

MEETING OF THE BOARD OF TRUSTEES
OF THE
UNIVERSITY OF ILLINOIS

May 17, 1960



The May meeting of the Board of Trustees of the University of Illinois was held in the Illini Union Building, Urbana, Illinois, on Tuesday, May 17, 1960, beginning at 2:00 p.m.

The following members of the Board were present: Mr. Howard W. Clement, Mr. Richard A. Harewood, Mr. Earl M. Hughes, Mr. Wayne A. Johnston, Mr. Harold Pogue, Mr. Timothy W. Swain, Mrs. Frances B. Watkins, Mr. George T. Wilkins, Mr. Kenney E. Williamson. Mr. Wirt Herrick and Governor William G. Stratton were absent.

Also present were President David D. Henry, Vice-President and Provost Gordon N. Ray, Dr. H. E. Longenecker, Vice-President in charge of the Chicago Professional Colleges, Executive Dean C. C. Caveny of the Chicago Undergraduate Division, Dean Lyle H. Lanier of the College of Liberal Arts and Sciences and Provost-Elect, Director C. S. Havens of the Physical Plant, Mr. Ralph F. Lesemann, Legal Counsel, Mr. C. E. Flynn, Director of Public Information, Mr. Vernon L. Kretschmer, Director of Auxiliary Services, Mr. Joseph S. Begando, Assistant to the President; and the officers of the Board, Mr. H. O. Farber, Comptroller, Mr. C. W. Weldon, Treasurer, and Mr. A. J. Janata, Secretary.

MEETINGS OF COMMITTEES

A meeting of the Board's Finance Committee was held in the Illini Union Building, on Monday, May 16, beginning at 8:00 p.m., and meetings of the Committees on General Policy and Buildings and Grounds were held on Tuesday, May 17, in the forenoon, beginning at 9:30 and 11:00 a.m.

MINUTES APPROVED

The Secretary presented the minutes of the meetings of the Board of Trustees on December 16, 1959, and January 20, 1960, press proof copies of which have previously been sent to the Board.

On motion of Mrs. Watkins, these minutes were approved as printed on pages 1091 to 1160, inclusive.

BUSINESS PRESENTED BY THE PRESIDENT OF THE UNIVERSITY

The Board took up consideration of the following reports and recommendations from the President of the University.

APPOINTMENTS TO THE FACULTY

(1) The following new appointments to the faculty of the rank of Assistant Professor and above, and involving tenure, have been approved since the previous meeting of the Board of Trustees.

1. ARTHUR E. BARKER, Professor of English, beginning February 1, 1961, at an annual salary of \$16,000 (A).
2. JOHN JAY BATEMAN, Assistant Professor of Classics, beginning September 1, 1960, at an annual salary of \$7,500 (B).
3. JOHN L. BRITTON, Visiting Assistant Professor of Mathematics, for one year beginning September 1, 1960, at a salary of \$7,500 (D).
4. JACK M. CRANNELL, Assistant Manager, WILL-TV, with rank of Assistant Professor, in the Division of University Broadcasting, on one-half time, and in the Office of Instructional Television, on one-half time, beginning June 1, 1960, at an annual salary of \$9,600 (DY).
5. FREDERIK W. DE WETTE, Research Assistant Professor of Physics, beginning May 16, 1960, at an annual salary of \$8,400 (DY).
6. ROBERT E. GALLAGHER, Assistant Professor of English, in the Division of Humanities, Chicago Undergraduate Division, beginning September 1, 1960, at an annual salary of \$6,600 (B).
7. HOWARD J. GAMBLE, Visiting Associate Professor of Anatomy, in the College of Medicine, for one year from September 1, 1960, at a salary of \$12,000 (DY).
8. JERRY HIRSCH, Associate Professor of Psychology, beginning July 1, 1960, at an annual salary of \$8,500 (on leave of absence without pay from July 1, 1960, to February 1, 1961) (A).
9. DONNELL R. HUNT, Associate Professor of Agricultural Engineering, beginning September 1, 1960, at an annual salary of \$10,500 (AY).
10. WILTON N. MELHORN, Visiting Associate Professor of Geology, for ten months from September 1, 1960, at a salary of \$8,150 (G).
11. STEPHEN L. SHERWOOD, Clinical Associate Professor of Neurophysiology, in the Department of Psychiatry, College of Medicine, beginning April 1, 1960, without salary (AY).
12. JOSEPH SIMON, Professor of Veterinary Pathology and Hygiene, in the College of Veterinary Medicine, and of Veterinary Research, in the Agricultural Experiment Station, for two years from May 1, 1960, at an annual salary of \$12,000 (FY).
13. HARRY J. SKORNIA, Associate Professor of Radio and Television, in the College of Journalism and Communications, beginning September 1, 1960, at an annual salary of \$12,300 (A).
14. HERBERT STERN, Professor of Botany, for one month beginning August 1, 1960, at a salary of \$1,166.67; and for the academic year beginning September 1, 1960, at a salary of \$10,500.

15. NOBORU SUEOKA, Assistant Professor of Microbiology, in the Graduate College, beginning September 1, 1960, at an annual salary of \$8,500 (B).
16. EDWARD C. THOMPSON, Clinical Assistant Professor of Oral and Maxillofacial Surgery, in the College of Dentistry, beginning April 18, 1960, without salary (DY).
17. MORTON W. WEIR, Assistant Professor of Psychology, beginning September 1, 1960, at an annual salary of \$6,300 (B).

Appointments to Nonacademic Staff

The Director of Nonacademic Personnel reports the following appointments to a supervisory position of upper level responsibility.

1. EDWIN E. ATWOOD, Site Planner, Physical Plant-Site Planning Office, beginning April 1, 1960, at an annual salary of \$10,000.
2. ROY W. DART, Assistant to Director of Health Services, beginning March 28, 1960, at an annual salary of \$5,700.
3. FLOYD E. DAVIS, Produce Supervisor, Residence Halls, beginning April 6, 1960, at an annual salary of \$5,700.
4. BUD J. MEADOR, Assistant Director of Statistical Service Unit, beginning April 1, 1960, at an annual salary of \$8,200.
5. RICHARD MARRS SELLEG, Landscape Architect, Physical Plant, beginning March 7, 1960, at an annual salary of \$7,200.

On motion of Mr. Swain, these appointments were confirmed.

SABBATICAL LEAVES OF ABSENCE, 1960-61

- (2) I recommend that the following members of the staff be given sabbatical leaves of absence during the academic year 1960-61 in accordance with the provisions of the University of Illinois Statutes and on the terms and for the period indicated. This is supplemental to the lists of applications recommended to the Board of Trustees at the meetings on March 16 and April 20, 1960.

College of Agriculture

- H. H. DRAPER, Assistant Professor of Animal Nutrition, second semester, full pay; for research on biological function and metabolism of Vitamin E; work to be done at the University of Liverpool where significant discoveries in this field of research have been made in recent years.
- CLEO A. HALL, Assistant State Leader of Home Advisers and Assistant Professor of Home Economics Extension, one year beginning October 1, 1960, one-half pay; for studies for professional improvement in the area of supervision and administration of state and county programs in home economics. (These are not studies for an advanced degree.)
- JANE E. WERDEN, Associate Professor of Home Economics, one year, beginning September 1, 1960, one-half pay; for studies in the fields of sociology, cultural anthropology, and psychology, for professional improvement and for relating these studies to her field of teaching and research in home economics. (These are not studies for an advanced degree; Miss Werden already has a Ph.D. degree.)

Chicago Undergraduate Division

- IRWIN K. FEINSTEIN, Associate Professor of Mathematics Education, second semester, full pay; for studies of the impact of modern mathematics on the curriculum of the elementary school and the educational methods and techniques employed and the learning situation encountered by pupils and teachers alike.

On motion of Mr. Clement, these leaves were granted, as recommended.

HONORARY DEGREES

- (3) The Urbana-Champaign Senate on April 11, 1960, voted to recommend that honorary degrees be conferred as follows:

EDWARD ADELBERT DOISY, Distinguished Service Professor of Biochemistry and Director of the Edward A. Doisy Department of Biochemistry, School of Medicine, St. Louis University — Doctor of Science.

VINCENT DU VIGNEAUD, Professor and Head of the Department of Biochemistry of Cornell University Medical College—Doctor of Science.
 JAMES R. KILLIAN, JR., Chairman of the Corporation, Massachusetts Institute of Technology—Doctor of Engineering.

These degrees will be conferred at the Commencement Exercises in Urbana on June 18, 1960, or at some other appropriate convocation in case any of the recipients is unable to be present at the June Commencement.

The presentations made to the Urbana-Champaign Senate in support of the nominations of the candidates are submitted herewith, and copies are being filed with the Secretary of the Board.

On motion of Mr. Hughes, the President of the University was authorized to confer these degrees, as recommended.

AWARD OF CERTIFIED PUBLIC ACCOUNTANT CERTIFICATES

(4) The Committee on Accountancy recommends that the certificate of Certified Public Accountant be awarded, under Section 5 of the Accountancy Act of 1943 as amended, to the following candidates who have presented evidence that they are holders of valid and unrevoked Certified Public Accountant certificates obtained by passing a standard written examination in another state or territory of the United States and who qualify in all other respects under this provision of the law:

<i>Name</i>	<i>Address</i>	<i>State from Which They Obtained Certificates</i>
ROBERT PAUL BEHLING	Chicago	Kansas
JAMES HOWARD BUCHER	Sikeston, Missouri	Missouri
EDWARD RAYMOND DEPPMAN	Chicago	Washington
ELMER WILLIAM ETLING, JR.	Belleville	Missouri
HENRY JOHN LUNNEMANN	St. Louis, Missouri	Missouri
WILLIAM ALTON MCCANN	Sikeston, Missouri	Missouri
LEO WALTER PIETRACK	Gary, Indiana	Indiana
LEWIS WILLIAM SEIDMAN	Ada, Michigan	Michigan
EARL EUGENE SODER	Downers Grove	Iowa
JACK GERARD WAHLIG	Dubuque, Iowa	Iowa

I concur.

On motion of Mr. Johnston, these certificates were awarded.

UNDERGRADUATE SCHOLARSHIPS FOR JUNIOR COLLEGE GRADUATES

(5) The Committee on Fees recommends authorization of seventy-five tuition-waiver scholarships for graduates of junior colleges in Illinois to be awarded on the basis of superior scholarship and financial need.

At present, graduates of junior colleges transferring to the University of Illinois are not eligible for some of the tuition-waiver scholarships, such as the County Scholarships, available to high school graduates. The Board of Trustees has recently authorized the award of tuition-waiver undergraduate scholarships to high school seniors who rank the highest in the County Scholarships examinations but who are technically ineligible for such scholarships because they have had work in high school at the college level. The present proposal would encourage the junior college movement and would improve relationships between the University and these colleges.

It is recommended that these scholarship awards be on a continuing basis, effective September, 1960, that they provide exemption from payment of tuition fees only, and that each scholarship shall be for a period of two years.

On motion of Mr. Wilkins, these scholarships were authorized, as recommended.

GRADUATE PROGRAM IN RUSSIAN LANGUAGE AND AREA STUDIES

(6) The Urbana-Champaign Senate recommends establishment of graduate minors in Russian Language and Area Studies as follows:

Minor for the Master's Degree. A candidate for the master's degree who elects Russian Language and Area Studies as a minor must earn at least two units

of graduate credit in specified courses chosen from anthropology, economics, geography, history, political science, and Russian. The courses chosen must be in at least two departments.

Minor for the Ph.D. Degree. A doctoral candidate who elects Russian Language and Area Studies as a minor must demonstrate a reading command of Russian as tested by examination or by completion of Russian 401 with a grade of "A" or "B" and in addition must earn at least four units of graduate credit in courses chosen from the list given just above. The four units must be distributed among at least two departments, not including the department offering the candidate's major.

This program has been approved by the Executive Committee of the Graduate College.

The Senate Coordinating Council indicates that no other Senate jurisdiction is involved.

I recommend approval.

On motion of Mr. Harewood, this recommendation was approved.

GRADUATE PROGRAM IN CHEMICAL PHYSICS

(7) The Urbana-Champaign Senate recommends authorization of a graduate program leading to the degree of Doctor of Philosophy in Chemical Physics. This program has been approved by the Executive Committee of the Graduate College. Its objective is to make it possible for students to gain the necessary background for original research in the interdisciplinary field of chemistry, physics, and mathematics.

The Senate Coordinating Council indicates that no other Senate jurisdiction is involved.

There is submitted herewith a statement giving the requirements for admission and for the degree, a copy of which is being filed with the Secretary of the Board for record.

I recommend approval.

On motion of Mrs. Watkins, this recommendation was approved.

CHANGE IN REQUIREMENTS FOR TEACHERS OF VOCATIONAL AGRICULTURE

(8) The Urbana-Champaign Senate recommends approval of minors in general science and biology for teachers of vocational agriculture, which are necessary for teachers of vocational agriculture to obtain certification as teachers of general science or biology, under the law requiring twenty-four hours for a minor in these areas which will become effective in 1961. These changes have been approved by the Committee on Preparation of Secondary Teachers of Vocational Agriculture, the Committee on the Preparation of Secondary Teachers of Science, and the Council on Teacher Education.

The Senate Coordinating Council indicates that no other Senate jurisdiction is involved.

Submitted herewith are the details of these new requirements, a copy of which is being filed with the Secretary of the Board for record.

I recommend approval.

On motion of Mr. Hughes, this recommendation was approved.

SUMMER SPEECH CLINIC WORK BY DIVISION OF SERVICES FOR CRIPPLED CHILDREN

(9) The Division of Services for Crippled Children has been supporting summer speech clinics in cooperation with higher educational institutions in several areas of the state. The patients are children who can not be given the necessary care in their communities and those selected represent some of the most complex speech rehabilitation problems and are cases afflicted with cerebral palsy, cleft palate, severe hearing loss, and aphasia. They are eligible for treatment under the program of the Division and are in need of speech treatment as an integral part of the complete medical care program. Cooperating institutions contribute their facilities and staff.

It is recommended that during the summer of 1960 speech clinics be authorized in the following institutions on a reimbursable cost basis, estimated as follows:

Rockford College, Rockford.....	\$26 076 75
Augustana College, Rock Island.....	8 892 50
Northern Illinois University, DeKalb.....	8 675 20
Southern Illinois University, Carbondale.....	8 820 00
Illinois State Normal University, Normal.....	10 823 00
	\$63 287 45

A similar clinic will be conducted at the University of Illinois at Urbana at an estimated cost of..... 15 119 00

Funds are available in the budget of the Division of Services for Crippled Children.

The Director of the Division of Services for Crippled Children, the Vice-President in charge of the Chicago Professional Colleges, and the Vice-President and Comptroller join in this recommendation.

I concur.

On motion of Mr. Johnston, this recommendation was approved.

CLINICAL RESEARCH CENTER IN THE RESEARCH AND EDUCATIONAL HOSPITALS

(10) The Department of Medicine in the College of Medicine has prepared a proposal to the National Institutes of Health, United States Department of Health, Education, and Welfare, for the establishment of a Clinical Research Center on the eighth floor of the Research and Educational Hospitals. The proposal includes an application for funds amounting to \$489,294 for the first year, \$305,592 for the second year, \$310,814 for the third year, \$316,296 for the fourth year, and \$322,055 for the fifth year.

The budget for the first year includes \$238,583 for renovation and major equipment, \$50,104 for operating expenses, and \$200,607 for basic hospitalization expenses for patients admitted to the Center for study.

