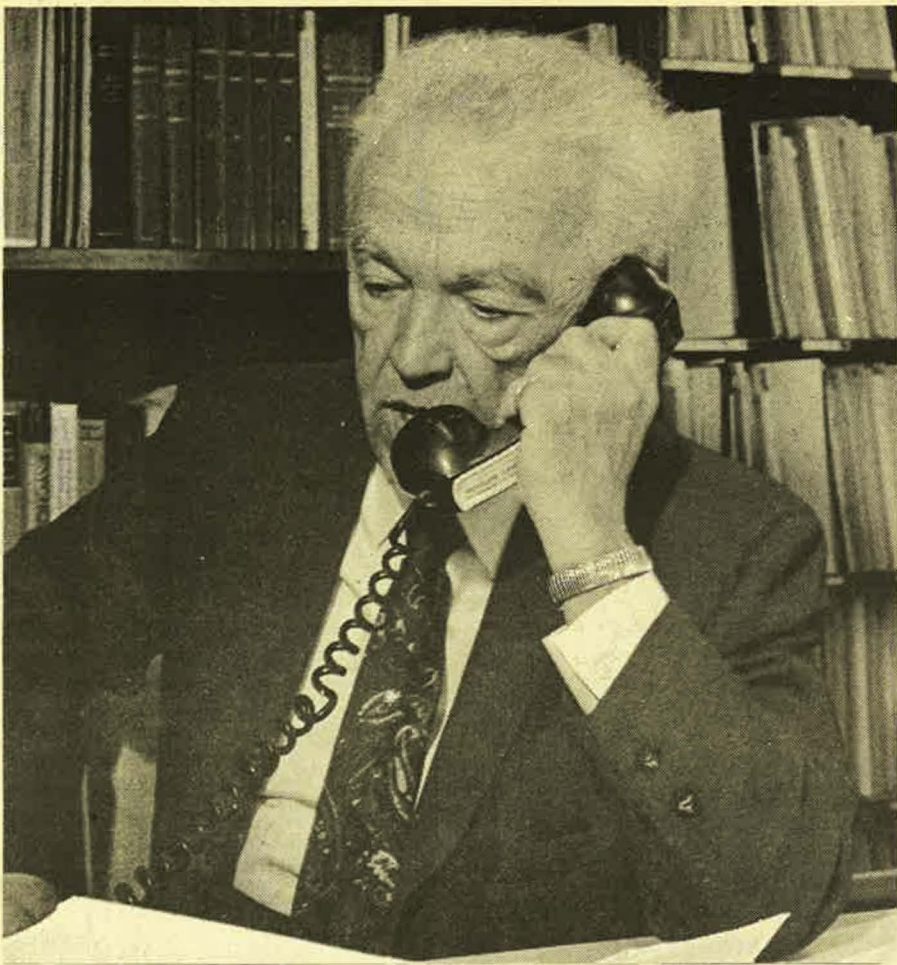
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S. HOWARD BARTLEY: A commendation from the President.
—Photo by Robert Brown

Bartley helps raise a field of research

Last summer President Nixon sent a telegram that said:

"The research, writings and teachings of S. Howard Bartley, psychologist and pioneer in the field of visual science have added immensely to the understanding of visual perception."

The occasion was the American Optometric Association's annual awards luncheon in Honolulu where Bartley received that organization's highest honor, the Apollo Award.

The director of MSU's Laboratory for the Study of Vision and Related Sensory Processes was indeed a pioneer in his field.

He began his work just when technological advances made sensory research feasible, and has since spent almost 45 years investigating the intricacies of the neurophysiology of the visual pathway, visual perception and fatigue. He has contributed more than 200 articles and chapters to scholarly journals, authored seven books, and became a world-recognized leader in his field.

"Before the 1920s research of this nature was limited by a lack of equipment," he recalls. "Then the Braun tube and the vacuum tube were developed."

The former, a rudimentary oscilloscope and forerunner of the modern television tube, allowed nervous impulses to be depicted, and the vacuum tube amplified those impulses for analysis.

* * *

BARTLEY GRADUATED from Greenville College in 1923, taught briefly at Miltonvale Wesleyan College, then joined the faculty of the University of Kansas as an assistant instructor of psychology.

Final concert

The MSU Symphony Orchestra will present its final concert of the school year this Monday (May 17) at 8:15 p.m. in the Okemos Fine Arts Center. The orchestra, under conductor Dennis Burkh, will feature pianist Ralph Votapek.

After earning the A.M. and Ph.D. degrees at Kansas, he went to the Washington University Medical School as a researcher in ophthalmology and neurophysiology.

"The tremendous cost of research is perhaps the biggest change I've seen over the years," he says.

"I once requested \$250 for a project I was working on, and with that I bought a movie camera, infrared film and a number of other supplies. When it was all over, I had enough material on visual fatigue to publish three articles and still had \$10 left."

Bartley left Washington University for Dartmouth Medical School's Eye Institute in 1942. At Dartmouth his studies in visual fatigue led him into investigations of general human fatigue.

It became a secondary specialty with him and a topic of two of his books.

* * *

DARTMOUTH'S FACILITY was disestablished after the war, and Bartley found himself at Michigan State where the Department of Psychology had just been formed.

"It was the roughest thing I ever went through," he says of the thousands of man-hours that went into helping build a curriculum from the ground up.

MSU was conscious of the talent it had during those expansion years. Bartley was recognized as an "outstanding professor" by the 1951 Wolverine.

The distinction was more formalized nine years later when MSU gave him a Distinguished Faculty Award.

Word went out prematurely two years ago that Bartley was about to retire, and colleagues from throughout the country converged on the Deacon's Bench for a bash in his honor.

Some who couldn't make it sent letters. One wrote:

"(He) has dedicated his life to vision research and many avenues related to it. Beyond this, however, he has never lost sight of the main benefit of all research; this is that mankind will someday live a better life because he went this way."

Bartley retires in June.

—MICHAEL MORRISON

State faculty group aims at cooperation

If the Elected Faculty Council decides next week to affiliate with the Association of Michigan Collegiate Faculties, it will be the 12th of 13 eligible four-year colleges in Michigan to do so.

The Association of Michigan Collegiate Faculties (AMCF) is an organization of faculty representatives from Michigan institutions which award the baccalaureate degree. Current members are the University of Michigan, Western Michigan, Central Michigan, Northern Michigan, Eastern Michigan, Michigan Technological, Wayne State and Oakland Universities, and Ferris State, Saginaw Valley and Lake Superior State Colleges.

Only MSU and Grand Valley State College are not now members.

The purposes of the AMCF, as stated in its constitution are: To facilitate the exchange of information; to foster academic cooperation among the faculties; to study educational and administrative practices or problems of member institutions; to promote public awareness of the importance, needs and problems of higher education in Michigan, and to serve as a spokesman for the faculties.

