MEETING OF THE BOARD OF TRUSTEES

OF THE

UNIVERSITY OF ILLINOIS

October 17, 1962



The October meeting of The Board of Trustees of the University of Illinois was held in the LaSalle Hotel, Chicago, Illinois, October 17, 1962, beginning at 10:30 a.m.

The following members of the Board were present: Mr. Howard W. Clement, Mr. Irving Dilliard, Mr. Earl M. Hughes, Mr. Wayne A. Johnston, Mr. Harold Pogue, Mr. Timothy W. Swain, Mrs. Frances B. Watkins, Mr. Kenney E. Williamson. Governor Otto Kerner and Mr. George T. Wilkins were absent.

Also present were President David D. Henry, Executive Vice-President and Provost Lyle H. Lanier, Professor Norman A. Parker, Vice-President, Chicago Undergraduate Division, Dr. Joseph S. Begando, Vice-President, University of Illinois at the Medical Center, Chicago, Director C. S. Havens of the Physical Plant, Mr. C. C. Caveny, Assistant to the President, Chicago Office, Mr. C. E. Flynn, Assistant to the President and Director of Public Information, Mr. James J. Costello, Legal Counsel; and the officers of the Board, Mr. C. W. Weldon, Treasurer, Mr. H. O. Farber, Comptroller, and Mr. A. J. Janata, Secretary.

REPORT OF THE EXECUTIVE COMMITTEE

The Secretary submitted a report of the Executive Committee of its actions at a duly called meeting held on October 5, 1962.

MEETING OF THE EXECUTIVE COMMITTEE

On call of the Chairman, a meeting of the Executive Committee of the Board of Trustees of the University of Illinois was held in the Illini Center, LaSalle Hotel, Chicago, Illinois, on Friday, October 5, 1962, beginning at 2:00 p.m.

The following members of the Committee were present: Mr. Howard W. Clement, Chairman, Mr. Wayne A. Johnston, Mrs. Frances B. Watkins. Also present were Mr. Timothy W. Swain, Member of the Board, Comptroller H. O. Farber, Director C. S. Havens of the Physical Plant, Mr. James J. Costello, Legal Counsel, Mr. C. E. Flynn, Assistant to the President and Director of Public Information, and Mr. A. J. Janata, Secretary of the Board.

The Committee considered the following reports and recommendations submitted on behalf of the President of the University, and took the actions indicated.

CONTRACTS FOR CONSTRUCTION OF PARKING FACILITIES

(1) The Board of Trustees has approved a program for the construction of automobile parking facilities on properties either now owned by the University, or which the University is acquiring, in the vicinity of the Graduate Student Residence Halls on Green Street, and the Student-Staff Apartments on Green Street and Goodwin Avenue in Urbana, to replace parking facilities on the site of the Illinois Street Residence Halls.

Bids on the construction of the new parking facilities, according to the program approved by the Board, including demolition of structures on ten properties, were received on October 3. Submitted herewith is a report from the Physical Plant Department on the bidding, and a copy is being filed with the Secretary of the Board for record.

As reported to the Board, funds are available in Housing Division reserves which will be advanced to finance this project, and will be repaid from the income from the rentals of parking spaces.

It is therefore recommended that a contract be awarded to the Champaign Asphalt Company, Champaign, in accordance with its total firm lump sum price of \$48,972.45, with the right reserved to delete any division to which the University is not given possession within the required time, or is not vested with title satisfactory to the University Legal Counsel.

On motion of Mr. Johnston, this contract was awarded, as recommended, by the following vote: Aye, Mr. Clement, Mr. Johnston, Mrs. Watkins; no, none; absent, none.

LITIGATION INSTITUTED BY DONALD VREULS

(2) The University has recently been named as an additional defendant in a suit originally filed against the city of Champaign in the Circuit Court of Champaign County (No. 61 L 347) by Donald Vreuls and his wife. The complaint alleges that Mr. Vreuls sustained injuries on May 30, 1961, during the progress of a water fight between numerous students of the University of Illinois and seeks recovery therefor from both the City and the University. The Legal Counsel states that in his opinion the University should resist the claim and the jurisdiction of the Circuit Court over the University in this proceeding. He requests that the Board of Trustees authorize him to take appropriate action to oppose and defend the claim in all respects, and to employ such special legal counsel as he may deem necessary or desirable to assist him in connection therewith.

The President of the University concurs.

On motion of Mrs. Watkins, authority was given as requested.

PURCHASES

(3) 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 lowest acceptable bid. The President of the University concurs.

Chicago Colleges and Divisions

Chicago	visions		
Item	Department	Vendor	Cost
One spectrofluorometer and accessories consisting of one power supply, twelve quartz cells, one cell adapter, and one calibration unit	Aeromedical Laboratory	Farrand Optical Co., Inc., New York, N.Y.	\$ 3 466 00 delivered
One spectrophotometer and accessories consisting of one monochromator, one lamp housing, one power supply unit, one sample changer, and one indicator unit	Clinical Research Center	W. H. Kessel & Co., Chicago	4 980 00 delivered
Modernization and updating of one model 314X Tri-carb spectrometer to make it equal to current model 314EX-1	Radiology	Packard Instrument Co., Inc., La Grange	4 800 00 delivered
Urbana-	Champaign Depa	riments	
Printing of 3,000 copies special mosaic soil map of Johnson County, Illinois	Agronomy	National Survey Co., Chester, Vt.	4 040 40 f.o.b. delivered
One fermentor drive assembly complete with bath heaters, stainless steel filters, and continuous adjustable speed regulation; the equipment will be used for mass growth of micro- organisms under controlled condi- tions in research on the biosynthesis of proteins by the Biochemistry Division of the Department of Chem- istry and Chemical Engineering	Chemistry and Chemical Engineering	New Brunswick Scientific Co., Inc., New Brunswick, N.J.	3 935 00 f.o.b. delivered
One lot of laboratory apparatus includ- ing two spectrophotometers and ac- cessories, thermometers, solution bottles, vials, pipette assemblies, blendors and magnetic stirrers for stock in the General Chemical Store- room	General Chemical Stores	Schaar Scientific Co., Chicago	5 967 80 f.o.b. delivered
Plexiglass, sheet, rod and tube, assorted for stock	General Chemical Stores	Cadillac Plastic Co., St. Louis, Mo.	3 002 32 f.o.b. delivered
Print and fold 35 issues, 2,700 copies per issue, "Channel 12 Newsletter" for the period October 15, 1962, through October 14, 1963	Television- Motion Pictures	Quality Service Press, Mansfield	2 621 50 f.o.b. delivered
400 cases napkins, paper, size 12 in. x 13 in., packed 12,000 per case	Office Supply Storeroom	Westervelt Paper Co., Inc., Decatur	4 800 00 f.o.b. delivered
400 cases tissue, cellulose, sanitary cleansing, white, size 8¼ in. x 9¾ in. 36 boxes per case, 400 single sheets per box (estimated twelve-month supply)	Office Supply Storeroom	Doeskin Products, Inc., New York, N.Y.	2 747 24 f.o.b. delivered
Paper pads, writing type, 100 sheets each, as follows: 2,000 lbs.3 in. x 5 in., white, not ruled 2,000 lbs.4 in. x 6 in., white, not ruled 1,000 lbs.5½ in. x 8½ in., white, not ruled 10,000 lbs.8½ in. x 11 in., white, not ruled 6,000 lbs.8½ in. x 11 in., canary, not ruled 100 gross 8½ in. x 11 in., white, ruled	Office Supply Storeroom	W. M. Putnam Co., Bloomington	7 711 00 f.o.b. delivered
100 gross 8½ in. x 11 in., canary, ruled On motion of Mr. Johns			ed.
On motion of Mr. Johnst	on, the Commi	ttee adjourned.	
		WAYNE A. JOHNS FRANCES B. WAT	

A. J. JANATA *Clerk* WAYNE A. JOHNSTON FRANCES B. WATKINS HOWARD W. CLEMENT Chairman 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.

PRESIDENT'S REPORT

President Henry presented a report on selected topics of current interest, copies of which were distributed at the meeting, and a copy was filed with the Secretary of the Board.

During this presentation, Mr. Ajit Prasad Jain, Member of Parliament of India and Chairman of the Board of Management of the Uttar Pradesh Agricultural University in India, who is an official guest of the University of Illinois this week, was introduced and invited to stay for the Board meeting. He was accompanied by Dr. Royden Dangerfield, Dean of Administration and Director of International Programs at the University.

BIENNIAL OPERATING BUDGET FOR 1963-65

(1) The estimates of state appropriations required for operations for the University during the biennium of 1963-65 are submitted herewith. These budget estimates have been prepared by the Executive Vice-President and Provost in consultation with the University's budget Committee' of which he is Chairman, and with the deans, directors, and other administrative officers. The estimates prepared by the colleges and institutes and other departments of the University have been carefully studied, revised, and in most cases substantially reduced. The University Council has also been consulted.

I recommend that these budget estimates be approved for filing with the State Department of Finance and for presentation to the state administration and all other state agencies involved in budget procedures.

President Henry then discussed the recommendations in the several categories of the budget estimates. Supporting statements were made by Executive Vice-President and Provost Lanier and Vice-President and Comptroller Farber.

Mr. Williamson reported that the Finance Committee and several of the other Trustees in a special work session had previously studied the budget recom-mendations in consultation with the President and other University officials and

that the Committee was prepared to support the recommendations as submitted. Following the presentations by the President and other University officials, and further discussion, on motion of Mr. Williamson the following budget was approved, and the President of the University was authorized to file it with the State Department of Finance and for presentation to the state administration and all other state agencies involved in budget procedures; and the President of the Board, the Chairman of the Finance Committee, and the President of the University were authorized to represent the Board in conferences with state officials concerning the budget.

This action was taken by the following vote: Aye, Mr. Clement, Mr. Dilliard, Mr. Hughes, Mr. Johnston, Mr. Pogue, Mr. Swain, Mrs. Watkins, Mr. Williamson; no, none; absent, Mr. Kerner, Mr. Wilkins.

¹Lyle H. Lanier, Executive Vice-President and Provost, Chairman; Herbert O. Farber, Vice-President and Comptroller; Norman A. Parker, Vice-President for the Chicago Under-graduate Division; Joseph S. Begando, Vice-President for the University of Illinois at the Medical Center; Frederick T. Wall, Dean of the Graduate College (Ex Officio Members); A. T. Malinosky, Assistant Professor of Accountancy, Chicago Undergraduate Division; J. Nelson Young, Professor of Law; James A. Yaeger, Assistant Professor of Histology, Medical Center (from the Senates); Gerald M. Almy, Professor of Physics and Associate Head of the Department; Robert W. Rogers, Professor of English and Head of the Department; O. Burr Ross, Professor of Animal Science and Head of the Department (from the faculty at large); Royden Dangerfield, Associate Provost and Dean of Administration; Gustav J. Froehlich, Director of the Bureau of Institutional Research (Staff Associates).

BIENNIAL BUDGET FOR OPERATIONS, 1963-65 Present Budget

The biennial budget of the University of Illinois includes only those funds that are appropriated by the General Assembly. These legislative appropriations are called "General Funds," and for the current biennium they will account for approximately 62 per cent of the University's expenditures for all purposes. The following is a breakdown of the 1961-63 biennial budget, showing the two sources of General Funds and their allocation over the two years of the biennium:

Source of Funds	1961-62	1962-63	1901-03 Total
General Revenue (Tax) Fund University Income Fund	\$63 500 000 7 528 000	\$66 200 000 7 528 000	\$129 700 000 15 056 000
Total	\$71 028 000	\$73 728 000	\$144 756 000 ¹

In addition to these General Funds, the University receives financial support in the form of gifts, grants, and contracts from many outside sources, including the federal government, private foundations, industry, and individual donors. Furthermore, the University operates various auxiliary enterprises that are largely self-supporting, such as residence halls, the union building, and bookstores. The income from these various sources represents about 38 per cent of the funds expended annually by the University. Since the use of such funds is limited to designated purposes, they are called "Restricted Funds" and do not require appropriation by the General Assembly.

The following table presents a comparison of expenditures of the two types of funds, for the two fiscal years of the present biennium:

		1961-62		1962-6.	3
			Per		Per
	Æ	1 mount	cent	Amount	cent
General Funds	\$ 71	028 000	63	\$ 73 728 000	62
Restricted Funds			37	44 989 410	38
Total	\$113	091 231	100	\$118 717 410	100

From the two foregoing tables it can be seen that state-tax funds account for only about 56 per cent (\$66,200,000) of the total of expenditures anticipated by the University in 1962-63. University income provides an additional 6 per cent (\$7,528,000), to bring the appropriation of General Funds to 62 per cent (\$73,728,000) of the over-all total.

Based upon figures for 1961-62, annual expenditures for the main types of University operations are approximately as follows, in terms of percentages:

- 39 per cent for instruction (mostly General Funds) 29 per cent for research (mainly Restricted Funds)
- 11 per cent for extension and public service, exclusive of Research and Educational Hospitals (about equally divided between General and Restricted Funds)
- 8 per cent for Research and Educational Hospitals (mainly General Funds)
- 13 per cent for self-supporting auxiliary enterprises and student aid (Re-stricted Funds)

These percentages reflect both the direct and the indirect costs of the indicated functions. That is to say, the expenses of administration, retirement benefits, library, and physical plant have been allocated to the several classes of operations. approximately in proportion to their respective direct costs.

The average cost of *undergraduate* instruction in 1961-62 was \$1,162 per student for the Urbana-Champaign campus and \$1,068 for the Chicago Under-graduate Division (two-year program only). The unit costs of graduate and professional education are considerably higher, but these students constitute less than 25 per cent of the total enrollment. It is estimated that the average over-all

¹ All figures in this statement include funds for the Police Training Institute, for which a separate appropriation was received in 1961-63. Since the budget for the Institute will be in-cluded in the University's regular operating appropriation for 1963-65, the Institute's budget for 1961-63 has been consolidated here with that of the University in order to facilitate com-parisons of the two sets of biennial figures.

cost per student for all types of on-campus instruction in 1961-62 was slightly more than \$1,400.

Special attention is called to the fact that the Research and Educational Hospitals in Chicago require about 8 per cent of the University's income for operations. Only an eighth of these costs is offset by fees collected from patients — a situation quite different from that in certain other major universities whose hospitals are entirely self-supporting. A similar item is the provision of funds for the Division of Services for Crippled Children — \$1,778,180 for 1962-63 — within the University's regular budget for operations. It is important to recognize these components of the University's budget, since the latter is sometimes compared with those of other institutions, without knowledge or recognition of the differences due to the inclusion of heavy items for public-service activities in its legislative appropriations.

Preparation of the Biennial Budget Requests for 1963-65

The biennial budget requested for 1963-65 is based upon recommendations made by the University Budget Committee, an all-University committee appointed by the President. The Executive Vice-President and Provost serves as chairman and the other members include the Vice-President and Comptroller, the Vice-President for the University of Illinois at the Medical Center, the Vice-President for the Chicago Undergraduate Division, the Dean of the Graduate College, the chairmen of the budget committees of the Senates on the three campuses, and three members-at-large.

The preparation of the biennial budget covered a period of approximately six months, beginning in the spring of 1962. The work began with a general request from the Chairman of the University Budget Committee addressed to deans, directors, and general administrative officers concerning the general conditions to be faced by the University during the biennium 1963-65. Estimates of enrollment were provided to all instructional departments and administrative officers, together with information concerning existing instructional loads and trends since 1954. All departments and divisions were requested to submit estimates of funds needed to handle increased enrollment, to meet the costs of operating new buildings, to overcome deficiencies in staff and expense budgets in academic programs.

The analysis of needs and the development of budget estimates for 1963-65 presented unusual difficulties and uncertainties. Principally, these related to the expected opening of the new campus at Congress Circle in September, 1964 — an opening date that has been assumed in the preparation of the 1963-65 budget request. One set of problems concerned the estimation of the dates of completion of the new buildings and of the time required to get them into condition for occupancy by the scheduled opening date. More difficult, however, was the prediction of enrollment at the new campus where students in the Chicago Undergraduate Division will be able for the first time to complete their work for baccalaureate degrees. There was also the related uncertainty as to what concurrent changes in enrollment might occur at the Urbana-Champaign campus, since no definitive basis existed for estimates of how the Urbana-Champaign enrollment would be affected by the Opening of the new campus. Enrollment predictions were nevertheless made by the Bureau of Institutional Research, and the figures adjusted by the Central Office on the Use of Space and the Space Planning Office of the Physical Plant Department. It was assumed that the new campus at Congress Circle would have adequate facilities for the expected enrollment if construction could be completed by September, 1964.

rianning Once of the russical rian Department. It was assumed that the new campus at Congress Circle would have adequate facilities for the expected enrollment if construction could be completed by September, 1964. The Budget Committee gave careful attention to various proposals for salary increases, and attempted to estimate the extent of salary improvement that would be necessary to maintain the position of the University of Illinois among comparable universities in the United States. The increasing competition from other universities and that from industry in certain fields were important considerations in this study.

When the University Budget Committee had completed its budget recommendations, they were submitted to the President of the University. After review by the President, the proposed biennial budget was presented for appraisal to the University Council, consisting of the deans and directors of all administrative units. In the light of the Council's advice, the President submitted his recommendations to the Board of Trustees for action.

Summary of Biennial Budget Requests for 1963-65

Including increases required by law and those required to maintain the present level of expenditure, the requests for additional funds submitted by the deans and directors, plus the increases for salary adjustments recommended by the Budget Committee, totaled \$40,286,808 for the biennium. This figure is slightly lower than the over-all increase requested for 1961-63 (\$41,144,325). Considering that less than 50 per cent of the latter amount was finally appropriated for 1961-63. and the fact that an extraordinary increase will be required for the Congress Circle campus in 1964-65, the total of increases requested by the deans and directors for the biennium 1963-65 is a relatively moderate one. Nevertheless, in the effort to hold the 1963-65 budget to a level required to

meet urgent needs, the biennial increase finally proposed to the General Assembly is some 20 per cent below the figure representing the original college and departmental requests. As shown in Schedule A (below), an increase of \$31,044,000 above the appropriations for 1961-63 (an average of \$15,522,000 per year) is requested by the University for the biennium of 1963-65. This represents an increase of 21 per cent over the amount appropriated for the current biennium. The total is \$175,800,000 in General Funds for 1963-65, \$15,500,000 of which would come from University income and the remainder of \$160,300,000 from the tax revenues of the state.

Special attention is called to the sharp increase in operating costs for the second year of the biennium (1964-65), mainly due to the opening of the new campus at Congress Circle. The increases for the latter are snown separately in Schedule A, and it can be seen that it will be necessary to add \$3,590,000 in 1964-65 for that purpose alone. In addition, the sum of \$3,000,000 is requested for further salary adjustments for the staff on all three campuses in 1964-65, and \$360,000 additional for the operation of new buildings completed at Urbana-Champaign for use in 1964-65. Thus the requested biennial budget of \$175,800,000 with the divided between the two worse of the biennium as follows: 292,400,000campus at Congress Circle. The increases for the latter are shown separately in would be divided between the two years of the biennium as follows: \$84,425,000 would be divided between the two years of the biennium as rollows: \$64,425,000 for 1963-64; \$91,375,000 for 1964-65. It is important for future planning to record that the difference of \$6,950,000 would have to be added to the total appropriated for the biennium 1965-67 in order to continue in that biennium the level of operations reached during the second year of the biennium 1963-65. In the following pages, detailed explanations are given for the increases requested under each of the major sections in Schedule A (below). Later

sections present analyses of the funds requested in accordance with the object classifications required under the State Finance Act, including the special breakdowns required by action of the Seventy-second General Assembly.

Schedule A. Increases Requested in the 1963-65 Biennial Budget

(All amounts are for two years except as noted.)

		o mme n ncreas	
I. Contributions to University Retirement System	\$	742	900
II. To Continue for a Full Biennium Funds Required for One Year Only in the 1961-63 Biennium	2	2 700	000
III. Salary Adjustments for All Staff:			
A. 1963-64 (for two years)	9	000	000
B. 1964-65 (for one year)	3	3 000	000
IV. To Provide for Increased Enrollment in 1963-64 (for two years):			
A. Instructional Staff (Urbana-Champaign and Medical Čenter) B. Nonteaching Staff, Expense, and Equipment	2	2 740	000
1. Urbana-Champaign and Medical Center	2	2 060	000
2. Congress Circle	1	000	000
V. To Provide for Increased Enrollment in 1964-65 (for one year): A. Instructional Staff (Congress Circle) B. Nonteaching Staff, Expense, and Equipment	1	770	000
(Congress Circle)	1	230	000

BOARD OF TRUSTEES

October 17

Recommended Increases

VI. To	Meet Increased Cost of Operation:			
Α.	Operating Costs of New Buildings in 1963-64 (for two years)			
	(Schedule B, page 176)			
	1. Urbana-Champaign and Medical Center	\$ 1	571	100
	2. Congress Circle	1	000	000
B.	Operating Costs of New Buildings in 1964-65 (for one year)			
	(Schedule B, page 176)			
	1. Urbana-Champaign and Medical Center		360	000
	2. Congress Circle		590	
C.	Increases to Maintain Present Level of Services			
	1. Increases in Expense and Equipment to Meet Rising Costs			
	and Accumulated Deficiencies.	1	500	000
	2. Increases in Auxiliary Staff to Meet Accumulated			- • •
	Deficiencies (Schedule C, page 177)	1	073	000
VII. In	provements in Educational Programs		707	000
	Total Increases	\$ 31	044	000
	Present Biennial Budget.			
	Proposed Biennial Budget			
	1 roposed Diennia Duagei	Ø173	000	000
	Fund Distribution			
	General Revenue Income Fund		Total	
Procent	Rudget \$120,700,000 \$15,056,000	@144		

			1 0000
Present Budget	\$129 700 000	\$15 056 000	\$144 756 000
Increase	30 600 000	444 000	31 044 000
Proposed Budget	\$160 300 000	\$15 500 000	\$175 800 000

Explanation of Increases Requested

I. CONTRIBUTIONS TO UNIVERSITY RETIREMENT SYSTEM......\$ 742 900

The University Retirement System provides disability and retirement benefits to all permanent staff members and employees of the University, of all other state institutions of higher education, and of related organizations. The University of Illinois' share of the cost of the System is included regularly in its appropriations. An increase of \$742,900 for the biennium is required to continue the benefits provided under the law, mainly because of the larger number of persons who will be on retirement.

For the current year of the biennium 1961-63 the University's budget as appropriated by the General Assembly included \$2,700,000 for increases in 1962-63 above the level for 1961-62. This is shown on page 165 where the budget from General Revenue funds for 1961-62 is given as \$63,500,000 while that for 1962-63 is \$66,200,000. More money was required in the second year of the biennium due to increased enrollment and to further salary adjustments. This is the kind of difference discussed above concerning the larger budget requested for 1964-65 due to the occupancy of the new campus at Congress Circle and to further salary adjustments for the second year of the biennium. The increase of \$2,700,000 is necessary to enable the University to continue

throughout the biennium 1963-65 the level of expenditures reached during the second year of the current biennium.

III. SALARY ADJUSTMENTS FOR ALL STAFF B. 1964-65.....\$3 000 000

Academic Staff. The University's original request for salary increases in the last biennium (1961-63) totaled \$14,600,000, an amount judged to be necessary to enable the University to retain its present staff and to recruit additional faculty in the face of the increasing heavy competition from other universities and from industry. The total finally appropriated, \$8,650,000, was only 59 per cent of the amount requested. Although considerable improvement in salaries was made possible by the increased appropriation, it was barely sufficient to enable the University to hold its own in the face of increasingly sharp competition for high-quality academic personnel.

The overriding condition that faces the University of Illinois, as well as other institutions of higher education, is a sharp increase in enrollment at a time when the supply of adequately-trained college teachers has shown a relative decline. In part, this has been due to increasing competition from noneducational occupations; but it has been due also to the fact that the 1930's and the following war years had a relatively low birth rate. This has meant a relative deficiency of candidates for the teaching profession at a time when college enrollments have been steadily rising and when they soon will begin to accelerate at an even sharper rate due to the postwar jump in the birth rate. In addition, a steadily-rising proportion of high school graduates is seeking admission to college.

college. The situation at the University of Illinois in the competition for faculty will be unusually difficult because of the large increase in staff required for the new campus at Congress Circle. In addition, substantial increases in graduate enrollment at Urbana-Champaign will cause increased demand for instructors in advanced courses, especially in the physical sciences and engineering. It would be especially unfortunate in these circumstances if the University were not in position to compete successfully for faculty of high quality. The increases requested for salary improvement should enable the University to hold its own among other comparable institutions; it will probably not permit any gain in standing, and certainly little if any improvement relative to other professions.

Nonacademic Staff. The Director of Nonacademic Personnel has urged strongly that funds be provided to enable the University to meet the continuing increase in prevailing rates as established by collective bargaining within the community, and also to maintain the University's competitive position as regards other categories of nonacademic personnel. So far as possible, an equitable relationship must be maintained between the wages that are determined through negotiation and the salaries and wages for other groups.

Of special importance are the salaries of administrative and managerial personnel, as well as those in certain technical categories, where competitive forces outside the local community influence salary scales. The University must maintain its competitive position or else lose highly-skilled personnel to other universities and to industry.

The opening of the new campus at Congress Circle in Chicago will result in a sharp expansion of nonacademic divisions, which in turn will require that the University keep pace with prevailing wage and salary scales if its recruitment is to be successful.

IV. TO PROVIDE FOR INCREASED ENROLLMENT IN 1963-64

A slight increase in enrollment is expected at the Medical Center campus in 1963-64, mainly in the Colleges of Nursing and Pharmacy. No increase is anticipated at the Chicago Undergraduate Division, since enrollment is now at capacity in the temporary quarters at Navy Pier. A net increase of 1,183 students has been predicted for Urbana-Champaign, distributed as follows: a decline of 255 at the freshman-sophomore level, partly offsetting the surplus noted for the preceding biennium; an increase of 1,010 at junior-senior level; an increase of 428 at the graduate-professional level.

The estimate of total funds needed has been based on the following standards: freshman-sophomore level, fifteen full-time-equivalent (FTE) students per full-time-equivalent instructor; junior-senior level, twelve full-time-equivalent students per full-time-equivalent instructor; graduate-professional level, seven full-time-equivalent students per full-time-equivalent instructor. Average salaries of \$8,000, \$9,000, and \$10,000 have been assumed for these three levels, respectively, in calculating the salary funds needed. (Since a slight decrease in enrollment is predicted at the freshman-sophomore level, a corresponding deduction was made in arriving at the amount needed.)

B. Nonteaching Staff, Expense, and Equipment

 1. Urbana-Champaign and Medical Center......\$ 2 060 000
 2. Congress Circle
 \$ 1 000 000

It seems desirable to separate the estimate for Congress Circle from that for the other two campuses, in accordance with the breakdown shown in Sched-ule A (page 167). For 1963-64, the need at Congress Circle is for administrative, technical, and clerical staff that will be needed to plan for the move to the new campus. Heads of departments, for example, will be needed to recruit staff for the increased enrollment expected in 1964-65. Administrative and clerical staff must be added in the Office of Admissions and Records, the Business Office, the Library, and the Physical Plant Department. The total of \$500,000 per year for the two years of the biennium is considerably below the amounts requested by the administrative officers in the various units concerned. The increased enrollment expected at Urbana-Champaign and at the Medical

Center will require substantial increases in nonteaching staff and in expense and equipment budgets. The total requested will cover all kinds of "indirect costs" associated with instruction and with student services. After a careful analysis of the existing relationship between teaching and nonteaching (indirect) costs, it was determined that the latter would be approximately 75 per cent of the former if adequate provision is to be made in the budget for enrollment in-creases. This figure will be too low if the enrollment at advanced (especially graduate) levels increases disproportionately in the laboratory sciences.