In order to meet a date deadline for the consideration of this application, it was submitted on April 26 with the approval of the Vice-President in charge of the Chicago Professional Colleges.

I recommend authorization of this application and acceptance of funds for the initiation of this project if approval is received from the National Institutes of Health.

On motion of Mrs. Watkins, this recommendation was approved.

ILLINI UNION SERVICE CHARGES

(11) The Committee on Fees recommends increases in service charges as follows: Illini Union Building, from \$7.00 a semester to \$10.00 a semester, and the Chicago Illini Union Building, from \$3.50 a quarter to \$5.00 a quarter.

These adjustments are necessary to cover the costs of general building operations. The Illini Union service charge was originally set at \$5.00 in 1940 and was increased to \$7.00 in 1951. Salaries and wages of Illini Union staff and operating costs of the building have, of course, been increasing. Rates in service activities have been adjusted in keeping with these increased costs but there is a deficit in general building operations which is supported solely by the student fee.

Submitted herewith is a communication from the Student Senate at Urbana requesting that the Board of Trustees carefully consider one or more of the following as alternatives to the proposed increase in the Illini Union Building service charge:

1. That the faculty should be assessed to help pay its proportionate part of the expense of the Union's operation, and/or
2. That the University compensate for its use by the faculty, the amount of the compensation to be equal to that paid in 1953 with adjustments for increased size of faculty and the inflation of the period, and/or
3. That *all* students of the University, including those on graduate fellowships and those carrying less than five academic hours, be assessed an appropriate fee for their use of the Union, and/or
4. That the University give the Union free use of its utilities (steam, water, and electricity) as is done in other Big Ten universities.

At the meeting of the Board on April 20 there was presented a petition signed by some 750 students supporting the resolution of the Student Senate.

Also submitted is a reply to the Student Senate's request by the Vice-President and Comptroller. Copies of these documents are being filed with the Secretary of the Board for record.

The alternatives suggested in the Student Senate's proposal are plausible, and have been given due consideration, but are not feasible because:

All income from state tax funds and from student fees is fully budgeted for the current biennium. Any assignments from University funds to Illini Union Building operations would require additional income and this would mean an increase in the general tuition fee. The net result so far as the student is concerned would be the same.

While it may be argued that proposals 1 and 3 of the Student Senate—assessment of the faculty and requiring *all* students including those holding graduate fellowships to pay the Illini Union Building service charge—would not add to the expenses of the University, in both cases this would mean a change in basic contracts of appointment, which could be accomplished only by adjustments in the salaries and stipends.

In the preparation of the next biennial budget, consideration can be given to some of the alternatives recommended by the Student Senate.

I recommend approval of the changes in fees indicated.

On motion of Mr. Johnston, these changes in service charges were approved.

At this point Mr. Wilkins left the meeting.

APPROPRIATIONS FOR NONRECURRING EXPENDITURES

(12) The Committee on Nonrecurring Appropriations recommends assignments of funds from the University's General Reserve, and from funds available in the state capital appropriations to the University for 1959-61 for remodeling, for the following:

1. College of Agriculture		
Completion of space for instruction in food technology in the Horticulture Field Laboratory.....	\$	2 500 00
Classroom in Agricultural Engineering Building.....		5 195 00
2. College of Engineering		
Department of Physics, construction of a temporary building adjoining the Physics Research Laboratory site.....		28 200 00
Department of Civil Engineering, purchase of a milling machine for use in graduate and structural research programs.....		15 000 00
3. College of Liberal Arts and Sciences		
Department of Botany, purchase of equipment.....		18 525 00
Department of Chemistry and Chemical Engineering:		
Completion of remodeling of physical chemistry laboratory.....	\$65 000 00	
Remodeling organic chemistry laboratory and equipment.....	80 500 00	145 500 00
4. College of Fine and Applied Arts		
Department of Architecture:		
Eighty drafting tables and stools.....	\$ 5 652 00	
Twenty-four exhibition and judgment panels....		384 00
Furniture.....		916 00
Shades for three rooms.....		410 00
Speaker stands.....		179 00
Slides.....	3 200 00	10 741 00
Department of Art:		
Furniture for drawing program.....	\$ 3 460 00	
Furniture for freshman program.....		4 560 00
Storage facilities for sculpture.....		2 000 00
Teaching equipment for painting and drawing programs.....		8 000 00
Equipment for sculpture program.....		13 800 00
Furniture for lounge.....	5 000 00	36 820 00

Department of City Planning and Landscape Architecture:			
Office furniture	\$	600 00	
Calculator		900 00	
Mimeograph, dictating, and duplicating machines	I	175 00	
Twenty drafting tables.....	I	300 00	
Slides.....		400 00	
Remodeling in building at 1202 West California.		800 00	5 175 00
5. College of Physical Education			
Remodeling in Huff Gymnasium for laboratory facilities for Health and Safety Education.....			23 235 00
6. Chicago Professional Colleges			
Remodeling for Department of Ophthalmology.....		30 000 00	
Conversion of College of Pharmacy classrooms into offices.....		10 000 00	
Remodeling College of Medicine Research Laboratories.....		10 000 00	
Remodeling Dental Clinic.....		16 500 00	
7. Chicago Undergraduate Division			
Remodeling lecture room to provide three classrooms.....		13 000 00	
8. Physical Plant			
Relocation of the tennis courts at Fifth and Armory Streets to clear site for Institute of Labor and Industrial Relations building..		27 000 00	
Relocation of Institute of Government and Public Affairs to provide site for Biology Building addition.....		27 500 00	
Remodeling in Natural History Building to provide a teaching laboratory for botany.....		16 475 00	
Remodeling building at 505 South Goodwin Avenue, Urbana....		10 000 00	
Partitioning rooms in Altgeld Hall, Davenport Hall, English Building, and Gregory Hall.....		40 800 00	
Improvements in Architecture Building:			
Remodeling to provide additional offices.....	\$	8 000 00	
Remodeling to provide additional library space..		18 000 00	
Remodeling classroom	I	150 00	
Chalk boards for four rooms.....	I	795 00	
Construction of partition and doors.....	I	970 00	
Improvements in lighting.....		19 000 00	49 915 00
Improvements in David Kinley Hall:			
Remodeling of rooms, partitioning of areas to provide additional offices; central lighting for the same.....	\$	23 000 00	
Remodeling and equipment of rooms for Graduate School of Business Administration.....		6 200 00	29 200 00
Remodeling Commerce Annex into offices.....		14 000 00	
Partitioning, painting, and lighting in Sixth Street Building.....		4 430 00	
Remodeling space in Gregory Hall vacated by National Association of Educational Broadcasters.....		7 000 00	
Changes in locker system in Men's Old Gymnasium.....		30 000 00	
Total.....			\$626 711 00

I concur.

On motion of Mr. Swain, these appropriations were made by the following vote: Aye, Mr. Clement, Mr. Harewood, Mr. Hughes, Mr. Johnston, Mr. Pogue, Mr. Swain, Mrs. Watkins, Mr. Williamson; no, none; absent, Mr. Herrick, Mr. Stratton, Mr. Wilkins.

APPLICATION TO THE FEDERAL COMMUNICATIONS COMMISSION

(13) In the operation of the Radio Astronomy Telescope, it is necessary to petition the Federal Communications Commission to amend or modify its rules and regulations to provide interference protection by restricting assignments of UHF television stations or any other type or class of station operating in the band of 608 to 614 megacycles.

It is desirable to retain a law firm in Washington, D.C., for the purpose of filing the petition and to follow through in the event adverse comments are received by the Commission and hearings are held. The law firm of Bingham, Collins,

Porter, and Kistler is recommended for this purpose. It is estimated that the cost of filing the petition will be a minimum of \$250, and could be as high as \$2,500 for professional services, plus the cost of transcripts and other out-of-pocket expenses. The final cost will depend upon whether hearings are held and the length of the hearings. The Department of Astronomy can pay the first \$250 from its departmental indirect costs.

I recommend the adoption of the following resolution and the assignment of \$2,500, or as much thereof as may be necessary, from general Indirect Costs funds accumulated from research contracts for legal services required.

Resolution of the Board of Trustees of the University of Illinois

WHEREAS, the University has undertaken the construction of a unique Radio Astronomy Telescope near Urbana, Illinois, which offers marked possibilities of providing a highly sensitive precision instrument at considerably lower cost than other instruments of comparable capabilities, and will contribute substantially to the scientific advancement of Radio Astronomy; and

WHEREAS, the Radio Astronomy Telescope now under construction has been designed for effective and efficient use at $611 \text{ megacycles} \pm 3 \text{ megacycles}$, or a required radio frequency band width of 6 megacycles extending from 608 megacycles to 614 megacycles; and

WHEREAS, this portion of the radio frequency spectrum is now allocated by the Federal Communications Commission to television broadcasting in the Ultra High Frequency Band and is designated by the Federal Communications Commission as UHF Television Channel No. 37; and

WHEREAS, this channel is unoccupied at this time by any television stations within the United States, except for an experimental station at Camden, N.J., licensed to the Radio Corporation of America; and

WHEREAS, the effective and efficient use of the Radio Telescope requires a high degree of protection from terrestrial radiations and it is, consequently, advisable to petition the Federal Communications Commission to afford such protection by reserving the radio frequency band 608-614 megacycles to radio astronomy on a nation-wide basis;

Therefore, Be It Resolved, that the President of the University, through such agents or officials as he may designate, is hereby empowered and authorized to retain the law firm of Bingham, Collins, Porter, and Kistler of Washington, D.C., to represent the University in the matter of filing and prosecuting a Petition before the Federal Communications Commission requesting that Agency to amend or modify its existing Rules and Regulations so as to provide protection to the University's Radio Telescope by ruling that no license shall be issued for a television station, or any other class or type of radio station, operating or proposing to operate within the radio frequency band 608-614 megacycles. Provided, however, that the fees to be charged by the said law firm shall, in the opinion of the President, be fair and reasonable.

On motion of Mr. Hughes, the foregoing resolution was adopted by the following vote: Aye, Mr. Clement, Mr. Harewood, Mr. Hughes, Mr. Johnston, Mr. Pogue, Mr. Swain, Mrs. Watkins, Mr. Williamson; no, none; absent, Mr. Herrick, Mr. Stratton, Mr. Wilkins.

PURCHASE OF ELECTRIC POWER

(14) Because of the freeze of state capital appropriations for 1959-61, a turbine generator scheduled for completion in 1961 can not be available prior to 1963. It is estimated that there will be a deficiency of 780 kilowatts of power in the summer of 1960, and over 2,300 kilowatts by the summer of 1962, so that it will be necessary to purchase power from the Illinois Power Company. The most economical arrangement is to purchase a 2,340 kilowatt block of power from a new substation in the vicinity of Florida Avenue and the Illinois Central Railroad.

To secure the lowest rates, it is necessary to contract for a minimum period of five years. Capital costs for this service will amount to \$9,200, and the annual cost of power will be \$33,000 greater than if the equivalent amount of power were generated at the Abbott Power Plant.

The Director of the Physical Plant and the Vice-President and Comptroller

recommend authorization of a contract with the Illinois Power Company for purchase of power, as indicated above, and subject to availability of funds; an increase of \$33,000 in the operating budget of the Physical Plant and a non-recurring appropriation of \$9,200 for the capital costs.

I concur.

On motion of Mr. Swain, this recommendation was approved by the following vote: Aye, Mr. Clement, Mr. Harewood, Mr. Hughes, Mr. Johnston, Mr. Pogue, Mr. Swain, Mrs. Watkins, Mr. Williamson; no, none; absent, Mr. Herrick, Mr. Stratton, Mr. Wilkins.

DEAN WILLIAM V. LAMBERT

At this point President Henry presented Dean William V. Lambert of the University of Nebraska who has been appointed University of Illinois Adviser to the Vice-Chancellor of the Uttar Pradesh Agricultural University, Rudrapur, U.P., in India, who spoke briefly on the opportunities he envisages in this position.

CONTRACT FOR CONSTRUCTION OF BUILDINGS FOR ANIMAL SCIENCE

(15) The Director of the Agricultural Experiment Station, the Director of the Physical Plant, and the Vice-President and Comptroller recommend authorization of the construction of two more buildings for the Agricultural Experiment Station's animal breeding and physiological research project at an estimated cost of \$15,300 under the standing, cost-plus contracts authorized by the Board of Trustees for minor construction and remodeling work.

Funds are available in the grant of \$200,000 received by the University from the Moorman Manufacturing Company, Quincy, for a special research project in animal breeding. Most of this money will be used to construct twenty-one buildings for the housing of experimental swine, sheep, and cattle for physiological research. These small agricultural buildings can be constructed from sketches prepared by the Department of Agricultural Engineering, thus saving the time and expense of preparing detailed drawings and specifications, and the facilities are being constructed as the experiment proceeds and according to the requirements of the research project and it is recommended that these buildings also be constructed under the cost-plus contracts in effect at the time a project is started.

The Board has authorized previous construction work for this project under the University's standing contracts which are awarded annually on the basis of competitive bids.

I concur.

On motion of Mr. Hughes, authority was given, as requested.

CONTRACT FOR REPAIRING ILLINOIS SURGICAL INSTITUTE FOR CHILDREN BUILDING

(16) The Director of the Physical Plant and the Vice-President and Comptroller recommend award of a contract for \$5,220 to Wolfes-Jensen and Company, Inc., Chicago, the lowest bidder, for masonry repairs to the Illinois Surgical Institute for Children Building at 905 South Wolcott Street, Chicago, which is one of the units of the Research and Educational Hospitals.

The work will include removal of loose brick and cut stone, parapet walls and their replacement. Due to weathering, portions of the building have deteriorated, and the repairs are necessary not only to restore the building but to eliminate hazards of falling stone and brick.

Funds are available in the Physical Plant Department budget.

I concur.

On motion of Mrs. Watkins, this contract was awarded, as recommended.

CONTRACT FOR LANDSCAPING AT CHICAGO PROFESSIONAL COLLEGES

(17) The Director of the Physical Plant and the Vice-President and Comptroller recommend award of a contract for \$3,525 to Clauss Brothers, Inc., Chicago, the

only bidder, for landscaping of the Laundry Building area at the Chicago Professional Colleges.

The work will consist of placing top soil, seeding, and planting of trees and shrubs, all to be provided by the contractor.

Funds are available in the Laundry Building construction account.

I concur.

On motion of Mr. Harewood, this contract was awarded, as recommended.

ADDITION TO CONTRACT FOR LABORATORY EQUIPMENT AT CHICAGO PROFESSIONAL COLLEGES

(18) The Business Manager of the Chicago Professional Colleges and the Vice-President and Comptroller recommend an increase of \$8,386 in a \$43,087.57 contract with the Kewaunee Manufacturing Company, Adrian, Michigan, for the fabrication and installation of laboratory equipment in the Medical Research Laboratory at the Chicago Professional Colleges.

The contract includes laboratory furniture and equipment for the virology laboratory. In this laboratory, dealing with contagious diseases, it is necessary to provide every precaution for the protection of personnel and to guard against the spread of contamination to other areas. There have been very recent developments, subsequent to the execution of the contract, in the design and fabrication of such equipment which provide greater safety factors. Accordingly, installation of six items of laboratory furniture and equipment for the virology laboratory has been held up until it could be ascertained if changes in the laboratory furniture could be made which would enable research workers to work with dangerous micro-organisms with a very high degree of safety to themselves and other personnel. The Kewaunee Manufacturing Company has offered to take the furniture back to its plant to make the necessary changes at an increase in contract indicated.