The association is an outgrowth of the Interfaculty Association (which included Eastern, Western, Central and Northern Michigan State Colleges, which were governed by a common board). With the adoption of the new Michigan constitution and the transference of these colleges to university status, the Interfaculty Association was dropped, according to Walter Johnson, professor of administration and higher education. The group has now been revived and expanded to include all of Michigan's four-year, state-supported degree-granting institutions.

Each member institution may elect from its faculty senate, council or similar body two representatives to represent the faculty at the AMCF's three annual meetings. Three members of the MSU Faculty Steering Committee have attended AMCF meetings as observers during the last year (Hideya

Kumata, professor of communication, Thomas Greer, professor of humanities, and Johnson).

Both Johnson and Greer have said they thought membership in the AMCF would be "useful."

Greer, who attended the spring meeting last month in East Lansing, said the Association "seemed to be a pretty well-organized and sophisticated group," which could be "an effective voice."

THREE RESOLUTIONS were passed at that spring meeting. One asked the State Legislature to grant faculty members pay increases equal to that proposed (8.1 percent) for the state's civil service employees.

A second resolution endorsed a "thoroughgoing reform of the state's tax structure," and supported Gov. Milliken's proposed income tax increase "until a more equitable and productive tax structure" is devised.

The third called for "greater coordination and cooperation among the institutions in improving both the quality of education for our 200,000 students and the training and experience of our 8,000 faculty members through a systematic and substantial annual faculty exchange program."

All three resolutions were approved unanimously. According to the AMCF constitution, public pronouncements of the Association must receive a two-thirds affirmative vote which represents at least two-thirds of the member institutions.

The winter meeting, which Johnson attended, was primarily organizational. The campus faculty organizations were discussed, Johnson said, and "we have the most complicated."

All the Michigan institutions are involved in increasing student participation in University governance, Johnson said, and all but Central Michigan have developed faculty compensation and budget advisory committees. (CMU has a collective bargaining unit.)

Next year's meetings (Oct. 14, 1971, and Feb. 17 and April 20, 1972) have been tentatively scheduled to be held at the Holiday Inn in East Lansing.

A-P meeting . . .

(Concluded from page 1)

schedule after five years. (This is being discussed with Breslin.)

* Recommendation for a retirement longevity benefit by which an A-P would receive, upon retirement, one week's salary per year of service. (Kenney said there was little hope for that recommendation's being approved this year.)

(Breslin said later that he concurred with each of the A-P proposals, but he pointed out that the limiting factor in considering them would be MSU's financial status in fiscal 1971-72.)

The members later voted to have the executive board investigate why University employees on the labor (hourly) payroll receive \$5.15 more per month in University contribution toward hospitalization insurance than do employees on the salary (monthly) payroll.

Most labor payroll employees subscribe to Blue Cross hospitalization, according to Al Chapman, assistant director of staff benefits, who suggested the investigation. And most salaried employees are not eligible for Blue Cross.

Nevertheless, he said, all labor employees receive the additional \$5.15, regardless of the type of insurance they are taking, and no salaried employees receive the \$5.15, regardless of the type of insurance they are taking.

The labor union contract provides for an additional \$6 University contribution beginning July 1. The A-Ps will also question whether this will apply to all University employees, and if not, why not.

* * *

IN OTHER BUSINESS, the A-P Association heard reports from its standing committees. Fred Henderson, chief engineer for closed circuit television, reported for the membership committee that of 614 A-Ps on campus eligible for membership, 368 have joined, which is an increase of 59 members (4 per cent) since the October meeting of the Association.

J. Henry Backus, employment specialist in the Personnel Center, reported that the classification committee is continuing its study of the structure of the University, its "lines of command," and procedures used to classify A-Ps at their 10 levels.

Applying behavioral research to peace

By MICHAEL MORRISON
Assistant Editor, News Bureau

Research funded by the military is often viewed in terms of building better bombers or in some other way contributing to the technology of war.

But behavioral scientists at MSU, working under an Air Force grant, are trying to reduce the need for bombers, and maybe even make the military itself unnecessary.

The group of psychologists, sociologists and political scientists form MSU's Cooperation/ Conflict Research Group (CCRG).

Begun three years ago under a \$400,000 grant from the Department of the Air Force, the CCRG has conducted a number of studies into the nature of conflict and cooperation.

Researchers are trying to isolate the variables that determine whether protagonists tend to settle their differences on the battlefield or by peaceful means.

Currently three major areas are under investigation by the CCRG. All three projects are examples of basic research. They form a foundation for further investigation that could have a direct effect on the limitation of conflict. The studies are concerned with:

- Actions of participants engaged in a life and death struggle.
- Bargaining as a means to avoid conflict.
- Events data analysis as a way to anticipate and head off international conflict.

Uelative conflict

James Phillips, CCRG program manager, had to coin a new word to describe his work in conflict research.

The work is "uelative." Its root is "duel," the familiar fight to the finish between two antagonists.

There is no mystery about the motivations of contestants in a duel each simply tries to kill the other. But Phillips and others became interested in what factors govern the action of three or more participants all engaged in a single conflict.

For three, it was easy enough to refer to a "truel," but with more participants terminology became cumbersome. So the term "uelative" was used to describe conflict between any number of combatants.

As in the simple duel, no more than one and possibly none of the participants can survive.

Previous theorists in the area now called "uelative conflict" hypothesized a "power inversion" phenomenon to govern the outcome of such situations.

Phillips explains, "The power inversion theory holds that when combatants of varying strengths find themselves in the same arena, each will attack whom he perceives to be his strongest opponent. Since the weakest participant would have the fewest attackers, he would have the greatest chance of survival."

If all participants acted rationally, the power inversion theory would hold up, but Phillips' laboratory tests have shown that it is unsafe to predict this rationality.

Using students as the participants and dollars as rewards, Phillips and his associates divided a number of "games" to test the power inversion theory.

Generally three players were used (a truel). Each started the game with the same number of "markers" but with a different ability to take markers from the other players. The markers were convertible to dollars at the end of the game.

In one variation, each student started with 20 markers. One, however, had the ability to take eight markers from one of his opponents on each turn, while the second could take six, and the third and weakest player could take only four.

If all acted rationally, on the first turn the strongest player would be reduced to 10 markers, the second to 12 markers and the weakest would retain all 20 since he would not have been attacked by either of the other two.

Carrying the game to its logical conclusion, the player who started from the weakest position would be the only one with the chance of survival. But that's not the way it always turned out. Between 10 and 40 per cent of the time the weakest did not survive.

The outcome tends to lend weight to the lessons of history that show men cannot be assumed to act rationally in an intense conflict situation.

Phillips emphasizes that the implications and applications of his research are limited.

"First, we are dealing with an ultimate form of conflict, and second, we're doing it in a laboratory," he says. "But we do feel that the observations we have made can be useful in understanding more realistic conflict situations."



James Phillips: Coining new words

Bargaining for peace

Although crucial to the overall understanding of conflict, the life and death, uelative struggle is rare. Most interpersonal, intergroup and international conflict is resolved through a cooperative means — bargaining.

Lawrence Messe, an assistant professor of psychology and a CCRG researcher, is trying to learn more about bargaining as a resolution of conflict.