V. TO PROVIDE FOR INCREASED ENROLLMENT IN 1964-65 OVER THE 1963-64 Level

A. Teaching Staff (Congress Circle only).....\$ 1 770 000

With the opening of the Congress Circle campus in September, 1964, it has been assumed that there will be a drop in undergraduate cnrollment at Urbana-Champaign, most heavily in the freshman class but also in the junior class which in the past has received a substantial number of transfer students from the Chicago Undergraduate Division. Although lacking relevant data for making definitive predictions in the new situation, the Bureau of Institutional Research estimated tentatively that the over-all decline in undergraduate enrollment at Urbana might be as high as 1,800 students. To offset this drop, however, the Bureau predicted a sharp increase in graduate enrollment that might run to more than 1,400 students. After lengthy study of both sets of predictions, and of the various conditions that might well combine to upset them, it was decided to assume that the two conflicting trends would wirtually earch each other in to assume that the two conflicting trends would virtually cancel each other in terms of their net impact upon budgetary requirements. So no additional funds are requested for increased enrollment at Urbana-Champaign in 1964-65. An increase of 100 students was predicted for the Medical Center, but here, too, it was decided not to request increased funds on the assumption that the increases requested for 1963-64 could be utilized so as to meet the needs for the following year.

Admittedly, these assumptions and calculations might turn out to be quite inaccurate, and substantial increases in applications for undergraduate admission might occur at Urbana-Champaign in 1964-65. In that event, the budgetary pro-vision will be seriously inadequate and some limitation upon enrollment might be necessary.

With respect to Congress Circle, it is assumed that there will be an increase of 3,035 students in 1964-65, bringing the total for the new campus to approximately 7,635 students. It is estimated that 2,335 would be at freshman-sophomore level while 700 would be at junior-senior level. The latter estimate in particular might turn out to be too low, since the offering of degree programs at the Chicago Undergraduate Division might induce many students who now drop out to continue in college until graduation. Furthermore, the number of transfer students might be substantial—a possibility given little weight in the estimates of the Bureau of Institutional Research.

The instructional staff required was determined by the standards indicated above to be 156 full-time-equivalent teachers for freshman-sophomore instruction and 58 for junior-senior instruction. At the assumed average salaries of \$8,000 and \$9,000, respectively, the sum of \$1,770,000 would be needed to provide these salaries for a single year (1964-65).

B. Nonteaching Staff, Expense, and Equipment (Congress Circle) \$1 230 000 The amount needed for the nonteaching costs of instruction at Congress Circle in 1964-65 was assumed to be 75 per cent of the instructional-salary costs as determined above — in addition to the physical-plant costs, which are represented by items in section VI of Schedule A (page 168) and are discussed in a following section. The physical-plant costs for the new campus will be substantially higher per student than the present inadequate facilities at Navy Pier. Furthermore the operating costs related more directly to instruction will be higher, when expansion of organization and programs takes place. It has been assumed, therefore, that all three types of budget increases shown for Congress Circle in Schedule A will be necessary to (a) transfer the existing staff and student body to that campus, and (b) to accommodate an enrollment increase of 3,035 students. (The three types of increases relate to teaching staff, nonteaching staff and expenses, and physical-plant costs.) A check on the validity of this assumption is provided partly by a determination of the estimated cost per student under the budgetary and enrollment conditions stipulated for the Congress Circle campus for 1964-65.

The total budget for the Chicago Undergraduate Division in 1962-63 is \$4,900,000. This includes all direct and indirect costs of operations at Navy Pier, but does not include whatever indirect costs might be attributable to the general administrative offices at Urbana-Champaign. With an enrollment of approximately 4,600 students for the current year, the average cost per student is \$1,065.

administrative offices at official current year, the average cost per student is \$1,065. From the figures shown in Schedule A, a total of \$4,590,000 would be added to the 1962-63 budget for the Chicago Undergraduate Division by 1964-65 — to bring the total figure for that year to \$9,490,000. This would include direct costs of instruction, physical-plant costs, and other indirect costs of instruction. With an estimated enrollment of 7,635 students, the average cost per student in 1964-65 would be \$1,243. This is only \$178 per student more than the present per capita cost at Navy Pier. This figure would be somewhat increased by salary increases that might be granted to the existing staff at Navy Pier by 1964-65. Even so, the estimated average cost per student seems quite moderate for the city of Chicago in 1964-65, considering the very substantial expansion in the facilities available and the great improvement in their quality. Furthermore, the facilities to be completed in Phase I at Congress Circle can accommodate an increase possibly to 9,000 students without appreciable increases in physical-plant costs. This would tend to lower the per capita cost, as an offset to salary and other increases in cost of operation.

VI. TO MEET INCREASED COSTS OF OPERATION

A. Operating Costs of New Buildings in 1963-64

2. Congress Circle\$1 000 000

The budget request for the operation and maintenance of the new buildings at the Congress Circle campus is based upon the completion and acceptance of the buildings by the University as follows:

Heating Plant — starting up operations during December, 1963 Physical Plant Building — February, 1964

Library — February, 1964

Classroom Clusters – April, 1964 Engineering and Sciences Laboratories – April, 1964

Lecture Center --- June, 1964

Staff and Administration - July, 1964

At least thirty days prior to acceptance, University operating personnel will run acceptance tests on the building equipment under the supervision of the architect's staff. This will require that the buildings be supplied with hightemperature hot water, electricity, etc., prior to acceptance, and hence operating personnel for the heating plant must be employed. As soon as the buildings are accepted by the University, moving into the buildings will commence and this will require operating and maintenance personnel, including police service. Heat, light, and power will be the principal item of increase, since starting operations of the heating plant will require electricity, and the entire 12,000-volt University distribution system will have to be tested and put into operation at the total test the test of that time in order to supply the buildings that are approaching completion. The period from December on is the greatest portion of the heating season, requiring maximum use of fuel.

The costs to be incurred at Congress Circle in 1963-64 are estimated to total \$500,000, or approximately one-fourth the annual operating cost of \$2,105,000.

B. Operating Costs of New Buildings in 1964-65

1. Urbana-Champaign and Medical Center.....\$360 000 The remainder of the buildings provided from the capital appropriation will be completed by July, 1964, and will require operating expenditure of \$360,000, as detailed in Schedule B (page 176).

2. Congress Circle\$590 000

The estimated cost of physical-plant operations at the Congress Circle campus, plus the Navy Pier drill hall, which will continue to be used for physical education instruction, is \$2,105,000 a year. After deducting the present budget for the operation and maintenance of the Navy Pier campus (\$1,015,000) and the funds requested for 1963-64 (\$500,000), the additional cost for 1964-65 amounts to \$590.000.

C. Increases to Maintain Present Level of Services

The deans and directors requested increases totaling slightly more than \$7,000,000 for the biennium to be used to overcome accumulated deficiencies and to meet the rising costs of existing programs. Enrollment increases in excess of budgetary provision, growing complexity and an increasing rate of obsolescence of scientific equipment, rising costs of modern hospital care, growing demand for technical personnel in science and engineering laboratories - all these factors, as well as the gradual upward drift in prices and miscellaneous wages, have combined to produce acute deficiencies and pressing needs throughout the University.

1. Increases in Expense¹ and Equipment Funds......\$1 500 000

The index in commodity prices, prepared by the National Association of Purchasing Agents, has increased approximately 4 per cent in the past two years. While the prices of some commodities have remained fairly stable, others have increased more than this amount. In the 1961-63 biennial budget, the University requested \$2,700,000 to meet accumulated deficiencies in expense and equipment budgets, but only about one-third of this amount was made available. The present asking, therefore, represents a deficiency existing two years ago which has not been met. As noted earlier, the University has absorbed an enrollment increase of about 550 more students than was provided for in the 1961-63 budget. In the meantime, prices have continued to rise and the postal increase effective in

¹Examples of expense items are office supplies, travel, postage, chemicals and glassware for laboratories, contractual services (i.e., telephones, IBM rentals), repairs to equipment, fuel (coal and oil), water, supplies used in plant maintenance, rentals.

January, 1963, will require approximately \$150,000 in additional funds for the biennium.

The University's equipment appropriation of \$3,200,000 is adequate to replace the existing equipment inventory only once in about every twenty to twenty-five years, while the most expensive type of equipment for scientific laboratories becomes obsolete in less than half of that time. The requested increase will help to meet the needs resulting from unanticipated increases in enrollment and also to improve the replacement-schedule for equipment.

The present level of appropriations to the Physical Plant Department will permit painting of interior walls only once in eighteen years, with two wall washings in the interim.

Two areas of special need are the Research and Educational Hospitals and the Division of Services for Crippled Children. Even after enforcing rigid economies, the Research and Educational Hospitals are unable to operate within the funds presently budgeted for them. They have requested an increase of \$644,000 in expense and equipment budgets, of which \$437,000 represent urgent and long-standing deficiencies. A major portion of the Division of Services for Crippled Children budget goes for hospital care of patients who are approved for treatment. Hospital costs have been increasing by approximately 10 per cent each year. It is estimated that \$268,000 will be needed for increased costs of hospital care alone. Failure to receive this increase will mean that fewer children can be treated for physical handicaps.

Requests from deans and directors totaled \$3,475,930 for increases to correct deficiencies in expense and equipment budgets. The Budget Committee, after careful consideration, concluded that \$1,500,000 was the minimum amount needed for this purpose.

2. Increases for Auxiliary Staff to Offset Accumulated

Deficiencies\$1 073 000

The deans and directors reported an increasing deficiency in auxiliary personnel throughout the University, and several stressed this need as being more important than any other facing them. A biennial total of \$3,691,262 was requested to provide administrative, technical, and clerical personnel in support of instruction, research, and public-service activities.

Inadequate staff provision related to increased enrollment has been most acutely felt in the Office of Admissions and Records, the Library, the Business Office, and the various offices for student services. Many departments are also understaffed in clerical personnel due to increasing work loads without commensurate staff additions.

The hospitals and clinics need more nursing and technical personnel to try to keep pace with the growing manpower requirements of modern diagnostic and therapeutic techniques in medicine. The Research and Educational Hospitals are hard-pressed to measure up to acceptable standards of present-day medical education and research—so severe is the shortage of hospital personnel in all major categories. The Director has estimated that a total of 54 full-timeequivalent additional staff members are needed to overcome these deficiencies.

The teaching and research laboratories in many science and engineering departments require more technical assistance in order to be most effectively used. The extensive and complex instrumentation required by modern science and technology can not be effectively utilized without adequate technical staff. The funds available in recent years have been seriously insufficient to permit these departments to expand their staffs in these areas on the scale demanded by technological development and increased enrollment.

A careful study of departmental requests was made, and a list of the individual positions that seemed to be most urgently needed was compiled. A summary of the funds required to support these positions is presented in Schedule C (page 177), grouped by colleges and other divisions. The total is \$536,500 on an annual basis or \$1,073,000 for the biennium.

VII. INCREASES FOR IMPROVEMENTS IN EDUCATIONAL PROGRAMS.......(\$707 000) In recent years, the University's legislative appropriations have provided little support for new educational programs or for substantial improvements of existing programs. It has been necessary repeatedly to delete such items from biennial budget requests, in order to bring the totals within the limit of available

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funds. As a result, the instructional departments have found it increasingly difficult to keep abreast of new developments in their fields. The extent of the University's failure to meet such needs is indicated by the magnitude of the askings in this category from all colleges for 1963-65: \$3,640,146.

The majority of these requests represent programs that should be undertaken by an institution such as the University of Illinois. But partly in view of the extraordinary costs involved in the move to the Congress Circle campus, the Budget Committee and the other administrative officers concerned with budget preparation decided that funds would be requested for only a few programs judged to be of very high priority. So the eight programs described in the following paragraphs are proposed for initiation or substantial improvement in 1963-65.

A. College of Engineering

1. Physics of the Upper Atmosphere (biennial amount)......\$80 000 To strengthen the University's graduate training and research in the space and atmospheric sciences. In addition to the work in other departments heavily supported by Federal funds — 2.0 full-time-equivalent physicists are needed to provide graduate instruction and research in this central area where the University has no staff at present. The salary of a clerical employee (1.0 full-time-equivalent) and funds for expense and equipment would comprise the remainder of the budget. Outside funds in at least an equal amount would be expected for the support of research in this area, including research assistantships for graduate students.

2. Molecular Electronics (biennial amount)......\$60 000 To provide staff for graduate instruction in solid-state devices and integrated electronics (including miniturization of circuits). This would permit the Department of Electrical Engineering to take fuller advantage, in its graduate training, of the new Materials Research Laboratory. Most of the cost would be met from federal funds, but the latter can not be used for instruction in regular courses. The budget item would permit the addition of 1.0 full-time-equivalent professor and 1.0 full-time-equivalent associate professor plus funds for expense and equipment.

3. Nuclear Engineering (biennial amount)......\$40 000

The interdepartmental program in nuclear engineering should be strengthened to take advantage of recent advances in the relatively new field of "Plasma Physics," which makes it possible to conduct fundamental studies related to the development of thermonuclear systems outside the large National Laboratories supported by the Atomic Energy Commission. The budget item would provide for the salary of a senior professor plus funds for expense and equipment needed in instruction. The greater part of the cost of the program (the laboratory facilities) would be provided from federal funds granted to the Departments of Physics and Electrical Engineering and to the Coordinated Science Laboratory.

B. College of Liberal Arts and Sciences

1. Department of Linguistics (biennial amount)......\$121 000 The University has a relatively strong graduate program in linguistics, presently administered by an interdepartmental committee. Since there is no Department of Linguistics as such, the staff consists of faculty members from the cooperating departments (Anthropology, English, the modern languages, Psychology, Speech). It is proposed to establish a small department with a core of faculty members interested in linguistics as a fundamental discipline and also responsible for service courses in certain non-Western languages. These would include elementary instruction in Hindi, Chinese, Japanese, and Arabic for the support of language and area studies, mainly in the program described below. The personnel requirement would be: 1.0 full-time-equivalent professor; 3.0 full-time-equivalent assistant professors in 1963-64; 2.0 full-time-equivalent assistant professors in 1964-65; 1.0 full-time-equivalent clerk stenographer III; \$1,000 for expense and equipment.

In addition to the graduate program in linguistics and research in the fundamental discipline of linguistics, this department would conduct experimentation in language instruction in connection with its conduct of instruction in non-Western languages. There would be no intention to develop instructional programs in these languages beyond the elementary level. The purpose of this instruction would be to provide the tools necessary for the study of non-Western culture, not to train experts in foreign languages and literature.

2. A Program of Asian Studies (biennial amount)......\$158 000 For more than two years the faculty and the administration have been considering the University's responsibilities for expanding work in non-Western studies. As a result of this extensive review, including the work of various committees and conferences, there is general agreement that the University should expand its relatively meager programs in the broad field of international studies. India, Southeast Asia, China, and Japan are possible areas of study—or some combination of these four. The choice would depend partly upon the offerings at other universities in this region, partly upon the availability of distinguished scholars, and partly upon national need.

Aside from the director of the program (1.0 full-time-equivalent professor), the staff would consist of 4.0 full-time-equivalent assistant professors (assigned to supporting departments in the social sciences) and a half-time secretary. A total of \$30,000 would need to be added to the budget of the Library, including funds for approximately 3.0 technical library personnel (acquisitions and cataloguing). It should be noted that the teaching staff would help to provide instruction for the increased number of students in 1963-65.

C. College of Medicine

The intramural programs should include (a) new courses for specialists in highly technical fields, i.e., surgery and specialties of surgery, obstetrics, ophthalmology (these programs should be patterned after the successful courses in otolaryngology and bronchoesophagology now being offered annually); (b) new short-course programs describing "new developments" for practitioners of general medicine; and (c) patient-centered programs for small numbers of physicians working on the wards and in the clinics of the University's teaching hospitals.

Extramural programs would center initially around short-course offerings scheduled at appropriate intervals in strategically-located centers within the State. Such programs would include the subject matter of the sciences basic to medicine as well as the subject matter of clinical medicine.

A subsidiary but no less important aim of the program of postgraduate or continuing education of the physician is to improve the climate for medical practice in the outlying regions of Illinois and thus provide added inducements to medical graduates to choose these areas as locations in which to practice. The full achievement of this objective will take time and great effort and may involve sharp departures from the University's present program of resident training. New elective offerings to undergraduate medical students may be indicated also. These possibilities are now under consideration by appropriate administrative units and faculty committees, and the implementation of the programs agreed upon will take place as soon as funds can be provided.

The staff requirements for 1963-65 would be as follows: 1.0 full-timeequivalent coordinator; .33 full-time-equivalent professional staff (part-time salaries and stipends for guest participants); 1.0 full-time-equivalent clerkstenographer III. The remainder of the budget would consist in funds for office expense, travel, and other miscellaneous expenses.

2. A School of Associated Medical Sciences (biennial amount)..\$102 000 The hospitals and other agencies in Illinois concerned with health problems are in acute need of medical technicians, medical librarians, and other technical personnel for the support of medical practice and research.

This problem has been studied intensively for some time, both in the College of Medicine and in the College of Liberal Arts and Sciences. It has been agreed that cooperative baccalaureate programs in several areas are desirable and that they should be centered administratively in a "School of Associated Medical Sciences" within the College of Medicine. Generally speaking, students would begin their work in the College of Liberal Arts and Sciences (either at Urbana or at the Chicago Undergraduate Division), with the terminal year or years spent in the College of Medicine. The existing program in occupational therapy would be assigned to the School for administrative purposes. Initially, two new programs are proposed: (a) a curriculum in medical technology, and (b) a curriculum in medical-records library science. Future curricula probably would include physiotherapy and x-ray technology.

physiotherapy and x-ray technology. The annual proposed budget of \$51,000 would provide salaries for the following personnel: 1.0 full-time-equivalent director; 1.5 full-time-equivalent assistant professors; 1.0 full-time-equivalent instructor; 2.0 full-time-equivalent clerkstenographers II.

D. College of Nursing

A Graduate Program (M.S.) in Nursing Education (biennial

Schedule B. Funds Requested for Operation of New Building	gs,	1963	-65
VI-A. 1963-64 (for two years)	A	mou	nt for
Urbana-Champaign		wo 1	lears
Electrical Engineering Addition	\$	84	550
Library Addition	-	71	650
Physics Addition		196	940
Plant Sciences Building		213	
Physical Plant Service Building		250	
University Press Addition			730
Digital Computer Laboratory			230
Veterinary Medicine Research Annex			640
Central Receiving Station			050
Armory Addition			150
Burnsides Research Laboratory			840
Power Plant Addition			950
Remodeled Areas.			830
Total Urbana-Champaign	\$1	157	020
Medical Center			
Medical Science Addition	\$	391	050
Remodeled Areas.			030
Total Medical Center		414	080
Congress Circle Campus			
VI-B. 1964-65 (for one year)			
Urbana-Champaign	4		int for Year
Commerce Building.	•	a 95 131	
Education Building	·		675
Office-Classroom Addition	·		280
Rehabilitation Center	·		340
Remodeled Areas.	•		540 740
Total Urbana-Champaign	• •	\$331	870
Medical Center			
Remodeled Areas		-	
Congress Circle Campus		\$590	000
Note: In addition to this amount, the budget for plant operation an maintenance at Congress Circle in 1964-65 will include the amount in th present budget for Navy Pier (\$1,019,180) and the item of \$500,00 provided for 1963-64 (see VI-A, above).	e		

Schedule B. Funds Requested for Operation of New Buildings, 1963-65

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Summary of Funds for Operation of New Buildings		
Campus 1963-64 1964-65		Total
Urbana-Champaign and Medical Center . \$1 571 100 \$360 000	\$1	931 100
Congress Circle		590 000
Total		521 100
10004	$\varphi_{\mathcal{I}}$	521 100
Schedule C. Increases in Auxiliary Staff to Meet Accumulated I	Defi	iciencies
		Annual
Urbana-Champaign		Basis
	8	16 400
College of Agriculture College of Commerce and Business Administration	Ψ	3 000
College of Education		11 600
College of Engineering		58 300
College of Fine and Applied Arts		11 000
Graduate College		9 000
Graduate College College of Journalism and Communications		6 600
College of Liberal Arts and Sciences.		90 200
College of Physical Education		41 000
Jane Addams Graduate School of Social Work and Division of University		
Extension.		9 000
College of Veterinary Medicine.		10 000
Office of the Dean of Students		13 000
Medical Center		21 200
College of Dentistry	Þ	21 300 36 500
College of Medicine		15 200
College of Nursing		
College of Pharmacy		6 500
Research and Educational Hospitals		60 000 10 000
Office of the Director of Student Affairs		10 000
All-University Offices and Divisions		
Office of Admissions and Records	\$	20 000
Business Office		13 000
University Library		32 600
Physical Plant Department		19 500
Statistical Service Unit		22 800
Total Annual Amount		536 500
	٣	$\times 2$
The I Dimental America	P 1	072 000

Total Biennial Amount...... \$1 073 000

Schedule D. Comparative Schedule of Biennial Operating Appropriations by Object Classification and Fund, 1963-65

				Es	tima	ted	Appropriatio		
	Appr	opric	ntions	Expenditures			Requested		
General Revenue		1961-	63		1961-	-63	1963-65		
Personal Services				\$104			\$130		
Contractual Services	10	003		10	003		12	000	
Travel			000		559			800	
Commodities	-	201			201			500	
Equipment	2	501	500	_	506		-	000	
Retirement Contributions	5	122	~~~	5	122		5	865	700
Permanent Improvements		450	000		450	000			
Appliances and Physical									
Examinations			000			000			000
Hospital and Medical Services	2	300	- + -	2	300	000	2	500	000
Contingencies		5	000			(1)			<u>.</u> .
Total	\$129	700	000	\$129	700	000	\$160	300	000
University Income Fund									
Personal Services	\$6	575	000	\$ 7	475	000	\$4	875	000
Contractual Services	1	000	000	2	300	000	1	000	000

¹ Allocated to above items.

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University Income Fund	Appropriations 1961-63			ıs	Ex	istim pend 1961-	itures	Appropriatio Requested 1963-65		
				æ				-		
Travel.	Þ		000 000	\$	•	450	000	\$		000
Commodities			000		1					000
Equipment Awards and Grants			000		1		000			000 000
Workmen's Compensation			000				000			000
Student Loan Matching			000				000			000
Permanent Improvements						900		1	000	
Refunds			000			325				000
Contingencies	5	000				020	(1)	6	000	
Total	\$ 15	056	000	\$	15	056		\$ 15		
General Revenue and Income Fund								•		
Personal Services	\$110	881	700	\$1	11	781	700	\$135	209	300
Contractual Services		003		÷-		303			000	
Travel		659	000		1	009				000
Commodities	5	001	500		5	901	500	6	300	000
Equipment	3	201	500		3	606	500	3	700	000
Retirement Contributions	5	122	800		5	122	800	5	865	700
Awards and Grants		550	000			650	000		594	000
Workmen's Compensation		75	000			100	000		100	000
Student Loan Matching		56	000			56	000		56	000
Permanent Improvements		450			1	350	000	1	000	
Refunds		200	000			325	000		275	000
Appliances and Physical										_
Examinations			000				000			000
Hospital and Medical Services		300			2	300			500	
Contingencies	5	005	000				(1)	6	000	000
Total	\$144	756	000	\$1	44	756	000	\$175	800	000

Schedule E.	Schedule of Appropriations Requested by Fund, Object,
	Classification, and Functions, 1963-65

General Revenue	Adminis- tration			(in Rese	Instruction (including Research and Extension)			hysic Plan				
Personal Services	\$11	234	300	\$103	100	000	\$16	000	000	\$130	334	300
Contractual Services	<u></u> 1		000			000		800			000	
Travel			000			000			000	_		000
Commodities			000			000			000		500	
Equipment.	F		000	2		000			000	3		000
Retirement Contributions.	5	865			••	• • • •		••	••••	3	865	700
Permanent Improvements. Appliances and Physical		• •			••			• •	••••		••	
Examinations					300	000					300	000
Hospital and Medical		• • •			000	000		• • •			500	000
Services				2	500	000				2	500	000
Contingencies												
Total	\$19	780	000	\$116	620	000	\$23	900	000	\$160	300	000
Income Fund												
Personal Services	\$	300	000	\$ 4	275	000	\$	300	000	\$ 4	875	000
Contractual Services		200	000		300	000			000	່ 1	000	000
Travel		• •			100	000					100	000
Commodities						000						000
Equipment		•••				000						000
Awards and Grants			. <u></u>		594	000			• • • •			000
Workmen's Compensation		100	000					• •				000
Student Loan Matching		•••			50	000		•••	• • • •		30	000

¹ Allocated to above items.

		dmin ratio		(in Rese	truct cludi arch ensic	ng and			hysic Plan				Total	
Permanent Improvements. Refunds Contingencies ¹		 	 (1)		275	000 (¹)	\$	1		000 (1)	\$		000 275 000	000
Total	\$	600	000	\$ 7	100	000	\$	1	800	000	\$	15	500	000
General Revenue and Income	Fun	d												
Personal Services Contractual Services Travel Commodities Equipment Retirement Contributions. Awards and Grants Workmen's Compensation Student Loan Matching Permanent Improvements. Refunds	1	950 180 600 150 865	000 000 000 000	5	750 700 070 100 594 	000 000 000 000 000 000 000		6 7 1	300 20 630 450 			13 6 3 5	000 900 300 700 865 594 100 56 000	000 000 000 700 000 000 000
Appliances and Physical Examinations Hospital and Medical Services			••••	2	300 500	000			•••			2	300 500	000
Contingencies ¹		••	<u>(י)</u>		500	(1)			• •	(¹)	_	6		
Total	\$20	380	000	\$123	720	000	\$2	5	700	000	\$1	75	800	000

INSTITUTION FOR TUBERCULOSIS RESEARCH BIENNIAL

OPERATING BUDGET FOR 1963-65

(2) The Institution for Tuberculosis Research was created by the General Assembly for the "production, distribution, and application of the bacillus Calmett-Guerin (BCG), and other methods and materials for the prevention of tuberculosis and for conducting research in tuberculosis." The responsibility for the professional operation and all other management and control of the Institution is vested in the University.

The Executive Vice-President and Provost recommends a budget amounting to \$194,000 for the 1963-65 biennium, an increase of \$21,000 over the present biennial appropriation. The increase is requested for the following purposes: One Technician for Extending the Research in Vaccination

by the Aerosol Route (without injection)\$ 8 000	
Increase in Equipment	
Salary Adjustments 11 000	
Total	
I recommend that this budget be approved for filing with the State Depart-	

ment of Finance and presentation to the Illinois Budgetary Commission.

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

APPOINTMENTS TO THE FACULTY

(3) 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. STANLEY F. BLOUNT, Assistant Professor of Geography, Department of Social Sciences, Chicago Undergraduate Division, beginning September 1, 1962, at an annual salary of \$7,200 (D).
- 2. ANNE L. COBBITT, Associate Professor of Library Science, beginning September 1, 1962, at an annual salary of \$10,000 (D).

* Applies to all funds and is included only in the total column.

- 3. DONALD L. DAY, Assistant Professor of Agricultural Engineering, beginning September 1, 1962, at an annual salary of \$8,700 (DY).
- 4. CECELIA M. FENNESSY, Assistant Professor of Nursing, beginning September 1, 1962, at an annual salary of \$8,000 (DY).
- 5. JOHN E. GEDO, Clinical Assistant Professor of Psychiatry, College of Medi-cine, beginning September 1, 1962, on one-fourth time, at an annual salary of \$3,500 (DY25).
- 6. JEAN PAGE GILBERT, Visiting Assistant Professor of Education, for the academic year 1962-63, at a salary of \$7,200 (E).
- HANS-DIETER HENATSCH, Lecturer in the Department of Pharmacology, with rank of Associate Professor, College of Medicine, for six and one-half months from October 15, 1962, at a salary of \$6,500 (G).
 MARTIN R. HURTIG, Assistant Professor of Architecture and Art, Chicago Undergradient Distingtion for the professor of Architecture and Art, Chicago
- Undergraduate Division, beginning September 1, 1962, at an annual salary
- 9. H. VICTORIA IVERSON, Assistant Professor of Hygiene and Medical Adviser for Women, Health Service, Chicago Undergraduate Division, beginning September 15, 1962, on one-half time, at an annual salary of \$6,000 (DY50).
 10. SHISHIRKUMAR JOGDEO, Assistant Professor of Mathematics, beginning Sept-tember 1, 1962, at an annual salary of \$7,500 (B).
 11. VICUOR ADVISION, Distribution of \$7,500 (B).
- 11. YASUO KOMAMIYA, Visiting Research Associate Professor in the Digital Computer Laboratory, Graduate College, for the academic year 1962-63, at a
- computer Laboratory, Graduate Conege, in the Laboratory, and salary of \$10,800 (E).
 12. RAYMOND E. LEWKOWICZ, Assistant Professor of Mathematics, beginning September 1, 1962, at an annual salary of \$7,800 (B).
 13. JAMES McGARRELL, Visiting Professor of Art, for one month from September 17, 1962, at a salary of \$1,200 (G).
 14. ARNOLD L. MILLER, Assistant Professor of Psychology, beginning September 1, 1962, on one-third time at an annual salary of \$2,600 (D33).
- 1, 1962, on one-third time, at an annual salary of \$2,600 (D33).
- 15. JEAN PHILLIPS, Visiting Assistant Professor of Education, for the academic year 1962-63, at a salary of \$7,200 (E).
- HAROLD S. SHULMAN, Assistant Professor of Psychology, beginning September 1, 1962, on one-third time, at an annual salary of \$3,300 (D33).
 JERRY S. WIGGINS, Associate Professor of Psychology, beginning September 1, 1962, at an annual salary of \$9,500 (A).