Three other leading manufacturers of laboratory equipment, two of whom bid on the original installation, were consulted to check the price quoted by Kewaunee. All three companies recommended that the work be done by the manufacturer of the original equipment, and that they would prefer not to bid on the revisions since this would result in a higher cost to the University, their estimates ranging from \$12,000 up.

Funds are available in the construction account for the Medical Research Laboratory which includes a federal grant under the Medical Research Facilities Act.

I recommend approval.

On motion of Mr. Swain, this change in the contract was authorized.

HOSPITAL-MEDICAL-SURGICAL INSURANCE FOR STUDENTS AND STAFF

(19) On June 23, 1959, the Board of Trustees authorized contracts with the Federal Life Insurance Company, Chicago, for hospital-medical-surgical insurance for students and staff at Urbana and at the Chicago Undergraduate Division. The rates are guaranteed for a two-year period but the benefits were guaranteed for one year, 1959-60, subject to negotiation. In lieu of adjusting the benefits, the Company has proposed the following adjustment in premiums for 1960-61, leaving the benefits the same:

	<i>Present</i>	<i>Increase</i>	<i>Proposed</i>
Student plan, Urbana, per semester.....	\$ 7.18	\$0.32	\$ 7.50
Student plan, Chicago, per semester.....	6.60	0.15	6.75
Staff plan, per year			
Employee.....	29.46	2.79	32.25
Employee and one dependent.....	56.50	2.75	59.25
Employee and two or more dependents.....	66.90	2.35	69.25

The proposed rates are all substantially lower than those submitted by the second lowest bidder a year ago.

The only change in benefits proposed is the addition to both student plans

of accidental death and dismemberment benefits up to \$3,000 in connection with loss incurred while off campus. Students are now required to purchase this coverage individually at a rate of 25 cents per day for all University field trips. This coverage will save students approximately \$1,500 a semester and will relieve the faculty members in charge of field trips of the chore of checking on insurance coverage of all students concerned.

The increases in premiums are reasonable on the basis of the Company's experience this year, since the benefits paid by the Company thus far are running ahead of the premiums paid by the University. No changes will be necessary in the amounts charged to students or staff; the difference between the charges and the insurance premiums is still sufficient to cover administrative costs.

After consultation with student and faculty groups, the Vice-President in charge of the Chicago Professional Colleges recommends that students be required to participate in the student insurance plan and that the staff plan be made available to the Chicago Professional Colleges staff on a voluntary basis; and that a student fee of \$6.00 per quarter be charged all students enrolled in the Chicago Professional Colleges. Students who have equivalent insurance coverage may secure exemption from the fee as at the other campuses. Optional coverage may be provided for a student's wife for an additional \$9.00 per quarter and for children at an additional \$6.00 per quarter each. Coverage during the summer quarter will be optional at the same rates.

The Company will add the Chicago Professional staff coverage at the same rate and provide the same benefits as the Urbana staff plan. The student plan will provide the same benefits as the Chicago Undergraduate Division plan, which are higher than the Urbana benefits. The premium will be \$5.05 per quarter for a student, \$7.31 additional for a spouse, and \$5.21 for one or more children.

I concur.

On motion of Mr. Swain, these recommendations were approved.

PURCHASES

Purchases Authorized

(20) The following purchases were authorized by the Executive Committee of the Board of Trustees on recommendation of the Director of Purchases, the Vice-President and Comptroller, and with the concurrence of the President of the University.

<i>Item</i>	<i>Department</i>	<i>Vendor</i>	<i>Cost</i>
Two sets components of high frequency direction finder AN/GRD.501 consisting of: RF tuner and first mixer, IF amplifiers and second mixers, local oscillators, panels, monitor units, cables, servo amplifier, power supplies (remote and local), fine frequency indicator, spectrum generator, frequency meter amplifier, fine amplifier, and 400 cps transformer unit	Electrical Engineering	General Precision Industries Ltd., Montreal, P.Q., Canada	\$41 801 20 f.o.b. Granby, P.Q., Canada
One laboratory unit for producing printed circuit boards—end to end construction	Electrical Engineering	Electralab Printed Electronics Corp., Needham Heights, Mass.	3 929 15 f.o.b. delivered
One spectrophotometer, infrared, recording, double monochromator, automatic recording spectra from 650 to 4000 cm ⁻¹ , with resolution 0.3 cm ⁻¹ ; complete with accessories; less trade-in of obsolete and defective IR2A spectrophotometer	Food Technology	Beckman Instruments, Inc., Chicago	14 428 00 f.o.b. delivered and installed

The following purchases were authorized by the President on the recommendation of the Director of Purchases and the Vice-President and Comptroller.

Labor and material to resurface six Library tennis courts	Physical Education for Men	Champaign Asphalt Co., Champaign	6 600 00 f.o.b. job site
50 feet columbium rod 3/16 in. o.d. ± .010	Theoretical and Applied Mechanics	Fansteel Metallurgical Corp., North Chicago	3 406 08 f.o.b. delivered

On motion of Mr. Johnston, these purchases were approved.

Purchases Recommended

The Director of Purchases has proposed and the Vice-President and Comptroller recommends the following purchases. Unless otherwise specified, the purchase in each case is recommended on the basis of the lowest acceptable bid.

<i>Item</i>	<i>Department</i>	<i>Vendor</i>	<i>Cost</i>
One Antlab antenna model support tower system, complete, including: model support tower with modified mast support arm, coaxial rotary joint and synchro system for azimuth and head; four-wheel cart; tower drive control system; three position indicators; two cable assemblies; and mast assembly including mast, torque tube, base, and head	Electrical Engineering Research	Antlab, Inc., Worthington, Ohio	7 410 00 f.o.b. delivered
One Midwestern Instruments model 621-VT 140-channel direct recording oscillograph complete with timing lines, rack mount adapter, longitudinal grid lines, trace identification, positive step switch speed selector, 14 galvanometers, and 10 rolls 6 in. x 100 ft. paper	Electrical Engineering	Midwestern Instruments, Inc., Tulsa, Okla.	6 334 00 f.o.b. delivered
Eighteen animal cages made to order	Electrical Engineering Research	Schroeder & Sons Co., Kenwood	5 576 78 f.o.b. delivered
One glass-blowing lathe complete with motor and controls	Coordinated Science Laboratory	Litton Engineering Laboratories, Grass Valley, Calif.	3 816 55
Three lapped balanced balls	Coordinated Science Laboratory	Professional Instruments Co., Minneapolis, Minn.	9 000 00 f.o.b. delivered
One model 1108 Heiland direct recording visicorder oscillograph 24 channels, DC to 5000 cps. Two model M-1000 galvanometers One model M-3300 galvanometer	Electrical Engineering	Minneapolis-Honeywell Regulator Co., Peoria	5 116 25 delivered
1000 hours of engineering services to redesign electronic systems used in neurosonic surgery	Electrical Engineering	Lechner Manufacturing Co., Champaign	7 000 00
Additional consulting engineering services, general and detailed supervision and inspection of the work performed by the sub-contractor in connection with construction of facilities for the radio telescope project	Electrical Engineering	Hanson, Collins, & Rice, Springfield	5 000 00
One homogenizer and accessories, with operating capacity of 80 to 250 gallons per hour and maximum operating pressure of 8000 p.s.i. for processing dairy products	Food Technology	Manton-Gaulin Manufacturing Co., Inc., Everett, Mass.	7 427 00 f.o.b. delivered
One ultracentrifuge, preparative type, with four rotors for speeds of 59,000, 94,000, 105,000, and 142,000 times gravity, 208-volt 3-phase, 60-cycle	Food Technology	Spinco Division, Beckman Instruments, Inc., Palo Alto, Calif.	7 935 00 f.o.b. delivered
One model 2758 Rubicon six-dial thermo-free potentiometer	Physics	Minneapolis-Honeywell Regulator Co., Peoria	3 510 00 f.o.b. Urbana
Two microscopes, research, with interchangeable nosepieces for five planapochromatic and apochromatic objectives, with optical accessories and photographic attachments	Zoology Physiology	W. H. Kessel & Co., Chicago	5 045 40 f.o.b. delivered and installed
One automatic liquid scintillation spectrometer	Biological Chemistry, Chicago Pro- fessional Colleges	Packard Instrument Co., Lyons	12 500 00 delivered
432 cases siliconized blood collection bottles	Blood Bank, Chicago	Cutter Laboratories, Chicago	3 317 76 delivered
Twelve pressure transducers	Pharmacology, College of Medicine	Dynisco, Inc., Cambridge, Mass.	2 700 00 delivered
One polygraph consisting of six-channel cabinets, 25 driver amplifiers, 25 oscillographs, six signal markers, and 26 preamplifiers	Pharmacology, College of Medicine	Grass Instrument Co., Quincy, Mass.	18 936 00 net delivered

<i>Item</i>	<i>Department</i>	<i>Vendor</i>	<i>Cost</i>
Four dual beam oscilloscopes	Pharmacology, College of Medicine	Tektronix, Inc., Park Ridge	\$ 3 383 64 delivered
Estimated quantities radio isotopes for use by the Isotope Laboratory during the period from July 1, 1960, through June 30, 1961	Radiology	Volk Radiochemical, Chicago	4 112 50 delivered
One blood cell counter, less trade-in allowance for one hemoglobin colorimeter	Research and Educational Hospitals	American Hospital Supply, Evanston	3 365 20 net, delivered
Estimated quantity of intravenous fluids and administration sets for use in Research and Educational Hospitals for the period July 1, 1960, through June 30, 1961, subject to renewal for one year by mutual agreement	Research and Educational Hospitals	Abbott Laboratories, Franklin Park	46 706 41
One surgical operating table with accessories	Research and Educational Hospitals	American Sterilizer Co., Chicago	2 693 00 delivered
Two motorized elevator files to hold 1,430 in. each of 3 x 5 cards	Research and Educational Hospitals	Diebold, Inc., Chicago	4 985 70 delivered and installed
One motorized elevator file to hold 1,950 in. each of 3 x 5 cards	Research and Educational Hospitals	Remington Rand, Inc., Chicago	3 714 20 delivered and installed
X-ray solution service for the year, beginning July 1, 1960	Various depart- ments, Chicago Professional Colleges	Donald J. McElroy, Inc., Chicago	4 462 60
One model SFD Flexowriter with edge card punch and reader and stand	Graduate College	Friden, Inc., Peoria Heights	4 510 00 f.o.b. delivered
One selectadata			
One electric tape winder			
One tape unwinder			
200 (approximately) uniforms for Advanced Army R.O.T.C. students	Military	Pettibone Brothers Manufacturing Co., Cincinnati, Ohio	31 006 30 f.o.b. delivered
75 (approximately) uniforms for Advanced Air Force R.O.T.C. students			
Purchase will be for actual number of students enrolled			
Printing and binding 1,500 copies (approximately 256 pages per copy) of <i>Italian Comedy in the Renaissance</i> by M. T. Herrick	University Press	Colonial Press, Inc., New York, N.Y.	3 079 35 f.o.b. delivered
4,000 copies <i>High School Mathematics</i> , Unit 5, Teacher's Edition, approximately 350 pages per copy	University Press	Braun-Brumfield, Inc., Ann Arbor, Mich.	8 086 00 f.o.b. delivered
4,000 copies <i>High School Mathematics</i> , Unit 6, Teacher's Edition, approximately 350 pages per copy			
16,000 copies <i>High School Mathematics</i> , Unit 5, Students' Edition	University Press	Waldemar Press Division, Indianapolis, Ind.	21 010 00 f.o.b. delivered
16,000 copies <i>High School Mathematics</i> , Unit 6, Students' Edition			
Printing and binding 1,000 copies of <i>Modern Land Policy</i> by Harold G. Halcrow	University Press	Colonial Press, Inc., New York, N.Y.	5 124 55 f.o.b. delivered
Lounge furniture for the Graduate Student Residence Hall	Housing Division	L. B. Herbst Corp., Chicago	8 006 00 f.o.b. Urbana
310 dual purpose sofa and bed combination units for the Graduate Student Residence Hall	Housing Division	Karoll's, Inc., Chicago	57 960 70 f.o.b. Miami, Fla.
145 dozen combination mattress pad and cover	Housing Division	Karoll's, Inc., Chicago	3 754 05 f.o.b. delivered
3,000 blankets, 64 in. x 90 in. 90 per cent wool, 10 per cent nylon, for Men's Residence Halls	Housing Division	Karoll's, Inc., Chicago	11 820 00 f.o.b. delivered
1,670 student study lamps and shades	Housing Division	Laurel Lamp Manufacturing Co., Inc., Newark, N.J. Lamps Excel Manufacturing Corp., Muncie, Indiana Shades	8 633 90 4 108 20 f.o.b. delivered

<i>Item</i>	<i>Department</i>	<i>Vendor</i>	<i>Cost</i>
330 study lamps for single Graduate Student Residence Hall	Housing Division	Gilbert A. Force Co., Chicago	\$ 2 953 50 f.o.b. delivered
Triple plate flatware:	Housing Division	International Service Co., Chicago	6 503 00 f.o.b. delivered
330 dozen dinner knives			
350 dozen dinner forks			
40 dozen salad-dessert forks			
460 dozen teaspoons			
280 dozen dessert spoons			
For Central Food Stores			
220 dozen 9 1/4 in. dinner plates	Housing Division	E. A. Hinrichs & Co., Chicago	16 669 44 f.o.b. delivered
425 dozen 6 1/2 in. salad plates			
295 dozen 7 1/2 oz. cups			
295 dozen 5 3/4 in. tea saucers			
375 dozen 6 3/8 in. soup nappies			
425 dozen 5 in. sauce dishes			
22 dozen 10 oz. sugar bowls			
100 dozen 9 in. dinner plates			
15 dozen 11 oz. sugar bowls			
For Central Food Stores			
90 dozen 9 3/4 in. dinner plates	Housing Division	American China & Glassware Co., Chicago	5 322 75 f.o.b. delivered
80 dozen 6 1/2 in. salad plates			
100 dozen 4 3/8 in. fruit dishes			
100 dozen cups			
130 dozen 5 1/4 in. saucers			
140 dozen 12 oz. oatmeal bowls			
10 dozen 12 oz. sugar bowls with lids			
20 dozen 23 oz. gravy bowls			
15 dozen vegetable ovals			
20 dozen 8 oz. cream pitchers			
For Central Food Stores			
Shenango china:	Illini Union	Arthur Schiller & Son, Inc., Chicago	2 863 60 f.o.b. delivered
24 dozen 9 in. luncheon plates			
36 dozen 6 3/4 in. salad plates			
50 dozen 5 in. bread and butter plates			
100 dozen 4 3/8 in. vegetable dishes			
100 dozen 5 1/2 in. rolled edge saucers			
150 dozen coffee cups			
250 reams 58 lb. and 70 lb. colored offset paper	Office Supply Stores	Marquette Paper Corp., Chicago	2 607 92 f.o.b. delivered
15,460 reams white offset paper in various sizes and weights (estimated six to eight months' supply)	Office Supply Stores	J. W. Butler Paper Co., Chicago	17 758 19 f.o.b. delivered
1,000,000 No. 10 white wove envelopes with various imprints, in 24 lb. and 28 lb. weights to be delivered as required for delivery to Urbana and Chicago for the period July 1, 1960, through June 30, 1961	Various Departments, Urbana	Columbia Envelope Co., Melrose Park	4 019 50
20,000 reams 8 1/4 x 11 20 lb. white No. 4 sulphite spirit duplicator paper for shipment to Urbana and Chicago for delivery in June and November, 1960	Office Supply Stores	Decatur Paper House, Inc., Decatur Dwight Brothers Paper Co., Chicago	7 183 40 7 191 24
102 steel laundry carts	Physical Plant	Mills Hospital Supply, Chicago	12 757 14 delivered
93 ft. 8 in., schedule 40, 6 in., seamless pipe with insulation in 12 in. cast iron casing	Physical Plant	Ric-Wil, Inc., Barberton, Ohio	3 326 33 f.o.b. Barberton, Ohio
93 ft. 8 in., schedule 80, 3 in., seamless pipe with insulation in 6 in. cast iron casing			
160,000 liters (approximately) liquid nitrogen, high purity, 99.9 per cent pure; delivered into the University of Illinois liquid storage container in quantities not less than 600 liters each, as needed, between June 1, 1960, and June 30, 1961	Physical Plant	Linde Co., Division of Union Carbide Corp., Chicago	16 000 00 f.o.b. delivered
Seven four-door sedans	Physical Plant	Courtesy Motor Sales, Inc., Chicago (Ford)	
One four-door station wagon		Five sedans	4 140 00
To replace seven four-door sedans and one carryall in University fleet		Lawder Brothers, Inc., Chicago (Ford)	
		Two sedans	1 775 00
		Rogers Chevrolet Co., Rantoul	
		One station wagon	1 854 15 (7 769 15) f.o.b. Urbana

On motion of Mr. Johnston, these purchases were authorized.