"People generally tend to get along well," says Messe. "Every day each of us bargains his way out of many potential conflict situations, and we do it willingly on the basis of equity."

Messe set out to isolate the factors that lead people to bargain effectively most of the time, and apply them to the infrequent occasions when bargaining breaks down.

He believes he has the answer.

"The key is an understanding of inputs," he says. "When both participants in a bargaining situation have a clear picture of what each has contributed, there is usually little difficulty in deciding how the rewards should be distributed."

When the inputs are not understood and considered, bargaining tends to revert to the "how much can I get out of this" approach which seldom leads to mutually satisfactory results, according to Messe.

He used students to test his hypothesis and the results were as he expected.

The students, answering newspaper ads, were put to work at tasks for varying lengths of time. Then they were given a specific amount of money and told to distribute it among themselves as they saw fit.

"In almost all cases the bargainers quickly agreed on how the money was to be divided because the inputs were explicit," Messe observed.

There is an obvious wrinkle in his research so far; he has been dealing with situations where participants can see the inputs of others. What happens when they can't see those inputs?

"That's where we go from here," says Messe. "Our next phase will be to see how bargainers react when they cannot agree on what the inputs are."

Events data analysis

The third major research project at CCRG involves running history through a computer to predict the future.

Called "events data analysis," it is based on the premise that history tends to repeat itself, provided its course is not altered by the introduction of new factors.

Edward Azar, assistant professor of political science, is compiling a coded data bank of domestic and international actions involving approximately 35 countries.

Each event is coded according to a multidimensional scaling technique that reflects such factors as violence content, level of trust or distrust and tendencies toward activism or passivism. The events extend from 1945 through 1969, and the system allows CCRG workers to retrieve, categorize, measure and analyze the events as effectively as possible.

Simultaneously, Azar is generating and testing a number of analysis models which will allow researchers to recognize patterns that indicate a rise or fall in the level of tension between nations or groups of nations. The objective here is to devise an early warning system to detect impending conflict before it reaches crisis proportions.

Azar's most recent model is the Signal Accounting Model (SAM), which concerns itself with short-range forecasting and the behavioral outputs of international "actors."

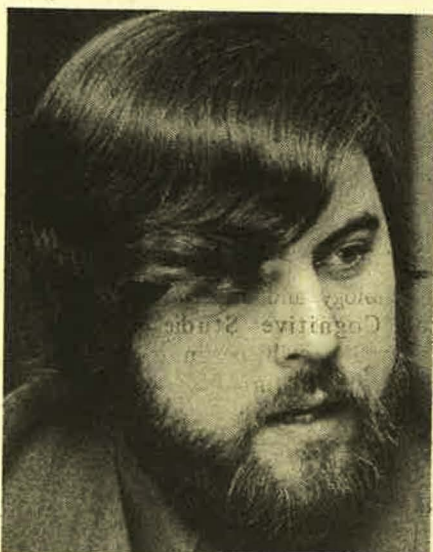
He describes his research in the cold language of the computer:

"Daily events serve as signals between nations. An announcement of larger defense appropriations, for example, is a signal that is received, interpreted and acted upon by other governments."

"We feel that by accumulating a large number of signals and understanding how they have been interpreted and acted upon in the past, we can learn something of how they will be received in the future."

Largely because of the amount of data available, the Middle East occupies a greater part of the data bank than any other arena. Most of the analysis models being tested revolved around the Arab - Israeli conflict.

"If the bank had existed 15 years ago, it could have predicted a stormy future for the 1958 United Arab Republic," says Azar. "It would, for example, have shown that only three years earlier Nasser himself said such a federation was impossible because of the differences among the Arab nations, and that until the 1950s, the Egyptians didn't even refer to themselves as Arabs."



LAWRENCE MESSE



EDWARD AZAR

—MICHAEL MORRISON

The faculty

Phil Frank: Artist, teacher, cartoonist

Phil Frank sketched a smiling sun for a SUNDAY poster and talked about his plans, his art, his interests, himself.

His basement office in the Journalism Building is cluttered with a myriad of papers, drawings, a bulletin board covered with clippings, sketches of work to be done, a strike armband, a poster one of his classes designed for the Listening Ear. But none of his work is posted. Artists, he says, never display their own work.

And Frank is an artist. Though he is best known here for his cartoons which have run regularly in the State News since his undergraduate days, he can also show examples of illustrations, renderings, graphic designs.

"I'm tired of being just a cartoonist," he says, and that is one of the reasons why he is leaving his position here as assistant instructor and art director in residence in advertising.

He'll leave this summer for California

where he hopes to develop other abilities — illustration and perhaps writing. And he hopes to distribute a cartoon strip ("for editorial pages; I don't want to be on the funny pages") with a larger syndicate. He is now syndicated in 60 college newspapers in nearly every state and in 12 metropolitan newspapers.

* * *

"ONE OF THE MAJOR reasons for leaving Michigan is the weather," he

No. 8 in a continuing series

says. But he cites others: "I'm leaving the advertising department because I don't think it's necessary that an art director should be required by a university to have a Ph.D. if he wants to stay on. A Ph.D. is not a necessary goal to be an effective instructor. People with outside experience should be considered as well informed as, or better

informed, than some of the academic people with Ph.D.s."

Frank, with bachelor's and master's degrees in graphic design, does not plan to go on for the Ph.D. He's done advertising work and free lancing for agencies since his graduation in 1965, while he was working with Hallmark Cards. He returned to East Lansing, in 1967, working as a commercial artists in an art studio and later in MSU's design service. He began teaching in 1969.

He team teaches in creative courses that involve layout and creative aspects of advertising. A student who can't draw, Frank says, is given some sense of being creative, of visual communication: What makes an exciting ad?

"The students' main interest is being prepared for the communications industry," Frank says, and persons best acquainted with the industry can train the students best, regardless of whether

or not they hold doctorates.

"There's only so much you can learn in books. With communication things, there's so much you learn by practice, trial and error."

* * *

THAT GOES for cartoon ideas, too. Frank says he has done about 6,000 cartoons, and that's a lot of funny ideas.

"You have to have a sense about the way you look at things. You look for incongruity. Humor is making something incongruous; you point out the humor or foolishness of something that may be happening."

And, he says, "the American way of life just gives you so many chances, with things like water beds; and the way a university is run, the red tape and bureaucracy."

Seeing the incongruity takes a lot of practice. He constantly clips newspaper articles for ideas. You have to find something that just about anyone would understand, he says, and sometimes that gets very general and loses some effect, and that's frustrating.

Social consciousness in cartoons is difficult when the cartoons are drawn several days before they are published, so he deals with things like ghettos, Vietnam protests, the draft, women's liberation, and anti-youth attitudes, trying to find the humor.

He shows an example: A youthful protester minus one leg, carrying an anti-war placard; on the other side of a fence an older man is asking what "you kids" know about Vietnam.

"It's not always possible to get deep and meaningful," Frank says, but cartoons designed for history books and not for the general public bore him.