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

ADMISSIONS PROCEDURES ---- DATES FOR ACCEPTING APPLICATIONS FOR ADMISSION

(4) The All-University Committee on Admissions, the Dean of Admissions and Records, and the Executive Vice-President and Provost recommend authorization of the following policy and procedures governing acceptance of applications for admission to the University.

A. Specific final (deadline) dates for acceptance of applications for admission and readmission in a given term may be established by the President, upon recommendation of the Dean of Admissions and Records and after consultation with other administrative officers concerned. These dates may vary among the three campuses as special conditions warrant.

"Applications for admission and readmission" shall mean that the complete file of credentials necessary for action on the application shall have been submitted.

- B. The Dean of Admissions and Records may accept applications after final (deadline) dates under exceptional circumstances which patently justify special consideration.
- C. Beginning in September, 1963, the following deadline dates on applications for admission and readmission will be established for fall registration at Urbana-Champaign:

In the case of foreign students, six weeks prior to the first day of the registration period for the first semester for the fall term of each year.

In the case of domestic students, two weeks prior to the first day of the registration period of the fall term of each year.

In the case of foreign students seeking readmission, or foreign applicants

who hold a baccalaureate degree from a college or university in the United States, the regulation covering domestic students will apply.

Adoption of such procedures is deemed necessary in the interests of orderly and systematic consideration of applications. Heretofore, many prospective students who have not previously submitted applications appear during the registration period or even later, hurriedly complete applications, and receive provisional permits which enable them to proceed with registration. Provisional permits are necessary because in most cases the applicants can not present official credentials. Following the registration period, the Office of Admissions and Records determines whether or not such applicants meet the requirements. Such special handling requires additional staff time and results in added expense. Furthermore, the effort to process new applications immediately preceding or during registration interferes with the registration of the large majority of students, old and new, whose credentials have been evaluated and approved. At the same time there should always be provision for considering the

At the same time there should always be provision for considering the applications of prospective students who have legitimate reasons for delay in filing their applications beyond the deadline, but there would be relatively few such cases. These late applicants could reasonably be required to defer registration until after the regular registration period, if this seemed desirable in order to avoid the difficulties just mentioned. Special procedures would be established for the registration of those late applicants for admission to the Graduate College who had been selected for assistantships or other University appointments. I concur.

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

REORGANIZATION OF COLLEGE OF EDUCATION

(5) The educational, research, and public service programs of the College of Education have heretofore been administered under nine divisions, which have had informal status, and five other administrative units — the University High School, the Bureau of Educational Research, an Evaluation Unit attached to the Bureau, the Institute for Research on Exceptional Children, and the Teacher Placement Office which also serves the University Council on Teacher Education. The Dean and the Executive Committee of the College have recommended

The Dean and the Executive Committee of the College have recommended the reorganization of the College of Education by the establishment of seven departments, each with an Executive Committee and a Chairman:

Department

Administration and Supervision
Educational Psychology
Elementary Education
History and Philosophy of Education
Secondary and Continuing Education
Special Education
Vocational and Technical Education

Associate Professor L. E. McCleary Professor R. Stewart Jones Professor John E. McGill Professor William O. Stanley Professor R. Will Burnett Professor Samuel A. Kirk Professor M. Ray Karnes

Chairman

The University High School, the Bureau of Educational Research, and the Institute for Research on Exceptional Children will be continued as separate administrative units. By administrative approval, the Evaluation Unit has been separated from the Bureau of Educational Research and is now the Office of Educational Testing; and the name of the Teacher Placement Office has been changed to Educational Placement Office.

The University Statutes provide that a new department may be created by the Board of Trustees on vote of the faculty of the college in which the department is to be located and on recommendation of the college and with the approval of the appropriate Senate and of the President. In the present case, the seven departments proposed are not new, in the sense that they will encompass new programs or units of instruction, research, or public service, but will constitute a formal reorganization, administratively, of existing programs which will be the equivalent of the prior informal divisions or units. Hence, action on the recommendation by the Urbana Senate is not indicated; nor does it appear necessary to submit these changes to the State Board of Higher Education for approval since that Board requires only that the State universities report "the establishment of a college, school, division, institute, department or other unit in any field of instruction, research, or public service not theretofore included in the program of the institution. . . ." With the approval of the Executive Vice-President and Provost, acting for the President, the seven departments have been functioning on an informal and unofficial trial basis, under the general administration of the Dean and the Executive Committee of the College. The Dean was requested to provide for elections of executive committees for the new departments, and these committees have been consulted regarding the nominations of chairmen.

The executive officers of the other units have been serving in those capacities for a number of years, and their reappointments were included in the budget for the current academic year when it was approved by the Board of Trustees: David M. Jackson, Principal of University High School; William P. McLure, Director of the Bureau of Educational Research; Samuel A. Kirk, Director of the Institute for Research on Exceptional Children; and J. Marlowe Slater, Head of the Educational Placement Office.

I recommend approval of the foregoing recommendations, including the appointments of the chairmen of the departments for one year from September 1, 1962.

On motion of Mrs. Watkins, these recommendations were approved.

CHANGES IN NAMES OF ADMINISTRATIVE UNITS

(6) The Vice-President for the Chicago Undergraduate Division has recommended that the name of its College of Fine and Applied Arts be changed to "College of Architecture and Art."

The Dean of the College of Physical Education has recommended that the Student Rehabilitation Center and the Program of Intramural Activities be renamed the "Division of Rehabilitation — Education Services" and the "Division of Intramural Activities," and that the executive officer of each be designated as Director.

I concur in these recommendations.

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

JUSTIN SMITH MORRILL HALL

(7) It is recommended that the new laboratories building south of Burrill Hall, construction of which was financed by grants from the National Institutes of Health, the National Science Foundation, and matching state funds, be named Justin Smith Morrill Hall for Congressman and later Senator from Vermont, Justin Smith Morrill, sponsor of the Land-Grant Act. This name has been approved by the Executive Committee of the School of Life Sciences and the Executive Committee of the University Council.

The University has named the Plant Sciences Building, now under construction, for Jonathan Baldwin Turner, early pioneer in the development of the concepts which underlay the initiation and growth of Land-Grant universities. The state of Illinois, which contributed greatly to the impetus for the Land-Grant movement, should also honor the sponsor of the national legislation under which the University of Illinois was founded. It is especially appropriate to take such action this year, the Centennial of the Land-Grant Act.

The new building will house the Department of Entomology and will also be used by other departments in biology. The building use thus reflects the University's broad interest in research and instruction, the early emphasis upon science, and the cooperative arrangements between the state and federal governments in the encouragement of the program of Land-Grant universities.

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

APPROPRIATIONS FOR NONRECURRING EXPENDITURES

(8) The Committee on Nonrecurring Appropriations recommends the for appropriations and assignments of funds from the University General R	leserve:
Statistical Service Unit, Urbana, equipment	\$ 4 885
Chicago Undergraduate Division, rental and option	•
to purchase IBM 1620 computer system	18 866
Physical Plant	
Horticulture Field Laboratory, improvement of lighting	5 100
Child Development Laboratory, air conditioning	5 500

1962]

The Vice-President and Comptroller recommends the following appropriation:

Repair of fire damage to University building at 1208 West Springfield Avenue, Urbana..... \$ 9 300

A fire of undetermined origin caused extensive damage to the University three-story, frame building at 1208 West Springfield Avenue, Urbana, which provided offices for the school mathematics project under the direction of Professor Max Beberman of the College of Education. The estimated cost of repairs is \$9,300. The building has 3,058 square feet of usable space so that the repairs result in an average cost of \$3.40 per square foot. Since other space could not be made available for the estimated cost of the repairs proposed, the Director of the Physical Plant and the Vice-President and Comptroller have recommended an appropriation for this purpose.

I concur.

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

AGREEMENT WITH COMMONWEALTH EDISON COMPANY FOR ELECTRICAL SERVICES

(9) The Director of the Physical Plant and the Vice-President and Comptroller recommend authorization of an "excess facilities" agreement with Common-wealth Edison Company, Chicago, for work in connection with improvements to the electrical service at the Medical Center at a cost of \$54,132.

During the 1959-61 biennium, the University began a change over of the During the 1939-01 blennum, the University began a change over of the electrical services to the Research and Educational Hospitals buildings from 4,000-volt service. All the work has been designed and a considerable portion completed. A final phase consists of electrical vault improvements and bringing into the campus additional feeders from the Commonwealth Edison system. The work to be done by Commonwealth Edison's work necessary for service to the University and includes changing of the transformers in work to review to the transformers in work to review the transformers in work to be the transformer in work to be the transformer in work to be the transformer in work to be the transformers in work to be the transformer in the transformer in work to be the transformer in work to be the transformer in the tran the transformers in vaults requiring increased capacity, furnishing and installing conduit and cables for two additional 12,000-volt feeders into the campus, rearrangement of switching equipment in four vaults, and cable rearrangement in the Edison system. When this work is completed, the possibility of an electrical outage will have been reduced to the minimum.

The proposed work by the Commonwealth Edison Company will implement in part recommendations in the "Report on Electrical Distribution System, Chi-cago Professional Colleges Campus," dated May 3, 1950, and is consistent with the long-range plan of improvements previously approved by the Board of Trustees.

Funds are available in the state capital appropriations to the University for 1961-63 from the Universities Building Fund and have been released.

I concur.

On motion of Mr. Johnston, this agreement was authorized by the following vote: Aye, Mr. Clement, Mr. Dilliard, Mr. Hughes, Mr. Johnston, Mr. Pogue, Mr. Swain, Mrs. Watkins, Mr. Williamson; no, none: absent, Mr. Kerner, Mr. Wilkins.

CONTRACTS FOR EXTENSION OF UTILITIES DISTRIBUTION SYSTEM (10) The Director of the Physical Plant and the Vice-President and Comptroller recommend awards of the following contracts for extension of the utilities distribution system, the award in each case being to the lowest bidder:

Construction of Underground Steam Tunnel (Division "FF") from Gregory Hall north on the east side of Wright Street to the service drive north of the Administration Building-Dean Evans Company, Champaign \$278 839 BOARD OF TRUSTEES

Installation of Plumbing for Underground Steam Tunnel (Division "GG") George S. Walker Plumbing and Heating, Inc., Decatur	18 000
Installation of Piping in Underground Steam Tunnel and Underground Cast Iron Conduit Piping (Division "HH") - M. J. Holleran, Inc.,	
Chicago	105 860
Additive alternate for installation of a six-inch high	
pressure steam main from the University Library north through the new steam tunnel and east to	
Harker Hall	
Furnishing and Applying of Thermal Insulation for Piping in Under- ground Steam Tunnel (Division "II") — Inland Insulation Com-	
pany, Chicago	26 500
Additive alternate for insulation of six-inch high pressure steam main	
Furnishing and Installation of Electrical Materials, including Tunnel Lighting and Power to Miscellaneous Pumps (Division "]]") —	
Square Deal Electrical Contracting, Inc., Urbana	17 411 \$446 610
Funds are available in the state capital appropriations to the Univer	

1961-63 from the Universities Building Fund and have been released. Submitted herewith is a report from the Physical Plant Department on this project, including a schedule of the bids received, a copy of which is being filed

project, including a schedule of the bids received, a copy of which is being filed with the Secretary of the Board for record. I concur.

1 concur.

On motion of Mr. Swain, these contracts were awarded, as recommended, by the following vote: Aye, Mr. Clement, Mr. Dilliard, Mr. Hughes, Mr. Johnston, Mr. Pogue, Mr. Swain, Mrs. Watkins, Mr. Williamson; no, none; absent, Mr. Kerner, Mr. Wilkins.

CONTRACT FOR STEAM SERVICE TO ILLINOIS EYE AND EAR INFIRMARY

(11) The Department of Mental Health has requested that the University furnish steam service to the new Illinois Eye and Ear Infirmary being constructed south of Taylor_Street between Wood Street and Wolcott Avenue.

The Director of the Physical Plant and the Vice-President and Comptroller recommend authorization of a contract on the same basis as the University's contracts with other consumers of steam in the Medical Center District supplied by the Medical Center Steam Company. The requirements of the Infirmary will not exceed 12,000 pounds per year maximum demand which is well within the capacity of the present Medical Center Steam Plant.

I concur.

On motion of Mrs. Watkins, this contract was awarded by the following vote: Aye, Mr. Clement, Mr. Dilliard, Mr. Hughes, Mr. Johnston, Mr. Pogue, Mr. Swain, Mrs. Watkins, Mr. Williamson; no, none: absent, Mr. Kerner, Mr. Wilkins.

CONTRACT FOR POWER SUPPLIES FOR THE MEDICAL CENTER CAMPUS

(12) The Director of the Physical Plant and the Vice-President and Comptroller recommend award of a contract for \$304,180 to the C and H Electrical Company, Chicago, Illinois, the lowest bidder, for new power supplies for the Research Laboratory and Library Building, Dentistry-Medicine-Pharmacy Building, Second Unit of the Dentistry-Medicine-Pharmacy Building, and the west section of the Research and Educational Hospitals, and network ties between vaults on the Medical Center Campus.

These installations are a phase of the 1961-63 improvements changing the electrical supply from an obsolete and overloaded 4,000-volt system to a new

and more reliable 12,000-volt system and include new duct work, cabling, and switchgear for the buildings listed.

Funds are available in the state capital appropriations to the University for 1961-63 from the Universities Building Fund and have been released. L concur.

On motion of Mr. Hughes, this contract was awarded by the following vote: Aye, Mr. Clement, Mr. Dilliard, Mr. Hughes, Mr. Johnston, Mr. Pogue, Mr. Swain, Mrs. Watkins, Mr. Williamson; no, none; absent, Mr. Kerner, Mr. Wilkins.

EMPLOYMENT OF ARCHITECTS AND ENGINEERS

(13) The Director of the Physical Plant and the Vice-President and Comptroller recommend the employment of architects and engineers for the following assignments and on the terms indicated:

- Civil Engineering Building, Urbana-Champaign A. Epstein and Sons, Inc., Chicago, with the firm of Richardson, Severns, Scheeler, and Associates, Champaign, as associate architect, for building planning and design, on the basis of a fee of 6 per cent of the construction contract costs, fee to cover building design, preparation of plans, working drawings, specifications, contract documents, and supervision of construction.
- Addition to Smith Music Hall, Urbana-Champaign—Lundeen and Hilfinger, Bloomington, on the basis of a fee of 6 per cent of the construction contract costs, fee to cover building design, preparation of plans, working drawings, specifications, contract documents, and supervision of construction.
- Life Sciences East Unit, Urbana-Champaign Fugard, Burt, Wilkinson, and Orth, Chicago, on the basis of a fee of 5% per cent of the construction contract costs, fee to cover building design, preparation of plans, working drawings, specifications, and supervision of construction.
- East Dentistry-Medicine-Pharmacy Addition, Medical Center Perkins and Will, Chicago, on the basis of a fee of 6 per cent of the construction contract costs, fee to cover building design, preparation of plans, working drawings, specifications, and supervision of construction.

These firms have been recommended for the specific assignments by the Advisory Committee on the Selection of Architects and Engineers. The Committee on Buildings and Grounds has also been consulted and recommends approval.

I concur in these recommendations.

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

ADDITION TO CONTRACT FOR ENGINEERING SERVICES ON PLANS FOR COORDINATED SCIENCE LABORATORY

(14) The Director of the Physical Plant and the Vice-President and Comptroller recommend an increase of \$4,000 in the contract with Brown, Manthei, Davis, and Mullins, Champaign, Illinois, for additional engineering services in the preparation and revision of working drawings and specifications for mechanical and electrical work in the construction of the Coordinated Science Laboratory.

Funds are available in assignments to the Coordinated Science Laboratory from indirect costs recovered under research contracts.

I concur.

On motion of Mrs. Watkins, this change in contract was authorized.

AMENDMENT OF GRANT AGREEMENT WITH FEDERAL AVIATION AGENCY

(15) The Federal Aviation Agency has requested a resolution authorizing acceptance and execution of "First Amendment to Grant Agreement, Project No. 9-11-026-6003, University of Illinois Willard Aiport" (Contract Serial No. FA3-586) pertaining to certain improvements at the University of Illinois-Willard Airport for which the Federal Aviation Agency agreed to provide one-half the funds with the state of Illinois, through its Department of Aeronautics, providing substantially the other half, except for the cost of engineering services, which were paid by the University. The purpose of the amendment is to provide for an increase in the federal grant from \$97,523 to \$98,636.14 (or \$1,113.14) to cover the Federal Aviation Agency's share of the additional and allowable project costs.

Accordingly, I recommend adoption by the Board of the Resolution submitted herewith, and that the Board authorize its execution as indicated therein.

Resolution Authorizing Acceptance and Execution of First Amendment to Grant Agreement Between the United States and the Board of Trustees of the University of Illinois, Champaign-Urbana, Illinois

WHEREAS, the Administrator of the Federal Aviation Agency, pursuant to a request from the University of Illinois, and in order to advance the interests of the United States in civil aviation, has tendered a First Amendment to the Grant Agreement executed between the Administrator of the Federal Aviation Agency, acting for and on behalf of the United States, and The Board of Trustees of the University of Illinois, a public corporation of the State of Illinois, with its principal office in the City of Urbana, Illinois, and the State of Illinois, acting by and through its Department of Aeronautics, on December 18, 1959, and December 21, 1959, respectively, covering a project on the University of Illinois Airport, Project No. 9-11-026-6003; and

WHEREAS, it is necessary that the said Amendment to the Grant Agreement be duly and formally accepted by The Board of Trustees of the University of Illinois, Urbana, Illinois; and

WHEREAS, the said Amendment to the Grant Agreement is in the words, figures, and form following:

FIRST AMENDMENT TO GRANT ACREEMENT

University of Illinois Willard Airport Champaign-Urbana, Illinois Project No. 9-11-026-6003

Contract Serial No. FA3-586

WHEREAS, the amount of final eligible and allowable and allowed project costs relating to the above-identified project has been determined to be \$197,272.28, the Federal share of which is \$98,636.14, and said Federal share exceeds the amount of the maximum obligation of the United States under the project Grant Agreement by the amount of \$1,113.14; and

WHEREAS, it is determined to be in the interest of the United States that the said Grant Agreement be amended, as authorized by Public Law 183, 81st Congress in the manner and particulars hereinafter set forth.

Now, Therefore, Witnesseth:

For and in consideration of the benefits which will respectively accrue to the parties hereto, it is hereby mutually agreed by and between the Federal Aviation Agency, for and on behalf of the United States, as Party of the First Part and The Board of Trustees of the University of Illinois and the Department of Aeronautics, State of Illinois, as Parties of the Second Part, that the Grant Agreement on Project No. 9-11-026-6003, be and the same is hereby amended by deletion of the monetary amount "\$97,523.00" appearing in numbered Paragraph 1 on Page 2 of Part I-Grant Offer, and by substitution therefore of the monetary amount of \$98,636.14."

IN WITNESS WHEREOF, the Parties hereto have caused this First Amendment

to be executed as of the, 1962.

UNITED STATES OF AMERICA FEDERAL AVIATION AGENCY

By..... Acting Chief, Airports Division, Central Region

Approved:

Director, Institute of Aviation University of Illinois

> THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ILLINOIS

(Seal)	THE UNIVERSITY OF ILLINOIS
Attest:	. Ву
Title	Title

CERTIFICATE OF CO-SPONSOR'S ATTORNEY

I, _____, acting as Attorney for the Board of Trustees of the University of Illinois (hereinafter called the Co-Sponsor) do hereby certify:

That I have examined the foregoing First Amendment to Grant Agreement and the proceedings taken by the Co-Sponsor relating thereto and find that the execution thereof by the Co-Sponsor has been duly authorized, and is in all respects due and proper and in accordance with the laws of the State of Illinois and further that, in my opinion said First Amendment to Grant Agreement constitutes a legal and binding obligation of the Co-Sponsor in accordance with the terms thereof.

Dated at day of 1962.

Title.....

STATE OF ILLINOIS, acting by and through its Department of Aeronautics

(Seal) Attest:______By_____

Title......

CERTIFICATE OF CO-SPONSOR'S ATTORNEY

I,, acting as Attorney for the State of Illinois, acting by and through its Department of Aeronautics, (hereinafter called the "Co-Sponsor"), do hereby certify:

That I have examined the foregoing First Amendment to Grant Agreement and the proceedings taken by the Co-Sponsor, the State of Illinois, Department of Aeronautics, relating thereto and find that the acceptance thereof by the said Co-Sponsor has been duly authorized, and that the execution thereof is in all respects due and proper and in accordance with the laws of the State of Illinois, and further, that in my opinion, said First Amendment to Grant Agreement constitutes a legal and binding obligation of the said Co-Sponsor in accordance with the terms thereof.

Dated at, this day of, 1962.

Title.....

Now, Therefore, in consideration of the benefit to be derived therefrom, Be II, and It Is Hereby Resolved by The Board Board of Trustees of the University of Illinois, a public corporation of the State of Illinois, with its principal office in the City of Urbana, Illinois, as follows:

- (1) That The Board of Trustees of the University of Illinois, a public corporation of the State of Illinois, with its principal office in the City of Urbana, Illinois, accept, and it does hereby accept the First Amendment to the Original Grant Agreement tendered to it by the Administrator of the Federal Aviation Agency, acting for and on behalf of the United States, in the words, figures, and form as hereinabove set forth, to be duly executed in its name and for and in its behalf.
- (2) That to accomplish the foregoing, H. O. Farber, Comptroller, be and he is hereby authorized and directed to execute for and in behalf of The Board of Trustees of the University of Illinois, Urbana, Illinois, the said First Amendment to the Grant Agreement, and that A. J. Janata, Secretary, be and he is hereby authorized and directed to attest said execution and to impress thereon the Official Seal of The Board of Trustees of the University of Illinois.

On motion of Mr. Swain, the resolution was adopted and execution of the same was authorized; Mr. Johnston was recorded as not voting.

PURCHASES FOR FACULTY OF MEDICINE, CHIENGMAI HOSPITAL IN THAILAND

(16) The Executive Vice-President and Provost has been authorized by the

President of the University and the Board of Trustees to act on recommendations for purchases of equipment and supplies for higher education institutions in India, which the University is servicing under contracts with the Agency for International Development and for which funds are supplied by the United States Government, to expedite placement of orders and deliveries.

It is recommended that this authorization be extended to include purchases under the AID contract for services to the Faculty of Medicine, Chiengmai Hospital in Thailand.

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

PURCHASES

(17) 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 lowest acceptable bid. I concur.

Chicago Colleges and Divisions

Item	Department	Vendor	Cost
One microscope and photomicrographic accessories	Histology	W. H. Kessel & Co., Chicago	\$ 6 213 55 delivered
40,000 tetracycline V capsules, 250 mg.; this product is an antibiotic drug which is used in the treatment of a variety of bacterial infections (this represents a six-month supply)	Pharmacy Stores	Upjohn Co., Chicago	5 340 00 delivered

Urbana-Champaign Departments

Reconstruction of flood control meas- ures at the Vermilion River Observa- tory (radio telescope) located south- east of Danville	Astronomy	Elton A. Wagner Co., Danville	27 950 00 f.o.b. site
One electrophoresis system, paper type	Animal Science	Fisher Scientific Co., Chicago	2 607 00 f.o.b. delivered
One centrifuge, automatic, refrigerated, with two rotors and two automatic pipettes, to be used in the research of fractionating cells which contain radioactive constituents under sus- tained low temperature operations	Botany	Ivan Sorvall, Inc., Norwalk, Conn.	3 830 00 f.o.b. delivered
Two grating monochromators for sepa- rating soluble compounds in sepa- rate colored layers, to be used in research projects in the Photosyn- thesis Laboratory	Botany	Chicago Apparatus Co., Chicago	4 000 00 f.o.b. delivered and installed including one year free service
One spectrophotometer, infrared, large size recording, single or double beam, quick scan device, for use in various research programs in inorganic chem- istry	Chemistry and Chemical Engineering	Beckman Instruments, Inc., Lincolnwood	4 905 00 f.o.b. delivered
One centrifuge, automatic, superspeed, refrigerated, with two rotors for use in sustained low temperature opera- tions, suitable for use with corrosive solutions for biosynthesis research	Chemistry and Chemical Engineering	Ivan Sorvall, Inc., Norwalk, Conn.	2 855 00 f.o.b. delivered
Fabrication and balancing of two spe- cial gyro rotors, vacuum tight, helium filled, leak rate less than 10 ⁻⁹ STD, CC/SEC; material, beryllium, spher- icity 0.000010 T.I.R., finish 5 micro inches; diameter 2.0035 ±.0035	Coordinated Science Laboratory	Minneapolis-Honeywell Regulator Co., Minneapolis, Minn.	3 000 00 f.o.b. Minneapolis, Minn.
One high vacuum evaporator system, large capacity, 400 liters per second organic and hydrocarbon free pump- ing system, vacuum range to 10 ⁻⁸ mm Hg	Coordinated Science Laboratory	Varian Associates, Palo Alto, Calif.	16 256 00 f.o.b. delivered
One magnetic core matrix stack: 256 x 32 word select, approximate core dimensions 0.029 in. O.D. 0.020 in. I.D., 0.0065 in. high, short words divided into four planes of 64 words each, long (1024 bit) words, two- dimensional random-access operation	Digital Computer Laboratory	Electronic Memories, Inc., Los Angeles, Calif.	2 780 00 f.o.b. Los Angeles, Calif.