COMPTROLLER'S REPORT OF CONTRACTS

(21) The Comptroller's report of contracts executed during the period April 1 to April 30, 1960.

<i>With Whom</i>	<i>Purpose</i>	<i>Amount to be Paid to the University</i>	<i>Effective Date</i>
California Spray-Chemical Corp.	Fungicides on diseases of apples and grapes	\$ 500 00	May 1, 1960
Corporation of Downers Grove, Illinois	Recreation and park survey	750 00	December 23, 1959
Illinois Archaeological Survey, Inc.	Preliminary archaeological site examination	3 064 70	April 21, 1960
Olin Mathieson Chemical Corp.	Compare ammonium phosphates with other sources of phosphate in banded and broadcast applications for corn	2 250 00	April 12, 1960
Ramo-Wooldridge Division, Thompson Ramo Wooldridge, Inc.	Producing high mass density beams of charged heavy particles suitable for use as the working fluid of a thrust producing device	11 195 00	February 1, 1960
United States Air Force AF 33(616)-7032	Absorbefacient surfaces for the 1000° F to 3500° F temperature range	17 887 00	March 1, 1960
United States Air Force AF 49(638)-819	Single dislocations in solids under static and dynamic conditions	128 200 00	March 1, 1960
United States Atomic Energy Commission AT (11-1)-878	Synthetic capacity of irradiated ciliates	13 127 00	April 21, 1960
United States Atomic Energy Commission AT (11-1)-883	Nature of catalysts, reactants, and extraneous materials in catalytic reduction reactions	12 800 00	April 14, 1960
United States Department of Health, Education, and Welfare, Office of Education	Language and area center in Russian	49 992 00	April 6, 1960

Leases

<i>With Whom</i>	<i>Purpose</i>	<i>Amount to be Paid by the University</i>	<i>Effective Date</i>
Lundell Manufacturing Co., Inc.	Lease of one offset chopper, one cornhead attachment, one 7.4 sheave, one hay conditioner attachment, and one automatic gauge kit	\$ 175 96 annually	March 15, 1960

Contract Changes

<i>With Whom</i>	<i>Purpose</i>	<i>Amount to be Paid to the University</i>	<i>Effective Date</i>
Crop-Hail Insurance Actuarial Association	Hailstorms in Illinois, estimating long-term loss costs	\$ 6 000 00	February 3, 1960
International Cooperation Administration ICAC-1220-1	Establish at Indian Institute of Technology, Kharagpur, West Bengal, teacher-training programs in engineering	20 000 00	April 11, 1960
United States Air Force AF 18(603)-62	High energy bunched electron beams	20 000 00	February 10, 1960
United States Air Force AF 33(616)-5486	Thermally stable polymers for high temperature aircraft application	50 000 00	February 1, 1960
United States Air Force AF 33(616)-6192	Elevated temperature resistant inorganic structural adhesives	40 000 00	March 1, 1960
United States Air Force AF 49(638)-371	Laws underlying human behavior in complex tasks	24 072 00	February 3, 1960
United States Air Force AF 49(638)-594	Meson photoproduction and meson interactions using a liquid	38 000 00	January 28, 1960
United States Army DA-11-022-ORD-1175	Alloys of the transition elements	22 497 00	February 19, 1960
United States Army DA-36-039-SC-78313	Microwave duplexer switching mechanisms	35 500 00	April 6, 1960
United States Atomic Energy Commission AT (11-1)-67 Project No. 4	Unclassified research in the field of radio chemistry	28 653 00	March 29, 1960
United States Atomic Energy Commission AT (11-1)-392	Obtaining one millimeter source of C.W. microwaves and associated components	55 000 00	April 7, 1960

<i>With Whom</i>	<i>Purpose</i>	<i>Amount to be Paid to the University</i>	<i>Effective Date</i>
United States Atomic Energy Commission AT (11-1)-706	Effect of phenol ethers on lesions of the skin produced by beta radiations	\$ 5 000 00	March 1, 1960
United States Navy Nonr-1244(00)	Initiation of training in military and disaster medicine	9 000 00	July 1, 1959
United States Navy Nonr-1459(02)	Thermal injury of the skin	66 635 00	March 9, 1960
United States Navy Nonr-1834(21)	Artificial intelligence computers	4 500 00	February 23, 1960
United States Navy NObs-77137	Fatigue behavior of welded HY80 at a stress calculated to provide failure at or between 10,000 cycles to 100,000 cycles	20 000 00	March 29, 1960

Adjustments Made in 1959-60 Cost-Plus Contract

<i>With Whom</i>	<i>Purpose</i>	<i>Amount</i>	<i>Date</i>
Harry F. Fisher (Plastering)	Twenty-three items; \$85.59 deduct to \$2,750.00	\$ 6 135 17	March and April, 1960

This report was received for record.

QUARTERLY REPORT OF THE COMPTROLLER

(22) The Comptroller presented his quarterly report to the Board as of March 31, 1960.

This report was received for record and a copy has been filed with the Secretary of the Board.

UNIVERSITY POLICY ON CONSTRUCTION OF FAMILY HOUSING

(23) In January, 1956, the Board of Trustees approved a comprehensive program for the construction of student housing, including family housing. As stated in this program, the planning is subject to revision from time to time according to the needs of the University and the availability of adequate private housing in the community of Urbana-Champaign. Indeed, in 1958 these factors being taken into account the construction schedule was revised accordingly. Submitted herewith is a memorandum prepared by the Housing Division, giving the background of this subject and the changes which have been made since its adoption; a copy of this is being filed with the Secretary of the Board for record.

Recent questions raised by the Apartment Owners Association of Champaign-Urbana concerning the need for construction by the University of additional family housing have been answered in conferences with representatives of the Association. However, it is desirable that there be public understanding of the University's program and needs, and it is therefore recommended that the Board authorize the following policy statement.

1. The projected enrollments for the University at Urbana-Champaign indicate that there will be a continuing need for family housing facilities for students, faculty, and staff. Without additional housing, the University can not continue to grow at Urbana-Champaign.
2. If the facilities are to be available when needed, decisions for planning and construction must be based on projected enrollments.
3. The University's enrollment projections and estimated housing requirements are always available and plans will continue to be announced as soon as they are approved.
4. The University hopes that private builders in the community will continue to help provide suitable housing for faculty, staff, and married students.
5. The University's efforts will be directed toward providing married students' housing facilities meeting University conditions and requirements which are estimated to be unavailable elsewhere in the local community.
6. The final appraisal and decisions as to need, both present and projected, must be the responsibility of the Board of Trustees.

On motion of Mrs. Watkins, this statement of policy was approved.

RECOMMENDATIONS OF THE UNIVERSITY PATENT COMMITTEE

(24) The University Patent Committee submits, with the concurrence of the Chairman of the University Research Board, the following recommendations relating to inventions by members of the staff.

1. Radio direction-finding system — Albert D. Bailey, Professor of Electrical Engineering, inventor. The purpose of this invention is to provide a radio direction-finding system that will permit one to obtain the direction of arrival of a radio wave with an accuracy that is considerably better than that obtained with the conventional small aperture radio direction-finding systems. The system is basically a sum-and-difference radio interferometer technique together with the means for continuously calibrating the indicated data to arrive at an accurate estimate of the bearing and elevation angle-of-arrival of the incoming radio signal. The novel features are the conception of the complete system and the use of a calibrator to provide a means for obtaining an accurate estimate of the bearing and elevation angles of arrival of a radio wave.

The Committee concurs in the recommendation of the Head of the Department of Electrical Engineering that there is little or no commercial value and recommends that this invention be released to the sponsoring agency, the United States Army Signal Corps.

2. Radio direction finding using phase-locked oscillators — F. J. Wymer, Research Assistant in Electrical Engineering, inventor. The only new idea in this system is the use of phase-locked oscillators in radio direction-finding systems. Other techniques and components employed — the receivers, phase-locked oscillator, goniometer, phase-sensitive detector, and Adcock Antenna Array — are not novel.

The Committee concurs in the recommendation of the Head of the Electrical Engineering Department that there is little or no commercial value and recommends that this invention be released to the sponsoring agency, the United States Navy.

3. Log-periodic resonant-V arrays — Paul E. Mayes, Research Associate Professor of Electrical Engineering, and Robert L. Carrel, Research Assistant in Electrical Engineering, inventors. This is a broadband antenna which utilizes a directive element pattern as well as the array factor to achieve moderately high gains over an extended range of frequencies (ten to one or more in ratio). The antenna consists of linear elements which are connected to a parallel-wire feed line.

The Committee concurs in the recommendation of the Head of the Department of Electrical Engineering and the University of Illinois Foundation that there is definite possibility of commercial value and that this invention be released to the University of Illinois Foundation, recognizing the rights of the sponsoring agency, the United States Air Force.

4. New circularly polarized omnidirectional antenna — Paul E. Mayes, Research Associate Professor of Electrical Engineering, and John D. Dyson, Research Assistant Professor of Electrical Engineering, inventors. Since this type of log-spiral antenna retains the extremely wide frequency band-widths of the balanced, two-arm conical log-spiral antenna, it provides a major improvement over most of the narrow band omnidirectional, circularly polarized antennas presently in use. Successful operation over frequency ranges of 10 to 1 and more are possible as compared to the 2 to 1 or less range with former antennas.

The Committee recommends that, in view of definite possible commercial value, this invention be released to the University of Illinois Foundation, recognizing the rights of the sponsoring agency, the United States Air Force.

5. All channel TV and FM receiving antenna — Robert L. Carrel, Research Assistant in Electrical Engineering, and Paul E. Mayes, Associate Professor of Electrical Engineering, inventors. At present the television broadcasting spectrum is allocated in several bands which are widely dispersed in frequency. As a result it is now common practice to use several antennas in order to receive from several transmitting stations. There is no commercially available antenna which will perform well at all frequencies in the television broadcast bands. Utilizing the ideas covered in this patent it is possible to design an antenna which operates well over all of the television spectrum plus that used in FM broadcasting as well. Furthermore, the design described here uses the available antenna structure more effectively insofar as producing directive gain than would be possible when using

several narrow band antennas. Structurally, this antenna is no more complex than certain commercial models on the market at present.

The University of Illinois Foundation reports that it appears that this invention has a more direct commercial appeal than any of the other antenna inventions now held by them; and therefore, the University Patent Committee recommends that this invention be released to the University of Illinois Foundation with the stipulation that they recognize the contractual rights of the sponsoring agent, the United States Air Force.

I concur in these recommendations.

Mr. Clement stated that the Board's Committee on Patents has considered these recommendations, and he moved their approval. This motion was adopted.

REQUEST OF FAUCETT-UMPHREY CORPORATION

(25) The Faucett-Umphrey Corporation, Bloomfield, Indiana, was awarded a contract for \$189,448.10 for the manufacture of student room furniture (chairs, beds, and desks) for University residence halls. The Corporation having failed to submit an owners protective bond as stated in the contract, the Board of Trustees exercised its option of retaining the Corporation's bid deposit of \$7,500, as liquidated damages for failing to comply with contract requirements, and declaring the contract null and void.

The Faucett-Umphrey Corporation, by James R. Riley, its Executive Director, has asked the Board of Trustees to reconsider its action relative to retention of the bid deposit.

Following discussion of this request, the Vice-President and Comptroller was instructed to inform the Faucett-Umphrey Corporation that the Board does not see its way clear to granting this request.

STATUS OF ASSISTANT PROFESSOR LEO F. KOCH

(26) At the meeting of the Board of Trustees on April 20, 1960, I reported that on recommendation of the Executive Committee of the College of Liberal Arts and Sciences, Assistant Professor Leo F. Koch of the Division of General Studies was relieved of all University duties as of April 7, 1960, and that he was informed that his appointment will be terminated at the end of the current academic year 1959-60. He was officially notified of this action by a copy of the following letter addressed to Dean Lyle H. Lanier of the College of Liberal Arts and Sciences which was delivered personally to him by Dean Lanier acting for me.

April 7, 1960

DEAR DEAN LANIER:

I have your memorandum of April 7 reporting the deliberations of the Executive Committee of the College of Liberal Arts and Sciences concerning Assistant Professor Leo F. Koch. You report that Professor Koch's letter published in the *Daily Illini* on March 18, 1960, raised serious doubt as to his sense of academic responsibility and hence as to his further usefulness as a teacher in the College of Liberal Arts and Sciences.

I note that the Head of Professor Koch's Department, Professor James M. McCrimmon, in substance informed Professor Koch on March 25 that his letter constituted a breach of professional responsibility and in conference with Professor Koch condemned both the tone and much of the content of the letter.

I note further that it is the Executive Committee's view that Professor Koch's published letter constitutes a breach of academic responsibility so serious as to justify his being relieved of his University duties.

This memorandum is to record my concurrence in the recommendation of the Committee and to request you to relieve Professor Koch of his duties immediately. His appointment will be terminated at the University at the end of the current academic year.

With you, I consider Professor Koch's letter a grave breach of academic responsibility. The views expressed are offensive and repugnant, contrary to commonly accepted standards of morality and their public espousal may be interpreted

as encouragement of immoral behavior. It is clear that Mr. Koch's conduct has been prejudicial to the best interests of the University.

I request that you and Professor McCrimmon communicate this decision to Professor Koch.

DAVID D. HENRY
President

Mr. Koch has requested, and has been granted, a hearing of his case by the Board, the date of which should now be set; provided that the date of the hearing is no less than fifteen days from the date of receipt by him of the notice as required by the University Statutes.

I now recommend that the Board of Trustees terminate Assistant Professor Koch's appointment at the end of the current academic year 1959-60 on the basis of the charges stated in the foregoing letter to Dean Lanier which are predicated upon Mr. Koch's action in having published in the *Daily Illini* issue of March 18, 1960, the communication referred to in my letter to Dean Lanier and a copy of which is submitted herewith. I request the Board not to act on this recommendation, however, until after the hearing with Mr. Koch has been held.