* * *

HE DOES A lot of artwork for students or groups, such as the SUNDAY poster.

"I get exploited very easily," he says, "but I exploit others." He picks up a board from a slide presentation he is developing, and says he thinks his art work is overpriced, "but that's what they'll pay; so I give it to others. It's easy to rationalize giving art away, if it helps, if it makes them happy."

He also works informally with the Justin Ward Advertising Agency, which was set up about a year ago by two MSU graduates. Frank does lay out, design, free lance art, whatever they may need.

The tone today is serious. Other days he is less so. But he says he got tired, as an undergraduate, of being expected to be constantly witty.

"I don't want to be a clown. I just want to sit back and put down a few things that I see once in a while, that hit me."

—BEVERLY TWITCHELL

Provost responds to faculty members who protested 'no work--no pay' memo

Provost John E. Cantlon issued a statement last week in response to some faculty reaction to his April 26 memorandum that reiterated the no work - no pay policy of the University.

Last week's statement explains the route taken by the original policy, which included approval by the Academic Council and Senate and the Board of Trustees. The policy, Cantlon said, "was developed at the specific directive of the Board of Trustees following several alleged instances of abrogated faculty responsibility during the attempted strike in the spring of 1970."

The provost's statement reads, in part:

"The University, through the colleges and departments, has the responsibility to see that students receive instruction for which the state allocates funds, and

for which students enroll and pay course tuition fees. If an instructor fails to provide for this instruction, the department normally attempts to meet the obligation through a qualified substitute. The department chairman has initial direct responsibility and authority for approving expenditures and administering his unit within University policies and in conformity with the fundamental principles of academic freedom and academic responsibility.

"Faculty have traditionally preserved broad latitude in which to meet their instructional objectives. This must be preserved if instruction is to be innovative and alive. However, each student clearly has the right to receive instruction for which he has enrolled and paid fees. The Code of Teaching Responsibility was developed in an attempt to protect students from

inconsiderate or irresponsible behavior by instructors. This code provides a mechanism for students to file a complaint in alleged cases of code violation.

"Faculty members who take issue with the principle of no work - no pay are, themselves, abusing the principles of academic freedom and responsibility. Their taking issue with deans and directors being reminded of University policy lacks an understanding of administrative responsibility. For those faculty who object to the specific language of the Code of Teaching Responsibility, I would remind them they have the normal routes for seeking amendments to it. But the overriding objective must continue to be that students deserve protection and an avenue of redress against the occasional, capricious, or irresponsible, or inconsiderate behavior of instructors."

'Revived' musical salutes Michigan's past

A musical play first performed 16 years ago to help celebrate MSU's first 100 years will be "revived" this weekend by Okemos High School students.

Originally called "Michigan Dream," the musical has been renamed "Peter

Homan's Dream" and is scheduled for performances today through Saturday at 8 p.m. in the Okemos Fine Arts Center.

H. Owen Reed, professor of music who composed the original musical, will conduct the performance. He said the

libretto has been changed slightly to allow more dialogue and less singing than the original version.

* * *

ORIGINALLY WRITTEN as a folk opera, "Michigan Dream" had its premiere on May 13, 1955, in the midst of the University's centennial celebration. The first cast included more than 100 actors, dancers and musicians.

The performance of "Michigan Dream" was part of a long list of events and speeches that made up the University's centennial observance in 1955.

Before the celebration ended late that year, there were appearances by and awards presented to dozens of state and national figures, including Milton S. Eisenhower (then president of Pennsylvania State University), historian Henry Steele Commager, Sen. Hubert H. Humphrey, social scientist Talcott Parsons, architect R. Buckminster Fuller, musician Howard Hanson, Adm. Arthur Radford (then chairman of the Joint Chiefs of Staff), motion picture actor (and former U.S. senator) George Murphy, and author James T. Farrell.

Emmy winner to speak

Award-winning cinematographer William Greaves will show one of his films and visit with students here at 8 p.m. Tuesday (May 18). The film showing, followed by a question and answer session, will be in the Conrad Hall Auditorium.

Greaves' visit is sponsored by the Department of Art.

Greaves, who received an Emmy Award as executive producer of NET's "Black Journal," also won first place in the San Francisco and Chicago International Film festivals for his film, "In the Company of Men." This documentary film has also received four other awards.

Unable to crack the discriminatory policies of the U.S. film industry in the early 1950s because he is Black, Greaves

went to the National Film Board of Canada. For 19 years he worked there as a writer, chief editor, assistant director and director.

Returning to the U.S. eight years ago, he was a producer for United Nations television before starting William Greaves Production with the making of three films for the U.S. Information Agency.

He is currently completing his first feature film, "Symbiopsychotaxiplasm: Take One," which he describes as an attempt to break through the humdrum of present conventional cinematic forms.

Greaves will be introduced by Mrs. Clifton R. Wharton Jr., who met him through her interest in art and contemporary Black culture.

Bruner here

Jerome Bruner, professor of psychology and director of the Center for Cognitive Studies at Harvard University, will be in residence here Friday and Saturday (May 14 and 15). He will speak in a general session Friday at 10:15 a.m. in the Erickson Hall Kiva. His topic is "The Growth of Human Skill." He will also give seminars Friday afternoon and Saturday morning. Information on the seminars is available from Mrs. Vogel at 355-9568.

Nature's show at Hidden Lake

Something akin to Eden is nestled on the edge of the Irish Hills in southeastern Michigan.

There, at MSU's Hidden Lake Gardens, flowering crabs and dogwood, redbud and primroses, tulips and masses of lilacs are now in bloom, to be followed with early June hawthorne, wildflowers, perennials, and annual displays until frost.

The prime objective of the gardens is to exhibit valuable plant collections for enjoyment and study, and, in an era of ecological awareness, to create landscape pictures that will give rise to a demand for more beautiful surroundings.

The gardens located two miles west of Tipton on M-50, include 620 acres: of native woodlands, open meadows, water, wildlife and developed landscape features.

Open until sundown every day, including weekends and holidays, the gardens attract more than 200,000 visitors annually, including students, senior citizens and garden clubs, as well as family and individual visitors.

The gardens were started by Mr. and Mrs. Harry Fee of Adrian and donated to the University in 1945. The late Mr. Fee, who had a great interest in scenic landscapes resulting in the "dream as you go" development, established trust funds to insure future maintenance and development. His sister, the late Miss Jessie Fee, also endowed the Gardens. Present administration is under the Division of Campus Park and Planning.