Item	Depariment	Vendor	Cost
1.020.000 data processing cards 60 reels without tape 60 reel containers 100 reels, each with 2,400 ft. magnetic	Digital Computer Laboratory	International Business Machines Corp., Springfield	\$ 6 013 32 f.o.b. delivered
tape Six ribbons, black			
One antenna system, special, for "sum" mode of monopulse operation, in- stalled	Electrical Engineering	Granger Associates, Palo Alto, Calif.	30 780 00 f.o.b. delivered and installed
One oscilloscope, dual trace, plug-in type preamplifiers, with Null Read- out feature, frequency response DC to 500 KC	Electrical Engineering	Analab Instrument Corp., c/o Ridgway Associates, Chicago	2 964 34 f.o.b. delivered
One universal line coupler to be used to permit coupling of the G-20 Bendix computer system to non-standard peripheral accessory equipment	Electrical Engineering	Bendix Corp., Computer Division, Chicago	18 500 00 f.o.b. Los Angeles, Calif.
One high vacuum pumping station with vacuum gauges and control unit for use in research on the surface be- havior of liquids under high electric field condition by the Electrical Engi- neering Research Laboratory	Electrical Engineering	Vacuum-Electronics Corp., Chicago	4 372 00 f.o.b. delivered
One autoanalyzer with two-speed pro- portioning pump and photo-tube colorimeter for continuous coloru- metric analysis of calcium, inorganic phosphates, microurea, and creatinine in research into mineral metabolism in humans and animals	Home Economics	Technicon Instruments Corp., Chauncey, N.Y.	5 200 00 f.o.b. Chauncey, N.Y.
Laboratory services for re-balancing sound tracks and other improvements in the Mathematics Project film series, which includes twenty film titles which are jointly owned by the University and the National Educa- tional Television and Radio Center	UICSM- Mathematics Project	Capital Film Laboratories, Washington, D.C.	7 866 39 f.o.b. delivered
One centrifuge, superspeed, refrigerated with two rotors, one of 1890 milliliter capacity and one of 400 milliliter ca- pacity, for research studies on the purification of subcellular components and the separation and purification of bacterial enzymes and nucleic acids	Microbiology	Ivan Sorvall, Inc., Norwalk, Conn.	2 933 40 f.o.b. delivered
One multiple sample absorbance re- corder, monochromator and acces- sories for spectrophotometric procedures used in the characteriza- tion of bacterial enzymes and bacte- rial nucleic acid preparations	Microbiology	Gilford Instrument Laboratories, Inc., Oberlin, Ohio	7 150 00 f.o.b. Oberlin, Ohio
One ultracentrifuge, preparative type with four rotor heads, 198,000 RPM x G speed, large capacity, refrigerated system	Microbiology	Spinco Division of Beckman Instruments, Inc., Palo Alto, Calif.	8 745 00 f.o.b. delivered
One electrophoresis column, large ca- pacity, high separating power, stabi- lized and well defined experimental conditions; for preparative fractiona- tion and purification of proteins, pep- tides, nucleic acids, nucleotides, and enzymes	Microbiology	LKB Instruments, Inc., Washington, D.C.	4 935 50 f.o.b. delivered
One metallograph, research microscope and camera for visual examination and photography of specimens in bright field, dark field or polarized light illumination, reflected or trans- mitted light	Mining, Metallurgy, and Petroleum Engineering	W. H. Kessel & Co., Chicago	8 454 70 f.o.b. delivered and installed
One X-ray machine, table model, com- plete with cable and supports, cooling hose, and vertical tube stand, suitable for use with interchangeable target tubes	Mining, Metallurgy, and Petroleum Engineering	Siemens New York, Inc., New York	2 710 00 f.o.b. delivered
Ten power supply systems, special, each consisting of two modular power sup- plies 95-125VAC 50-60 cps input, 20- VDC output variable ±5 per cent; two, ditto, cecept output voltage 10- VDC; two, ditto, 20VDC output, variable ±10 per cent; all 1.5 amperes	Physics	Technipower, Inc., c/o Kenneth W. Meyers Co., Chicago	10 950 00 f.o.b. delivered

Item	Depariment	Vendor	Cost
One magnetic resonance stabilizer, field control unit, including gauss probes, oscillator, lock in amplifier, power	Physics	Harvey-Wells Corp., Framingham, Mass.	3 453 00 f.o.b. delivered
supply and amplifier One field ion microscope with polaroid camera and mechanical pump	Physics	Central Scientific Co., \$ Chicago	3 109 00 f.o.b. delivered
One special combination temperature and power controller One automatic programmer-reader One recorder, 6 in. strip chart, eight chart speeds, ten calibrated spans, 0.2 per cent accuracy with installed re- transmitting potentiometer One recorder, X-Y, time driven, 11 in. by 17 in. paper, sixteen DC calibrated ranges, eight AC calibrated ranges, eight chart speeds, accuracy 0.2 per	Theoretical and Applied Mechanics Theoretical and Applied Mechanics	Research, Inc., Minneapolis, Minn. F. L. Moseley Co., c/o Crossley Associates, Chicago	2 947 45 f.o.b. delivered 3 525 00 f.o.b. Pasadena, Calif.
cent One metallographic microscope, camera, and attachments	Theoretical and Applied Mechanics	W. H. Kessel & Co., Chicago	6 876 77 f.o.b. delivered and
One stereoscope and one compound mi- croscope, each with accessories, to be used in Zoology research programs	Zoology	Eric Sobotka Co., Inc., New York, N.Y.	installed 3 737 00 f.o.b. delivered
One ultracentrifuge, preparative type with three rotors with capacities of 15 milliliter, 100 milliliters, and 940 mil- liliters, refrigerated, speeds up to 198,000 rpm. x G	Zoology	Spinco Division Beckman Instruments, Inc., Palo Alto, Calif.	9 503 20 f.o.b. delivered
120 lessons on film and tape produced by the Encyclopedia Britannica Films	University High School	Encyclopedia Britannica Films, Wilmette	3 000 00 f.o.b. delivered
22 films, 16 mm., miscellaneous, color and black and white	Visual Aids Service	Films, Inc., Wilmette	3 180 00 f.o.b. delivered
Print and bind 15,000 copies of <i>Charling</i> the Universe, approximately 80 pages per copy, trim size 8½ in. by 11 in.	Education, Elementary Education Division	George Banta Co., Chicago	2 574 00 f.o.b. delivered
 Print and bind 25,000 copies High School Mathematics, units 1 through 4, stu- dent edition, approximately 708 pages per copy, trim size 8½ in. by 11 in. Print and bind 4,000 copies High School Mathematics, unit 1, student edition, approximately 164 pages per copy, trim size 8½ in. by 11 in. 	University Press	George Banta Co., Chicago	30 082 60 f.o.b. Menasha, Wis.
One portable basketball floor for the Assembly Hall, 60 ft. by 120 ft., wood construction, rubber cushioned, de- signed for single-upright basketball backstop installations; the floor will be completely finished and fitted Fifteen storage trucks, caster wheel mounted	Assembly Hall	Cincinnati Floor Co., Cincinnati, Ohio	16 500 00 f.o.b. delivered and installed
Furnish and install low-frequency radio paging system to include base station, 20 radio receivers, and 10 lapel speakers	Illini Union	Motorola Communica- tions & Electronics, Inc., Chicago	5 740 00 f.o.b. delivered and installed
80 receivers, television, hotel type, table model, 19-inch screen, to be furnished and installed in guest rooms of the Illini Union Building Addition	Illini Union	Lee School Supply Co., Inc., Terre Haute, Ind.	10 054 00 f.o.b. delivered and installed
Paper, English finish, book, white, as follows: 800 reams, 25 by 38-60 lb. 350 reams, 221 by 35-491 lb. 150 reams 25 by 38-70 lb.	Office Supply Storeroom	Decatur Paper House, Inc., Decatur	14 392 55 f.o.b. delivered
702 steel office chairs, upholstered, swivel, posture, and side chairs; de- liveries are to be made to Urbana and Chicago storerooms on three shipping dates, namely, November 15, 1962, January 7, 1963, and April 15, 1963	Office Supply Storeroom	Milwaukee Metal Furniture Co., Chicago	15 654 87 f.o.b. delivered

UNIVERSITY OF ILLINOIS

Item One street sweeper, self-propelled by gasoline engine, two cubic yard ca- pacity complete with two gutter brushes and 49-inch wide main brush with a total sweeping swath of 8 ft. 6 in., to be used by Physical Plant Department to maintain parking lots, streets, and bicycle lanes	Department Physical Plant	<i>Vendor</i> Scruggs-Drake Equipment, Inc., Decatur	Cost \$ 8 309 00 f.o.b. delivered
Seventy-one parking meters, sealed, single-cylinder type collection system, to be furnished and installed in the Illini Union drive and the parking lot at 601-03-05 East Healey Street, Champaign	Physical Plant	Duncan Parking Meter Co., Division of Nauter Corp., Chicago	4 230 54 f.o.b. delivered and installed
Special replacement parts for stoker No. 5 at Abbott Power Plant, as follows: 100 grate bars 20 ½ in. pins for chain 2 top support rails, side 2 rear corner support rails	Physical Plant	Detroit Stoker Co., Monroe, Mich.	2 726 50 f.o.b. Monroe, Mich.

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

COMPTROLLER'S REPORT OF CONTRACTS

(18) The Comptroller's report of contracts executed during the period September 1 to 30, 1962.

With Whom	Purpose	Amount to be Paid to the University	Effective Date
G. and W. H. Corson, Inc.	Prospectus for lime-pozzolan mix- tures	\$ 3 125 00	July 1, 1962
Dairy Industries Supply Association, Inc.	Study of problems relating to the dairy industry	2 050 00	September 14, 1962
Edison Electric Institute	Study of electrical heating	74 000 00	September 10, 1962
United States Air Force AF-AFOSR-6-63	Photoproduction of mesons in liquid hydrogen bubble chamber	47 050 00	July 1, 1962
United States Air Force AF 29 (601) 5535	Study of the dynamic soil-structure interaction characteristics of real soil media	79 377 00	September 1, 1962
United States Army DA-31-124-ARO (D)-35	Synthesis, reactions, and structures of certain sulfur-nitrogen com- pounds	56 311 00	September 1, 1962
United States Depart- ment of Health, Educa- tion, and Welfare OE-3-10-031	Rule-guided behavior and strategies in teaching	121 849 00	September 1, 1962
Total		\$383 762 00	
With Whom	Purpose	Amount to be Paid by the University	Effective Date
State's Attorney of Piatt County	Payment, in lieu of taxes, for serv- ices rendered (Allerton and War- ren)	\$ 11 562 64	July 9, 1962
	Leases		
With Whom	Purpose	Amount to be Paid to the University	Effective Date
Delta Alumni of Sigma Phi Delta, Inc.	905-905 ¹ / ₄ South Fifth Street, Champaign, from September 1, 1962, to June 30, 1963	\$ 5 500 00 (ten months rental)	July 31, 1962
	Contract Changes		
With Whom	Purpose	Amount to be Paid to the University	Effective Date

With Whom	Purpose	University	Date
American Cyanamid Co.	Systemic insecticides for control of insects on wheat	\$ 1 000 00	June 25, 1962
American Society of Heating, Refrigerating, and Air Conditioning Engineers	Steam and condensate flow in pipes	5 000 00	September 1, 1962

BOARD OF TRUSTEES

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With Whom	Putpose	Amount to be Paid to the University	Effective Date
American Steel & Wire Division	Behavior of deformed wire fabric in concrete	1 200 00	April 27, 1962
Bendix Corp.	High temperature thermal proper- ties of ceramic-metal combina- tions	\$ 28 656 25	September 15, 1962
Griffin Wheel Co.	Improvement of cast steel railway car wheels	13 489 29	June 14, 1962
Moorman Manufacturing Co.	Nutritional quality of pig starter rations	2 600 00	August 21, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-2	Highway problems	16 500 00	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-5	Riveted and bolted structural joints	10 000 00	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-9	Impact on highway bridges	21 500 00	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-10	Prestressed concrete highway bridges	29 000 00	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-12	Soil exploration and mapping	30 000 00	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-46	Soil-aggregate mixtures for highway pavement	25 500 00	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-47	Chemical stabilization of soils	6 000 00	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-53	Vehicular speed regulation	27 000 00	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-58	Equipment for roadside cover	17 500 00	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-59	Highway medians	18 500 00	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-64	Welded highway structures	21 000 00	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-65	Drainage laws and practices	14 000 00	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-66	Woody ground cover	13 500 00	August 20, 1962

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		Amount to be Paid to the	Effective
With Whom	Purpose	University	Date
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-67	Grasses and their establishment	\$ 11 500 00	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-68	Guide lines for appraisals	20 000 00	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-69	Traffic linkage patterns	5 000 00	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-70	Social factors and traffic	8 500 00	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways 1HR-71	Impact on urban real estate values	21 000 00	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-72	Creep in structural concrete	16 000 DO	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-73	Fatigue failure in concrete	17 500 00	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways IHR-75	Seal coats and surface treatments	13 000 00	August 20, 1962
State of Illinois Depart- ment of Public Works and Buildings, Divi- sion of Highways 1HR-76	Lime stabilization of soils	17 000 00	August 20, 1962
United States Air Force AF 18 (600) 689	Properties of insulating and con- ducting solids	2 578 06	August 23, 1962
United States Air Force AF 29 (601) 2876	Effects of dynamic loads on soils and buried structures	25 000 00	May 9, 1962
United States Army DA 11-022-ORD-3467	Mechanical characteristics of poly- crystalline N10	19 070 00	September 10, 1962
United States Army DA 49-193-MD-2060	Interpersonal and psychological ad- justment of group members	32 684 00	August 31, 1962
United States Bureau of Public Roads, Depart- ment of Commerce CPR 11-7768	Study on fatigue of welded beams and girders in structural and low alloy steels	30 000 00	July 1, 1962
VioBin Corp.	Fishmeal and fishmeal products in swine nutrition	1 500 00	August 1, 1962
Total		\$542 277 60	

This report was received for record.

RELEASE OF LANGUAGE-STUDY MATERIALS PREPARED UNDER CONTRACT WITH THE PEACE CORPS

(19) Certain instructional materials in the Gujrati language were prepared last summer under the University's contract with the Peace Corps, principally by Mr. Purushottam J. Mistry. These consisted of ten written lesson-units with coordinated magnetic tapes. Under University regulations, and in accordance with the contract with the Peace Corps, this material belongs to the University of Illinois, but the Peace Corps and other agencies of the federal government would be granted license-free use of them be granted license-free use of them.

It is understood that the Peace Corps is contracting directly with Mr. Mistry for the production of some seven additional lesson-units for further training in India of the Peace Corps volunteers trained in Gujrati on this campus. Furthermore, Professor Page, the project director under the Peace Corps contract, indicates that the materials prepared last summer need substantial revision before they can be considered to be in satisfactory final form. Both he and Dean Dangerfield, Director of International Progams, state that the materials in their present form have little or no commercial value. Mr. Mistry has requested that the University of Illinois release to him the materials developed under the Peace Corps contract in order that he might improve and extend the instructional program in Gujrati, with the right to copyright and publish the materials if this seems desirable. Both Professor Page and Dean Dangerfield recommend approval of this request, with the stipulation that both the University and the Peace Corps and other agencies of the federal government would have the right to use the materials developed under the University's contract in their present form without payment of royalties or license fees. The Executive Vice-President and Provost, the Vice-President and Comp-troller, and the Legal Counsel endorse this recommendation.

I concur.

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

GIFT OF ELECTRONIC CARILLON

(20) Mr. A. R. Staley, a member of the Class of 1931, has agreed to give the University of Illinois Foundation for the University at Urbana-Champaign a "Carillon Americana" having 305 bells, the largest carillon made by Schulmerich Carillons, Inc. of Sellersville, Pennsylvania. The playing console will be installed on the average descent the University and the states will be located on the second floor of the University Auditorium and the stentors will be located on the second hoor of the onversity Andromain and the sterious will be focused as a contribution to the program of the School of Music and to the cultural life of the campus. The Carillon will be played from time to time by mechanical means and by members of the staff of the School of Music.

The gift has been accepted by the Foundation and the President and is reported for record. I have already expressed appreciation on behalf of the University but the Board will also wish to record its appreciation.

The Carillon is being installed and it is anticipated that the work will be completed so that the first concert can be played on Saturday, November 24, on which day a brief dedicatory ceremony will also be held in the forenoon.

On motion of Mr. Pogue, acceptance of this gift by the University of Illinois Foundation and the President of the University was confirmed.

On motion of Mrs. Watkins, the Board recorded its appreciation of this gift, and the Secretary was instructed to send Mr. Staley an appropriate message on behalf of the Trustees.

REPORTS TO THE BOARD OF HIGHER EDUCATION OF ILLINOIS

(21) The University of Illinois has submitted to the State Board of Higher Education reports on new public service activities undertaken, new courses added, and new research and public service contracts negotiated, during the period August 22, 1961, through June 30, 1962.

The Board of Higher Education has requested such reports periodically, the first of these being for the period indicated which began when the Act creating that Board became effective and continuing through the end of the fiscal year 1961-62.

The University has also submitted to the State Board of Higher Education a statement of the procedures it follows in the initiation, review, and approval of new units of instruction, research, and public service.

Copies of these reports and statement are submitted herewith for the information of the Board and copies are being filed with the Secretary of the Board for record.

These reports were received for record.

MEMORIAL TO MRS. NELLIE VOIGHT FREEMAN

Mr. Pogue offered the following resolution.

The Board of Trustees records with deep sorrow the death on October 14, 1962, of Mrs. Nellie Voight Freeman of Mattoon, a former member of this Board. Mrs. Freeman (Nellie Voight) was born in Mattoon March 12, 1873. She

married Dr. T. O. Freeman of that city in December, 1898, who died in October, 1932

Mrs. Freeman devoted much of her life to education and to civic affairs — as a teacher in the public schools of Mattoon, prior to her marriage, as an officer at the local and state levels in parent-teacher associations, as an officer of the Women's Auxiliary of the Illinois State Medical Society, in the Business and Professional Women's Club of her community, and as a worker for her church.

Mrs. Freeman served as a member of the Board of Trustees of the University of Illinois from 1933-39, and on its Committees on Buildings and Grounds, Agriculture, Chicago Departments, and Student Welfare and Activities, being Chairman of the latter Committee for five years. In all these assignments she discharged her responsibilities faithfully and effectively.

The Board of Trustees desires to pay tribute to the memory of a former colleague who served her community and the state of Illinois, by incorporating this resolution in the official minutes of today's meeting and by sending copies to the surviving members of Mrs. Freeman's family as an expression of the Board's sympathy.

This resolution was unanimously adopted.

SECRETARY'S REPORTS

The Secretary presented for record the following lists: appointments made by the President; graduate fellows; resignations, declinations, and cancellations: leaves of absence: retirements.

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, ROBERT K., Instructor in Architecture (Chicago Undergraduate Divi-sion), academic year beginning September 1, 1962, \$6,500 (10-3-62).
- ALEXOPOULOS, GEORGE G., Instructor in Physics (Chicago Undergraduate Divi-ALEXOPOULOS, GEORGE G., Instructor in Prysics (Chicago Undergraduate Division), ¼ time, to render service during the first semester of the academic year, September 1, 1962-January 31, 1963, \$1,200 (10-2-62).
 ANDERSON, RACHEL E., Assistant Editor in the University Press, ½ time, one year from September 1, 1962, \$3,125, supersedes (9-14-62).
 ANDREWS, JAMES A., Instructor in Accountancy (Chicago Undergraduate Division), academic year beginning September 1, 1962, \$5,200 (9-7-62).
 ANDREWS, UNEVLA, M. Instructor in Pharmacomosu and Pharmacology (Pharmacu)

- ARO, AURELIA M., Instructor in Pharmacognosy and Pharmacology (Pharmacy), 1/2 time, academic year beginning September 1, 1962, \$2,800, supersedes (10-1-62).

ARONSON, ALAN R., Clinical Instructor in Medicine (Medicine), 1/5 time, one year from September 1, 1962, \$1,500 (8-29-62).
 AZUMA, YASUO, Research Associate in Food Technology (S), one year from

September_1, 1962, \$5,850 (9-7-62).

BAKER, JAMES L. L., Research Assistant and Assistant in Mechanical Engineering (C), nine months from September 16, 1962, \$5,000 (9-14-62)

BALES, RETTA E., Assistant Director of Admissions and of Clinics (Research and Educational Hospitals), one year from September 1, 1962, \$9,450, supersedes (9-7-62).

BARD, BEVERLY S., Research Assistant in the Institute for Research on Exceptional Children, nine months from September 16, 1962, \$4,900 (9-13-62). BEERS, RAY F., JR., Clinical Assistant Professor of Medicine (Medicine), 25

BEEVES, IAA F., JK., Chindai Assistant Professor of Methodie (Methodie), 45 time, one year from September 1, 1962, \$3,600 (8-29-62).
 BEEVERS, LEONARD, Research Associate in Plant Physiology (Agronomy) (S), one year from September 1, 1962, \$6,500 (9-7-62).
 BENZEL, JAMES F., Research Associate in Ceramic Engineering (S), 1/2 time, September 15, 1962-August 31, 1963, \$3,300 a year, supersedes (10-3-62).

BERGERON, CLIFTON G., Research Assistant Professor of Ceramic Engineering (C and S), full time from September 1-15, 1962, and June 16-August 31, 1963, \$6,795 a year, and ½ time from September 16, 1962-June 15, 1963, \$4,705 a year, supersedes (9-11-62).

BLAHA, GORDON C., Instructor in Anatomy (Medicine), one year from September 1, 1962, \$6,000 (8-29-62).

BOCKMAN, DALE E., Instructor in Anatomy (Medicine), one year from September 1, 1962, \$7,000 (9-12-62).

BOOTH, ALFRED W., Professor of Geography, Peace Corps Training Office (Provost's Office), September 1-15, 1962, \$220; this is in addition to his present appointment (9-14-62).

BOSMA, E. GAYLE C., Research Assistant in Physiology and Biophysics, one year from September 1, 1962, \$4,900 (9-13-62).
 BOYLE, MRS. JUDITH E., Research Assistant in Education (University High

School), nine months from September 16, 1962, \$4,000 (9-13-62).

- BRANCH, BEVERLY, Assistant in French, nine months from September 16, 1962. \$4,800 (9-7-62).
- BRENT, GEORGE W., Instructor in Prosthodontics (Dentistry), 7/10 time, one year from September 1, 1962, \$5,250, supersedes (10-1-62).
 BROADRICK, KING W., Associate Professor of Speech, ³/₃ time, indefinite tenure, and Assistant Dean of the College of Liberal Arts and Sciences, ¹/₃ time, one year, to render service during each academic year beginning September 1, 1962, \$9,100 a year; Associate Professor of Speech, full time, indefinite tenure from September 1, 1963, supersedes (9-14-62). BRODY, MRS. LITA H., Assistant in Medicine (Medicine), one year from Septem-

ber 1, 1962, \$5,600 (10-1-62). CALAHAN, DONALD A., Assistant Professor of Electrical Engineering (C), one

month from August 16, 1962, \$811.11; this is in addition to his present appointment (9-14-62).

CARLIER, ROBERT G., Assistant in Education and Assistant Principal of University High School, September 16, 1962-January 31, 1963, \$3,375, and Assistant in Education (University High School), February 1-June 15, 1963, \$3,000, supersedes (9-27-62).

CARROLL, JOHN A., Program Director of the Illini Union, one year from September 1, 1962, \$8,000, supersedes nonacademic appointment (9-28-62).

Cessna, KENNETH, Assistant Extension Editor, with rank of Instructor (E), September 16, 1962-August 31, 1963, \$6,800 a year (10-2-62). CHANDLER, HUGH S., Instructor in Philosophy, academic year beginning Septem-

ber 1, 1962, \$6,200 (9-14-62).

CHURCHICH, JORGE E., Research Associate in Chemistry, eleven months from October 1, 1961, \$7,330 a year (9-11-62).
 CLAUSING, ARTHUR M., Research Assistant in Mechanical Engineering (C), nine months from September 16, 1962, \$5,000 (9-13-62).

COOMBS, FRED S., Assistant in Education (University High School), nine months from September 16, 1962, \$5,400 (9-13-62).

COMPTON, MARION, Assistant in Veterinary Pathology and Hygiene (College of Veterinary Medicine), one year from September 1, 1962, \$5,300, supersedcs (9-17-62).

CROW, SAMUEL E., Extension Specialist in Firemanship Training (Division of University Extension), eleven months from October 1, 1962, \$7,900 a year (9-26-62).

CURTIS, LELIA A., House Director, Beta Cooperative House, ten months from September 1, 1962, \$2,200; for the convenience of the University she will receive room and board valued at \$31 a month (9-27-62).

CUTLER, DOUGLAS, Research Associate in Metallurgical Engineering (C), October 15, 1962-August 31, 1963, \$8,000 a year (10-1-62).
 DADMUN, STEWART E., Instructor in Medicine (Medicine), ²/₅ time, four months

from September 1, 1962, \$200 a month (8-29-62).

DAI, PETER K., Research Associate in Civil Engineering (C and S), academic

DANIELZADEH, ALBERT, Research Associate in Givin Engineering (C and S), academic year beginning September 1, 1962, \$6,500, supersedes (10-2-62).
 DANIELZADEH, ALBERT, Research Assistant in Biological Chemistry (Medicine), one year from September 1, 1962, \$4,900 (8-29-62).
 DAVIS, CHARLES S., Instructor in Medicine (Medicine), ½ time, one year from

September 1, 1962, \$3,750 (9-14-62).
DEES, DENZIL E., Instructor in Veterinary Anatomy and Histology (College of Veterinary Medicine), 2/3 time, one year from September 1, 1962, \$4,850 (9-14-62).

DENMARK, WILLIAM L., Assistant Professor of Climatology (Horticulture) (S), one year from September 1, 1962, without salary (10-2-62). DERRICK, LUCILE, Special Administrative Appointment, Office of the Vice-President

(Chicago Undergraduate Division), 1/4 time, one month from July 1, 1962, \$302.77; this is in addition to her previous appointment (10-3-62).

DIMICK, ROBERT C., Assistant in Mechanical Engineering (C), nine months from

DIMICK, KOBERT C., ASSIStant in McChantcal Engineering (C), nine months from September 16, 1962, \$4,400, supersedes (10-1-62).
 DINGER, SHARON, Research Assistant in Physiology and Biophysics, one year from September 1, 1962, \$5,200 (10-2-62).
 DIVILBISS, JAMES L., Research Associate in the Coordinated Science Laboratory (C), one year from September 1, 1962, \$11,000, supersedes (9-4-62).
 DOLNEY, EDWIN L., Research Associate in Education (University High School), war head mining September 1, 1962, \$1500 (10-2-62).

14 time, academic year beginning September 1, 1962, \$1,500 (10-3-62).
 EADES, JAMES L., Research Assistant Professor of Geology, one year from September 1, 1962, \$9,000 (9-21-62).
 ELLIOTT, BRUCE D., Research Associate in the Coordinated Science Laboratory of the second se

(C), ½ time, one year from September 1, 1962, \$3,600 (10-1-62).

ELSEY, JOHN C., Research Associate in the Coordinated Science Laboratory (C), one year from September 1, 1962, \$7,100 (10-3-62).

EVANS, CLARYCE L., Research Associate in Education (University High School),

 academic year beginning September 1, 1962, \$5,900, supersedes (9-14-62).
 FAIR, ARMOR J., Instructor in Management (Chicago Undergraduate Division), academic year beginning September 1, 1962, \$6,500 (9-14-62).
 FARA, HARRY, Research Associate in Petroleum Engineering (C), September 1-15, 1962, \$666.67 a month; this is in addition to his present appointment (9-14-62).

FARHI, EDNA S., Research Assistant in Physiology and Biophysics, one year from September 1, 1962, \$4,900 (9-13-62).

 FEDER, CECLE S., Instructor in Mathematics (Chicago Undergraduate Division), 1/2 time, academic year beginning September 1, 1962, \$3,000 (9-28-62).
 FELDMAN, SHELDON, Research Associate in Psychology, 1/3 time, and in the Institute of Communications Research, 2/3 time, June 16, 1962-May 31, 1963, 1963, \$722.22 a month, supersedes; and Research Associate in Psychology, 1/3 time, June 1-15, 1963, \$120.37 (9-7-62).

FIEDLER, MARY A., Research Assistant in Preventive Medicine (Medicine),

eleven months from October 1, 1962, \$6,300 a year, supersedes (10-3-62). FIELDS, R. JOANNE, Instructor in Library Science, one year from September 1, 1962, \$6,120, supersedes nonacademic appointment (9-7-62). FILEEY, MARY L., Assistant to the Dean of Women, 1/2 time, nine months from Soutcamber 16, 1062 72,000 (7, 52).

September 16, 1962, \$2,000 (9-7-62).

FLYNN, JAMES D., Supervisor of Counseling in the Student Rehabilitation Center with rank of Instructor, (College of Physical Education), one year from September 1, 1962, \$7,000 (9-14-62).

Schember 1, 1962, \$, 5000 (914-02).
 FRANKMANN, MRS. JUDITH P., Assistant Professor of Psychology, 1/3 time, academic year beginning September 1, 1962, \$2,400 (9-14-62).
 FRATICELLI, JOANNE C., Assistant in Occupational Therapy (Medicine), September 10, 1962-August 31, 1963, \$6,000 a year (8-29-62).

FRENCH, WILBUR L., Research Associate in Zoology, one year from September 1, 1962, \$7,500 (10-2-62).

FREUND, ERIC C., Research Associate in the Bureau of Community Planning, one month from September 1, 1962, \$641.75 (10-3-62).
 FUKAZAWA, KAICHI, Research Associate in Food Technology (S), one year from

September 1, 1962, \$7,000, supersedes (10-3-62).

GALLI, ALESSANDRO, Research Associate in Chemistry, one year from September 1, 1962, \$6,000 (9-13-62).

GIBBS, ERICH, Research Assistant in Psychiatry (Medicine), 1/2 time, one year from September 1, 1962, \$2,450 (10-2-62).