Mr. Johnston moved that the hearing requested by Mr. Koch be held in the Illini Union Building, Urbana, Illinois, on Tuesday, June 14, 1960, the date fixed by the Board for its regular June meeting, beginning at 10:30 a.m.; that the hearing be open to accredited press representatives and to the public to the extent space permits; that the Director of Public Information be instructed to issue proper identification to one accredited correspondent from each newspaper, press association, radio or television station involved in coverage of the hearing; and that no cameras or mechanical recording devices be permitted in the room in which the hearing is conducted.

This motion was adopted.

SECRETARY'S REPORTS

The Secretary presented for record the following lists: (1) appointments made by the President; (2) graduate fellows; (3) resignations, declinations, and cancellation; (4) leaves of absence; (5) change in sabbatical leave of absence; (6) retirement.

APPOINTMENTS MADE BY THE PRESIDENT

(The date in parentheses is the date on which the appointment was made by the President of the University. C = College; S = Station; E = Extension.)

ADAMS, DONALD F., Instructor in Theoretical and Applied Mechanics (C), $\frac{1}{2}$ time, academic year beginning September 1, 1960, \$2600 (5-3-60).

BABA, MINORU, Research Associate in Medicine (Medicine), six months from July 1, 1960, \$500 a month (5-3-60).

BARBER, DENNIS B., Instructor in Operative Dentistry (Dentistry), one year from September 1, 1960, \$7500 (4-14-60).

BARRETT, WILLIAM B., Instructor in Accountancy, $\frac{1}{2}$ time, academic year beginning September 1, 1960, \$2400 (4-7-60).

BAUMAN, STEVEN, Research Assistant in Mathematics, August 16-31, 1960, \$200 (4-26-60).

BECK, PAUL A., Professor of Physical Metallurgy, Department of Mining and Metallurgical Engineering (C), two months from June 16, 1960, \$1500 a month; this is in addition to his present appointment (5-3-60).

BECK, ROBERT J., Assistant in Physical Education for Men (Chicago Undergraduate Division), nine months from September 16, 1960, \$4200; this is in addition to \$500 he will receive from the Athletic Association for services rendered to it (4-26-60).

BERG, EDWIN W., Instructor in Economics (Chicago Undergraduate Division), academic year beginning September 1, 1960, \$6500 (4-26-60).

- BOKENKAMP, ROBERT W., Instructor in General Engineering (C), $\frac{4}{5}$ time, academic year beginning September 1, 1960, \$5800 (4-26-60).
- BOURGIN, DAVID G., Professor of Mathematics, June 16-August 24, 1960, \$3750; this is in addition to his present appointment (4-26-60).
- CAIRNS, STEWART S., Professor of Mathematics, June 16-August 24, 1960, \$3750; this is in addition to his present appointment (4-8-60).
- CHORDIKIAN, FILOR K., Research Assistant in Psychiatry (Medicine), March 21-August 31, 1960, \$366.66 a month, supersedes (4-26-60).
- CONNELL, BARBARA, Assistant to the Dean of Women, one month from July 1, 1960, \$400 (5-3-60).
- CRAWFORD, ROBERT B., Instructor in History, academic year beginning September 1, 1960, \$6500 (4-6-60).
- DE LONG, CHARLES C., Short-term Consultant in India, under Contract US ICAC-1258 with the International Cooperation Administration, beginning March 1, 1960, and continuing through five working days after departure from India, \$14,950 a year; regular salary to be charged again to budget position after returning from India; supersedes (4-6-60).
- DERUS, DAVID L., Instructor in English, academic year beginning September 1, 1960, \$5800 (4-6-60).
- DESCOUROUEZ, JAMES C., Assistant in Physical Education for Men (Chicago Undergraduate Division), nine months from September 16, 1960, \$4200; this is in addition to \$500 he will receive from the Athletic Association for services rendered to it (4-26-60).
- DHARMARAJAN, SANGIAH, Research Associate in Theoretical and Applied Mechanics (C), to render service on a $\frac{1}{2}$ time basis beginning September 16, 1959, through November 30, 1959; on a $\frac{3}{4}$ time basis beginning December 1, 1959, through January 31, 1960; and on a 70 per cent time basis beginning February 1, 1960, through June 15, 1960; salary for this service to be paid over a twelve-month period, \$3056 a year from September 1, 1959, through February 29, 1960, and \$3500 a year from March 1, 1960, through August 31, 1960, supersedes (4-6-60).
- DOBROVOLNY, JERRY S., Professor of General Engineering (C), two months from June 16, 1960, \$2222; this is in addition to his present appointment (5-3-60).
- DOYLE, JAMES M., Research Associate in Theoretical and Applied Mechanics (C), $\frac{1}{2}$ time, academic year beginning September 1, 1960, \$2500 (4-26-60).
- EHRHARD, JEAN E., Visiting Professor of French, nine months from September 16, 1960, \$10,000 (previously here as Visiting Professor in 1958-59) (4-8-60).
- ELLIOTT, PETER R., Associate Professor of Physical Education for Men, 13/100 time, indefinite tenure from September 1, 1960, to render service during each academic year, \$2350 a year; this is in addition to his appointment and salary as Head Football Coach for which services he is paid by the Athletic Association (4-7-60).
- ENGANDELA, VICTOR J., Instructor in Medical Social Work (Medicine), July 1, 1960-August 31, 1961, \$6000 a year (5-3-60).
- FELTSKOG, ELMER N., Assistant in English, nine months from September 16, 1960, \$3800 (4-26-60).
- FREEMAN, HAL M., Instructor in Ophthalmology (Medicine), 85/100 time, one year from July 1, 1960, \$5400 (5-3-60).
- GARVER, THOMAS H., Assistant to the Director of the Krannert Art Museum and Instructor in Art, one year from September 1, 1960, \$7000 (4-26-60).
- GILLESPIE, ROBERT W., Instructor in Economics, academic year beginning September 1, 1960, \$7250 (4-7-60).
- GOLDSTEIN, MELVIN L., Instructor in Psychology, $\frac{2}{3}$ time, February 1-June 15, 1960, \$414.81 a month (4-14-60).
- GRIEST, GUINEVERE L., Instructor in English (Chicago Undergraduate Division), academic year beginning September 1, 1960, \$6400 (4-26-60).
- HEADINGS, PHILIP R., Instructor in English, academic year beginning September 1, 1960, \$6100 (4-6-60).
- HILL, JEAN, Assistant to the Dean of Women, one month from August 1, 1960, \$400 (5-3-60).
- HOCHBERG, ISIDOR, Physician in the Health Service (Chicago Professional Colleges), $\frac{1}{2}$ time, March 3-August 31, 1960, \$2200 a year (4-22-60).

- KITAGAWA, ISAO, Research Associate in Food Technology (S), one year from September 1, 1960, \$500 (4-26-60).
- KLEWER, KENNETH L., Research Assistant in Physics (C), June 16-August 31, 1960, \$422 a month (4-26-60).
- LANDWEHR, GOTTFRIED, Research Associate in Electrical Engineering (S), $\frac{1}{2}$ time, five months from April 1, 1960, \$270 a month (4-28-60).
- LARSON, BERNT O., Professor of General Engineering (C), June 16-July 31, 1960, \$1078 a month; this is in addition to his present appointment (5-3-60).
- LATHERAP, DONALD W., Instructor in Anthropology, two months from June 16, 1960, \$666.67 a month; this is in addition to his present appointment (5-3-60).
- LEE, BONG KUK, Research Assistant in Chemistry (Pharmacy), five months from April 1, 1960, \$400 a month (5-3-60).
- LEKAN, EUGENE C., Research Associate in Oral and Maxillofacial Surgery (Dentistry), $\frac{1}{2}$ time, five months from April 1, 1960, \$300 a month, supersedes his nonsalaried appointment (5-3-60).
- LESCHER, ALFRED J., Pharmacy Resident in Hospital Pharmacy (Research and Educational Hospitals) (Pharmacy), $\frac{1}{2}$ time, five months from April 1, 1960, \$125 a month; for the convenience of the University he will also receive room and board while on duty (4-26-60).
- LIM, YUNG KUO, Research Associate in Physics (C), one year from January 1, 1961, \$7000 (4-6-60).
- LINDBLAD, WILLIAM E., Assistant in English, nine months from September 16, 1960, \$4200 (4-26-60).
- LO PRIORE, VICTOR M., Clinical Instructor in Pediatrics (Medicine), five months from April 1, 1960, without salary (4-26-60).
- LUNN, HUEY N., Instructor in Accountancy, $\frac{1}{4}$ time, academic year beginning September 1, 1960, \$1200 (4-7-60).
- MARTIN, GORDON E., Instructor in General Engineering (C), June 16-July 31, 1960, \$700 a month; this is in addition to his present appointment (5-3-60).
- MEYER, FRANCIS A., Assistant in the Institute of Aviation, June 20-August 13, 1960, \$475 a month (4-26-60).
- MORRIS, CHARLES E., JR., Assistant in Mathematics, two months from June 16, 1960, \$800 (4-29-60).
- MUKHERJEE, SUPROKASH, Research Associate in Physics (C), one year from September 1, 1960, \$7000 (4-6-60).
- O'MEARA, EDWARD T., Research Assistant in Education Articulation (College of Education), $\frac{1}{2}$ time, and Assistant Coordinator of Admissions-Articulation (Office of Admissions and Records), $\frac{1}{2}$ time, one year from September 1, 1960, \$5000 (4-26-60).
- PATLOGAN, MRS. SYLVIA, Instructor in Foreign Languages (Chicago Undergraduate Division), $\frac{1}{2}$ time, academic year beginning September 1, 1960, \$3200 (4-26-60).
- PATTON, WILLARD T., Instructor in Electrical Engineering (C), five months from April 1, 1960, to render service during the second semester of the academic year, \$544.17 a month, supersedes (4-14-60).
- REINER, IRVING, Professor of Mathematics, June 16-August 24, 1960, \$2750; this is in addition to his present appointment (4-26-60).
- RICKETTS, BERNARD G., Professor of Metallurgical Engineering, Department of Mining and Metallurgical Engineering (C), two months from June 16, 1960, \$2088.88; this is in addition to his present appointment (5-3-60).
- ROBINSON, WILFRED K., Assistant in the Institute of Aviation, June 20-August 13, 1960, \$475 a month (4-26-60).
- ROSE, WALTER D., Professor of Petroleum Engineering, Department of Mining and Metallurgical Engineering (C), two months from June 16, 1960, \$1133.33 a month; this is in addition to his present appointment (5-3-60).
- RUBEL, LEE, Assistant Professor of Mathematics, June 16-August 24, 1960, \$1800; this is in addition to his present appointment (4-26-60).
- RUSSO, THOMAS F., Assistant in Physical Education for Men (Chicago Undergraduate Division), nine months from September 16, 1960, \$4200; this is in addition to \$500 he will receive from the Athletic Association for services to it (4-26-60).
- SACHS, DAVID, Instructor in Mathematics, academic year beginning September 1, 1960, \$7000 (4-13-60).

- SCHWARZ, ENRIQUE, Assistant Professor of Radiology (Medicine), $\frac{3}{4}$ time, April 4-August 31, 1960, \$812.50 a month, supersedes (4-26-60).
- SEYLER, EARL C., Short-term Consultant in India, under Contract US ICAC-1258 with the International Cooperation Administration, beginning March 1, 1960, and continuing until five working days after leaving India, \$16,445 a year; regular salary to be charged again to budget position after return from India; supersedes (4-6-60).
- SHUBERT, HARRY A., Research Assistant in Electrical Engineering (S), five months from April 1, 1960, \$425 a month, supersedes (4-26-60).
- SIDEBOTTOM, OMAR M., Professor of Theoretical and Applied Mechanics (C), $83\frac{1}{3}$ time, two months from June 16, 1960, \$888.89 a month; this is in addition to his present appointment (4-26-60).
- SILVERSTEIN, SETH D., Research Assistant in Physics (C), two months from July 1, 1960, \$404.44 a month, supersedes (5-3-60).
- SINGH, SHRI KRISHNA, Visiting Assistant Professor of Mathematics, academic year beginning September 1, 1960, \$7000 (4-13-60).
- STEINER, GAAR W., Assistant in the Institute of Aviation, June 20-August 13, 1960, \$475 a month (4-26-60).
- STIPPES, MARVIN C., Professor of Theoretical and Applied Mechanics (C), $\frac{1}{2}$ time, two months from June 16, 1960, \$500 a month; this is in addition to his present appointment (4-26-60).
- STREET, NORMAN, Professor of Petroleum Engineering, Department of Mining and Metallurgical Engineering (C), one month from June 16, 1960, \$1000; this is in addition to his present appointment (5-3-60).
- TUCKER, LEDYARD R., Professor of Psychology, indefinite tenure from September 1, 1960, to render service during each academic year, \$14,000 a year (4-8-60).
- VORBECK, JOSEPH F., Assistant in the Institute of Aviation, June 20-August 13, 1960, \$475 a month (4-26-60).
- WATADA, NORITAKA, Research Associate in Food Technology (S), July 1, 1960-August 31, 1961, \$5500 a year (4-26-60).
- WEMPNER, GERALD A., Visiting Associate Professor of Theoretical and Applied Mechanics (C), two months from July 1, 1960, \$833 a month (4-26-60).
- WETENKAMP, HARRY R., Professor of Theoretical and Applied Mechanics (C), two months from June 16, 1960, \$1000 a month; this is in addition to his present appointment (4-26-60).
- WHEATLEY, JAMES H., Instructor in English, academic year beginning September 1, 1960, \$5800 (4-6-60).
- WOGULIS, STANLEY G., JR., Research Assistant in Physics (C), two months from June 16, 1960, \$422 a month (4-26-60).
- WOLOSHIN, ARTHUR A., Instructor in Psychiatry (Medicine), $\frac{1}{2}$ time, five months from April 1, 1960, \$458.33 a month, supersedes his nonsalaried appointment (4-14-60).

GRADUATE FELLOWS

The following appointments made by the Dean of the Graduate College were approved on April 1, 1960, except where otherwise indicated in parentheses.

Accountancy

- BARBER, JOHN W., Fellow, nine months from September 16, 1960, \$1500.
- GALLIART, WILLARD H., Teaching Fellow, nine months from September 16, 1960, \$1000.
- POSZGAI, DALE G., Teaching Fellow, nine months from September 16, 1960, \$1000.
- TRINE, J. ARDEN, Teaching Fellow, nine months from September 16, 1960, \$1000.

Aeronautical Engineering

- KELLER, LEON C., Fellow, nine months from September 16, 1960, \$1500.
- STROM, CHARLES R., Engineering Faculty Development Teaching Fellow, one year from September 1, 1960, \$2000.
- THYSON, NOEL A., Fellow, nine months from September 16, 1960, \$1500.

Agricultural Economics

- COWLING, K. G., Fellow, nine months from September 16, 1960, \$1500.
- LANNER, SIXTUS, Wright Fellow, nine months from September 16, 1960, \$1500.
- TOMPKINS, WILLIAM A., Fellow, nine months from September 16, 1960, \$1500.

Agricultural Engineering

HUGGINS, LARRY F., Alfred P. Sloan Faculty Development Fellow, nine months from September 16, 1960, \$2400.

WELLS, GARY L., Hackett Fellow, nine months from September 16, 1960, \$1500.

Agronomy

CHERRY, JOE H., Wright Fellow, nine months from September 16, 1960, \$1500.

CHRISPEELS, MAARTEN J., Fellow, nine months from September 16, 1960, \$1500.

WATKINS, PHILLIP W., W. L. Burlison Fellow, nine months from September 16, 1960, \$2000.

WILDING, LAWRENCE P., Campbell Soup Company Fellow in Plant Sciences, nine months from September 16, 1960, \$2400 (4-18-60).