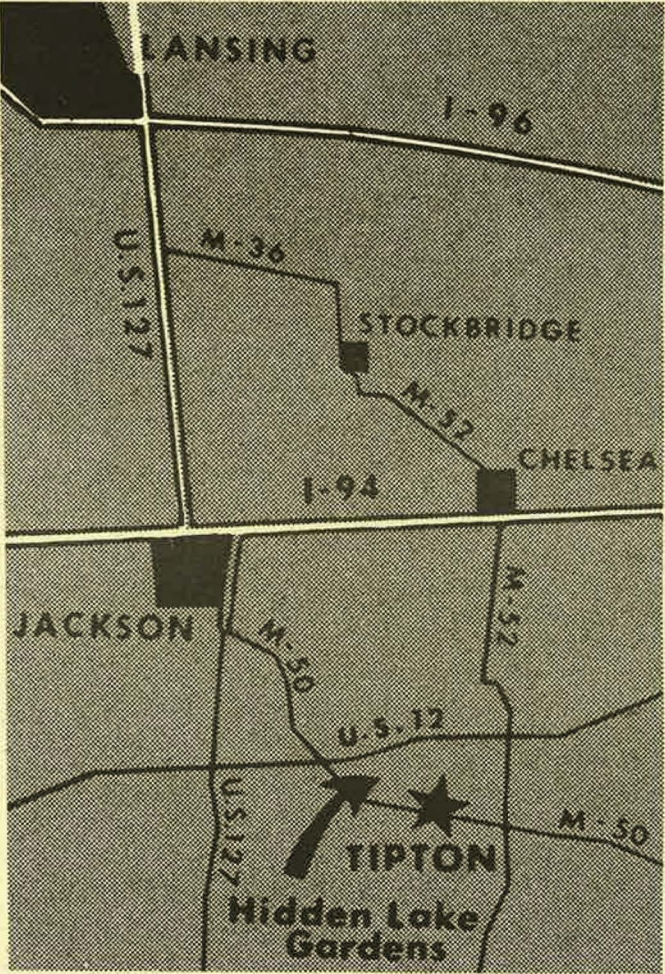
The Gardens Center Building houses an information and sales counter, exhibits pertaining to natural history and use of plants in the landscape, a library, an auditorium seating 80, a classroom, and offices.

The double-domed Plant Conservatory building consists of the Tropical Dome, housing plants originating in hot, humid portions of the earth, the arid dome, containing plants from dry regions, and the temperate house, displaying plants generally from more moderate climates but intolerant of Michigan winters.

Both the Gardens Center Building and the Plant Conservatory were given to the University by the Ray W. Herrick family of Tecumseh.

Approximately seven miles of scenic, one-way automobile drives and five miles of marked walking trail circuits link the major points of interest and allow visitors to experience nature first-hand.

Especially noteworthy of the many woody plant collections



are lilacs of more than 150 cultivated varieties and flowering crabapples of more than 170 varieties.

Credit classes in the sciences and noncredit classes in practical horticulture and related areas are offered at the Gardens from time to time.

No charge is made for guided tours on a first request, first served basis. Picnic facilities are available only for organized groups by reservation.

For further information or tour arrangements, call (313) - 431-2060.

-PATRICIA GRAUER

Citation to Siebert

Frederick S. Siebert, research professor of communication and dean emeritus of the College of Communication Arts, has received the Missouri Honor Award for Distinguished Service in Journalism.

Siebert, three other individuals and two publications were honored during the 62nd annual Journalism Week at the University of Missouri in Columbia. He was recognized for his "four decades of service as a journalism educator and administrator . . . and his unflagging efforts to build a better understanding of the concept of Freedom of the Press."

Siebert and another award recipient, Howard K. Smith, co-anchor man of ABC's the Evening News, were featured speakers at the annual awards banquet.

In his banquet remarks, Siebert said that journalism, by the 21st century will be mostly electronic, with television dominating the media. He called today's students "earnest and dedicated" and said he is confident that they will be able to improve the quality and scope of future news coverage.

Siebert joined the MSU faculty in 1957 as director of the School of Journalism after 30 years at the University of Illinois. He served as dean of communication arts from 1960 to 1967.

Russian chorus

The MSU Russian Chorus will present a free concert next Tuesday (May 18) at 8 p.m. in People's Church in East Lansing. The concert, featuring Russian folk, composed and liturgical music, is sponsored by the Russian and East European Studies Program.

Tax withholding changes could cost you money

Changes in the federal tax withholding system may mean that some faculty and staff won't have enough individual income tax withheld during 1971.

Most employees will find that withholding and actual tax liability will be fairly even, as in previous years. But withholding will fall short of tax liability for some wage earners,

particularly the following:

- * Faculty or staff members who expect to earn more than \$11,500 in 1971 and who expect to claim either the \$1,500 standard deduction or itemized deductions totaling less than 13 per cent of their salaries.

- * Single employees who anticipate earnings of \$15,000 or more in 1971.

- * Married employees who expect to earn \$25,000 or more this year and whose spouses are not employed.

- * All working couples.

Persons not reasonably sure that enough tax is being withheld can estimate the amount to be withheld during all of 1971, and compare this

with the amount of the expected tax liability on their 1971 incomes.

New exemption certificates (Form W-4) are available in the payroll division, Office of the Comptroller, 350 Administration Building. Persons wishing to make installment payments to the Internal Revenue Service may do so on a Declaration of Estimated Tax (Form 1040 ES).

1971 Tax Rate Schedules

For individuals who itemize deductions and individuals with incomes of \$10,000 or more.

These rates are effective for taxable years beginning on or after January 1, 1971, and are to be used only

for the purpose of computing your tax on Form 1040-ES, Declaration of Estimated Tax for individuals.

Schedule W

Single Taxpayers

Not Qualifying for Rates in Schedule Y

If the amount on line 3, Estimated Tax Worksheet, is: Enter on line 4, Estimated Tax Worksheet:

Not over \$500.....14% of the amount on line 3.

Over—	But not over—		of excess over—
\$2,000	\$4,000	\$310+19%	\$2,000
\$4,000	\$6,000	\$690+21%	\$4,000
\$6,000	\$8,000	\$1,110+24%	\$6,000
\$8,000	\$10,000	\$1,590+25%	\$8,000
\$10,000	\$12,000	\$2,090+27%	\$10,000
\$12,000	\$14,000	\$2,630+29%	\$12,000
\$14,000	\$16,000	\$3,210+31%	\$14,000
\$16,000	\$18,000	\$3,830+34%	\$16,000
\$18,000	\$20,000	\$4,510+36%	\$18,000
\$20,000	\$22,000	\$5,230+38%	\$20,000
\$22,000	\$26,000	\$5,990+40%	\$22,000
\$26,000	\$32,000	\$7,590+45%	\$26,000
\$32,000	\$38,000	\$10,290+50%	\$32,000
\$38,000	\$44,000	\$13,290+55%	\$38,000

Schedule X

Married Taxpayers

Filing Joint Returns and Certain Widows and Widowers

If the amount on line 3, Estimated Tax Worksheet, is: Enter on line 4, Estimated Tax Worksheet:

Not over \$1,000.....14% of the amount on line 3.