GILBERT, ROBERT L., Instructor in Physics (Chicago Undergraduate Division), 1/3 time, five months from September 1, 1962, \$240 a month (10-3-62).

GOLDEN, WILLIAM M., Research Associate in Education (University High School), one year from September 1, 1962, \$9,900 (9-11-62).

- GÖTZ, GERTRUDE, Assistant in Home Economics (S), in the Physical Environment Unit, and in Mechanical Engineering, one year from September 1, 1962, \$5,400 (9-28-62).
- GRANT, EMERSON W., Adjutant, Military Science, 1/10 time, one year from September 1, 1962, \$600 (9-28-62).
 GRANT, RHODA, Research Associate in Pathology (Medicine), one year from September 1, 1962, \$8,000 (10-2-62).
- September 1, 1902, \$8,000 (10-2-02).
 GRAY, PETER V., Research Assistant in Electrical Engineering (S), one year from September 1, 1962, \$5,600 (9-27-62).
 HAASE, GERHARD H., Clinical Instructor in Medicine (Medicine), ¼ time, one year from September 1, 1962, \$1,900 (8-29-62).
 HAGENBERGER, CHERYL M., Assistant in English (Chicago Undergraduate Division), nine months from September 16, 1962, \$4,300 (9-13-62).
 HALFORD, GARY R., Instructor in Theoretical and Applied Mechanics (C), 66/100 time, academic year beginning Sentember 1, 1962, \$3800 (10-3-62).

- 66/100 time, academic year beginning September 1, 1962, \$3,800 (10-3-62). HARDING, MRS. SARAH K., Research Associate in Veterinary Pathology and Hygiene (College of Veterinary Medicine), September 15, 1962-August 31,

- Hygiene (College of Veterinary Medicine), September 15, 1962-August 31, 1963, \$5,850 a year (9-14-62).
 HERNDON, MARY S., Instructor in Home Economics (C), academic year beginning September 1, 1962, \$6,300 (9-14-62).
 HIBNICK, HERBERT, Special Lecturer in Pharmacy (Pharmacy), 2/5 time, January 2-March 16, 1963, \$240 a month (9-4-62).
 HILDRETH, MILDRED L., Assistant Reference Librarian, with rank of Instructor, September 12, 1962-August 31, 1963, \$6,500 a year (9-17-62).
 HILKER, GLORIA, Assistant Professor of Hygiene and Medical Adviser for Women in the Health Service (Chicago Undergraduate Division), 3/5 time, one year from September 1, 1962, \$7,200, supersedes (9-14-62).
 HINDLEY, RICHARD D., Research Associate in Education (University High School), academic year beginning September 1, 1962, \$5,800 (9-13-62).
 HINRICHSEN, COLIN, Research Assistant in Pedodontics (Dentistry), one year

- School), academic year beginning September 1, 1902, \$5,800 (9-13-02).
 HINRICHSEN, COLIN, Research Assistant in Pedodontics (Dentistry), one year from September 1, 1962, \$5,000 (9-27-62).
 HOCHMAN, LAWRENCE S., Clinical Instructor in Surgery (Medicine), without salary, and Instructor in Oral and Maxillofacial Surgery (Dentistry), ½ time, \$3,500, one year from September 1, 1962 (8-29-62).
 HODEES, THOMAS K., Research Associate in Agronomy (S), September 6, 1962-August 31, 1963, \$6,500 a year (10-2-62).
 HODEFMAN, FORDERICK Instructor in Mathematics academic year beginning September 1, 1962 (8-29-62).
- HOFFMAN, FREDERICK, Instructor in Mathematics, academic year beginning Sep-tember 1, 1962, \$6,500 (9-13-62).
- HOGG, LORETTA A., Research Assistant in Microbiology, nine months from September 16, 1962, \$4,000 (10-2-62).
 HONMA, TOSHIO, Visiting Assistant Professor of Physical Metallurgy (C), one
- year from September 1, 1962, \$8,000, supersedes (9-7-62). HULSIZER, ROBERT I., JR., Professor of Physics (C), September 1-15, 1962,
- \$741.67; this is in addition to his present appointment (9-14-62).
 IVENS, VIRGINIA, Instructor in Veterinary Pathology and Hygiene (College of Veterinary Medicine), one year from September 1, 1962, \$7,000, supersedes (9-7-62).
- JOHNSON, HAROLD J., Research Associate, 3/3 time, and Instructor, 1/3 time, in Psychology, academic year beginning September 1, 1962, \$7,100, supersedes (9-17-62).
- JULIAN, JAMES W., Research Associate in Psychology, one year from September 1,
- JUNKER, JAMES W., Research Associate in Fsychology, one year from September 1, 1962, \$8,000 (9-17-62).
 JUNKER, DARREL D., Assistant in Animal Science (S), one year from September 1, 1962, \$5,000 (10-2-62).
 KAHLER, DAVID T., Instructor in Architecture, academic year beginning September 1, 1962, \$6,500 (9-14-62).
- KAHNE, STEPHEN J., Research Associate in the Coordinated Science Laboratory, 34 time, September 1, 1962-June 15, 1963, and full time, June 16-August 31, 3963, \$4,650; and Instructor in Electrical Engineering, 14 time, September 16, 1962-June 15, 1963, \$1,200; total salary September 1, 1962, through August 31, 1963, \$5,850 (8-24-62).

KATAGUE, DAVID B., Instructor in Chemistry (Pharmacy), 1/2 time, to render service during the academic year, September 16, 1962-August 31, 1963, \$3,000

a year (9-26-62). KIESLER, DONALD, Instructor in Psychology, 1/3 time, to render service during the first semester of the academic year, September 1, 1962-February 28, 1963, \$1,000 (9-4-62).

KILLIAN, PAULETTA L., Research Assistant in Chemistry, one year from September 1, 1962, \$5,400 (10-1-62).

KOIK, JUTA V., Assistant Professor of Medicine (Medicine), 3/4 time, one year from September 1, 1962, \$10,500 (8-29-62).

KONITZKI, JOSEPH F., Assistant to Director of the Student Rehabilitation Center with rank of Instructor, (College of Physical Education), one year from September 1, 1962, \$8,000 (10-3-62).

KOOB, JUDITH L., Research Assistant in Chemistry, September 10, 1962-August 31, 1963, \$5,800 a year, supersedes (10-1-62).

KULIS, JOHN C., Clinical Instructor in Medicine (Medicine), 12/100 time, one

JURN C., Chinical Instructor in Medicine (Medicine), 12/100 mile, one year from September 1, 1962, \$900 (8-29-62).
 LEVINGS, CHARLES S., III, Assistant in Plant Breeding (Agronomy) (S), two months from September 1, 1962, \$450 a month (8-27-62).
 LEWIS, L. DEAN, Associate Professor of Hygiene and Staff Physician in the Wist Science of the Sectomber 1, 1962, \$450 km and \$15, 100, 451, 455 (9, 20, 62).

Health Service, 1/2 time, September 1, 1962-June 15, 1963, \$5,455 (8-29-62).

LONG, CHESTER C., Assistant Professor of Speech and Theatre, academic year

beginning September 1, 1962, \$7,000, supersedes (9-14-62).
 LOOMIS, F. WHEELER, Professor of Physics (C), 1/3 time, one year from September 1, 1962, \$7,200 (9-14-62).
 LOW LEONE LEONE THE METHODAL SECTION 10 (19-14-62).

Low, LEONE, Instructor in Mathematics, academic year beginning September 1, 1962, \$7,000 (9-14-62).

MACNEIL, ELIZABETH, Assistant in Pediatrics (College of Nursing), one year from September 1, 1962, \$6,000 (8-29-62).

MALHOTRA, OM P., Instructor in Veterinary Physiology and Pharmacology (Col-lege of Veterinary Medicine), one year from September 1, 1962, \$9,150,

supersedes (9-25-62). MALTER, RICHARD F., Psychometrist in the Student Counseling Service (Chicago Undergraduate Division), one year from September 1, 1962, \$5,400 (9-4-62).

MARIN-RICAUD, LOURDES, Research Assistant in Anthropology, September 24, 1962-August 31, 1963, \$4,900 a year (10-3-62).

MAY, WILLIAM H., Research Associate in the Institute of Communications Research (College of Journalism and Communications), one year from September 1, 1962, \$6,000 (9-14-62).

McCAMISH, JOAN, Instructor in Microbiology, academic year beginning September 1, 1962, \$7,500 (9-7-62).

McCowen, Thomas A., Assistant Coordinator in the Office of the Coordinator of International Cooperation Programs (Provost's Office), eleven months from October 1, 1962, \$6,300 a year (8-24-62).

McDonald, Owen G., Clinical Assistant Professor of Surgery (Medicine), 1/4

time, one year from September 1, 1962, \$2,400 (8-29-62). McGUIRE, EDWARD, Research Assistant in Biological Chemistry (Medicine), one year from September 1, 1962, \$4,900 (8-29-62).

McIver, JAMES M., Research Assistant in Surgery (Medicine), one year from

MCIVER, JAMES M., Research Assistant in Surgery (Medicine), one year from September 1, 1962, \$7,200 (8-29-62).
MCKIBBIN, BRIAN, Clinical Instructor in Surgery (Medicine), 35/100 time, September 4, 1962-August 31, 1963, \$2,200 a year (10-2-62).
MEDROW, ROBERT A., Assistant in Mechanical Engineering (C), nine months from September 16, 1962, \$4,400 (9-13-62).
MEERMAN, GERARDINE, Research Assistant in Chemistry, nine months from September 16, 1962, \$4,500 (8-27-62).
MEUWESE, WILHELMUS A. T., Research Associate in Psychology, 2/3 time, and Instructor in Psychology 16 time academic year beginning September 1

Instructor in Psychology, 1/3 time, academic year beginning September 1. 1962, \$6,600 (9-4-62).

MEYER, JULIA, Assistant Professor of Oral Pathology (Dentistry), one year from September 1, 1962, \$11,500 (10-2-62).
 MILLER, LAURENCE H., Bibliographer in the Library with rank of Instructor, one

year from September 1, 1962, \$7,200, supersedes (10-3-62).

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MONTGOMERY, CLARK A., Instructor in Medicine (Medicine), 3/5 time, one year from September 1, 1962, \$4,600 (8-29-62). MORRISON, SHERMAN W., Instructor and Registered Pharmacist in Manufactur-

- ing Pharmacy (Pharmacy), eleven months from October 1, 1962, \$7,900 a year (10-2-62).
- MUHLSTADT, WILLIAM J., Assistant and Research Assistant in Ceramic Engineer-
- ing (C), nine months from September 16, 1962, \$4,200, supersedes (8-29-62). MURTY, N. R., Research Associate in Botany (Photosynthesis), one year from September 1, 1962, \$7,900 (10-1-62).
- NAIKELIS, UGNYS S., Instructor in Mathematics (Chicago Undergraduate Division), academic year beginning September 1, 1962, \$5,800 (9-14-62).
 NAM, NGUYEN HOANG, Research Associate in the Radiocarbon Laboratory, one year from September 1, 1962, \$6,600 (8-24-62).
 NAMTVEDT, MRS. MARY J., Research Assistant in Chemistry, one year from September 1, 1962, \$5,700 (8-27-62).
 NAMATVETT, DELA A Assistant in Home Economics (S) one year from September

- NAVARRETE, DELIA A., Assistant in Home Economics (S), one year from September 1, 1962, \$5,200 (8-29-62).
- NARASINGA-RAO, KOTCHERLAKOTA V., Research Associate in Electrical Engineer-ing (S), one year from September 1, 1962, \$7,500 (9-14-62).
- NARAYANASAMY, R., Research Associate in the Coordinated Science Laboratory and Instructor in Electrical Engineering (C), 2/3 time, one year from September 1, 1962, \$3,920 (9-7-62).
- NEILL, DAVID M., Assistant in Electrical Engineering (Chicago Undergraduate Division), nine months from September 16, 1962, \$6,000 (10-2-62).
 NEWMAN, GERALD A., Research Associate in Chemistry, one year from September 1, 1962, \$5,850 (9-13-62).
- NOTZOLD, RICHARD A., Instructor in Veterinary Anatomy and Histology (College of Veterinary Medicine) and in Veterinary Research (Agricultural Experi-
- ment Station), one year from September 1, 1962, \$7,700, supersedes (9-7-62). NUTTAL, JOHN L., JR., Assistant Director of International Programs (Provost's Office), eight months from January 1, 1963, \$8,000 a year (10-2-62). OETTING, GEORGE D., Administrative Officer in Air Force Science, 1/10 time, one
- year from September 1, 1962, \$600 (9-28-62).
- OSBORN, HOWARD, Research Associate Professor of Mathematics, one month from August 1, 1962, \$1,089; this is in addition to his present appointment (9-14-62)
- PEDERSOLI, WALDIR M., Instructor in Veterinary Physiology and Pharmacology (College of Veterinary Medicine) and in Veterinary Research (Agricultural Experiment Station), 2/3 time, one year from September 1, 1962, \$4,850 (9-7-62).
- PENEV, LUBEN C., Clinical Instructor in Medicine (Medicine), 12/100 time, one year from September 1, 1962, \$900 (8-29-62).
- PERRY, MRS. AIKO KINJO, Assistant in Home Economics (C and S), one year from September 1, 1962, \$5,400 (8-29-62).
 PETERSON, DONALD R., Associate Professor in charge of the Psychological Clinic (Psychology), on indefinite tenure from September 1, 1962, \$12,850 a year superseds (10.1-62) year, supersedes (10-1-62).
- PINKERTON, MARY, Research Assistant in Chemistry, one year from September 1, 1962, \$5,900 (8-29-62).
- POLLOCK, MICHAEL L., Instructor in Physical Education for Men, 3/3 time, and Counselor on the University Council on Teacher Education, 1/3 time, aca-
- demic year beginning September 1, 1962, \$5,800, supersedes (9-11-62).
 PROPST, FRANK M., Research Associate in the Coordinated Science Laboratory and in Physics (C), one year from September 1, 1962, \$9,800 (9-7-62).
 RAFF, LIONEL M., Research Associate in Chemistry, five months from September 1, 1962, \$2,750 (10-3-62).
 RANSFORD, RALPH E., Lecturer, with rank of Assistant Professor in Anatomy (Medicine) 16 time nine months from October 1, 1962, \$557 a month
- (Medicine), 1/2 time, nine months from October 1, 1962, \$557 a month (9-12-62).
- RAO, PILLARISETTY J., Instructor in Veterinary Pathology and Hygiene (College of Veterinary Medicine), 3/5 time, eleven months from October 1, 1962, \$4,800 a year (10-3-62).

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REILLY, JAMES R., Instructor in Veterinary Pathology and Hygiene (College of Veterinary Medicine), 3/5 time, one year from September 1, 1962, \$4,800, supersedes (10-3-62).

REISNER, SALOMON H., Research Associate in Pediatrics (Medicine), one year from September 1, 1962, \$7,000 (10-2-62).

RICH, CATHERINE L., Research Assistant in Neurology (Medicine), July 1, 1962-August 31, 1963, \$6,972 a year (10-3-62).

Rose, CRONWELL A., Research Assistant in Preventive Medicine (Medicine),

 Ross, UNER I. A., Research Associate in Treventive Medicine (Medicine), eleven months from October 1, 1962, \$6,300 a year (10-3-62).
 Ross, JUNE R. P., Research Associate in the State Geological Survey, one year from October 1, 1962, \$6,900 (9-14-62).
 Ross, ROBERT C., Leader of Foreign Agriculture Visitors and Assistant Coor-dinator, International Cooperation Programs (E), ½ time, one year from Scotter bar 1, 1962, \$6,700 (9-14-62). September 1, 1962, \$6,750 (9-14-62). RUBENIS, MARY E., Research Assistant in Medicine (Medicine), one year from

September 1, 1962, \$6,350 (10-3-62).

RUSSO, ALEXANDER J., Assistant in the Radiocarbon Laboratory, nine months from September 16, 1962, \$4,050 (8-24-62).

RYDER, WALTER R., Assistant in Industrial Engineering (C), nine months from September 16, 1962, \$4,500 (9-7-62). SAADEH, IBBAHIM Q., Research Associate in Education, one year from Septem-

- ber 1, 1962, \$9,000 (9-14-62).
- SACKS, LAWRENCE J., Research Assistant in Chemistry, August 16-31, 1962, \$222.50 (9-27-62).

SANDBERG, MRS. KAREN R., Research Assistant in Chemistry (Pharmacy), Sep-tember 16, 1961-August 31, 1963, \$4,900 a year (10-1-62).

SANGHVI, INDRAVADAN S., Research Assistant in Pharmacology (Medicine), one year from September 1, 1962, \$5,000 (10-3-62).

Scheider, Adrian September 1, 1902, \$5,000 (10-3-62).
 Scheider, Adrian E., Professor of Petrophysics (Mining, Metallurgy, and Petroleum Engineering) (C), September 1-15, 1962, \$1,333.33 a month; this is in addition to his present appointment (10-3-62).
 Schroer, David E., Instructor in Mathematics, academic year beginning September 1, 1962, \$7,700 (10-2-62).

SEILHEIMER, RICHARD A., Assistant in Industrial Engineering (C), nine months from September 16, 1962, \$6,000 (10-2-62).

SHAFTER, HAROLD A., Clinical Assistant Professor of Medicine (Medicine), 1/4

 SHAMELS, HARDES K., CHIMEL ASSISTING THERSOLOF METHODIE (METHODIE), 44 time, one year from September 1, 1962, \$2,400 (8-29-62).
 SHTOHRYN, DMYTRO M., Cataloger in the Library, with rank of Instructor, one year from September 1, 1962, \$7,800, supersedes (10-3-62).
 SHUMAN, FRANK H., Foreign Visitor Consultant in International Cooperation Programs (Provost's Office), 1/5 time, one year from September 1, 1962, \$220, (10, 1, 62). \$2,520 (10-1-62).

SIEGFRIED, ROBERT, Associate Professor of Chemistry in the Division of General Studies, 1/2 time, and in the Department of Chemistry, 1/2 time, indefinite tenure from September 1, 1962, to render service during each academic year, \$8,900 a year (10-2-62).

SIMONSEN, ELAINE, Assistant in Education (University High School), nine months from September 16, 1962, \$4,000 (10-2-62).

SINHA, MRS. INDU B., Research Assistant in Plant Pathology (S), one year from September 1, 1962, \$5,000 (8-29-62).

SKORA, ROBERT, Research Assistant in Biological Chemistry (Medicine), one year from September 1, 1962, \$4,900 (8-29-62).
 SMITH, GARTH, Clinical Assistant Professor of Psychiatry (Medicine), 3/10 time, one year from September 1, 1962, \$3,300 (10-2-62).
 SMITH, JAMES L., Research Assistant in Civil Engineering (S), nine months from September 1, 1962 (\$2,22).

September 16, 1962, \$5,000, supersedes (9-13-62).

 SMITH, RICHARD K., Instructor in History (Chicago Undergraduate Division), 25 time, ten months from September 1, 1962, \$2,200 (9-7-62).
 SOHN, DAVID M., Clinical Instructor in Surgery (Medicine), without salary, and Instructor in Oral and Maxillofacial Surgery (Dentistry), 15 time, one year from Sostember 1, 1962, \$1,200 (2) (2) from September 1, 1962, \$1,400 (8-29-62). STAMBAUGH, MARY K., Research Assistant in Microbiology, one year from Sep-

tember 1, 1962, \$6,000 (9-13-62).

STEIN, HERBERT J., Instructor in Electrical Engineering (C), academic year beginning September 1, 1962, \$5,500 (9-17-62).
STOOPS, BETTY, Extension Specialist in Audio-Visual Aids Service (Division of University Extension), to render Service during the academic year, October 1, 1962-June 30, 1963, \$888.89 a month (9-28-62).
SWANSON, JUDITH E., Research Assistant in Microbiology, one year from September 1, 1962, \$5,390 (10-2-62).
TAMAI, TADASI, Research Associate in Physiology and Biophysics, one year from September 1, 1962, \$6,000 (10-2-62).

September 1, 1962, \$6,000 (10-2-62).

TANAKA, Ryo, Research Associate in Psychiatry (Medicine), one year from September 1, 1962, \$7,500 (10-2-62).
 TAULBEE, DALE B., Instructor in Theoretical and Applied Mechanics (C), 14 time, September 16, 1962-January 31, 1963, \$750 (10-3-62).

TAYLOR, SUSAN, Assistant in English (Division of English for Foreign Stu-dents), nine months from September 16, 1962, \$4,500 (8-27-62).

- TESTA, DANIEL P., Instructor in Spanish, academic year beginning September 1.
- 1962, \$6,500, supersedes (10-3-62). Тномаs, Mary R., Instructor in the Jane Addams Graduate School of Social Work, academic year beginning September 1, 1962, \$7,000, supersedes (9-14-62)
- TOMITA, MASAO, Instructor in Anesthesiology (Surgery) (Medicine), 2/3 time,
- I OMITA, MASAO, INSTRUCTOF IN ARESTNESSOIGUY (SUFGERY) (MEdicine), ³/₃ time, August 29, 1962-August 31, 1963, \$4,250 a year (10-2-62).
 TRUSS, HILMAN L., Jr., Registered Pharmacist in Hospital Pharmacy (Pharmacy), one year from September 1, 1962, \$7,000 (8-29-62).
 UNZICKER, JOHN D., Research Associate in the State Natural History Survey, ¹/₂ time, nine months from September 1, 1962, \$2,400 a year, and full time, three months from June 1, 1963, \$4,800 a year (8-29-62).
 VAPTANDEH, MASCOUR Become Associate in Production (Medicine)
- VARZANDEH, MASSOUD, Research Associate in Radiology (Medicine), one year from September 1, 1962, \$9,600 (9-27-62).
 VESTLING, MRS. CHRISTINA M., Assistant in Library Science, one year from Sep-tember 1, 1962, \$5,700 (9-12-62).

- VON LEHMDEN, ALICE A., Research Assistant in Zoology, nine months from September 16, 1962, \$4,000 (9-27-62).
 WALLACE, JAMES D., Instructor in Philosophy, academic year beginning September 1, 1962, \$6,200 (8-24-62).
 WALTER, JOHN H., Research Associate Professor of Mathematics, one month from August 11 1962 \$1000 this is in addition to his present accomment.
- from August 11, 1962, \$1,000; this is in addition to his present appointment (9-14-62).

WANG, SHU-YUNG, Research Associate in Oral Pathology (Dentistry), 3/10 time, one year from September 1, 1962, \$2,760 (10-1-62).

- WARE, EDWARD E., Research Assistant Professor in the Institute of Communi-WARD L., Research Assistant Frofessor of Journalism, 14 time, academic year beginning September 1, 1962, \$8,200 (9-7-62).
 WATANABE, TAKESI, Visiting Research Associate in Mathematics, nine months from September 16, 1962, \$5,000 (4-23-62).
 WATRACH, ADOLF M., Professor of Pathology and Hygiene (College of Veterinary Medicine), indefinite tenure from September 1, 1962, to render service during again a work and a non-service service during again.

- during each academic year, \$11,000 a year, supersedes (9-7-62). WATRACH, MRS. MARIAN N., Research Associate in Veterinary Pathology and Hygiene (College of Veterinary Medicine), 45 time, one year from Septem-

- Hygiene (College of Veterinary Medicine), 45 time, one year from September 1, 1962, \$5,760 (10-1-62).
 WATSON, EDWARD A., Assistant in English (Chicago Undergraduate Division), nine months from September 16, 1962, \$4,600 (9-13-62).
 WEBB, RICHARD S., JR., Instructor in Surgery (Medicine), 9/10 time, one year from September 1, 1962, \$7,650 (7-17-62).
 WEINMAN, KARLA P., Research Assistant in Physiology and Biophysics, September 16, 1962-January 31, 1963, \$444.44 a month (9-13-62).
 WILSON, EULINE D., Assistant in Mining, Metallurgy, and Petroleum Engineering (C), 1/2 time, and Assistant in Verbal Communication (Division of General Studies), 1/2 time, nine months from September 16, 1962, \$5,000, supersedes (9-11-62). sedes (9-11-62). WINNIKOW, S., Assistant in Mechanical Engineering (C), nine months from
- September 16, 1962, \$5,000 (9-17-62).

WOLFE, SHARON, Research Associate in the Institute of Communications Research and in Psychology, one year from September 1, 1962, \$6,000 (10-3-62).
WOODHALL, BRIAN J., Research Associate in Chemistry, August 23, 1962-August 31, 1963, \$6,000 a year, supersedes (9-13-62).
YAMAUCHI, KUNIO, Research Associate in Food Technology (S), one year from September 1, 1963, \$6,000 a year, \$27,620

- September 1, 1962, \$6,200 (8-27-62). ZEHME, DONALD F., Instructor in Foreign Languages (Chicago Undergraduate Division), academic year beginning September 1, 1962, \$5,400, supersedes (9-14-62).

GRADUATE FELLOWS

(The following appointments made by the Dean of the Graduate College were approved on the date indicated in parentheses.)

AFREMOW, ARTHUR M., National Institute of Mental Health Fellow (Trainee) in

Arkenow, Arrick M., Varional Institute of Mental Health Fellow (1rainee) in Social Work, nine months from September 16, 1962, \$1,800 (8-21-62).
Arwood, GERALD J., United States Public Health Service Fellow (Trainee) in Medicine, July 1-September 15, 1962, \$600 (7-27-62).
BAILEY, MRS. MARY E. R., National Institute of Mental Health Fellow (Trainee) in Social Work, nine months from September 16, 1962, \$1,800 (8-17-62).
BALKAN, MRS. ESTHEF, National Institute of Mental Health Fellow (Trainee) in Social Work, nine months from September 16, 1962, \$24,620 (8-21-62).

BALKAN, MRS. ESTHEF, National Institute of Mental Health Fellow (Trainee) in Social Work, nine months from September 16, 1962, \$2,000 (8-21-62).
BARTOSIK, DELPHINE B., United States Public Health Service Fellow (Trainee) in Medicine, one year from July 1, 1962, \$4,500 (7-16-62).
BEAUCHAMP, JAMES W., Magnavox Fellow in Electrical Engineering (and Music), one year from September 1, 1962, \$3,600 (9-6-62).
BECKER, MRS. ALETHIA A. H., National Institute of Mental Health Fellow (Trainee) in Social Work, nine months from September 16, 1962, \$1,800 (8,17-62). (8-17-62).

BECKER, FRANK O., United States Public Health Service Fellow (Trainee) in

DECKLA, FRANK C., Onnice States Funce freatine Service Fellow (Trainee) in Medicine, one year from July I, 1962, \$6,500 (7-25-62).
 BEEMAN, SAMUEL D., United States Office of Vocational Rehabilitation Fellow (Trainee) in Speech and Theatre, nine months from September 16, 1962, \$2,800 (8-21-62).
 BOARDMAN, MARY S., Special Fellow in Social Work, nine months from Septem-ber 16, 1962, \$2,000 (8-21-62).
 BOARDMAN, L. National Science Foundation Institute Fellow in Social Vork.

BOSTIC, DOYLE L., National Science Foundation Institute Fellow in Mathematics, one year from June 16, 1962, \$4,740, supersedes, (8-21-62).
 BREFELD, GAIL L., Special Fellow in Social Work, nine months from September 16, 1962, \$2,000 (8-21-62).
 BRILL, WINSTON J., United States Public Health Service Fellow (Trainee) in Mathematics from September 1, 1962, \$2,667, (0, 6, 62).

Microbiology, ten months from September 1, 1962, \$2,667 (9-6-62). BROOKER, MARIE I. L., National Institute of Mental Health Fellow (Trainee) in

DROWNER, MARIE I. D., Ivational Institute of Mental Health Fellow (Trainee) in Social Work, nine months from September 16, 1962, \$1,800 (8-21-62).
 BROWING, EDWARD T., United States Public Health Service Fellow (Trainee) in Pharmacology, one year from September 1, 1962, \$2,400 (8-10-62).
 CHALFANT, JAMES C., United States Office of Education Fellow in Education, nine months from September 16, 1962, \$4,000 (10-2-62).
 CHRISTENSEN, JAMES, JR., Office of Vocational Rehabilitation Fellow (Trainee) in Education, September 16, 1962, 4000 (10-2-62).