ZIESERL, JOHN F., JR., Fellow, nine months from September 16, 1960, \$2000.

Animal Science

BREIDENSTEIN, BLAINE B., Wright Fellow, nine months from September 16, 1960, \$1500.

CLINE, TILFORD R., Hackett Fellow, nine months from September 16, 1960, \$1500 (4-20-60).

Anthropology

NAGATA, SHUICHI, Fellow, nine months from September 16, 1960, \$1500.

Art

BUTLER, KENNETH J., Fellow, nine months from September 16, 1960, \$1500.

HUDSON, AGNES G., Fellow, nine months from September 16, 1960, \$1500.

LOVELL, MRS. ROSA L. E., Fellow, nine months from September 16, 1960, \$1500.

LOVELL, WILLIAM G., Fellow, nine months from September 16, 1960, \$1500.

Astronomy

ROEDER, ROBERT C., Fellow, nine months from September 16, 1960, \$2000.

Botany

ALLEN, RICHARD D., Fellow, nine months from September 16, 1960, \$1500.

KUMAR, HARDARSHAN, Fellow, nine months from September 16, 1960, \$1500.

LIBERTA, ANTHONY E., Teaching Fellow, nine months from September 16, 1960, \$1000.

UECKER, FRANCIS A., National Science Foundation Summer Fellow, June 16-August 11, 1960, \$600 (4-13-60).

Business Administration

BARKER, VICTOR G., Fellow, nine months from September 16, 1960, \$1500.

Ceramic Engineering

BAKER, ROBERT J., Teaching Fellow, nine months from September 16, 1960, \$1000.

Chemical Engineering

AYEN, RICHARD J., Dow Chemical Company Fellow, nine months from September 16, 1960, \$1700 (4-26-60).

BENTLEY, WILLIAM H., National Science Foundation Cooperative Fellow, one year from September 1, 1960, \$2200 (4-15-60).

BUEHL, WALTER M., JR., Shell Oil Company Fellow, nine months from September 16, 1960, \$1800.

EDWARDS, ARTHUR L., Fellow, September 16, 1960-January 31, 1961, \$825.

HARDING, JOHN W., Fellow, September 16, 1960-January 31, 1961, \$825.

KIRBY, DAVID B., National Science Foundation Cooperative Fellow, one year from June 16, 1960, \$2200 (4-15-60).

KRUSE, ROBERT L., Procter and Gamble Company Fellow, nine months from September 16, 1960, \$1800 (4-4-60).

MERSON, RICHARD L., Amoco Foundation Fellow, nine months from September 16, 1960, \$1800.

REISS, L. PHILIP, Monsanto Chemical Company Summer Fellow, two months from June 16, 1960, \$550 (4-20-60); and National Science Foundation Cooperative Fellow, one year from September 1, 1960, \$2200 (4-15-60).

SHAW, PAUL V., Engineering Faculty Development Teaching Fellow, one year from September 1, 1960, \$2000 (4-5-60).

YATABE, JON M., Monsanto Chemical Company Fellow, nine months from September 16, 1960, \$1800 (4-26-60).

YOUNGQUIST, GORDON R., Minnesota Mining and Manufacturing Company Fellow, nine months from September 16, 1960, \$2000 (4-26-60).

ZAHNER, JOHN C., Fellow, nine months from September 16, 1960, \$2000.

Chemistry

BECK, JAMES R., Gillette-Toni Fellow, September 16, 1960-January 31, 1961, \$1000.
BURTON, GILBERT W., National Science Foundation Summer Fellow, June 16-August 11, 1960, \$600 (4-14-60); and USI Fellow, nine months from September 16, 1960, \$1800.

CARLSON, C. G., Fellow, nine months from September 16, 1960, \$1500.

CARLSON, ROBERT L., National Science Foundation Cooperative Fellow, one year from September 1, 1960, \$2200 (4-15-60).

CLERON, VICTOR, National Science Foundation Cooperative Fellow, one year from September 1, 1960, \$2200 (4-15-60).

COX, CLIFFORD, Fellow, nine months from September 16, 1960, \$1650.

DE VRIES, DONALD L., National Science Foundation Summer Fellow, June 16-August 11, 1960, \$600 (4-14-60).

DEYRUP, JAMES A., National Science Foundation Cooperative Fellow, nine months from September 16, 1960, \$1650 (4-15-60).

DONOVAN, THOMAS A., Fellow, nine months from September 16, 1960, \$1500.

DUNN, JAMES E., Teaching Fellow, nine months from September 16, 1960, \$1000.

DYBVIG, DOUGLAS H., National Science Foundation Summer Fellow, June 16-August 11, 1960, \$600 (4-14-60).

EYZAGUIRRE, JAIME, Fellow, nine months from September 16, 1960, \$1500.

FISHER, THOMAS H., Fellow, nine months from September 16, 1960, \$1650.

FOGHT, JAMES L., Fellow, nine months from September 16, 1960, \$1500.

FRIHAUF, EDWARD J., National Science Foundation Cooperative Fellow, one year from June 16, 1960, \$2200 (4-15-60).

GREEN, MELVIN H., National Science Foundation Cooperative Fellow, one year from June 16, 1960, \$2200 (4-15-60).

GUIRE, PATRICK E., Procter and Gamble Fellow, nine months from September 16, 1960, \$2100.

GUTMAN, DAVID, Fellow, nine months from September 16, 1960, \$1650.

HAYNES, LEROY W., National Science Foundation Summer Fellow, June 16-August 11, 1960, \$600 (4-14-60); and Fellow, September 16, 1960-January 31, 1961, \$750.

HAYNES, RAYMOND R., Standard Oil Company of California Fellow, nine months from September 16, 1960, \$2400.

HEINS, CONRAD F., Fellow, nine months from September 16, 1960, \$1500.

JOESTEN, MELVIN D., National Science Foundation Summer Fellow, June 16-August 11, 1960, \$600 (4-14-60); and Eastman Kodak Company Fellow, nine months from September 16, 1960, \$2500.

JOHNSON, CARL R., Lubrizol Foundation Fellow, nine months from September 16, 1960, \$2000.

JOHNSON, ROBERT P., Dow Chemical Company Fellow, nine months from September 16, 1960, \$1700.

KLEIN, RICHARD M., Fellow, nine months from September 16, 1960, \$1500.

KOKALIS, SOTER G., Ethyl Corporation Fellow, nine months from September 16, 1960, \$1900.

KOLKER, HAROLD J., National Science Foundation Cooperative Fellow, one year from June 16, 1960, \$2200 (4-15-60).

KONZ, MARVIN J., National Science Foundation Summer Fellow, June 16-August 11, 1960, \$600 (4-14-60); and Eli Lilly and Company Fellow, nine months from September 16, 1960, \$1700.

LARSON, JOHN G., National Science Foundation Cooperative Fellow, one year from June 16, 1960, \$2200 (4-15-60).

LYDY, DAVID, National Science Foundation Summer Fellow, June 16-August 11, 1960, \$600 (4-14-60); and National Science Foundation Cooperative Fellow, one year from September 1, 1960, \$2200 (4-15-60).

- MCCARTY, CHARLES G., National Science Foundation Cooperative Fellow, one year from June 16, 1960, \$2200 (4-15-60).
- McMURRAY, WALTER J., United States Rubber Company Foundation Post Graduate Fellow in Physical and Engineering Science, nine months from September 16, 1960, \$1800.
- MEEK, DEVON W., General Electric Foundation Fellow, nine months from September 16, 1960, \$1750.
- MOORE, HAROLD W., Phillips Petroleum Company Fellow, nine months from September 16, 1960, \$2000.
- NEALE, ROBERT S., National Science Foundation Summer Fellow, June 16-August 25, 1960, \$750 (4-14-60).
- PALMER, RICHARD A., Fellow, nine months from September 16, 1960, \$1650.
- RAFF, LIONEL M., Minnesota Mining and Manufacturing Company Fellow, nine months from September 16, 1960, \$2000.
- RHODES, YORKE E., JR., Rohm and Haas Fellow, nine months from September 16, 1960, \$1750.
- SCHULTZ, JOHN E., National Science Foundation Cooperative Fellow, one year from June 16, 1960, \$2200 (4-15-60).
- SHERMAN, EDWARD O., JR., National Science Foundation Summer Fellow, June 16-August 11, 1960, \$600 (4-14-60).
- SHIER, GEORGE D., Fellow, nine months from September 16, 1960, \$1650.
- SIMS, L. B., Teaching Fellow, nine months from September 16, 1960, \$1000.
- SPICER, LARRY, Fellow, nine months from September 16, 1960, \$1650.
- STEIGELMANN, EDWARD F., American Cyanamid Fellow, nine months from September 16, 1960, \$1800.
- SWOFFORD, HAROLD S., JR., National Science Foundation Summer Fellow, June 16-August 11, 1960, \$600 (4-14-60); and National Science Foundation Cooperative Fellow, one year from September 1, 1960, \$2200 (4-15-60).
- TEETS, DAVID W., National Science Foundation Cooperative Fellow, one year from June 16, 1960, \$2200 (4-15-60).
- TOREN, E. CLIFFORD, JR., Socony-Mobil Fellow, nine months from September 16, 1960, \$2000.
- UEBEL, JACOB J., Fellow, nine months from September 16, 1960, \$1500.
- UPPER, CHRISTEN D., National Science Foundation Cooperative Fellow, one year from June 16, 1960, \$2200 (4-15-60).
- WEDEGAERTNER, DONALD K., Union Carbide Plastics Company Fellow, nine months from September 16, 1960, \$2100.
- WEISGERBER, DAVID W., National Science Foundation Cooperative Fellow, nine months from September 16, 1960, \$1650 (4-15-60).
- WENZ, DONALD A., Fellow, September 16, 1960-January 31, 1961, \$750.
- WERNER, N. D., National Science Foundation Summer Fellow, June 16-August 11, 1960, \$600 (4-14-60); and National Science Foundation Cooperative Fellow, nine months from September 16, 1960, \$1650 (4-15-60).
- YETHON, ANDREW E., Sinclair Research Laboratories Fellow, nine months from September 16, 1960, \$1800.

Chicago Professional Colleges

- AKCASU, ALAEDDIN, Postdoctoral Upjohn Research Fellow, six months from April 1, 1960, \$500 a month (4-7-60).
- GRADY, LEE T., National Science Foundation Cooperative Fellow, one year from September 16, 1960, \$2200 (4-15-60).
- TURNER, FRED A., National Science Foundation Cooperative Fellow, one year from October 1, 1960, \$2200 (4-15-60).

Civil Engineering

- BEDSEEM, WILLIAM B., Esso Research and Engineering Company Fellow, nine months from September 16, 1960, \$1800.
- BEMBEN, STANLEY M., Engineering Faculty Development Teaching Fellow, one year from September 1, 1960, \$2000 (4-12-60).
- BURNS, NED H., California Oil Company Fellow, nine months from September 16, 1960, \$2000.
- CARLISLE, JOHN B., Fellow, nine months from September 16, 1960, \$1500.

- CHUANG, KUEN-PUO, Fellow, nine months from September 16, 1960, \$1500.
CORLEY, WILLIAM G., Fellow, nine months from September 16, 1960, \$1500.
DAI, PETER K., Fellow, nine months from September 16, 1960, \$1500.
DONNELLAN, B. A., Raymond Concrete Pile Company Fellow in Civil Engineering in Memorial to A. E. Cummings, nine months from September 16, 1960, \$1500.
DOWSE, BRIAN E. W., Fellow, nine months from September 16, 1960, \$1500.
HANLEY, JOHN T., Engineering Faculty Development Teaching Fellow, one year from September 1, 1960, \$1350 (4-11-60).
HARPER, GOIN N., Teaching Fellow, nine months from September 16, 1960, \$1000.
HARRIS, NEVILLE R., Fellow, nine months from September 16, 1960, \$1500.
HENDRON, ALFRED J., JR., Fellow, nine months from September 16, 1960, \$2000.
HERNESS, ERVIN D., Fellow, nine months from September 16, 1960, \$1500.
JONES, ROBERT M., National Science Foundation Cooperative Fellow, one year from June 1, 1960, \$2200 (4-15-60).
LAMB, JOHN H., JR., Engineering Faculty Development Teaching Fellow, September 16, 1960-January 31, 1961, \$666 (4-5-60).
MARCELLIS, JACK C., Automotive Safety Foundation Fellow in Highway Engineering, September 16, 1960-January 31, 1961, \$750.
MIKITKA, ROBERT W., Fellow, nine months from September 16, 1960, \$1500.
MUGA, BRUCE J., Teaching Fellow, nine months from September 16, 1960, \$1000.
MURAKAMI, MASASHI, Fellow, nine months from September 16, 1960, \$1500.
NORDELL, WILLIAM J., Fellow, nine months from September 16, 1960, \$1500.
PFRANG, E. O., Engineering Faculty Development Teaching Fellow, two months from June 16, 1960, \$395 (4-5-60); and nine months from September 16, 1960, \$1000 (4-5-60).
RODDA, ERROL D., Engineering Faculty Development Teaching Fellow, September 16, 1960-January 31, 1961, \$541 (4-4-60).
SHAW, WARREN A., Fellow, September 16, 1960-January 31, 1961, \$750.
SHIELDS, D. H., Fellow, nine months from September 16, 1960, \$1500.
SINGH, KRISHAN P., Fellow, nine months from September 16, 1960, \$1500.
SIRAPYAN, ARTIN N., Fellow, nine months from September 16, 1960, \$1500.
UMEMOTO, GILBERT A., Fellow, nine months from September 16, 1960, \$1500.
WIGGINS, JOHN H., JR., Fellow, nine months from September 16, 1960, \$1500.
WOODRING, RICHARD E., Engineering Faculty Development Teaching Fellow, one year from September 1, 1960, \$1500.
WORTH, EDWARD G., Engineering Faculty Development Teaching Fellow, September 16, 1960-January 31, 1961, \$175 (4-4-60).

Classics

- DIETZ, HANS P., Fellow, nine months from September 16, 1960, \$1500.

Communications

- CRUZ, NORA J., Fellow, nine months from September 16, 1960, \$1500.

Economics

- LEFTWICH, HOWARD M., Fellow, nine months from September 16, 1960, \$1500.
ONANIAN, EDWARD D., Fellow, nine months from September 16, 1960, \$1500.
RYDER, HARL E., JR., Teaching Fellow, nine months from September 16, 1960, \$1000.
SMITH, ROBERT F., Teaching Fellow, nine months from September 16, 1960, \$1000 (4-18-60).
WICKS, JOHN H., Fellow, nine months from September 16, 1960, \$1500.

Education

- AFRICK, DEANNA, Fellow, nine months from September 16, 1960, \$1500.
AUGER, FERRIS K., Fellow, nine months from September 16, 1960, \$1500.
FARRELL, BARBARA K., Fellow, nine months from September 16, 1960, \$1500.
FURUHATA, KAZUTAKA, Fellow, nine months from September 16, 1960, \$1500.
GOODWIN, WILLIAM L., Fellow, nine months from September 16, 1960, \$1500.
SANDERSON, PEGGY, Fellow, nine months from September 16, 1960, \$1500.
SHIBA, SUKEYORI, Fellow, nine months from September 16, 1960, \$1500.
SPENCLEY, KENNETH J., Fellow, nine months from September 16, 1960, \$1500.