Over—	But not over—		of excess over—
\$4,000	\$8,000	\$620+19%	\$4,000
\$8,000	\$12,000	\$1,380+22%	\$8,000
\$12,000	\$16,000	\$2,260+25%	\$12,000
\$16,000	\$20,000	\$3,260+28%	\$16,000
\$20,000	\$24,000	\$4,380+32%	\$20,000
\$24,000	\$28,000	\$5,660+36%	\$24,000
\$28,000	\$32,000	\$7,100+39%	\$28,000
\$32,000	\$36,000	\$8,660+42%	\$32,000
\$36,000	\$40,000	\$10,340+45%	\$36,000
\$40,000	\$44,000	\$12,140+48%	\$40,000
\$44,000	\$52,000	\$14,060+50%	\$44,000
\$52,000	\$64,000	\$18,060+53%	\$52,000
\$64,000	\$76,000	\$24,420+55%	\$64,000
\$76,000	\$88,000	\$31,020+58%	\$76,000

Schedule Y

Unmarried (or legally separated) Taxpayers Who Qualify as Heads of Household

If the amount on line 3, Estimated Tax Worksheet, is: Enter on line 4, Estimated Tax Worksheet:

Not over \$1,000.....14% of the amount on line 3.

Over—	But not over—		of excess over—
\$8,000	\$10,000	\$1,480+23%	\$8,000
\$10,000	\$12,000	\$1,940+25%	\$10,000
\$12,000	\$14,000	\$2,440+27%	\$12,000
\$14,000	\$16,000	\$2,980+28%	\$14,000
\$16,000	\$18,000	\$3,540+31%	\$16,000
\$18,000	\$20,000	\$4,160+32%	\$18,000
\$20,000	\$22,000	\$4,800+35%	\$20,000
\$22,000	\$24,000	\$5,500+36%	\$22,000
\$24,000	\$26,000	\$6,220+38%	\$24,000
\$26,000	\$28,000	\$6,980+41%	\$26,000
\$28,000	\$32,000	\$7,800+42%	\$28,000
\$32,000	\$36,000	\$9,480+45%	\$32,000
\$36,000	\$38,000	\$11,280+48%	\$36,000
\$38,000	\$40,000	\$12,240+51%	\$38,000
\$40,000	\$44,000	\$13,260+52%	\$40,000
\$44,000	\$50,000	\$15,340+55%	\$44,000
\$50,000	\$52,000	\$18,640+56%	\$50,000
\$52,000	\$64,000	\$19,760+58%	\$52,000

Schedule Z

Married Taxpayers

Filing Separate Returns

If the amount on line 3, Estimated Tax Worksheet, is: Enter on line 4, Estimated Tax Worksheet:

Not over \$500.....14% of the amount on line 3.

Over—	But not over—		of excess over—
\$2,000	\$4,000	\$310+19%	\$2,000
\$4,000	\$6,000	\$690+22%	\$4,000
\$6,000	\$8,000	\$1,130+25%	\$6,000
\$8,000	\$10,000	\$1,630+28%	\$8,000
\$10,000	\$12,000	\$2,190+32%	\$10,000
\$12,000	\$14,000	\$2,830+36%	\$12,000
\$14,000	\$16,000	\$3,550+39%	\$14,000
\$16,000	\$18,000	\$4,330+42%	\$16,000
\$18,000	\$20,000	\$5,170+45%	\$18,000
\$20,000	\$22,000	\$6,070+48%	\$20,000
\$22,000	\$26,000	\$7,030+50%	\$22,000
\$26,000	\$32,000	\$9,030+53%	\$26,000
\$32,000	\$38,000	\$12,210+55%	\$32,000
\$38,000	\$44,000	\$15,510+58%	\$38,000

Bulletins

FACULTY MEETING

Wonders Kiva.

The University College faculty meeting will be held at 4 p.m. Thursday, May 20, in

REVISED CLASS LISTS

Revised class lists will be delivered to departmental offices on Friday, May 14.

These lists include the names of all students enrolled in each course and section as of May 12. These should be carefully checked as soon as possible, and questions directed to the Office of the Registrar (3-0731 or 5-9596). Final grade cards corresponding to the students listed on these class lists will be distributed. To insure proper distribution of grade cards, all discrepancies must be cleared prior to May 20.

SKY SCANNING

Afree program emphasizing current sky observation is presented at Abrams

Planetarium the second Thursday of each month at 8 p.m. The topic for May 13 is "Jupiter: The Giant Steps Backward." Outdoor observing will follow the presentation, weather permitting. Anyone interested in becoming familiar with the evening sky is cordially invited.

ATL LECTURE

Richard Morris, secretary of the Committee of Small Magazine Editors and

Presses (COSMEP), will lecture on "The Underground Scene" May 19 at 8 p.m. in Room 38 of the Union. Morris is the editor of Camels Coming Press and the author of several volumes of poetry. His lecture is part of the Counter Culture Festival being sponsored during May by the Dept. of American Thought and Language.

FICTION CRITIQUED

Sheldon Sacks, professor at the University of Chicago, will give an informal

discussion of his critical approach to fiction at 8 p.m. Thursday, May 20, in the Green Room of the Union. The talk is sponsored by the English Dept.

GAMUT ON WMSB

On Gamut Saturday, the MSU Broadcasters' Guild presents "The Art of

Karate," a program that will investigate the origin and background of Karate and talk about the Karate tournament following the program. Gamut can be seen Saturday mornings at 10:30 a.m. on WMSB-TV Channel 10

LECTURE ON ART

Elizabeth Gilmore Holt, visiting lecturer in the history of art, will give an

illustrated lecture on "Images of Horror: The Fantastic and the Terrible in 19th Century Art" at 8 p.m. Thursday, May 20. The lecture, in 137 Akers Hall, will be sponsored by the College of Arts and Arts and Letters.

HORIZONS ON WKAR

Saturday on Horizons, the problems of the returning veteran are featured on

"Vietnam Veterans Rehabilitation." Resettlement and readjustment to family and job are two of the topics discussed. Horizons can be heard at 5:30 p.m. Saturdays on WKAR-AM (870 khz.)

SEMINARS

concluded from page 8

Induction of autolytic enzymes associated with cell division in E. Coli.

D. Joseph Clark, U. of British Columbia. 4:10 p.m., 146 Giltner Hall (Microbiology & Public Health).

Botanical research of 18th century Spanish expedition to New Spain.

Rogers McVaugh, u. of Michigan, noon, 168 Plant Biology (Organismic Botany).

Measuring serum-free salicylate. **Fusako Maehira**, 4:10 p.m., 346 Giltner Hall (Pathology).

The renin-angiotensin system. **I. B. Wilson**, U. of Colorado. 4 p.m., Rm. 334, Giltner (Pharmacology).

WEDNESDAY, MAY 19, 1971

Photoelectron emission by solutions: details of theoretical aspects and experimental methods. **Paul Delahay**, New York U., N.Y. 3 p.m., 138 Chemistry Bldg. (Chemistry).

General systems approach to the study of the family. **David Olson**, Family Dev. Section, HEW, NIMH, Bethesda, Md., 1 p.m., 301 Human Ecology Bldg. (Family Ecology & Family and Child Sciences).

Tryptophan metabolism in the ruminant animal. **Constantine L. Fenderson**, 4:10 p.m., 131 Anthony Hall (Institute of Nutrition).