CHRISTENSEN, JAMES, JR., Office of Vocational Rehabilitation Fellow (Trainee) in Education, September 16, 1962-January 31, 1963, \$900 (9-12-62).
CLARKE, GREGORY B., United States Public Health Service Fellow (Trainee) in Food Technology, four months from September 1, 1962, \$733.34 (9-13-62).
DAVIS, LORIN R., Engineering Faculty Development Teaching Fellow in Mechan-ical Engineering, one year from September 1, 1962, \$2,000 (8-1-62).
DUNKIN, MICHAEL J., Fellow in Education, February 1, 1962-June 15, 1963, \$750, and two months from June 16, 1963, \$375, supersedes (7-17-62).
DYER, OLYMPIA P., Office of Vocational Rehabilitation Fellow (Trainee) in Social Work nine months from September 16, 1962 \$1800 (8-17-62).

 Social Work, nine months from September 16, 1962, \$1,800 (8-17-62).
 FERGUSON, JULIANNE, National Institute of Mental Health Fellow (Trainee) in Social Work, nine months from September 16, 1962, \$2,000 (8-21-62).
 FIERER, MRS. MARTHA J. S., National Institute of Mental Health Fellow (Trainee) in Social Work, nine months from September 16, 1962, \$2,000 (8-21-62).

FISCHER, JOEL, National Institute of Mental Health Fellow (Trainee) in Social Work, nine months from September 16, 1962, \$1,800 (8-17-62).

FITES, ROGER C., Wright-Burlison Fellow in Agronomy, nine months from September 16, 1962, \$2,300, supersedes (9-19-62).
 FITZGERALD, JAMES E., United States Public Health Service Fellow (Trainee) in

- Veterinary Medical Science, nine months from September 1, 1962, \$4,125,
- supersedes (8-29-62). FLYNN, MRS. MARILYN L. J., National Institute of Mental Health Fellow (Trainee) in Social Work, nine months from September 16, 1962, \$1,800 (8-17-62).

FUJIWARA, JOHN J., John B. Felmley Memorial Fellow in Architecture, nine months from September 16, 1962, \$2,400 (8-21-62).
 FUNK, MERLE W., National Institute of Mental Health Fellow (Trainee) in So-

cial Work, nine months from September 16, 1962, \$2,000 (8-21-62).
 GILMAN, ALICE, United States Public Health Service Fellow (Trainee) in Microbiology, September 16, 1962-June 30, 1963, \$1,900 (8-29-62).
 GLASS, MATTHEWS I., National Science Foundation Institute Fellow in Mathematical Science Foundation Institute Fellow in Science Foundation Institute Fellow in Science Foundation Institute Fellow in Science Foundation Foundation Fellow in Science Foundation Foundation Fellow in Science Foundation Fellow in Science Foundation Foundation Fellow in Science Foundation Fellow in Science Foundation Fellow in Science Foundation Fellow in Fellow in Science Foundation Fellow in Science Foundation Fellow in Fellow i

matics, one year from June 16, 1962, \$5,310, supersedes (8-3-62). GRAHAM, MRS. BARBARA A. R., National Institute of Mental Health Fellow (Trainee) in Social Work, nine months from September 16, 1962, \$2,000 (8-17-62).

HABUSH, SANDRA B., National Institute of Mental Health Fellow (Trainee) in Social Work, nine months from September 16, 1962, \$1,800 (8-17-62).

HARDY, CAROLINE E., United States Public Health Service Fellow in Biological

HAWKES, ROBERT C., Office of Vocational Rehabilitation Fellow (Trainee) in Speech, one year from September 1, 1962, \$2,400 (9-19-62).
 HEHT, PATRICIA J., United States Public Health Service Fellow (Trainee) in Evolution for the Section of the Section

Education, nine months from September 1, 1902, \$1,800 (7-30-62). HEMBROUCH, CAROL J. S., National Institute of Mental Health Fellow (Trainee)

HEMBROUGH, CAROL J. S., National Institute of Mental Health Fellow (1 rainee) in Social Work, nine months from September 16, 1962, \$1,800 (8-21-62).
HIRSCH, ESTHER D., Office of Education Fellow in Education, nine months from September 16, 1962, \$2,000 (10-2-62).
HOFMANN, LORENZ, United States Public Health Service Fellow (Trainee) in Pharmacology, one year from September 1, 1962, \$2,900 (8-10-62).
HOLQUIST, MRS. LYDIA L., United States Office of Vocational Rehabilitation Fel-low (Trainee) in Speech and Theatre, September 16, 1962-January 31, 1963, \$1 200 (8-22-62)

(\$1,200 (8-22-62).
 HOWARD, SARAH J., Office of Vocational Rehabilitation Fellow (Trainee) in Speech, nine months from September 16, 1962, \$2,400 (9-11-62).
 HURLEY, OLIVER L., United States Office of Education Fellow in Education, nine

months from September 16, 1962, \$3,200 (10-2-62).

JOHNSON, JUDITH A., National Institute of Mental Health Fellow (Trainee) in Social Work, nine months from September 16, 1962, \$1,800 (8-21-62).

JOHNSON, WILLIAM D., Office of Vocational Rehabilitation Fellow (Trainee) in Education, nine months from September 16, 1962, \$1,800 (10-3-62).
 JONES, CAROLYN G., United States Public Health Service Fellow (Trainee) in Microbiology, August 16-31, 1962, \$116.67 (8-21-62).
 KLATTENHOFF, MARY L., Office of Vocational Rehabilitation Fellow (Trainee) in Education in a service for Several Rehabilitation Fellow (Trainee) in Foundation for the form Several Rehabilitation Fellow (Trainee) in

Education, nine months from September 16, 1962, \$2,000 (9-12-62). KLING, PAULETTE B., United States Public Health Service Fellow (Trainee) in

Education, nine months from September 1, 1962, \$1,800 (7-30-62). KRANCH, LINDA L., United States Public Health Service Fellow (Trainee) in Chemistry, nine months from September 16, 1962, \$2,000 (8-30-62). LANDY, ARTHUR H., United States Public Health Service Fellow (Trainee) in Marticipation Line 16, 1062, Service Fellow (Trainee) in

Microbiology, June 16, 1962-August 31, 1963, \$3,222.19, supersedes (9-12-62). LERNER, LEON, United States Public Health Service Fellow in Biological Chem-

- LERNER, LEON, United States Public Health Service Fellow in Biological Chemistry, September 16, 1962-June 30, 1963, \$1,900 (8-8-62).
 LEVINE, SUSAN P., United States Public Health Service Fellow (Trainee) in Psychiatry, one year from November 1, 1962, \$3,600 (8-27-62).
 LIEBER, ROSLYN, National Institute of Mental Health Fellow (Trainee) in Social Work, nine months from September 16, 1962, \$1,800 (8-17-62).
 MAGLIONE, FRANK D., JR., Office of Vocational Rehabilitation Fellow (Trainee) in Education, nine months from September 16, 1962, \$2,800 (9-12-62).
 MCCREATE DAVIN W. National Institute of Mental Health Fellow (Trainee) in

McCREATH, DAVID W., National Institute of Mental Health Fellow (Trainee) in Social Work, nine months from September 16, 1962, \$2,000 (8-17-62).

MELTON, MRS. MARILYN R., Office of Vocational Rehabilitation Fellow (Trainee) in Education, nine months from September 16, 1962, \$1,800 (9-12-62).

MICHENER, ELIZABETH, United States Office of Vocational Rehabilitation Fellow (Trainee) in Speech and Theatre, nine months from September 16, 1962, \$2,400 (8-21-62).

MIKA, DOROTHY E., Office of Vocational Rehabilitation Fellow (Trainee) in Social Work, nine months from September 16, 1962, \$2,000 (8-17-62). MILLER, RAYMOND P., Raymond Concrete Pile Company Fellow in Civil Engi-

- MILLER, RAYMOND P., Raymond Concrete Pile Company Fellow in Civil Engineering, nine months from September 16, 1962, \$1,500 (9-7-62).
 MORRIS, DAVID R., Procter and Gamble Fellow in Chemistry, eleven months from September 16, 1962, \$2,570, supersedes (7-25-62).
 MOSIMANN, ELLA B., Office of Vocational Rehabilitation Fellow (Trainee) in Education, September 16, 1962-January 31, 1963, \$900 (9-12-62).
 MYERS, DAVID D., United States Public Health Service Fellow (Trainee) in Veterinary Medicine, nine months from September 1, 1962, \$3,500, supersedes (8-29-62).
- NISHIDA, MRS. HIRO I., Lauterback Memorial Fellow in Food Technology, nine months from September 1, 1962, \$1,500 (9-19-62). O'BLOCK, FRANCIS R., United States Public Health Service Fellow (Trainee) in

- O'BLOCK, FRANCIS R., United States Public Health Service Fellow (Trainee) in Education, nine months from September 1, 1962, \$2,000 (7-30-62).
 PEACOCK, DOUGLAS W., National Institute of Health Teaching Fellow (Trainee) in Chemistry, one year from September 1, 1962, \$2,400 (9-24-62).
 PLATT, SHEILA C., National Institute of Mental Health Fellow (Trainee) in So-cial Work, nine months from September 16, 1962, \$1,800 (8-21-62).
 RADDATZ, ALAN P., National Institute of Mental Health Fellow (Trainee) in Social Work, nine months from September 16, 1962, \$2,000 (8-17-62).
 RAINSFORD, DENNIS, Office of Vocational Rehabilitation Fellow (Trainee) in Microbiology, nine months from September 16, 1962, \$2,000 (8-17-62).

- Microbiology, nine months from September 16, 1962, \$1,800 (9-12-62). REED, MRS. MARY R. B., National Institute of Mental Health Fellow (Trainee) in Social Work, nine months from September 16, 1962, \$2,000 (8-21-62). REIELS, DARLENE C., United States Public Health Service Fellow (Trainee) in
- Biochemistry, ten months from September 1, 1962, \$2,000 (8-14-62).
- RUDOLPH, GREGORY C., Office of Vocational Rehabilitation Fellow (Trainee) in Social Work, nine months from September 16, 1962, \$2,000 (8-17-62).
 SAUNDERS, GRADY F., United States Public Health Service Fellow (Trainee) in Microbiology, September 16, 1962-June 30, 1963, \$2,216.64 (9-24-62).
 SCLAFINI, PATRICIA A., United States Public Health Service Fellow (Trainee) in
- Anatomy, one year from September 1, 1962, \$2,340 (8-2-62). SEELY, OLIVER, JR., United States Public Health Service Fellow (Trainee) in
- Chemistry, one year from September 1, 1962, \$2,400 (7-24-62).
- SPRIGGS, GEORGE H., Special Fellow in Social Work, nine months from September 16, 1962, \$2,000 (8-21-62).
 STEWART, THOMAS B., United States Public Health Service Fellow (Trainee) in
- Veterinary Medical Science, four months from September 1, 1962, \$1,900 (8-21-62)

TESKA, JAMES A., United States Office of Education Fellow in Education, nine months from September 16, 1962, \$3,200 (10-1-62).

- THEISS, PAUL E., Fellow (Teaching Intern) in Mechanical Engineering, nine months from September 16, 1962, \$2,000 (9-13-62).
 TRAASTAD, M. JEANNE, Office of Vocational Rehabilitation Fellow (Trainee) in
- Social Work, nine months from September 16, 1962, \$1,800 (8-21-62).
- VOLNER, PATSY R., Office of Vocational Rehabilitation Fellow (Trainee) in Education, nine months from September 16, 1962, \$1,800 (9-12-62).
- Voy, FHYLLIS G., Office of Vocational Rehabilitation Fellow (Trainee) in Education, nine months from September 16, 1962, \$2,000 (9-12-62).
 WARD, MRS. LINDA R. G., Office of Vocational Rehabilitation Fellow (Trainee) in Education, September 16, 1962-January 31, 1963, \$900 (9-12-62).
- WEIDMAN, THOMAS A., United States Public Health Service Fellow (Trainee) in Anatomy, one year from September 1, 1962, \$2,700 (7-30-62).
- WELTMAN, ADELE M., National Institute of Mental Health Fellow (Trainee) in Social Work, nine months from September 16, 1962, \$1,800 (8-21-62).
 WILLIAMS, CHARLES A., National Science Foundation Institute Fellow in Mathe-
- matics, one year from June 16, 1962, \$5,880, supersedes (9-19-62).

WILLICK, GORDON E., National Institute of Health Fellow (Trainee) in Chemistry, one year from September 1, 1962, \$2,400 (9-10-62).
WINDOM, SULSA D., Office of Vocational Rehabilitation Fellow (Trainee) in Education, nine months from September 16, 1962, \$1,800 (9-20-62).
YACKEL, ADOLPH, Office of Vocational Rehabilitation Fellow (Trainee) in Education, nine months from September 16, 1962, \$2,000 (9-12-62).

RESIGNATIONS, DECLINATIONS, AND CANCELLATIONS

AMON, ALBERT H., Assistant Professor of Psychology (Digital Computer Labo-ratory and College of Liberal Arts and Sciences) - declination effective September 1, 1962.

BERESKIN, BEN, Research Associate in Dairy Science — cancellation effective September 1, 1962. BIRGE, WESLEY J., Assistant Professor of Zoology — resignation effective Sep-

tember 1, 1962. Bosworth, R. C. L., Visiting Professor of Chemical Engineering — declination effective February 1, 1963.

BOUC, CHARLES A., Instructor in Theoretical and Applied Mechanics - resignation effective September 1, 1962.

BRIMHALL, PAULINE N., Associate Professor of Health Education (Home Economics) - resignation effective September 1, 1962.

BRUCE, ELEANOR A., Assistant in Home Economics - resignation effective November 1, 1962.

CELLI, VITTORIO, Assistant Professor of Metallurgical Engineering --- resignation effective September 16, 1962.

DAOUD, HANNA N., Fellow in Food Technology - resignation effective September 16, 1962.

DECKER, LOREN E., Administrative Officer in Air Force Science -- resignation effective September 1, 1962. DEMBSKI, WILLIAM J., Instructor in Biological Sciences — resignation effective

September 1, 1962. DEPEYSTER, FREDERIC, Clinical Associate Professor of Surgery (Medicine) —

declination effective September 1, 1962.

DICKERSON, VINCENT M., Professor of Naval Science and Head of the Depart-

ment — resignation effective September 1, 1962. DIVILBISS, JAMES L., Research Associate in the Coordinated Science Laboratory — declination effective September 1, 1962. FEUCHTWANG, THOMAS E., Research Associate in the Coordinated Science Lab-

oratory-resignation effective September 15, 1962.

FRITZ, THOMAS E., Instructor in Veterinary Research and in Veterinary Pathology and Hygiene — resignation effective September 1, 1962. GLISSENDORF, OWEN F., Assistant Editor with rank of Assistant Professor of

Agriculture — resignation effective August 20, 1962. GLUCKLICH, JOSEPH, Visiting Research Assistant Professor of Theoretical and Applied Mechanics — resignation effective September 1, 1962.

GORDON, WALTER R., Fellow in Geology-resignation effective September 16, 1962

GUPTA, BRAJENDRA K., Fellow in Civil Engineering - resignation effective September 16, 1962. HAGGLUND, RAY R., Instructor in Theoretical and Applied Mechanics — resigna-

tion effective September 1, 1962.

HEATH, MRS. KATHLEEN F. S., Fellow in Physical Education - resignation effective September 16, 1962.

HEDISH, NORMAN D., Instructor in Accountancy (Chicago Undergraduate Divi-sion) — declination effective September 1, 1962.

ISOLINE, CHARLES J., Assistant Extension Editor with rank of Assistant Professor of Agriculture — resignation effective September 15, 1962. JANOWSKI, TADEUSZ M., Instructor in Architecture — resignation effective Sep-

tember 1, 1962.

JORDAN, DAVID M., Consultant in Psychology, with rank of Associate Professor - resignation effective September 1, 1962.

KEMP, EMORY L., Instructor in Theoretical and Applied Mechanics - resignation effective September 1, 1962.

KINGSOLVER, JOHN M., Research Associate in the State Natural History Survey - resignation effective October 11, 1962.

LEE, SHUN-KU, Research Associate in Theoretical and Applied Mechanics – resignation effective September 1, 1962.

LERNER, RICHARD H., Instructor in English (Chicago Undergraduate Division) — resignation effective September 1, 1962. MACHNE, XENIA, Assistant Professor of Pharmacology (Medicine) — resignation

effective September 1, 1962.

MADDEN, DIANA M., Research Assistant in Chemistry - resignation effective September 1, 1962.

MANN, DENNIS K., Research Associate in Veterinary Pathology and Hygiene (College of Veterinary Medicine) — resignation effective October 1, 1962. MEYERS, BARBARA E., Fellow in Music — resignation effective September 16, 1962.

MOLTENI, AGOSTINO, Research Associate in Pathology (Medicine) - resignation effective October 1, 1962.

MORGAN, LEZLIE A., Research Assistant in the Coordinated Science Laboratory — declination effective September 1, 1962. NEILL, DAVID M., Research Assistant in Electrical Engineering — resignation ef-

fective September 1, 1962.

tective September 1, 1962.
 NEVEL, DONALD E., Instructor in Theoretical and Applied Mechanics — resignation effective September 1, 1962.
 PANTONE, ANTON M., Clinical Associate Professor of Radiology (Medicine) — resignation effective October 1, 1962.
 PATTERSON, MURRAY N., Research Assistant in Mechanical Engineering — resignation effective September 1, 1962.
 PATTON, WILLARD T., Instructor in Electrical Engineering — resignation effective

September 1, 1962.

RAJAN, N. S., Research Associate in the Radiocarbon Laboratory -- resignation effective July 27, 1962.

REYNOLDS, HARRY A., United States Public Health Service Fellow (Trainee) in Veterinary Medicine - resignation effective September 1, 1962

ROBINSON, IRWIN B., Clinical Associate Professor of Surgery and Associate Professor of Oral and Maxillofacial Surgery - declination effective September 1, 1962.

RONNOW, HENRY K., Special Fellow in Social Work -- resignation effective September 16, 1962. SHENOI, B. ANANTHA, Assistant Professor of Electrical Engineering — resigna-

tion effective September 1, 1962. SINGAL, MAHENDAR K., Visiting Professor of Mathematics — declination effective September 16, 1962.

SNOKE, MYRON D., Adjutant, R.O.T.C. — resignation effective September 1, 1962. STELER, WILLIAM H., Assistant Professor of Electrical Engineering — resigna-

tion effective September 1, 1962.

STREHL, FRANCIS W., Clinical Assistant Professor of Surgery (Medicine) declination effective September 1, 1962. STROMFELD, ROBERT M., United States Public Health Service Fellow (Trainee)

in Anatomy (Medicine) — resignation effective July 1, 1962. SUSINA, STANLEY V., Associate Professor of Pharmacy (Pharmacy) — resigna-

tion effective September 1, 1962.

TUNG, MRS. SANDRA L., Fellow in Linguistics -- resignation effective September 16, 1962.

WILMS, ERNEST V., Research Associate in Theoretical and Applied Mechanics resignation effective September 1, 1962.

YOUNGWORTH, RANDOLPH J., Research Assistant in Civil Engineering -- cancellation effective September 16, 1962.

LEAVES OF ABSENCE

DEBOER, JOHN J., Professor of Education - leave of absence, with full pay, for the first semester of 1962-63, on account of illness.

KAISER, GERTRUDE E., Associate Professor and Assistant Leader of Extension Education and Training, in the Cooperative Extension Service in Agriculture and Home Economics-leave of absence, without pay, November 1 through 30, 1962, so that she may engage in graduate study at the University of Chicago.

1962]

- MILLER, DWIGHT C., Associate Professor of Art leave of absence, without pay, one year from September 1, 1962, so that he may accept a Fulbright Research
- Grant for study abroad.
 WETMORE, L. B., Professor of City and Regional Planning and Head of the Department leave of absence, one-third time, without pay, September 1, 1962, through February 28, 1963, to enable him to work with the Chicago City Iberuing Department. City Planning Department.

RETIREMENTS

Collins, William R., Chief Pharmacist and Instructor in Hospital Pharmacy — retirement effective September 1, 1962. HARTLEY, MILES C., Professor of Mathematics (Chicago Undergraduate Divi-

sion) - retirement effective September 1, 1962.

OCTOBER DEGREES CONFERRED

The Secretary presented for record the list of degrees conferred at Urbana, Illinois, as of October 15, 1962, on recommendation of the Urbana-Champaign Senate.

Summary

Degrees in the Graduate College, conferred at Urbana:

Degrees in the Graduate Conege, conterred at Ground.	
Doctor of Philosophy	153
Doctor of Education	19
Doctor of Musical Arts	1
Doctor of Business Administration	3
Master of Arts	27
Master of Science	54
Master of Music	
Master of Education	2
Master of Fine Arts	1
Master of Comparative Law	1
Total, Graduate College	263)
Baccalaureate Degrees, conferred at Urbana:	
Bachelor of Science, College of Agriculture	
Bachelor of Science, College of Engineering	
Bachelor of Arts, College of Liberal Arts and Sciences	5
Bachelor of Science, College of Liberal Arts and Sciences	7
Bachelor of Science, College of Education	6
Bachelor of Science, College of Commerce and Business Administration	4
Bachelor of Science, College of Journalism and Communications	1
Bachelor of Fine Arts, College of Fine and Applied Arts	1
Total, Baccalaureate Degrees	
Total, Degrees Conferred at Urbana	292

GRADUATE COLLEGE

Degree of Doctor of Philosophy

In Accountancy

 WILLIAM BERNARD BARRETT, B.S., Arkansas Agricultural and Mechanical College, 1952;
 M.B.A., University of Arkansas, 1954
 JAMES WILLIAM GIESE, A.B., University of Washington, 1947;
 M.S., 1959
 WAYNE MELVIN HIGLEY, B.S., University of Omaha, 1958;
 A.B., State University of Omaha, 1958;
 A.B., State University sity of Iowa, 1958; M.S., 1960 George Clarence Mead, B.S., M.S., 1957, 1959

In Agricultural Economics

Albert Gail Madsen, B.S., M.S., Utah State University, 1956, 1960

In Agronomy

RUSSELL STANLEY ADAMS, JR., B.S., M.S., Kansas State University, 1958, 1959 JERE EVANS FREEMAN, B.S., University of Tennessee, 1958; M.S., 1961 JACK CORUM SHANNON, B.S., University of Tennessee, 1958; M.S., 1959

In Animal Science

GEORGE WILLIAM BRENIMAN, B.S., M.S., Colorado State University, 1949, 1959

HARLEY ALLEN JORDAN, B.S., Utah State University, 1957; M.S., Montana State College, 1959

In Botany

FRANCIS AUGUST UECKER, B.S., Quincy College, 1956; M.S., 1959

In Business

JAMES JUDSON CHASTAIN, B.S., University of Utah, 1948; M.B.A., University of Chicago, 1949

ATEF MOHAMED EBIED, B.Com., Cairo University, 1952; M.Com., Fouad University, 1956

FRANK JOHNSON, B.S., University of Utah, 1955; M.S., 1959

JEROME BERNARD KERNAN, B.B.A., University of Cincinnati, 1957; M.S., 1959 BERNARD SARACHEK, A.B., A.M., University of Kansas City, 1952, 1955

In Ceramic Engineering

RAJNIKANT BABUBHAI AMIN, B.S., Gujarat University, 1956; B.S. (Tech.), Ba-naras Hindu University, 1959; M.S., 1960 CHARLES AINSLEY HALL, B.S., M.S., 1959, 1960

In Chemical Engineering

TIRUNILLAYI SESHAIER GOVINDAN, B.S., University of Madras, 1955; B.S. (Tech.), M.Tech., Indian Institute of Technology, 1957, 1959; M.S., 1960

In Chemistry

DONALD ALLEN BAFUS, B.S., Kansas State University, 1959; M.S., 1961

DONALD ALLEN BAFUS, B.S., Kansas State University, 1959; M.S., 1961
ROBERT HAROLD BAUM, B.S., Cornell University, 1957
FLOYD ALLEN BLANKENSHIP, B.S., University of Georgia, 1957
RICHARD JULIAN CHALLIS BROWN, B.S., M.S., University of Sydney, 1957, 1959
PHILIP JOHN BURCK, A.B., Lawrence College, 1958; M.S., 1960
WILLIAM CECIL DEAL, JR., B.S., Louisiana College, 1958; M.S., 1962
ROBERT CLINTON FAY, A.B., Oberlin College, 1957; M.S., 1960
MARY TWICKLER FRANKHOUSER, B.S., University of Louisville, 1955
WILLIAM ERNEST GROVES, B.S., Southern Methodist University, 1957; M.S., 1959
HERMAN STEWART HENDRICKSON II, A.B., Pomona College, 1959
MELVIN DUANE JOESTEN, B.S., Northern Illinois University, 1954; M.S., 1959
SOTER GEORGE KOKALIS, B.S., Purdue University, 1958; M.S., 1960
MARVIN JOSEPH KONZ, B.S., M.S., St. Bonaventure University, 1954, 1956
JAMES ROBERT KUSZEWSKI, B.S., University of California (Berkeley), 1959
JOHN ALLAN LANDGREBE, B.S., University of California (Berkeley), 1959
DAVID FRANK O'BRIEN, A.B., Wabash College, 1958
LIONEL MISCHA RAFF, B.S., M.S., University of Tampa, 1956, 1957
WILLIAM HEROD RILEY, JR., B.S., University of Tampa, 1952; M.S., University of Florida, 1955 of Florida, 1955

WALLACE LARIMER RIPPIE, A.B., University of Pennsylvania, 1954
 LAWRENCE HENRY SHEPHERD, JR., B.S., Millsaps College, 1957; M.S., 1959
 ROBERT CLAYTON SLAGEL, B.S., Western Michigan College of Education, 1958
 EDWARD FREDERICK STEIGELMANN, B.S., University of Wisconsin, 1957; M.S., 1962
 HAROLD SPENCER SWOFFORD, JR., A.B., Western Washington College of Education, 1958; M.S., 1960
 DAWRD LAWDRYCT, THEFN, B.S., Wittenberg College, 1958

DAVID LAWRENCE TULEEN, B.S., Wittenberg College, 1958

In Civil Engineering

ROBERT NOLAN BRUCE, JR., B.S., M.S., Tulane University, 1952, 1953 CHUNDURI VENKATA CHELAPATI, B.Eng., Andhra University, 1954; M.S., 1 KUEN-PUO CHUANG, B.S., National Taiwan University, 1956; M.S., 1959 MOHAMED AREF MAHAYNI, B.S., University of Texas, 1958; M.S., 1959 TONIS RAAMOT, A.B., B.S., M.S., Columbia University, 1953, 1954, 1956 SIDNEY HERBERT SIMMONDS, B.S., M.S., University of Alberta, 1954, 1956 1959

In Dairy Science

ROBERT MEROLD COOK, B.S., M.S., 1957, 1961

LARRY LARUE EWING, B.S., University of Nebraska, 1958; M.S., 1960 RUSSELL LEWIS LARSON, B.S., M.S., South Dakota State College of Agriculture and Mechanic Arts, 1957, 1959 FRED WILLIAM WEYTER, A.B., University of Pennsylvania, 1956; A.M., Amherst College, 1958

CARL ARTHUR ZOGG, B.S., M.S., 1949, 1960

In Dairy Technology

GEORGE ARTHUR MUCK, B.S., M.S., 1959, 1961

In Economics

SAM BARONE, B.S., M.S., 1958, 1959

RIKUMA ITO, A.B., A.M., 1956, 1959 WILLIAM HALL WALLACE, B.B.A., M.B.A., University of Mississippi, 1955, 1956

In Education

ABDEL-HAMID FAWZI ABDEL-AZIZ, B.Sc., Cairo University, 1945; A.M., California

State Polytechnic College, 1957 DONALD GENE BEANE, A.B., Iowa Wesleyan University, 1951; A.M., 1958 DONALD FITZGERALD, Diploma, Sydney Technical College, 1951; A.M., 1961 FRANK HENRY KLASSEN, A.B., University of Manitoba, 1953; A.M., 1960 WILGA MARIE RIVERS, A.B., A.M., University of Melbourne, 1939, 1948