Electrical Engineering

- AKITT, D. P., Fellow (Teaching Intern), nine months from September 16, 1960, \$2000.
- AUTH, LEO V., JR., Engineering Faculty Development Teaching Fellow, one year from September 1, 1960, \$1250 (4-5-60).
- BEULIGMANN, RAYMOND F., Engineering Faculty Development Teaching Fellow, nine months from September 16, 1960, \$1833 (4-4-60).
- BLACHFORD, CAMERON W., Engineering Faculty Development Teaching Fellow, one year from September 1, 1960, \$2000 (4-5-60).
- BOLES, WILLIAM D., Fellow (Teaching Intern), nine months from September 16, 1960, \$2000.
- DAVIS, DANIEL J., Fellow (Teaching Intern), nine months from September 16, 1960, \$2000.
- ELSEY, JOHN C., Bendix Aviation Corporation Teaching Fellow, nine months from September 16, 1960, \$3000.
- GHOSH, HITENDRA N., Teaching Fellow, nine months from September 16, 1960, \$1000 (4-7-60).
- HARADER, WAYNE R., Fellow (Teaching Intern), nine months from September 16, 1960, \$2600.
- HEDVIG, THOMAS I., Engineering Faculty Development Fellow, three months from September 1, 1960, \$333 (4-5-60).
- KESHORAM, AGGARWAL J., Fellow, nine months from September 16, 1960, \$1500.
- KLOCK, PAUL W., Engineering Faculty Development Teaching Fellow, September 16, 1960-January 31, 1961, \$801 (4-5-60).
- KORSH, JAMES F., Fellow (Teaching Intern), nine months from September 16, 1960, \$2000 (4-15-60).
- LYNK, CHARLES N., JR., Radio Corporation of America Fellow, nine months from September 16, 1960, \$2100 (4-25-60).
- MCGEE, W. F., Fellow, nine months from September 16, 1960, \$1500.
- MERKELO, HENRY, Fellow (Teaching Intern), nine months from September 16, 1960, \$2000.
- MUELLER, THOMAS E., General Electric Foundation Fellow, nine months from September 16, 1960, \$1750.
- PAGONES, MICHAEL J., Fellow, February 1-June 15, 1961, \$750.
- SCHNEIDER, JOHN M., Engineering Faculty Development Teaching Fellow, one year from September 1, 1960, \$2000 (4-11-60).
- SINNEMA, WILLIAM, Fellow (Teaching Intern), nine months from September 16, 1960, \$2000.
- TOEPFER, RICHARD E., JR., Engineering Faculty Development Teaching Fellow, September 16, 1960-January 31, 1961, \$657 (4-5-60).
- YASUI, TEIZO, Fellow, nine months from September 16, 1960, \$1500.

English

- ANDERSEN, SAYRE D., Teaching Fellow, nine months from September 16, 1960, \$1000.
- BAKER, LORIS S., Teaching Fellow, nine months from September 16, 1960, \$1000.
- CERNY, FRANCES B., Fellow, nine months from September 16, 1960, \$1500.
- COLACURCIO, MICHAEL J., JR., Fellow, nine months from September 16, 1960, \$2000.
- FRIEND, GEORGE L., Fellow, nine months from September 16, 1960, \$1500.
- GUFFEY, GEORGE R., Fellow, nine months from September 16, 1960, \$1500.
- HEAGARTY, MARY A., Teaching Fellow in English, nine months from September 16, 1960, \$1000.
- WALLACE, L. NADINE, Fellow, nine months from September 16, 1960, \$1500.
- WILFONG, ANNE E., Teaching Fellow, nine months from September 16, 1960, \$1000.

Entomology

- CUTTS, WILLIAM B., Teaching Fellow, nine months from September 16, 1960, \$1000.
- FRAEMBS, FRANK A., National Science Foundation Summer Fellow, June 16-August 11, 1960, \$600 (4-14-60); and Teaching Fellow, nine months from September 16, 1960, \$1000.
- HURLEY, RICHARD, Teaching Fellow, nine months from September 16, 1960, \$1000.
- RENSHAW, HAROLD W., Fellow, nine months from September 16, 1960, \$1500.

Finance

- PETERSON, DAVID E., Fellow, nine months from September 16, 1960, \$1500.
SUMMER, HARRY H., Illinois Consumer Finance Association Fellow, nine months from September 16, 1960, \$2000 (4-22-60).

Food Technology

- GROESCHEL, EDWARD C., JR., Wright Fellow, nine months from September 16, 1960, \$1500.
KIM, DONG H., Fellow, nine months from September 16, 1960, \$1500.
KIMURA, HIROSHI, Wright Fellow, nine months from September 16, 1960, \$1500 (4-18-60).
LEBEKMAN, KENNETH W., Fellow, nine months from September 16, 1960, \$1500.
SGOUTAS, DEMETRIOS, Fellow, nine months from September 16, 1960, \$1500.
WALKER, BRIAN L., Fellow, nine months from September 16, 1960, \$1500.

French

- McNAMARA, CAROLE A., Fellow, nine months from September 16, 1960, \$1500.
RIGGS, ROBERT M., Teaching Fellow, nine months from September 16, 1960, \$1500.
WOLIN, HELGA D., Teaching Fellow, nine months from September 16, 1960, \$1000.

Geography

- ARMSTRONG, RICHARD W., Fellow, nine months from September 16, 1960, \$1500.
McDONALD, JAMES R., Teaching Fellow, nine months from September 16, 1960, \$1000.

Geology

- BAKER, PETER E., Fellow, nine months from September 16, 1960, \$1500.
CARL, JAMES D., National Science Foundation Summer Fellow, June 16-August 11, 1960, \$600 (4-14-60); and Shell Companies Foundation Fellow, nine months from September 16, 1960, \$1800 (4-4-60).
COOGAN, ALAN H., Fellow, nine months from September 16, 1960, \$1500.
FARVOLDEN, ROBERT N., Fellow, nine months from September 16, 1960, \$2000.
GILMAN, RICHARD A., National Science Foundation Summer Fellow, June 16-September 8, 1960, \$900 (4-14-60).
GUBER, ALBERT L., National Science Foundation Summer Fellow, June 16-August 11, 1960, \$600 (4-14-60).
HAWLEY, JOHN W., Fellow, nine months from September 16, 1960, \$1500.
McGUIRE, ODELL S., Fellow, nine months from September 16, 1960, \$1500.
MONROE, EUGENE A., Illinois Clay Products Company Fellow, nine months from September 16, 1960, \$1700 (4-4-60).
NIEMANN, ROBERT L., Illinois Clay Products Company Fellow, nine months from September 16, 1960, \$1700.
PAGE, N. J., Fellow, nine months from September 16, 1960, \$2000.
PARIZEK, RICHARD B., National Science Foundation Cooperative Fellow, nine months from September 16, 1960, \$1650 (4-15-60).
RIGGS, ELLIOTT A., National Science Foundation Summer Fellow, June 16-September 8, 1960, \$900 (4-14-60).
TOTTEN, STANLEY M., Fellow, nine months from September 16, 1960, \$1500.
WILSON, WILLIAM E., III, Minneapolis-Honeywell Regulator Company Fellow, nine months from September 16, 1960, \$1800 (4-25-60).
WOLFF, ROGER G., National Lead Company (Baroid Division) Fellow, nine months from September 16, 1960, \$1500.

German

- ADAMS, NOEL (Miss), Fellow, nine months from September 16, 1960, \$1500.
BARTHEL, JOHN W., Fellow, nine months from September 16, 1960, \$1500.

History

- CADY, DARREL, Fellow, nine months from September 16, 1960, \$1500.
DAVIS, GEORGE C., JR., Fellow, nine months from September 16, 1960, \$1500.
HODGE, JOHN E., Fellow, nine months from September 16, 1960, \$1500.
KELLY, NAOMI M., Fellow, nine months from September 16, 1960, \$2000.
KELLY, THOMAS, Fellow, nine months from September 16, 1960, \$1500.
KING, PETER J., Teaching Fellow, nine months from September 16, 1960, \$1000.

PIERDOS, THEODORA A., Fellow, nine months from September 16, 1960, \$1500.
SKEHEN, MRS. DEBORAH H., Fellow, nine months from September 16, 1960, \$1500.
SPRUNGER, KEITH L., Fellow, nine months from September 16, 1960, \$1500.
STRICKLAND, ARVARH E., Fellow, nine months from September 16, 1960, \$1500.
WAKSTEIN, ALLEN M., Kendric C. Babcock Fellow, nine months from September 16, 1960, \$1800 (4-19-60).

Home Economics

ADAMS, MRS. RUBY, General Foods Fellow, nine months from September 16, 1960, \$3000.

Horticulture

CAPEL, RICHARD E., Fellow, nine months from September 16, 1960, \$1500.
LU, WEI-JUNE, Fellow, nine months from September 16, 1960, \$1500.
YUDA, JOSEPH E., Fellow, nine months from September 16, 1960, \$1500.

Italian

BREMNER, LUCILLE, Teaching Fellow, nine months from September 16, 1960, \$1000.
CANALE-PAROLA, MRS. THELMA, Fellow, nine months from September 16, 1960, \$1500.

Journalism

BROWN, ROGER L., Fellow, nine months from September 16, 1960, \$1500.

Library Science

BRIDGES, JUDITH A., Fellow, nine months from September 16, 1960, \$1500.
ENGEL, RHODA R., Fellow, nine months from September 16, 1960, \$1500.
POOL, JANE, Fellow, nine months from September 16, 1960, \$1500.
SMITH, DAVID A., Fellow, nine months from September 16, 1960, \$2000.

Management

JOHNSON, JERALD L., Fellow, nine months from September 16, 1960, \$1500.

Marketing

COFFEY, ROBERT E., Teaching Fellow in Business, nine months from September 16, 1960, \$1000.
FURUHASHI, YUSAKU I., Fellow in Business, September 16, 1960-January 31, 1961, \$750.
GIST, RONALD R., Teaching Fellow in Business, nine months from September 16, 1960, \$1000.
LANGE, IRENE L., Fellow, nine months from September 16, 1960, \$1500.
MCDIARMID, JOHN D., Fellow, nine months from September 16, 1960, \$1500.
PATINKIN, FLOYD E., Fellow, nine months from September 16, 1960, \$1500.

Mathematics

CHAKRAVARTI, RENU, Fellow, nine months from September 16, 1960, \$1650.
DEMARR, RALPH A., National Science Foundation Summer Fellow, June 16-September 8, 1960, \$900 (4-14-60).
GRAFF, GEORGE C., National Science Foundation Cooperative Fellow, one year from June 16, 1960, \$2200 (4-15-60).
GROSSMAN, MARVIN W., Fellow, nine months from September 16, 1960, \$1650.
LANGBERG, GEORGE, National Science Foundation Summer Fellow, June 16-August 11, 1960, \$600 (4-14-60).
LEAF, GARY K., National Science Foundation Summer Fellow, June 16-August 11, 1960, \$600 (4-14-60).
LEVY, LAWRENCE S., Teaching Fellow, nine months from September 16, 1960, \$1000.
MORAN, DANIEL A., National Science Foundation Cooperative Fellow, one year from September 1, 1960, \$2200 (4-15-60).
PAUL, E. M., Special Fellow, two months from April 1, 1960, \$400 (4-15-60).
PETERS, JOSEPH A., National Science Foundation Summer Fellow, June 16-August 11, 1960, \$600 (4-14-60).
RAO, CHIVUKULA R., Continental Oil Company Fellow, nine months from September 16, 1960, \$2200.

- ROBINSON, IRVINE J. W., Fellow, nine months from September 16, 1960, \$2000.
 ROSENKRANTZ, WALTER A., National Science Foundation Cooperative Fellow, nine months from September 16, 1960, \$1650 (4-15-60).
 RUSSELL, PETER B., Fellow, nine months from September 16, 1960, \$1650.
 SADAGURSKY, PAUL L., Fellow, nine months from September 16, 1960, \$1650.
 SISTER MADELINE SOPHIE DRUFENBROCK, O. S. F., National Science Foundation Cooperative Fellowship, one year from June 1, 1960, \$2200 (4-15-60).
 SKEATH, J. EDWARD, National Science Foundation Cooperative Fellow, nine months from September 16, 1960, \$1650 (4-15-60).

Mechanical Engineering

- ADDY, A. L., Fellow, nine months from September 16, 1960, \$1500.
 APPL, FRANKLIN J., Fellow (Teaching Intern), nine months from September 16, 1960, \$2000 (4-5-60).
 BUTLER, J. S., Fellow (Teaching Intern), nine months from September 16, 1960, \$2000.
 CLAUSING, ARTHUR M., National Science Foundation Cooperative Fellow, one year from September 1, 1960, \$2200 (4-15-60).
 FRENCH, JAMES L., Engineering Faculty Development Teaching Fellow, one year from September 1, 1960, \$1625 (4-5-60).
 GAITHER, ROBERT B., Engineering Faculty Development Teaching Fellow, one year from September 1, 1960, \$2000 (4-5-60).
 GILBERT, W. H., JR., Fellow (Teaching Intern), nine months from September 16, 1960, \$2000.
 GOLIK, RAYMOND J., Engineering Faculty Development Teaching Fellow, one year from September 1, 1960, \$2000.
 HELMBURG, RICHARD W., Fellow (Teaching Intern), nine months from September 16, 1960, \$3000.
 IHRIG, H. KARL, JR., Engineering Faculty Development Teaching Fellow, one year from September 1, 1960, \$1350.
 JONES, BARCLAY G., Fellow, nine months from September 16, 1960, \$2000.
 LAMB, JAMIE P., JR., Fellow, nine months from September 16, 1960, \$1500.
 LARSON, CARL S., National Science Foundation Summer Fellow, June 16-August 11, 1960, \$600 (4-14-60).
 McNARY, ROSS O., Fellow (Teaching Intern), nine months from September 16, 1960, \$2000.
 ROBERTS, VERNER L., Fellow (Teaching Intern), nine months from September 16, 1960, \$2600.
 WEDEKIND, GILBERT L., Fellow (Teaching Intern), nine months from September 16, 1960, \$2000.
 YELLIN, EDWARD L., Fellow (Teaching Intern), nine months from September 16, 1960, \$3000 (4-5-60).
 YOUNGBLOOD, WALLACE W., Fellow, nine months from September 16, 1960, \$1500.

Microbiology

- LEE, CHIN K., United States Public Health Service Fellow (Trainee), five months from April 1, 1960, \$1000 (4-18-60).

Mining and Metallurgical Engineering

- HEINS, ROBERT W., Engineering Faculty Development Teaching Fellow in Mining Engineering, one year from September 1, 1960, \$2000.
 MEYER, MARSHALL D., National Science Foundation Cooperative Fellow in Metallurgy, one year from September 16, 1960, \$2200 (4-15-60).
 RATTI, GIUSEPPE E., Fellow in Mining Engineering, nine months from September 16, 1960, \$2000.

Music

- BACH, JAN M., Teaching Fellow, nine months from September 16, 1960, \$1000.
 BOARDMAN, EUNICE L., Fellow, nine months from September 16, 1960, \$1500.
 BOTKIN, SANDRA E., Fellow, nine months from September 16, 1960, \$1500.
 CAVANAGH, GEORGE A., Fellow, nine months from September 16, 1960, \$1500.
 DEANE, DERRY, Teaching Fellow, nine months from September 16, 1960, \$1000.
 DRINKALL, ROGER, Fellow, nine months from September 16, 1960, \$1500.