New concepts in bovine mastitis research. **John McDonald**, 12:15 p.m., 213 Vet Clinic (Large Animal Surg. & Med.).

Undergraduate education at MSU. **Dorothy Arata**, 3 p.m., 322 North Kedzie (Natural Science).

Effects of helminthosporium carbonum toxin on nitrogen metabolism and membrane characteristics of corn cells. **Olen Yoder**, 4:10 p.m., 168 Plant Biology (Plant Pathology).

Reports from the American Animal Hospital Assoc. meeting held in Miami, Florida, April 25-30. **Ralph McGovney**, **R. G. Schirmer**, and **Gretchen Flo**, 7:45 a.m., S123 Veterinary Clinic (Small Animal Surg. & Med.).

THURSDAY, MAY 20, 1971

Combined effects of source and message on attitude change. **Harold B. Gerard** of UCLA, 4 p.m., 304 Olds Hall (Psychology).

OBSERVATORY OPEN

There will be a public open night at the observatory on Saturday, May 15. The observatory will be open 8:30-11 p.m. Children under 13 should be accompanied by an adult, with at least one adult per three children.

TEA HOUR MONDAY

Wu-chi Liu, chairman of the English department at the University in Chungking, China, will speak on "Moral and Aesthetic Values in Chinese Literature" at 3 p.m. Monday, May 17, in the Green Room of the Union. He is currently a sprofessor of Chinese language and literature at Indiana University and a visiting professor at Yale.

SEMINAR ADDITIONS

Lerner B. Hinshaw, University of Oklahoma Medical School, will speak on "The role of the heart in shock" Friday, May 14, at 9 a.m., 216 Giltner Hall, sponsored by physiology. John Harris of MIT will speak on "Migration and unemployment in Africa" at 3 p.m. Friday in 16 Agriculture Hall, sponsored by Economic Development.

NAVAL RES. RESEARCH

The Naval Research Reserve will sponsor a seminar at 7:30 p.m. Monday, May 17, in 102 N. Kedzie. Walter Johnson of the College of Education will speak on "The Current Revolution in Educational Philosophy." Former Naval officers are invited to become members of this Naval Reserve Seminar, to attend meetings on scientific and educational matters twice a month. For more information, call Maynard Miller in geology, 3-7862.

STUDIES GROUP FILMS

"And Quiet Flows the Don," a Soviet film will be shown tonight at 7:30 p.m. in 101 N. Kedzie, sponsored by the Russian and East European Studies Group. A second film, "Great Battle of the Volga," will be shown at 7:30 p.m. Monday, May 17, in 106B Wells Hall. No admission charge.

SEMINAR SERIES HERE

The Asian Studies Center, in coöperation with several other departments, will present a series of seminars on "Socioeconomic and Cultural Change in Taiwan" with Martin M. C. Yang, professor of rural sociology at the National Taiwan University NTU. Yang is a former chairman of the Dept. of Agricultural Extension at NTU and the author of "A Chinese Village" and "Chinese Social Structure." Notices of the seminars will be published in the seminar section of this paper.

OUTDOOR POOL OPENS

The outdoor pool will open Saturday, May 22, weather permitting. No guests will be allowed until the end of spring term, June 13.

U. CLUB BARBECUE

The University Club will hold a family chicken barbecue 5-7 p.m. Saturday, May 25. Swimming races for children are set for 4-5 p.m. Following dinner there will be movies for children; dancing for teenagers and adults. Reservations should be made by 7 p.m. Wednesday, May 26.

Investment and disinvestment. **Francis Idachaba**, 3:30 p.m., 16 Ag Hall (Agricultural Economics).

Studies on viral RNA dependent DNA polymerase. **Maurice Green**, Institute for Molecular Virology, St. Louis U. (Mo.) Medical School, 4:10 p.m., 101 Biochemistry (Biochemistry).

Police-citizen relations in Britain and the United States, **Michael Banton**, U. of Bristol, England; 7:30 p.m., 11 Olds Hall (Criminal Justice).

Structural geology and geophysics—without really trying. **Mary Davis**, 3 p.m. 205 Natural Science (Geology).

Resonant phonon-assisted generation of second-harmonic light. **P. N. Keating**, Bendix Research Labs. 4:10 p.m., 221 Physics-Astronomy (Physics Depts.).

Camel physiology. **W. V. Macfarlane**, of Adelaide, Glen Osmond, South Australia, 3 p.m. 107 South Kedzie (Depts. of Physiology & Zoology).

FRIDAY, MAY 21, 1971

Functions of aboriginal desert nomads in summer. **W. V. Macfarlane**, of Adelaide, Glensmond, Aouth Australia; 3 p.m., 109 South Kedzie (Depts. of Physiology & Zoology).

Salvinig on Lake Kariba—the spectacular explosive growth of an aquatic weed on a large tropical man-made lake. **D. S. Mitchell**, U. of Rhodesia; Room 338, Natural Resources (Institute of Water Research).

May 14-15	Junior Academy of Science
May 16-20	Midwest Housing Institute (ACUHO)
May 17	Pupil Personnel Conference
May 17-18	Government Accountants Conference
May 18-20	Michigan United Fund
May 19-20	Impact of White Collar Union
May 20	Mastitis — Vet. Clinic
May 20-21	Family Service Agencies
May 21	Michigan Council on International Education
May 21-22	Student Conference on African Studies
May 21-23	Michigan Kidney Foundation

All Conferences are held at Kellogg Center unless otherwise noted.

Friday, May 14, 1971

- Parents Weekend.
- 9 a.m. Greenwich Village Days—Many students and faculty members will join the more than 100 artists displaying their work on sidewalks of East Lansing. Included will be paintings, sketches, pottery and ceramics, handweaving, macrame, glass blowing and other items. Open until dusk.
- 2 p.m. Baseball—MSU vs. Wisconsin, doubleheader. Admission is \$1 for adults; 50 cents for children. John Kobs Field.
- 7:30 p.m. International Film Series—"Funny Girl," starring Barbra Streisand, is the musical drama of the late Fanny Brice. Admission is \$1, available at the door. Auditorium.
- 8 p.m. Pop Entertainment—ASMSU presents The Guess Who and Zebra. Tickets available at Marshall's, Campbell's and the Union Ticket Office. Jenison Field House.
- 8 p.m. Planetarium Program—"The New World" is an original science fiction drama created especially for presentation at Abrams. Last weekend for the program. Admission is \$1 for adults; 50 cents for students and children.
- 8:15 p.m. Concert—University Chorale will perform. Music Auditorium.
- 8:30 p.m. New Players—"One Flew Over the Cuckoo's Nest" uses unusual effects to bring to life a day in a mental institution. Tickets, \$2, available at the Union Ticket Office, Marshall's State Discount and Lum's. Wonders Kiva.
- 8:30 p.m. New Players—"Tom Paine," a two-part play by Paul Foster, will be the last production of the season. Shaw Little Theater.
- 10 p.m. Planetarium Program (see above) Abrams.
- midnight Planetarium Program (see above) Abrams.