In Electrical Engineering

RICHARD LEE CUMMINS, B.S., M.S., 1953, 1959

VICTOR HUGO GONZALEZ, Engineer, National University of Cordoba, 1954; M.S., 1958

KENNETH WENDELL HEIZER, B.S., M.S., Southern Methodist University, 1950, 1951 WILLIAM FREDERICK McGEE, B.A.Sc., A.M., University of Toronto, 1959, 1960 JOHN ORIN PENHOLLOW, B.S., State University of Iowa, 1956; M.S., 1959

In English

MARGARET MECKES CONROW, A.B., Swarthmore College, 1954; A.M., 1956 JOHN HENRY DORENKAMP, A.B., A.M., St. Louis University, 1954, 1957 GEORGE BURNHAM FERCUSON, B.S., M.S., State Teachers College (St. Cloud, Minnesota), 1952, 1955

JOSEPH GEORGE JURICH, Ph.B., A.M., University of Chicago, 1946, 1951 RAYMOND ALBERT KLOPSCH, B.S., Illinois Institute of Technology, 1949; A.M., 1950

WILLIAM EDWARD LINDBLAD, A.B., A.M., 1951, 1955 WILLIAM ASHLEY MCQUEEN III, A.B., Vanderbilt University, 1949; A.M., University of New Mexico, 1952

CHARLES ALEXANDER PENNEL, B.S., A.M., Memphis State College, 1955, 1956

DANIEL SHIVER SILVIA, JR., A.B., A.M., University of North Carolina, 1956, 1958

In Food Technology

DONALD ROBERT DICKERSON, B.S., M.S., 1950, 1959 KRYSTYNA CZESLAWA KOPACZYK, B.S., Wayne State University, 1953; M.S., Western Reserve University, 1956

In Geography

CHARLES FREDERICK HELLER, JR., A.B., A.M., University of Kansas, 1952, 1957 ROYLE JAMES HEYL, B.S., M.S., 1953, 1957

In Geology

JOHN DALLAS BREDEHOEFT, B.S.E., Princeton University, 1955; M.S., 1957 NORBERT EVERETT CYGAN, B.S., M.S., 1954, 1956 JAMES LYNWOOD EADES, A.B., A.M., University of Virginia, 1950, 1953 DONALD ROBERT GORMAN, B.S., A.B., Saint Joseph's College (Indiana), 1953, 1957 JOHN WILLIAM HAWLEY, A.B., Hanover College, 1954 WILLIAM HILTON JOHNSON, A.B., Earlham College, 1956; M.S., 1961 ROBERT FOLKE LUNDIN, A.B., Augustana College, 1958; M.S., 1961 ODELL S. MCGUIRE, B.Geol., University of Tulsa, 1956; A.M., Columbia Univer-sity 1958

sity, 1958

JARMO GEORG WILLIAM SODERMAN, A.B., Columbia University, 1957: M.S., 1960

In History

RALPH DALE GRAY, A.B., Hanover College, 1955; A.M., University of Delaware, 1958

JAMES OLIN RICHARDS, A.B., Georgetown College, 1958; A.M., 1960 JOSEPH FREDERICK ZACEK, A.B., A.M., 1952, 1953

In Home Economics

RUBY LOUISE FRANKLIN ADAMS, B.S., M.S., Kansas State University, 1953, 1957

In Horticulture

DAVID BUDD DICKINSON, JR., B.S., University of New Hampshire, 1957

In Mathematics

JOSEPH HAROLD OPPENHEIM, B.S., University of Chicago, 1954; M.S., 1955 ROBERT CARTER SINE, B.S., 1958; M.S., Massachusetts Institute of Technology, 1959

In Mechanical Engineering

ROBERT BARKER GAITHER, B.M.E., Auburn University, 1951; M.S., 1957 RAYMOND JOHN GOLIK, B.S., M.S., 1953, 1959 ZUHAIR NAIM SARAFA, Diploma, Baghdad College of Engineering, 1956; M.S.E., University of Michigan, 1957

In Microbiology

STEPHEN BURT FRIEDMAN, A.B., University of Rochester, 1953; M.S., Syracuse University, 1955

RICHARD STEPHEN HANSON, B.S., South Dakota State College of Agriculture and Mechanic Arts, 1959 MASAKI HAYASHI, B.Agr., University of Tokyo, 1954 ROBERT WILLIAM KYNDBERG, A.B., Lake Forest College, 1954; M.S., 1958 RAYMOND CARLYLE VALENTINE, B.S., M.S., 1958, 1960

In Musicology

DOUBLE E HILL, B.Mus., Northwest Nazarene College, 1948; M.Mus., University of Idaho, 1954

In Physical Education

JAMES SALVATORE BOSCO, B.S., Springfield College, 1951; M.S., 1952 EUGENE VALEN DOROSCHUK, B.P.E., University of British Columbia, 1957; M.S., 1959

FRANCIS JOSEPH HAYDEN, A.B., University of Western Ontario, 1955; M.S., 1958

In Physics

WALTER BAUER, A.B., University of California, 1957; M.S., 1959 PAUL MARTIN BAUM, A.B., Columbia University, 1955; M.S., 1957 JOHN WILLIAM DE FORD, A.B., Carleton College, 1957; M.S., 1959 SNOWDEN LEMUEL EISENHOUR, A.B., Berea College, 1956; M.S., 1958 DOUGLAS BEACH FITCHEN, A.B., Harvard College, 1957; M.S., 1959 PETER VANCE GRAY, B.S., Union College, 1958; M.S., 1959 DON CARLOS HOPKINS, B.S., Eastern Illinois University, 1957; M.S., 1959 ROBERT KESSLER SWANK, A.B., Miami University, 1943; M.S., California Institute of Technology 1048

of Technology, 1948 ARTHUR BERTRAM CUTHBERT WALKER, JR., B.S., Case Institute of Technology, 1957; M.S., 1958

In Physiology

JOHN KENNETH KLICKA, B.S., M.S., Northern Illinois University, 1957, 1958

ALLAN MARK LEFER, A.B., Adelphi College, 1957; A.M., Western Reserve University, 1959

In Plant Pathology

PAUL GENE CALTRIDER, B.S., Glenville State College, 1956; M.S., West Virginia University, 1958

DALE IVAN EDWARDS, B.S., Eastern Illinois University, 1956; M.S., 1960

WILLIAM LOUIS KLARMAN, B.S., Eastern Illinois University, 1957; M.S., 1960 JANESHWAR UPADHYAY, B.S., Bihar University, 1954; M.S., Banaras Hindu University, 1956

In Political Science

LEONARD EDWIN GOODALL, A.B., Central Missouri State College, 1958; A.M., University of Missouri, 1960

JOSEPH BLANTON TUCKER, A.B., Ohio Wesleyan University, 1958; A.M., 1960

In Psychology

MOHAMMAD AKHTAR, A.B., Islamia College, 1955; A.M., University of Karachi. 1957

LYLE ROSS CREAMER, B.S., M.S., Kansas State University, 1953, 1959 LOWELL THOMAS CROW, B.S., A.M., University of South Carolina, 1957, 1959 ROBERT GOLDSTEIN, A.B., College of the City of New York, 1954

EDWARD ELLES KRIECKHAUS, A.B., Williams College, 1954 CHARLES LAWRENCE KUTSCHER, A.B., Georgetown College (Kentucky), 1958; A.M., 1961

A.M., 1961
COLIN GORDON MCDIARMID, A.B., University of British Columbia, 1954
DARHL MAX PEDERSEN, B.S., M.S., Brigham Young University, 1957, 1958
ALBERT SANOM RODWAN, A.B., Wayne State University, 1957; A.M., 1961
AHMAD ABD-EL AZIZ SALAMA, A.B., Cairo University, 1947; Diploma, Diploma, A.M., Ain Shams University, 1949, 1954, 1957; A.M., 1960
JAMES SHAW TERWILLIGER, B.S., A.M., 1957, 1960
INA CEPENAS UZGIRIS, B.S., A.M., 1957, 1960
DANIEL JAMES WEINTRAUB, A.B., Dartmouth College, 1954; A.M., 1961

In Sociology

JULIE ELLEN WHITE, A.B., A.M., Texas State College for Women, 1945, 1950

In Spanish

DANIEL EDWARD QUILTER, A.B., University of Toledo, 1955; A.M., 1956

In Speech

MORRIS RAY BOGARD, Ph.B., Illinois Wesleyan University, 1950; A.M., 1952 JEAN VALJEAN CUTLER, A.B., Lynchburg College, 1955; A.M., 1959 ROGER LEON MEERSMAN, A.B., St. Ambrose College, 1952; A.M., 1959 NORMAN JERALD MYERS, A.B., Hiram College, 1957; A.M., 1959 ABE WOLLOCK, A.B., Brooklyn College, 1947; A.M., Cornell University, 1948

In Theoretical and Applied Mechanics

KENNETH RONALD BOCKMAN, B.S., University of Idaho, 1958; M.S., 1961 FRITZ EGBERT DOHSE, M.S., Louisiana State University, 1954 SHUN-KU LEE, B.S., National Taiwan University, 1956; M.S., 1960 ROBERT LEE THOMS, B.S., M.S., University of Texas, 1955, 1957

In Veterinary Medical Science

JULIUS PETER KREIER, D.V.M., University of Pennsylvania, 1953; M.S., 1959 ALVIN HAROLD SAFANIE, D.V.M., Cornell University, 1947; M.S., Michigan State University, 1950

In Zoology

WILBUR LILE FRENCH, B.S., M.S., 1956, 1957

Degree of Doctor of Education

In Education

DOLORES FAY AHRENS, B.S., M.S., 1951, 1954 ROGER DEAN BLOMGREN, B.S., Illinois State Normal University, 1947; A.M., Colorado State College of Education, 1949 LAURENCE DONALD BROWN, B.S., University of Dayton, 1953; Ed.M., Miami University, 1957 CLEN ENVADOR CLEMER D.S. M.S., 1957

University, 1957
GLEN EDWARD GAIDES, B.S., M.S., 1955, 1957
NORMAN STANLEY GILBERT, B.S., Northern Illinois University, 1954; Ed.M., 1959
TOD HAMILTON HERRING, B.S., Northern Illinois University, 1949; A.M., Ohio State University, 1952
EDWARD LEONARD KELLY, B.S., State Teachers College (Lock Haven, Pennsylvania), 1953; Ed.M., Pennsylvania State University, 1954

JAMES LEON LISTER, B.S., M.S., Eastern Illinois University, 1958, 1959 RICHARD TREVELYN SALZER, B.S., Ed.M., 1955, 1956 FRANCES JANE SIGBORN, B.Ed., National College of Education, 1951; Ed.M.,

FRANCES JANE SIGBORN, B.Ed., National College of Education, 1951; Ed.M., University of Oregon, 1955
LEONE MARY SMITH, A.B., A.M., University of Auckland, 1955, 1958
ROBERT MCNELL SMITH, B.S., University of Maryland, 1957; Ed.M., 1958
ANTHONY THOMAS SOARES, B.S., Ed.M., Boston College, 1953, 1954
LOUISE GAVONI SOARES, B.Mus., M.Mus., Boston University, 1954, 1956
ELIZABETH FRANCES SPENCER, B.S., Northeast Missouri State Teachers College, 1945; Ed.M., University of Missouri, 1951
RONALD WILMER STADT, B.S., Illinois State Normal University, 1957; Ed.M., 1958
ALAN ROMAN SUESS, B.S., A.M., Western Michigan University, 1956, 1959
JAMES EDWARD WOODS, A.B., A.M., University of Minnesota, 1952, 1954

In Music Education

DONALD WILLIAM SIMMONS, B.Mus.Ed., Knox College, 1950; M.S., 1954

Degree of Doctor of Musical Arts

STEPHEN THOMAS FARISH, JR., B.S., East Carolina College, 1958; M.Mus., 1959

Degree of Doctor of Business Administration

FRANK MILLER RACHEL, B.S., Oklahoma State University of Agricultural and and Applied Science, 1952; M.Com., 1961 LEON ERNEST RICHARTZ, B.S., M.B.A., 1959, 1961 HALBERT CALVIN SMITH, JR., B.S., Purdue University, 1956; M.B.A., Indiana

University, 1959

Degree of Master of Arts

In Art History

MARY ELLEN YOUNG PAGEL, B.F.A., 1955

In English

JEAN CAROLYN BENDT, A.B., Northern Illinois University, 1960 THOMAS MICHAEL BLOOM, A.B., 1960 ROSEMARY ANNETTE COFFEY, A.B., 1959

HELEN ELISABETH OSTROWSKI, A.B., Northern Illinois University, 1960

In German

NAOMI IRENE STEPHAN, A.B., Indiana University, 1961

In History

John Henry Althoff, A.B., 1961 Marguerite Fallucco, A.B., 1959

JAMES ANTHONY HARRINGTON, B.S., Eastern Illinois University, 1954

In Labor and Industrial Relations

WALTER CHARLES BRAUER III, B.S., University of Kansas, 1961

ROBERT EVAN COLE, A.B., Hobart College, 1959

In Mathematics

FREDERICK GEORGE WISE, A.B., 1961

In Philosophy

STANLEY JACK ODELL, A.B., University of Kansas City, 1960
 VELVA JEANNE OSBORN, B.S., Kansas State Teachers College (Emporia), 1939;
 A.M., University of Chicago, 1944

In Political Science

KAREN DRAUT LONG, A.B., Ohio Wesleyan University, 1961 EUGENE ARNOLD OLSEN, B.S., New York University, 1954 FREDERICK LEE WETTERING, A.B., 1961

In Psychology

RICHARD LEE GORSUCH, A.B., Texas Christian University, 1959 GLENN IRWIN HATTON, A.B., North Central College, 1960 EDWARD ANDREW HOLOVKA, B.S., Pennsylvania State University, 1958 RICHARD EDWIN MARTIN, A.B., Pomona College, 1955; B.D., McCormick Theo-logical Seminary, 1959

LUTHER JAMES TROMATER, A.B., Bethany College, 1958

In Russian

MICHAEL HEGEDUS, A.B., Augustana College, 1959 RICHARD TRICKOVICH, A.B., 1961

In Social Sciences

HOMER WESSEL SWENSON, B.S., University of Pittsburgh, 1949

In Spanish

WILLIAM WHITNEY CRESSEY, A.B., Trinity College, 1961 MARCIA SIMPSON LEWIS, A.B., College of Notre Dame (Maryland), 1961

Degree of Master of Science

In Accountancy

METWALLI BADAWI AMER, B.Com., Cairo University, 1957 JAMES CONRAD JACOBSEN, A.B., Lake Forest College, 1957 MOHAMED ONSI MOHAMED, B.Com., Cairo University, 1956 JAMES ERNEST WHEELER, B.S., Bowling Green State University, 1958

In Advertising

JERRY RICHARD LYNN, B.S., Southern Illinois University, 1960

In Agricultural Economics

LAWRENCE ALVIN DUEWER, B.S., 1960 ROBERT CHRISTOPHER HUGHES, B.S., 1961

In Ceramic Engineering

Richard Martin Brown, B.S., 1961 Howard Wayne Hill, B.S., 1961 William Gordon Long, B.S., 1961 Valentine Morris Patarini, B.S., 1961

In Chemical Engineering

DAVID RANDOLPH CARTER, B.S., Stanford University, 1961 JOHN ROBERT COLLIER, B.S., South Dakota School of Mines and Technology, 1961 HAROLD SONNY HAHN, B.Ch.E., University of Dayton, 1960 JOHN LOUIS KARDOS, B.S., Pennsylvania State University, 1961 JAMES LYLE MCCORMICK, B.S., Oregon State College, 1961

JON MIKIO YATABE, B.S., University of California (Berkeley), 1960

In Civil Engineering

STEWART WILLARD JOHNSON, B.S., South Dakota State College, 1956; A.B., University of Maryland, 1961

In Dairy Science

ANNA SOPHIE BERNER, B.S., The Royal Veterinary and Agricultural College (Denmark), 1961

EVAN EARL JONES, B.S., Colorado State University, 1960

PADMAKAR NILKANTHRAO PATHAK, B.V.Sc., University of Saugar, 1952 AUDREY DELBERT WAGNER, B.S., 1957

In Education

ANITA LOUISE HERMANN, B.S., University of Wisconsin (Milwaukee), 1959

In Entomology

DIAMANTIA NALLINI TIYASAKA WICKRAMASINGHE, B.S., University of Ceylon, 1957

In Finance PETER JOHN WALSH, A.B., LaSalle College, 1957

In Food Technology EDWARD CLARENCE GROESCHEL, JR., B.S., Illinois Institute of Technology, 1958

In Geology JOAN ESTHER GORDON, B.S., University of Wisconsin, 1956

In Home Economics

HELEN MILLER HOUSE, B.S., 1943 ALICE PIXLEY KOENECKE, B.S., Eastern Illinois University, 1958 FRANCES MILLER LAFONT, B.S., University of Tennessee, 1957

In Journalism

WILLIAM DAVID PENNIMAN, B.S., 1960

In Library Science

MARGUERITE BROOKS FERGUSON, B.S., Southern University, 1945 ALENE CANTRELL GALBREATH, B.Ed., Southern Illinois University, 1935; A.M., 1939

SOONG OK LEE YI, A.B., Ewha Womans University, 1950

In Marketing

MORRIS DAVID LOSKOVE, B.B.A., Memphis State University, 1961 RICHARD DALE VONRIESEN, B.B.A., Washburn University of Topeka, 1960

In Mechanical Engineering

WILLIAM GRANT YEICH, JR., B.S., Drexel Institute of Technology, 1960

In Metallurgical Engineering

BRUNO GRISON, Ing., Ecole Nationale Superieure des Mines, 1961 HASSELL MARION LEDBETTER, JR., B.S., Wayne State University, 1961 RAJ KUMAR MALIK, B.S., University of Delhi, 1958 RICHARD BRUCE MINCH, B.S., Case Institute of Technology, 1960

In Physical Education

DONALD EDWIN BROWNING, B.S., Eastern Illinois University, 1961 ASHER FARHI, B.S., Northeast Missouri State Teachers College, 1961 ABRAHAM ISRAEL GROSSFELD, B.S., 1960 HAROLD EUGENE HARRIS, B.S., 1960 RAY OLSON MCCLUNG, B.S., Agricultural and Mechanical College of Texas, 1959

In Physiology

THOMAS CHARLES BIANCO, A.B., St. Ambrose College, 1960

In Recreation

HENRY ALEXANDER TURIK, A.B., Central Washington College of Education, 1961

In Sanitary Engineering

THOMAS HENRY PATTON, JR., B.Eng., Vanderbilt University, 1961

In Theoretical and Applied Mechanics

ARTHUR RALPH GIAQUINTA, B.S., Northeastern University, 1960

In Zoology

MARSHALL BURNICE BISCHOFF, B.S., 1960 NOYCE LANE BISCHOFF, A.B., Berea College, 1960 BRUCE BENNER CRILEY, B.S., 1960 NANCY JO VAN CURA, B.S., 1959

1962]

BOARD OF TRUSTEES

Degree of Master of Music

BARBARA KATHRYN BARNETT, A.B., Wellesley College, 1960 TED ARLEN HARRIS, A.B., William Jewell College, 1953; B.Mus., Oklahoma Baptist University, 1961

Degree of Master of Education

EDWARD JAMES FINN, B.S., Lewis College of Science and Technology, 1961 MILDRED MILLER REA, B.S., Eastern Illinois University, 1957

Degree of Master of Fine Arts

In Landscape Architecture

DONALD LUMSDEN WALKER, JR., B.F.A., 1955

Degree of Master of Comparative Law

PAUL S. FU, LL.B., Soochow University, 1960

COLLEGE OF AGRICULTURE

Degree of Bachelor of Science

In Agriculture

DAVID BOERNER

In Home Economics

MELBA JEAN OAKLEY SNIVELY

COLLEGE OF ENGINEERING

Degree of Bachelor of Science

In Aeronautical and Astronautical Engineering

VIRGIL ALFRED BLYTHE

In Civil Engineering

ESTEBAN ANTONIO QUINTERO

In Engineering Physics

BRUCE DEE WHEELER

COLLEGE OF LIBERAL ARTS AND SCIENCES

Degree of Bachelor of Arts

In Liberal Arts and Sciences VIRGINIA LYTLE BROUGHER BARBARA ISREALDA SCHROTE PATRICK COGAN O'DAY NANCY ANN SINGMAN, (Posthumously)

In the Teaching of English

Degree of Bachelor of Science

In Chemical Engineering

WILLIAM BYRON AYTON

TERRY JANIS LIBMAN

In Liberal Arts and Sciences

BEVERLY DENNEN, Honors in Liberal Arts and Sciences Donna Peters Kolarik Jack Komenetzky LARRY RAY MITTENDORF BONNIE LOUISE MOLANDER, HONORS in Liberal Arts and Sciences ALVIN RONALD VOELKNER

COLLEGE OF EDUCATION

Degree of Bachelor of Science

In Elementary Education

NANCY TOWNSEND CLEMENT LYNN FOX EGGERS FLORENCE BEVERLY GOLDMAN PENELOPE GROVES MYRNA BORNSTEIN LEVIN 1962

In the Education of Mentally Handicapped Children MARY AGNES BATES

COLLEGE OF COMMERCE AND BUSINESS ADMINISTRATION

Degree of Bachelor of Science

In Accountancy In Finance

Robert Udle Goldman

WILLIAM DWIGHT DEIHL

Robert William Thomas

ARTHUR ANTHONY HASSE

COLLEGE OF JOURNALISM AND COMMUNICATIONS

In Marketing

Degree of Bachelor of Science

In Communications

JANICE HACKBARTH GOBEL

COLLEGE OF FINE AND APPLIED ARTS

Degree of Bachelor of Fine Arts

In Advertising Design

CLAIRE JOHNSON SCHAEFER, HONORS

FUTURE MEETINGS OF THE BOARD

By vote of the Board of Trustees, the November meeting has been changed from the third Wednesday, November 21, to Friday, November 9, so that official action by the Board can be taken on the University's building program for 1963-65 and estimates of state capital appropriations needed in time for filing of said estimates with the State Department of Finance not later than November 15, as required by law.

President Clement reminded the Board that it has agreed to hold the November meeting in Danville to enable the Trustees to participate in the dedication of the University's Radio Telescope at the Vermilion River Observatory in the outskirts of Danville, the dedication to be sponsored jointly by the University and the Danville Chamber of Commerce. Official notice of the meeting and schedule will be sent by the Secretary.

RECESS

The Comptroller reported that bids on the Housing Revenue Bonds which will be issued to finance construction of the Illinois Street Residence Halls were opened at 11:00 a.m. today and are being evaluated. He asked that action on the recommendation relating to the revenue bond issue be deferred until later in the day.

President Clement stated that President Henry has requested a recess period to give representatives of the press an opportunity to ask questions and to secure further information concerning the biennial operating budget for 1963-65 which has been approved at today's meeting.

At 12:05 p.m., on motion of Mr. Dilliard, the Board recessed.

When the Board reconvened, at 1:40 p.m., the same members of the Board and officers of the University were present as recorded at the beginning of these minutes.

HOUSING REVENUE BONDS OF 1962, SERIES B AND C

(23) Eight bids were received at 11:00 a.m. today (October 17, 1962) in the Illini Center, LaSalle Hotel, Chicago, for the sale of \$2,400,000 of Housing Revenue Bonds of 1962, Series B, and six bids were received at the same time for certain maturities of \$4,300,000 Housing Revenue Bonds, Series C, to finance construction of the Illinois Street Residence Halls.

construction of the Illinois Street Residence Halls. The Vice-President and Comptroller recommends that the Series B bonds be sold to Wertheim and Company, 1 Chase Manhattan Plaza, New York, New York, and L. F. Rothschild and Company, 120 Broadway, New York, New York, at a price of \$2,377,392 plus accrued interest and at an effective interest rate of 3.4867 per cent; that \$390,000 of Series C bonds maturing in 1965 through 1972 be sold to Smith, Barney, and Company and Associates at a price of \$390,287.82 plus accrued interest and at an effective interest rate of 2.7723 per cent; and that \$790,000 Series C bonds maturing in 1973 through 1982 be sold to Wertheim and Company and L. F. Rothschild and Company at a price of \$791,003.30 plus accrued interest and at an effective interest rate of 3.172 per cent \$791,003.30 plus accrued interest and at an effective interest rate of 3.172 per cent. These bids represent the lowest interest cost to the University.

Submitted herewith are schedules of all bids received, copies of which have

been filed with the Secretary of the Board for record. The Vice-President and Comptroller presents a Loan Agreement (Contract No. H(402)-697) with the Federal Housing and Home Finance Agency and recommends that he be authorized to execute it. In accordance with the provisions of the Loan Agreement, he recommends that \$3,120,000 Series C bonds maturing in 1983 through 2002 be sold to the Housing and Home Finance Agency at par and accrued interest and at an interest rate of 33% per cent.

The Vice-President and Comptroller also presents the Sixth Supplemental Housing Bond Resolution supplementing the Resolution approved December 17, 1958, and creating \$2,400,000 Housing Revenue Bonds of 1962, Series B, and \$4,300,000 Housing Revenue Bonds of 1962, Series C, and recommends its adoption.

He further recommends that the Board (1) authorize the execution of the bonds by A. J. Janata, Secretary of the Board, by facsimile signatures of the President of the Board, and by the facsimile signatures of Frances B. Watkins and Timothy W. Swain, members of the Board, and (2) ratify and confirm all actions taken or to be taken by the officers and members of the Board in con-nection with the sale and delivery of the bonds to the purchasers indicated above.

The President of the University concurs in all the foregoing recommendations.

On motion of Mr. Johnston, these recommendations were approved and the Sixth Supplemental Housing Bond Resolution supplementing the Resolution approved December 17, 1958, and creating \$2,400,000 Housing Revenue Bonds of 1962, Series B, and \$4,300,000 Housing Revenue Bonds of 1962, Series C, was adopted, this action being taken by the following vote of record: Aye, Mr. Clement, Mr. Dilliard, Mr. Hughes, Mr. Johnston, Mr. Pogue, Mr. Swain, Mrs. Watkins. Mr. Williamson; no, none; absent, Mr. Kerner, Mr. Wilkins.

Sixth Supplemental Housing Revenue Bond Resolution

A RESOLUTION CREATING AND AUTHORIZING THE ISSUE, AUTHENTICATION, AND DELIVERY OF \$2,400,000 HOUSING REVENUE BONDS OF 1962, SERIES B, AND \$4,300,000 HOUSING REVENUE BONDS OF 1962, SERIES C, AND FURTHER SUPPLE-MENTING A RESOLUTION DULY ADOPTED BY THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ILLINOIS ON DECEMBER 17, 1958.

WHEREAS, The Board of Trustees of the University of Illinois, on due consideration and investigation, does now find and determine that it is advisable 1962]

and necessary and in the interests of the University of Illinois and the welfare of its students and faculty to construct and equip additional buildings and related facilities for the purpose of housing its students and staff; and

WHEREAS, in order to provide such facilities it is advantageous to the University and necessary that the University borrow money and issue and sell revenue bonds under the provisions of paragraphs 48.1 through 48.7 of Chapter 144 of the Illinois Revised Statutes 1961, and all laws amendatory thereof and supplemental thereto; and

WHEREAS, The Board of Trustees of the University of Illinois on December 17, 1958, did duly adopt a resolution (herein sometimes called "Original Resolution") providing for the issuance of revenue bonds; and

WHEREAS, The Board of Trustees of the University of Illinois on June 23, 1959, October 21, 1959, June 14, 1960, May 17, 1961, and May 24, 1962, respectively, duly adopted First, Second, Third, Fourth and Fifth Supplemental Resolutions for the purpose of supplementing the Original Resolution and providing for the issuance of additional revenue bonds thereunder, and

WHEREAS, there are now issued and outstanding under the Original Resolution as supplemented by the First, Second, Third, Fourth and Fifth Supplemental Resolutions thereto, \$24,296,000 aggregate principal amount of Bonds designated "The Board of Trustees of the University of Illinois Housing Revenue Bonds" and having the further designations of year and series in the respective principal amounts as follows:

Year and Series	Principal Amount
1958, Series A	\$1,570,000
1958, Series B	1,477,000
1959, Series A	90,000
1959, Series B	1,489,000
1959, Series C	
1959, Series D	
1960, Series A	
1960, Series B	
1960, Series C	750,000
1962, Series A	2,100,000

WHEREAS, The Board of Trustees of the University of Illinois now desires to create and to authorize the issue, authentication and delivery of an additional issue of Bonds under and in accordance with the Resolution as supplemented by this Sixth Supplemental Resolution thereto which additional Bonds are to be limited to the aggregate principal amount of \$6,700,000 at any one time outstanding, \$2,400,000 of which shall be known as "The Board of Trustees of the University of Illinois Housing Revenue Bonds of 1962, Series B (hereinafter called "1962 Series B Bonds") and \$4,300,000 of which shall be known as "The Board of Trustees of the University of Illinois Housing Revenue Bonds of 1962, Series C" (hereinafter called "1962 Series C Bonds").