FARISH, STEPHEN T., JR., Fellow, nine months from September 16, 1960, \$1500.
FINFGELD, MRS. CAROLYN A., Fellow, nine months from September 16, 1960, \$1500.
HEILES, WILLIAM H., Fellow, nine months from September 16, 1960, \$2000.
HOFFREN, JAMES, Fellow, nine months from September 16, 1960, \$1500.
MCWILLIAMS, BURR M., Fellow, nine months from September 16, 1960, \$1500.
WARD-STEINMAN, DAVID, Fellow, nine months from September 16, 1960, \$2000.

Nuclear Engineering

BAXTER, ALAN M., Fellow, nine months from September 16, 1960, \$1500.
HORNYIK, KARL, Fellow, nine months from September 16, 1960, \$1500.
McCORMICK, NORMAN J., National Science Foundation Cooperative Fellow, one year from September 1, 1960, \$2200 (4-15-60).

Philosophy

DAVIS, STEVEN, Fellow, nine months from September 16, 1960, \$1500.
WHITTIER, DUANE H., Fellow, nine months from September 16, 1960, \$2000.

Physical Education

WILKEY, SAM, Fellow, nine months from September 16, 1960, \$1500.

Physics

AHRENKIEL, RICHARD, National Science Foundation Cooperative Fellow, one year from June 1, 1960, \$2200 (4-15-60).
ALLEN, RICHARD R., National Science Foundation Cooperative Fellow, one year from September 1, 1960, \$2200 (4-19-60).
ANDERSON, GORDON W., Fellow (Teaching Intern), nine months from September 16, 1960, \$2000.
BLAKE, J. BERNARD, Raytheon Manufacturing Company Fellow, nine months from September 16, 1960, \$2000 (4-26-60).
FERNELIUS, NILS C., National Science Foundation Cooperative Fellow, one year from September 1, 1960, \$2200 (4-15-60).
FINNEMORE, DOUGLAS K., United States Steel Foundation Fellow, nine months from September 16, 1960, \$2600 (4-26-60).
FITCHEN, DOUGLAS B., International Business Machines Corporation Fellow, nine months from September 16, 1960, \$1800.
GARRELL, MARTIN H., National Science Foundation Cooperative Fellow, nine months from September 16, 1960, \$1650 (4-15-60).
GRAY, EDWARD R., Fellow, nine months from September 16, 1960, \$1650.
HALL, EDNA J., Fellow, nine months from September 16, 1960, \$1650.
HENRY, CHARLES H., Fellow, nine months from September 16, 1960, \$1650.
HILL, DENNIS M., Fellow, nine months from September 16, 1960, \$1650.
HOPKINS, DON C., Haloid Xerox Fellow, nine months from September 16, 1960, \$2000 (4-26-60).
MANGAN, JAMES M., Fellow, nine months from September 16, 1960, \$1650.
MATHEWS, WESLEY N., JR., National Science Foundation Cooperative Fellow, one year from September 16, 1960, \$2200 (4-15-60).
PROBST, FRANKLIN M., National Science Foundation Cooperative Fellow, nine months from September 16, 1960, \$1650 (4-15-60).
STEPHENS, STEPHEN V., Fellow, nine months from September 16, 1960, \$2000.
TIPPINS, HARRY H., JR., General Electric Foundation Fellow, nine months from September 16, 1960, \$2500 (4-26-60).
WALKER, ARTHUR B. C., JR., Corning Glass Works Foundation Fellow, nine months from September 16, 1960, \$2000 (4-26-60).

Physiology

BAGBY, ROLAND, National Science Foundation Cooperative Fellow, nine months from September 16, 1960, \$1650 (4-15-60).
DEGROAT, DRUSILLA A., Teaching Fellow, nine months from September 16, 1960, \$1000.

Political Science

ALLEN, KENNETH E., Charles E. Merriam Fellow, nine months from September 16, 1960, \$1800.

- BENNETT, T. J., James Wilford Garner Fellow, nine months from September 16, 1960, \$1800.
BERG, DARLA, James Wilford Garner Fellow, nine months from September 16, 1960, \$1800.
DOUGLAS, STEVE A., Fellow, nine months from September 16, 1960, \$1500.
GOODALL, LEONARD E., Fellow, nine months from September 16, 1960, \$2000.
KAWASAKI, HEIICHIRO, James Wilford Garner Fellow, nine months from September 16, 1960, \$1800.
KEBSCHULL, HARVEY G., Fellow, nine months from September 16, 1960, \$1500.
KITAJIMA, MRS. TAKAE, Fellow, nine months from September 16, 1960, \$1500.
RATLIFF, DAVID P., Fellow, nine months from September 16, 1960, \$1500.
SOKOLOV, ALVIN D., Kendric C. Babcock Fellow, nine months from September 16, 1960, \$1800.
SORENSEN, A. DON, Fellow, nine months from September 16, 1960, \$1500.
STEPHENSON, PATRICIA A., Fellow, nine months from September 16, 1960, \$1500.

Radio and Television

- RASBERRY, CHARLES L., Fellow, September 16, 1960-January 31, 1961, \$750.

Sociology

- PRYKE, R. W. S., Fellow, nine months from September 16, 1960, \$1500.
SUTTLES, GERALD D., Fellow, nine months from September 16, 1960, \$1500.

Spanish

- ALLEY, ETHEL H., Fellow, nine months from September 16, 1960, \$1500.
KIRBY, HARRY L., JR., Fellow, nine months from September 16, 1960, \$1500.
QUILTER, DANIEL E., Fellow, nine months from September 16, 1960, \$2000.
SIRACUSA, JOSEPH, Teaching Fellow, nine months from September 16, 1960, \$1000.
WALSH, JAMES L., Fellow, nine months from September 16, 1960, \$1500.

Speech

- HOOPS, RICHARD A., Fellow, nine months from September 16, 1960, \$1500.
ROBINSON, H. W., Teaching Fellow, nine months from September 16, 1960, \$1000.
ROSENFELD, SYLVIA A. S., Fellow, nine months from September 16, 1960, \$1500.
SLOAN, JOHN H., Fellow, nine months from September 16, 1960, \$1500.

Theoretical and Applied Mechanics

- CARLSON, DONALD E., National Science Foundation Cooperative Fellow, one year from June 1, 1960, \$2200 (4-15-60).
COOK, ROBERT D., Fellow, nine months from September 16, 1960, \$1500.
GUBSER, JOHN L., National Science Foundation Cooperative Fellow, one year from September 1, 1960, \$2200 (4-15-60).
HILL, JAMES L., Fellow (Teaching Intern), nine months from September 16, 1960, \$2000.
HULTGREN, RONALD O., Fellow, nine months from September 16, 1960, \$1500.
KEMP, E. L., Fellow, nine months from September 16, 1960, \$1500.
RAUSCH, PAUL J., Engineering Faculty Development Teaching Fellow, one year from September 1, 1960, \$2000.
SCHWIEBERT, PHILLIP, Teaching Fellow, February 1-June 15, 1961, \$500.
SLITER, GEORGE E., Fellow, nine months from September 16, 1960, \$1500.
THOMS, ROBERT L., Engineering Faculty Development Teaching Fellow, one year from September 1, 1960, \$800 (4-5-60).

Zoology

- BRANDON, RONALD A., National Science Foundation Cooperative Fellow, one year from September 1, 1960, \$2200 (4-15-60).
BRUNNER, ROBERT W., Fellow, nine months from September 16, 1960, \$1500.
CLARKE, RICHARD B., Fellow, nine months from September 16, 1960, \$1500.
FORSYTH, NANCY J., Fellow, nine months from September 16, 1960, \$2000.
LEHMANN, WILMA H., Fellow, nine months from September 16, 1960, \$1500.
MARKS, SUZANNE, Fellow, nine months from September 16, 1960, \$2000.
WALKER, ROSA A., Fellow, nine months from September 16, 1960, \$1500.
WILLIAMS, JOHN E., National Science Foundation Cooperative Fellow, one year from September 1, 1960, \$2200 (4-15-60).

RESIGNATIONS, DECLINATIONS, AND CANCELLATIONS

- AKCASU, ALAEDDIN, Research Associate in Pharmacology (Medicine) — resignation effective April 1, 1960.
- ANDERSON, WILLIAM R., Associate Professor of Physics (Chicago Undergraduate Division) (Summer Session of 1960) — declination effective June 20, 1960.
- ANNIS, NORMAN L., Instructor in Art — resignation effective September 1, 1960.
- BAUMAN, STEVEN, Assistant in Mathematics (Summer Session of 1960) — declination effective June 20, 1960.
- BOICE, LUBELLE, Fellow in Microbiology — resignation effective May 15, 1960.
- CECE, JOSEPH D., Assistant in Obstetrics and Gynecology (Medicine) — cancellation effective October 1, 1959.
- DOWD, CAROL C., Assistant in Occupational Therapy (Medicine) — resignation effective April 16, 1960.
- GALLAGHER, MRS. MARY T., Instructor in English (Chicago Undergraduate Division) — resignation effective September 1, 1960.
- GHOSH, ASOKE K., Assistant in Agronomy (S) — resignation effective May 1, 1960.
- GUILLEMIN, VICTOR, Professor of Biophysics, Department of Physiology (Medicine) and Biophysicist in the Aeromedical Laboratory — resignation effective September 15, 1960.
- HASHIMOTO, TATSUICHIRO, Research Associate in the Institution for Tuberculosis Research — resignation effective June 14, 1960.
- IRBY, H. E., Associate Professor of Civil Engineering, Civil Engineering Summer Surveying Camp (Summer Session of 1960) — declination effective July 25, 1960.
- KHACHATURIAN, NARBEY, Associate Professor of Civil Engineering (Summer Session of 1960) — declination effective June 20, 1960.
- KNOX, ROBERT S., Research Assistant Professor of Physics (S) — resignation effective July 1, 1960.
- KOPLIN, JULIUS O., Assistant Professor of Electrical Engineering (Summer Session of 1960) — declination effective June 20, 1960.
- LATHRAP, DONALD W., Instructor in Anthropology (Summer Session of 1960) — declination effective June 20, 1960.
- LEMBURG, WAYNE A., Instructor in Business Management — resignation effective June 1, 1960.
- LI, TING Y., Professor of Aeronautical Engineering (C) — declination effective September 1, 1960.
- MALTER, HENRY, Lecturer in Civil Engineering (Summer Session of 1960) — declination effective June 20, 1960.
- MAY, P. CONRAD, United States Public Health Service Fellow (Trainee) in Psychiatry (Chicago Professional Colleges) — resignation effective April 1, 1960.
- MELOY, CARL R., Professor of Physical Sciences (Chicago Undergraduate Division) (Summer Session of 1960) — declination effective June 20, 1960.
- MYRICK, VESTA T., Resident Assistant, Arbor Suites — resignation effective April 15, 1960.
- NEWMARK, NATHAN M., Professor of Civil Engineering and Head of the Department (Summer Session of 1960) — declination effective June 20, 1960.
- OLIVER, WILLIAM A., Professor of Civil Engineering (Summer Session of 1960) — declination effective June 20, 1960.
- PATLOGAN, MRS. SYLVIA, Instructor in Foreign Languages (Chicago Undergraduate Division) — declination effective September 1, 1960.
- PETERS, JOSEPH A., Assistant in Mathematics (Summer Session of 1960) — declination effective June 20, 1960.
- ROBERTS, DONALD M., Assistant Professor of Mathematics (Summer Session of 1960) — declination effective June 20, 1960.
- SCHUMAIER, CLARENCE P., Assistant Professor of Agricultural Economics (S) — resignation effective May 9, 1960.
- SINGH, RAJINDER, Fellow in Mathematics — resignation effective April 16, 1960.
- STONE, CLARENCE W., Professor of Library Science — resignation effective September 1, 1960.
- TRIANDAFILIDIS, G. E., Instructor in Civil Engineering (Summer Session of 1960) — declination effective June 20, 1960.

- TSUNODA, EMIKO, Research Assistant in the Institution for Tuberculosis Research — resignation effective May 14, 1960.
- WEDDING, NUGENT, Professor of Marketing (Summer Session of 1960) — declination effective June 20, 1960.
- WHITE, CARLOS A., Research Assistant in Agricultural Entomology (Graduate College and Illinois Natural History Survey) — resignation effective May 20, 1960.
- WOOLEY, MRS. HELEN, Rare Book Room Assistant with rank of Instructor — resignation effective September 1, 1960.
- ZINGRONE, LOUISE D., Research Assistant in Economic Entomology (Illinois Natural History Survey and Graduate College) — resignation effective May 1, 1960.

LEAVES OF ABSENCE

- CHABOT, ANDRE, Instructor in Pediatrics (Medicine) — leave of absence, without pay, beginning May 14, 1960, and continuing through June 17, 1960.
- FLANAGAN, JOHN T., Professor of English — leave of absence, without pay, for the academic year beginning September 1, 1960, so that he may accept a Fulbright lectureship for services at the Universities of Brussels, Liege, and Ghent.
- FREYER, WARREN R., Instructor in English (Chicago Undergraduate Division) — leave of absence, with full pay, for the second semester of 1959-60, on account of disability.
- GRAMPP, WILLIAM D., Professor of Economics (Chicago Undergraduate Division) — leave of absence, without pay, for the academic year beginning September 1, 1960, so that he may accept a visiting appointment in the Department of Economics at City College in New York.
- HOCHMUTH, MARIE, Professor of Speech — leave of absence, without pay, for one year from September 1, 1960.
- KAUFMAN, JEROME L., Assistant Professor of Community Planning — leave of absence, without pay, beginning July 15 and continuing to August 15, 1960, for the purpose of travel abroad.
- LENG, EARL R., Professor of Agronomy, in the College of Agriculture and in the Agricultural Experiment Station — leave of absence, without pay, for six months from September 1, 1960, so that he may serve as Hybrid Maize Consultant in Yugoslavia. This is in addition to his sabbatical leave of absence.
- LEVINE, SOLOMON B., Associate Professor of Labor and Industrial Relations — leave of absence, without pay, for one month beginning July 1, 1960, so that he may teach in the Department of Economics at Pennsylvania State University during the summer session.
- LINSKY, LEONARD, Associate Professor of Philosophy — leave of absence, without pay, for one year from September 1, 1960.
- VOLPP, LOUIS D., Assistant Professor of Marketing — leave of absence, without pay, for the academic year 1960-61, so that he may serve as Visiting Associate Professor of Business Administration at the Amos Tuck School of Business Administration of Dartmouth College.
- VON NEUMANN, ROBERT A., Assistant Professor of Art — leave of absence, without pay, beginning May 1 and continuing through June 15, 1960, so that he may travel to Japan as a member of a four-man team under the auspices of the International Cooperation Administration to provide technical assistance to the Japanese handicraft industry.
- ZIMMERMAN, VERNON K., Associate Professor of Accountancy — leave of absence, without pay, for the academic year 1960-61, so that he may accept a Fulbright visiting lectureship at the Institute of Commerce in Vienna, Austria.

CHANGE IN SABBATICAL LEAVE OF ABSENCE

- MAPOTHER, DILLON E., Professor of Physics, in the College of Engineering — sabbatical leave of absence for the academic year beginning September 1, 1960, on one-half pay, instead of for the first semester on full pay and leave without pay during the second semester.

RETIREMENT

- WHEELER, MRS. DOROTHEA M., Pharmacy Reference Librarian, with rank of Instructor, *Emerita*, effective May 3, 1960.

JULY MEETING

On motion of Mrs. Watkins, the Board voted to hold its July meeting in Chicago, Illinois, on Tuesday, July 26, 1960, the hour and place to be determined by the President and Secretary of the Board.

On motion of Mr. Swain, the Board adjourned.

A. J. JANATA
Secretary

KENNEY E. WILLIAMSON
President