Saturday, May 15, 1971

- 9 a.m. Greenwich Village Days (see May 14). East Lansing.
- 10 a.m. Karate—Fifth annual Karate Club tournament. Sports Arena.
- 1 p.m. Baseball—MSU vs. Northwestern, doubleheader. John Kobs Field.
- 1 p.m. Track—MSU vs. Indiana, running events. Field events begin at 12:30. No admission charge. Ralph Young Field.
- 2 p.m. Green and White Football Game.
- 2 p.m. Football—Green and White Game. Final intra-squad game of the spring training period. Tickets are \$2 for adults; \$1 for students and children. Spartan Stadium.
- 2 p.m. Lacrosse—MSU vs. Chicago Lacrosse Club. No admission charge. Old College Field.
- 2:30 p.m. Planetarium Program (see May 14). Abrams.
- 7 p.m. New Players ("Cuckoo's Nest", see May 14). Wonders Kiva.
- 7 p.m. New Players ("Tom Paine", see May 14). Shaw Little Theater.
- 8 p.m. Planetarium Program (see May 14). Abrams.
- 10 p.m. New Players ("Cuckoo's Nest", see May 14). Wonders Kiva.
- 10 p.m. New Players ("Tom Paine", see May 14). Shaw Little Theater.
- 10 p.m. Planetarium Program (see May 14). Abrams.
- midnight Planetarium Program (see May 14). Abrams.

Sunday, May 16, 1971

- 2:30 p.m. Planetarium Program (see May 14). Abrams.
- 4 p.m. Planetarium Program (see May 14). Abrams.
- 6 p.m. Outdoor Concert—The Band will perform on grounds near Spartan Village.
- 7:30 p.m. New Players ("Cuckoo's Nest", see May 14). Wonders Kiva.
- 8:15 p.m. Graduate Recital—Tenor Stephen Oosting will perform. Music Auditorium.

Monday, May 17, 1971

- 8 p.m. University Club family movies, with Keystone Cops, will follow buffet supper. University Club.
- 8:15 p.m. Graduate Recital—Organist Donald Busarow will perform. Hart Recital Hall.
- 8:15 p.m. Concert—The Symphony Orchestra will perform works by Mendelssohn and Hindemith. Okemos Fine Arts Center.

Tuesday, May 18, 1971

- noon University Club Luncheon—Guest speaker will be Bernie Offerman, instructor in labor and industrial relations, on "Manpower Training in the '70s."
- 3 p.m. Elected Faculty Council meeting. Con Con Room, International Center.
- 8 p.m. Award-winning Film—William Greaves, who received an Emmy Award as executive producer of NET's "Black Journal," will show one of his films and visit with students. Conrad Auditorium.
- 8:15 p.m. Graduate Recital—Pianist Evelyn Mariani will perform. Music Auditorium.

Wednesday, May 19, 1971

- 4 p.m. Academic Senate meeting. Anthony Auditorium.
- 7:15 p.m. University Club informal bridge.

Thursday, May 20, 1971

- 8 p.m. Performing Arts Company (PAC)—Opening three plays in repertory will be "The Rope Dancers." Tickets, \$2, available at the Fairchild box office, open afternoons during the week and one hour before performance. Arena Theatre.
- 8:15 p.m. Graduate Recital—Pianist Barbara Heys will perform. Music Auditorium.
- 8:30 p.m. New Players ("Tom Paine" see May 14). Wonders Kiva.

Friday, May 21, 1971

- Alumni Weekend.
- 10 a.m. Board of Trustees—monthly meeting. Board Room, Hannah Administration Bldg.
- 8 p.m. PAC (see May 20). Arena Theatre.
- 8 p.m. Planetarium Program—"Stellarphonic Moog," running two weekends only, features original music on the moog synthesizer creatively blended with lighting by The Eye See The Light Show Company. Admission by advanced tickets, \$1.50, available at the planetarium or the Union Ticket Office. Abrams.
- 8:30 p.m. New Players ("Tom Paine" see May 14). Wonders Kiva.
- 9 p.m. University Club informal dancing to music by the Spartan Four will follow bridge which begins at 8 p.m.
- 10 p.m. Planetarium Program (see above). Abrams.
- midnight Planetarium Program (see above). Abrams.

Saturday, May 22, 1971

- 2 p.m. Lacrosse—MSU vs. Wittenberg. No admission charge. Old College Field.
- 2:30 p.m. Planetarium Program (see May 21). Abrams.
- 7 p.m. New Players ("Tom Paine" see May 14). Wonders Kiva.
- 8 p.m. PAC (see May 20). Arena Theatre.
- 8 p.m. Planetarium Program (see May 21). Abrams.
- 10 p.m. New Players ("Tom Paine" see May 14). Wonders Kiva.
- 10 p.m. Planetarium Program (see May 21). Abrams.
- midnight Planetarium Program (see May 21). Abrams.

SEMINARS

MONDAY, MAY 17, 1971

- Ionizing radiobiology: discipline and tool. **Alan Haber**, Oak Ridge National Lab, 4:10 p.m., 106 Plant Biology (AEC Plant Research Lab).
- Photochemistry of pesticides. **Matthew Zabik**, 4 p.m., 136 Chemistry (Biophysics).
- Photoelectron emission by solutions, **Paul Delahay**, New York U., 4 p.m., 138 Chemistry Bldg. (Chemistry).
- Lactational effects on fatty acid and glycerol mobilization, **Kirpal Sidhu**, 12:30 p.m., 126 Anthony (Dairy).
- Enzymatic changes in bovine adipose and mammary tissue with initiation of lactation. **John E. Shirley**, 12:30 p.m., 126 Anthony Hall (Dairy).
- Acetyl-CoA synthetase activity in non-lactating and lactating heifer mammary gland. **Diana Marinex**, 12:30 p.m., 126 Anthony (Dairy).
- Natural toxicants in foods. **Olaf Mickelsen**, 4 p.m., 110 Anthony Hall (Food Science & Human Nutrition).
- Food Science Forum, **Georg Borgstrom**, 103 Food Science 8 a.m.

- Quantum, statistical mechanics and vapour pressure. **G. Pollack**, 4:10 p.m., 118 Physics-Astronomy Bldg. (Physics).
- Excitation-contraction coupling and ultrastructure of vascular smooth muscle. **Andrew P. Somlyo**, Presbyterian-U of Pennsylvania, Medical Center, Philadelphia, 4 p.m., 107 S. Kedzie (Physiology).

TUESDAY, MAY 18, 1971

- Was land reform in Taiwan a mistake—merits and weaknesses as seen in 1971. **Martin M. C. Yang**, National Taiwan U.; 3 p.m., 16 Agricultural Hall (Agricultural Economics).
- Acid-base equilibria of aprotic solvents of intermediate dielectric constants. **I. M. Kolthoff**, U. of Minnesota, 4 p.m., 136 Chemistry Bldg. (Chemistry).
- Successful teaching of general mathematics. **Jack Foley**, Florida Atlantic U. 4:10 p.m., A304 Wells Hall (Mathematics-Education).