Now, Therefore, Be It Resolved by The Board of Trustees of the University of Illinois:

ARTICLE ONE

SUPPLEMENTARY PROVISIONS RELATING TO INCOME AND THE APPLICATION THEREOF

SECTION 1.1. Pledge of Revenues. The pledge of the revenues (including the revenues to be derived from the operation of Project G hereinafter mentioned) contained in Section 5.01 of the Original Resolution and Section 1.1 of each of the First, Second, Third, Fourth and Fifth Supplemental Resolutions is hereby ratified and confirmed and all revenues to be derived from the operation of Project G are hereby specifically pledged for the purposes mentioned in said Section 5.01 of the Original Resolution.

SECTION 1.2. Supplementation of Revenues. It is hereby determined by the Board of Trustees and it is hereby covenanted that in view of the additional issue of Bonds to be outstanding it is necessary to supplement the revenues to be derived from the facilities by a further use of student tuitions which are authorized by law to be retained in the Treasury of the University and therefore the limitation contained in clause (b) of Section 5.03 of the Original Resolution as supplemented by Section 1.2 of each of the First, Second, Third, Fourth and Fifth Supplemental Resolutions be and the same is hereby increased by an amount equal to \$250,000 so that such supplementation shall henceforth be an amount not to exceed in any one fiscal year the lesser of (a) an amount which when added to the revenues to be derived from the facilities will be sufficient to meet the annual operating expenses of the facilities and to provide for the payments required to be made into the Bond and Interest Sinking Fund established for the benefit of the Bonds in subsection (b) of Section 5.02 of the Original Resolution, or (b) \$1,110,000 plus such additional sums as may be specified in any other resolution supplemental to the Resolution as supplemented hereby, creating or authorizing the issuance of additional Bonds.

ARTICLE TWO

1962 Series B and 1962 Series C Bonds and the Issuance Thereof

SECTION 2.1. Project G and Purpose of Issue of Bonds. The project (hereinafter designated "Project G") to be acquired, constructed, equipped and completed pursuant to this Sixth Supplemental Resolution is described in a general way as:

A residence hall to be located north of Illinois Street and east of the Student-Staff Apartments, consisting of two housing buildings, one food service building and a lounge-recreation building for approximately 1210 undergraduate students, sometimes known as the Illinois Street Residence Halls, plus parking lots near the Illinois Street Residence Halls and the Graduate Residence Halls.

The estimated cost of said Project G is 6,700,000 exclusive of land and exclusive of any pro rata share of the University power and heating plant serving the Project, but including the cost of extending utilities to the Project. The estimated cost of each portion of said Project G is more fully set forth in the plans and specifications therefor on file with the Comptroller of the University.

It is hereby determined that in order to produce the funds necessary to construct and equip Project G that the University borrow the sum of \$6,700,000 and in evidence thereof to issue its Housing Revenue Bonds hereunder in said principal amount.

SECTION 2.2. Terms of 1962 Series B Bonds and 1962 Series C Bonds. There is hereby created and authorized two additional series of Bonds to be issued under the Resolution as supplemented by this Sixth Supplemental Resolution to be substantially in the form and of the tenor and purport hereinafter set forth and limited to the aggregate principal amount of Six Million Seven Hundred Thousand Dollars (\$6,700,000) at any one time outstanding, Two Million Four Hundred Thousand (\$2,400,000) of which shall be designated "The Board of Trustees of the University of Illinois Housing Revenue Bonds of 1962, Series B" (hereinafter called "1962 Series B Bonds") and Four Million Three Hundred Thousand (\$4,300,000) of which shall be designated "The Board of Trustees of the University of Illinois Housing Revenue Bonds of 1962, Series C" (hereinafter called "1962 Series C Bonds"). The 1962 Series B Bonds and the 1962 Series C Bonds shall be issued as perotiable couron Bonds dated October 1, 1962 registrable as to aprincipal in the

The 1962 Series B Bonds and the 1962 Series C Bonds shall be issued as negotiable coupon Bonds dated October 1, 1962, registrable as to principal in the denomination of \$1,000 or as fully registered Bonds without coupons, dated as of the interest payment date to which interest was last paid, next preceding the date of issue, unless issued on an interest payment date on which interest was paid, in which case they shall be dated as of the date of issue, or unless issued prior to April 1, 1963, in which case they shall be dated October 1, 1962. Each fully registered Bond without coupons shall be of a single maturity. Fully registered Bonds without coupons, shall be numbered in such manner satisfactory to the Trustee as may be designated by the Comptroller and shall be issued in denominations of \$1,000 or multiples thereof, shall bear interest from October 1, 1962, payable semiannually on the first days of April and October in each year until paid, commencing April 1, 1963, at the rates provided below and shall mature in the following amounts on October 1 of the following years:

1962 Series B Bonds

1962 Series C Bonds

	1904 Seri	es B Bonds	1902 Seri	es C Bonds
Year of				
Maturity	Amount	Interest Rate	Amount	Interest Rate
1965	\$ 20,000	3%	\$ 40,000	21/4 %
1966	20,000	3%	40,000	214 0%
1967	30,000	3%	40,000	$2\frac{1}{4}\%$ $2\frac{1}{4}\%$
1968	30,000	3 07	50,000	2.90%
1969	30,000	3% 3%	50,000	2.90%
1970	30,000	3%	50,000	2.90%
1971	40,000	3%	60,000	2.90%
1972	40,000	3%	60,000	2.90%
1973	40,000	3%	70,000	3%
1974	40,000	3%	70,000	3%
1975	40,000	3%	70,000	3%
1976	40,000	3%	70,000	30%
1977	50,000	31/4 %	70,000	31/4 %
1978	50,000	31/4 %	80,000	31/4 %
1979	50,000	31,0%	80,000	31/07
1980	50,000	31/07	90,000	31/07
1981	50,000	31/07	90,000	31/07
1982	50,000	31/4 %	100,000	31/4 %
1983	50,000	314%	110,000	33/8%
1984	50,000	31/4 %	110,000	33,07
1985	60,000	314 %	120,000	33/07
1986	60,000	374 /0 31/07	120,000	33607
1987	60,000	$3\frac{1}{4}\%$ 3.40%	120,000	33/8%
1988	70,000	3.40%	130,000	378/0
1080	70,000	3.40%	130,000	378 /0
1989		3.40%	140,000	378/0
1990 1991	70,000	3.40 %	140,000	37870
1992	70,000 80,000	$3\frac{1}{2}\%$ $3\frac{1}{2}\%$	150,000	33/07
1002	80,000	$3\frac{1}{2}\%$	150,000	37870
1993		$3\frac{72}{2}$	150,000	37870
1994	80,000 90,000	372%	160,000	37870
1995		37270	160,000	37870
1996	90,000	31/2% 31/2%		37870
1997	100,000	$3\frac{1}{2}$ %	170,000 180,000	37870
1998	100,000	3.60%	190,000	37870
1999	120,000			33/8%
2000	130,000	3.60%	210,000	33/8% 33/8%
2001	130,000	3.60%	230,000	378%
2002	140,000	3.60%	250,000	33/8%

The 1962 Series B Bonds and the 1962 Series C Bonds shall be redeemable prior to their maturity at the option of the Board of Trustees, either in whole or in part, on October 1, 1972, or on any interest payment date thereafter in the inverse order in which they mature at the principal amount thereof plus accrued interest to the date of redemption plus a premium of the following percentages of such principal amount if redeemed during the following periods respectively:

Period of Redemption	Applicable Premium
October 1, 1972 through April 1, 1977	3%
October 1, 1977 through April 1, 1982	$\dots 2\frac{1}{2}\%$
October 1, 1982 through April 1, 1987	
October 1, 1987 through April 1, 1992	
October 1, 1992 through April 1, 1997	
October 1, 1997 or thereafter prior to maturit	zy None

provided, however, that the 1962 Series C bonds maturing in the years 1997 through 2002 shall be redeemable prior to their maturity at the option of the Board of Trustees, either in whole or in part, on any interest payment date at the principal amount thereof plus accrued interest to the date of redemption and without premium. All redemptions shall be made in the manner, upon the notice, and with the effect provided in Article Three of the Original Resolution.

SECTION 2.3. Payment of Principal and Interest. Both the principal of and the interest on the 1962 Series B Bonds and the 1962 Series C Bonds shall be payable in any coin or currency which, on the respective date of payment of such principal and interest, is legal tender for the payment of debts due the United States of America, at The First National Bank of Chicago, or its successor, in the City of Chicago, Illinois, or, at the option of holders at The Chase Manhattan Bank, or its successor, in the Borough of Manhattan and City and State of New York.

SECTION 2.4. Form of Bonds. The definitive coupon Bonds of 1962 Series B and 1962 Series C, the interest coupons to be attached thereto, and the form of fully registered Bonds without coupons of 1962 Series B and 1962 Series C, shall be in substantially the following forms with appropriate insertions, omissions and variations to evidence differences in series, number, interest rate, maturity and like matters:

(Form of Coupon Bond) UNITED STATES OF AMERICA STATE OF ILLINOIS THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ILLINOIS HOUSING REVENUE BOND OF 1962

(Series)

Number.....

\$1,000

Both principal hereof and interest hereon are hereby made payable in any coin or currency which, on the respective dates of payment of such principal and interest, is legal tender for the payment of debts due the United States of America, at The First National Bank of Chicago (hereinafter called "Trustee"), or its successor in trust under the Resolution hereinafter referred to, in the City of Chicago, Illinois, or at the option of the holder, at The Chase Manhattan Bank, in the Borough of Manhattan and City and State of New York.

This bond is one of an authorized series of ______ Dollars (\$______) principal amount of Housing Revenue Bonds of 1962, Series _______, which, with the 1962 Series ______ Bonds constitute an issue of Six Million Seven Hundred Thousand Dollars (\$6,700,000), issued or to be issued pursuant to a Bond Resolution of The Board of Trustees of the University of Illinois duly adopted December 17, 1958, as supplemented by First, Second, Third, Fourth, Fifth and Sixth Supplemental Resolutions thereto duly adopted June 23, 1959, October 21, 1959, June 14, 1960, May 17, 1961, May 24, 1962, and October 17, 1962, respectively (said Bond Resolution as so supplemented being herein referred to as the "Resolution"), for the purpose of providing funds for paying the cost of constructing and equipping student and staff housing and related facilities. Said Resolution, among other things, provides for the issuance of additional bonds pursuant thereto in the manner and upon the terms and conditions more fully set forth therein.

The bonds of this Series are redeemable prior to maturity as a whole or in part on October 1, 1972, or on any interest payment date thereafter in the inverse order in which they mature at the option of The Board of Trustees of the University of Illinois at par and accrued interest to the date of redemption and a premium as follows: three per cent (3%) of the principal amount thereof if redeemed October 1, 1972 through April 1, 1977; two and one-half per cent $(2\frac{1}{2}\%)$ of the principal amount thereof if redeemed October 1, 1977 through April 1, 1982; two per cent (2%) of the principal amount thereof if redeemed October 1, 1982 through April 1, 1987; one and one-half per cent $(1\frac{1}{2}\%)$ of the principal amount thereof if redeemed October 1, 1987 through April 1, 1992; one per cent (1%) of the principal amount thereof if redeemed October 1, 1987 through April 1, 1992; through April 1, 1997; and without premium if redeemed October 1, 1997 or thereafter.

(1962 Series C Bonds Only)

The period at the end of the foregoing paragraph shall be deleted in the 1962 Series C Bonds and a semicolon substituted therefor and the following proviso added to the end of said paragraph.

[provided, however, that the bonds of this series maturing in the years 1997 through 2002 shall be redeemable prior to their maturity at the option of The Board of Trustees of the University of Illinois, either in whole or in part, on any interest payment date at the principal amount thereof plus accrued interest to the date of redemption and without premium].

Notice of redemption of any or all of said bonds shall be published once a week for two successive calendar weeks, the first such publication to be not less than thirty days prior to the date of redemption, such publication to be made in one daily newspaper printed in the English language and published and of general circulation in the City of Chicago, Illinois, and also in a financial newspaper printed in the English language and published and of general circulation in the Borough of Manhattan, City and State of New York, and when this bond or any of the bonds of such authorized issue shall have been duly called for redemption, interest thereon shall cease from and after the specified redemption date if redemption monies are available for the payment of all bonds called for redemption.

interest thereon shall cease from and after the specified redemption date if redemption, interest thereon shall cease from and after the specified redemption date if redemption monies are available for the payment of all bonds called for redemption. This bond and the series of which it forms a part is issued under the authority of The Board of Trustees of the University of Illinois to issue and sell revenue bonds under the provisions of paragraphs 48.1 through 48.7 of Chapter 144 of the Illinois Revised Statutes, 1961, and all laws amendatory thereof and supplemental thereto and the Resolution above referred to.

This bond is payable, both as to principal and interest, only from the revenues required to be credited to the Housing Revenue Bond Fund as provided in the Resolution, which revenues are to be derived from (1) the operation of the revenue producing facilities constructed, completed, and equipped with the proceeds of this bond issue, bonds heretofore issued pursuant to the Resolution and additional bonds which may hereafter be issued pursuant to the Resolution, (2) student tuitions authorized by law to be retained in the University treasury, but not in excess of \$1,110,000 annually plus such additional sums as may be specified in any supplemental resolution creating or authorizing additional bonds to be issued pursuant to the Resolution as so supplemented, and (3) certain existing revenue producing buildings of the University after the prior payment of other indebtedness to the extent set forth in the Resolution. This bond and the series of which it forms a part do not constitute an indebtedness of said University of Illinois, or the State of Illinois within any constitutional or statutory limitation, and neither the taxing power nor the general credit of said University, of said Board of Trustees or of the State of Illinois is pledged to the payment of this bond or the interest thereon

power nor the general credit of statutory initiation, and normal intervention and power nor the general credit of staid University, of said Board of Trustees or of the State of Illinois is pledged to the payment of this bond or the interest thereon. This bond shall pass by delivery unless it is registered as to principal in the name of the holder on the books of registration of said University kept at the office of the Trustees in Chicago, Illinois, such registration to be noted on the back hereof. After such registration no transfer hereof shall be valid unless made on such books by the registered holder in person or by attorney duly authorized in writing and similarly noted hereon, but this bond may be transferred in like manner to bearer, and thereupon transferability by delivery shall be restored and it may again from time to time be registered or transferred to bearer as before. Such registration, however, shall not restrict the negotiability of the coupons hereto appertaining, but such coupons shall be transferable by delivery merely and payable to the bearer hereof.

Subject to the provisions for registration and transfer, this bond and all other bonds of this issue shall have all of the qualities of negotiable instruments, and during such time as this bond is payable to bearer, the same and each of the coupons hereto appertaining may be negotiated by delivery by any person having possession thereof, and any holder who shall have taken this bond while so payable to bearer or any of said coupons from any person for value and without notice shall thereby acquire absolute title to this bond or to such coupons, as the case may be, free of any defenses enforceable against any prior holder and free from all equities and claims of ownership of any such prior holder, and The Board of Trustees of the University of Illinois, the Trustee, and any paying agent may deem and treat the bearer of this bond, or, if registered, the person in whose name it is registered, and the bearer of any interest coupons appertaining hereto as the absolute owner hereof for all purposes and shall not be affected by any notice to the contrary whether this bond or any coupon appertaining thereto be overdue or not.

The bonds of this series are issuable as coupon bonds registrable as to principal only in the denomination of \$1,000 and as registered bonds without coupons in the denomination of \$1,000 or a multiple thereof. Each fully registered bond without coupons shall be of a single maturity. The coupon bonds and the registered bonds without coupons are interchangeable for bonds of the same interest rate and maturity upon presentation thereof for such purpose by the holder or registered owner at the principal office of the Trustee in the City of Chicago, Illinois, and upon payment of charges and otherwise as provided in the Resolution.

The rights and obligations of the University and of the holders of the bonds may be modified or amended at any time with the consent of The Board of Trustees of the University of Illinois and of the holders of sixty-six and twothirds per cent ($66\frac{1}{3}$ %) in principal amount of outstanding bonds in the manner, to the extent, and upon the terms and conditions provided in the Resolution; provided that no such modification or amendment shall (i) extend the maturity of or reduce the interest rate on or otherwise alter or impair the obligation of the University to pay the principal, interest or redemption premiums, if any, at the time and place and at the rate and in the currency provided therein of any bond without the express consent of the holder, or (ii) permit the creation of any mortgage or pledge or lien on the facilities, or upon any income therefrom or other funds pledged or held under the Resolution, except as permitted by the Resolution, other than the lien and pledge created thereunder, or (iii) permit the creation by The Board of Trustees of the University of Illinois of any preference or priority of any bond or bonds over any other bond or bonds or coupon or coupons over any other coupon or coupons, or (iv) reduce the percentage in principal amount of bonds required for the affirmative vote or written consent to an amendment or modification without the consent of the holder of this bond; all as more fully set forth in the Resolution.

bond; all as more fully set forth in the Resolution. The Board of Trustees of the University of Illinois hereby covenants with the holder of this bond that it will keep and perform all the covenants and agreements in the Resolution adopted by it, authorizing the issuance of this bond and the series of which it forms a part, and hereby irrevocably obligates itself to administer the said income and revenue derived from the operation of said facilities, as provided for in and by said Resolution, and to establish from time to time parietal rules, rents, and charges for the use of said facilities and to maintain and collect rents and charges and to withhold student tuitions, sufficient to pay the reasonable cost of operating and maintaining said facilities, and pay the principal of and interest upon all revenue bonds which by their terms are payable from such revenues, until all of such bonds have been paid in full, both as to principal and interest.

It is hereby certified and recited and declared that all acts, conditions, and things required to exist, to happen, and to be performed, precedent to and in the issuance of this bond, have existed, have happened, and have been performed in due form, time, and manner, as required by law and the applicable resolutions of The Board of Trustees of the University of Illinois, and that provision has been made for setting aside the income and revenue to be derived from the operation of said facilities to be applied in the manner hereinabove set forth.

IN WITNESS WHEREOF, The Board of Trustees of the University of Illinois has caused this bond to be executed by the facsimile signatures of its President and two of its members, the corporate seal of the University of Illinois to be hereto affixed (or a facsimile thereof to be reproduced hereon), and attested by its Secretary, and has caused the interest coupons hereto attached to be executed by the facsimile signatures of said President and Secretary, and this bond to be dated as of the 1st day of October, 1962.

THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ILLINOIS

Attest: By	
Secretary	President
Member	Member
(Form of Interest C	oupon)
Number	\$
On the first day of to which this coupon is attached has theretofy payment made or provided for), The Board of Illinois will pay to bearer on surrender hereof in the bond to which this coupon is attached, the	ore been called for payment and f Trustees of the University of , solely out of the fund specified
Dollars (\$) in any coin or c dates of payment of such principal and interes of debts due the United States of America, Chicago, in the City of Chicago, Illinois, or at Chase Manhattan Bank, in the Borough of M New York, as provided in the Housing Revenu October 1, 1962, Number	urrency which, on the respective t is legal tender for the payment at The First National Bank of the option of the holder at The fanhattan and City and State of
Secretary	President

(Form of Registered Bond Without Coupons) UNITED STATES OF AMERICA STATE OF ILLINOIS THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ILLINOIS HOUSING REVENUE BOND OF 1962

(Series)

\$-----

Number..... The Board of Trustees of the University of Illinois, a body corporate, created and existing under the laws of the State of Illinois, for value received promises to pay (but only out of the Housing Revenue Bond Fund as hereinafter provided for, and not otherwise) to ______, or registered assigns, on October 1, 19....., the principal sum of ______, or Dollars (\$______) and to pay interest thereon which shall be paid by check or draft mailed to the registered owner at his address as it appears on the bond registration books of the Trustee hereinafter mentioned as Bond Registrar, April 1, 1963, and semiannually thereafter on the first days of April and October in each year from the date hereof until the principal amount hereof has been fully paid.

Both principal hereof and interest hereon are hereby made payable in any coin or currency which, on the respective dates of payment of such principal and interest, is legal tender for the payment of debts due the United States of America, at The First National Bank of Chicago (hereinafter called "Trustee"), or its successor in trust under the Resolution hereinafter referred to, in the City of Chicago, Illinois, or at the option of the holder, at The Chase Manhattan Bank, in the Borough of Manhattan and City and State of New York.

Illinois duly adopted December 17, 1958, as supplemented by First, Second, Third, Fourth, Fifth and Sixth Supplemental Resolutions thereto duly adopted June 23, 1959, October 21, 1959, June 14, 1960, May 17, 1961, May 24, 1962, and October 17, 1962, respectively (said Bond Resolution as so supplemented being herein referred to as the "Resolution"), for the purpose of providing funds for paying the cost of constructing and equipping student and staff housing and related facilities. Said Resolution, among other things, provides for the issuance of additional bonds pursuant thereto in the manner and upon the terms and conditions more fully set forth therein.

The bonds of this Series are redeemable prior to maturity as a whole or in part on October 1, 1972, or on any interest payment date thereafter in the inverse order in which they mature at the option of The Board of Trustees of the University of Illinois at par and accrued interest to the date of redemption and a premium as follows: three per cent (3%) of the principal amount thereof if redeemed October 1, 1972 through April 1, 1977; two and one-half per cent (2½%) of the principal amount thereof if redeemed October 1, 1982; two per cent (2%) of the principal amount thereof if redeemed October 1, 1982; two per cent (2%) of the principal amount thereof if redeemed October 1, 1982; through April 1, 1987; one and one-half per cent (1½%) of the principal amount thereof if redeemed October 1, 1982; through April 1, 1987; one and one-half per cent (1½%) of the principal amount thereof if redeemed October 1, 1982; through April 1, 1987; one and one-half per cent (1½%) of the principal amount thereof if redeemed October 1, 1982; through April 1, 1987; one and one-half per cent (1½%) of the principal amount thereof if redeemed October 1, 1982; through April 1, 1987; one and one-half per cent (1½%) of the principal amount thereof if redeemed October 1, 1987; one per cent (1%) of the principal amount thereof if redeemed October 1, 1997; or thereafter.

(1962 Series C Bonds Only)

The period at the end of the foregoing paragraph shall be deleted in the 1962 Series C Bonds and a semicolon substituted therefor and the following proviso added to the end of said paragraph.

[provided, however, that the bonds of this series maturing in the years 1997 through 2002 shall be redeemable prior to their maturity at the option of The Board of Trustees of the University of Illinois, either in whole or in part, on any interest payment date at the principal amount thereof plus accrued interest to the date of redemption and without premium].

Notice of redemption of any or all of said bonds shall be published once a week for two successive calendar weeks, the first such publication to be not less than thirty days prior to the date of redemption, such publication to be made in one daily newspaper printed in the English language and published and of general circulation in the City of Chicago, Illinois, and also in a financial newspaper printed in the English language and published and of general circulation in the Borough of Manhattan, City and State of New York, and when this bond or any of the bonds of such authorized issue shall have been duly called for redemption, interest thereon shall cease from and after the specified redemption date if redemption monies are available for the payment of all bonds called for redemption.

This bond and the series of which it forms a part is issued under the authority of The Board of Trustees of the University of Illinois to issue and sell revenue bonds under the provisions of paragraphs 48.1 through 48.7 of Chapter 144 of the Illinois Revised Statutes, 1961, and all laws amendatory thereof and supplemental thereto and the Resolution above referred to.

This bond is payable, both as to principal and interest, only from the revenues required to be credited to the Housing Revenue Bond Fund as provided in the Resolution, which revenues are to be derived from (1) the operation of the revenue producing facilities constructed, completed, and equipped with the proceeds of this bond issue, bonds heretofore issued pursuant to the Resolution and additional bonds which may hereafter be issued pursuant to the Resolution, (2) student tuitions authorized by law to be retained in the University treasury, but not in excess of \$1,110,000 annually plus such additional sums as may be specified in any supplemental resolution creating or authorizing additional bonds to be issued pursuant to the Resolution as so supplemented, and (3) certain existing revenue producing buildings of the University after the prior payment of other indebtedness to the extent set forth in the Resolution. This bond and the series of which it forms a part do not constitute an indebtedness of said University of Illinois, The Board of Trustees of the University of Illinois, or the State of Illinois within any constitutional or statutory limitation, and neither the taxing power nor the general credit of said University, of said Board of Trustees, or of the State of Illinois is pledged to the payment of this bond or the interest thereon.

Subject to the provisions for registration and transfer contained herein and in the Resolution, this bond and all other bonds of this issue shall have all of the qualities of negotiable instruments, and shall be transferable by the registered owner at the principal office of the Trustee in the City of Chicago, Illinois, upon surrender and cancellation of this bond and thereupon a new registered bond without coupons of the same principal amount, interest rate and maturity will be issued to the transferee as provided in the Resolution, upon payment of the transfer charges therein prescribed. The Board of Trustees of the University of Illinois, the Trustee and any other person may treat the person in whose name this bond is registered as the absolute owner hereof for the purpose of receiving payment and for all other purposes and shall not be affected by any notice to the contrary whether this bond be overdue or not.

The bonds of this series are issuable as coupon bonds registrable as to principal only in the denomination of \$1,000 and as registered bonds without coupons in the denomination of \$1,000 or a multiple thereof. Each fully registered bond without coupons shall be of a single maturity. The coupon bonds and the registered bonds without coupons are interchangeable for bonds of the same interest rate and maturity upon presentation thereof for such purpose by the holder or registered owner at the principal office of the Trustee in the City of Chicago, Illipois, and upon payment of charges and otherwise as provided in the Resolution.

nois, and upon payment of charges and otherwise as provided in the Resolution. The rights and obligations of the University and of the holders of the bonds may be modified or amended at any time with the consent of The Board of Trustees of the University of Illinois and of the holders of sixty-six and twothirds per cent (662/3%) in principal amount of outstanding bonds in the manner, to the extent, and upon the terms and conditions provided in the Resolution; provided that no such modification or amendment shall (i) extend the maturity of or reduce the interest rate on or otherwise alter or impair the obligation of the University to pay the principal, interest or redemption premiums, if any, at the time and place and at the rate and in the currency provided therein of any bond without the express consent of the holder, or (ii) permit the creation of any mortgage or pledge or lien on the facilities, or upon any income therefrom or other funds pledged or held under the Resolution, except as permitted by the Resolution, other than the lien and pledge created thereunder, or (iii) permit the creation by The Board of Trustees of the University of Illinois of any preference or priority of any bond or bonds over any other bond or bonds or coupon or coupons over any other coupon or coupons, or (iv) reduce the percentage of principal amount of bonds required for the affirmative vote or written consent to an amendment or modification without the consent of the holder of this bond; all as more fully set forth in the Resolution.

The Board of Trustees of the University of Illinois hereby covenants with the holder of this bond that it will keep and perform all the covenants and agreements in the Resolution adopted by it, authorizing the issuance of this bond and the series of which it forms a part, and hereby irrevocably obligates itself to administer the said income and revenue derived from the operation of said facilities, as provided for in and by said Resolution, and to establish from time to time parietal rules, rents, and charges for the use of said facilities and to maintain and collect rents and charges and to withhold student tuitions, sufficient to pay the reasonable cost of operating and maintaining said facilities, and pay the principal of and interest upon all revenue bonds which by their terms are payable from such revenues, until all of such bonds have been paid in full, both as to principal and interest.

It is hereby certified and recited and declared that all acts, conditions, and things required to exist, to happen, and to be performed, precedent to and in the issuance of this bond, have existed, have happened, and have been performed in due form, time, and manner, as required by law and the applicable resolutions of The Board of Trustees of the University of Illinois, and that provision has been made for setting aside the income and revenue to be derived from the operation of said facilities to be applied in the manner hereinabove set forth. BOARD OF TRUSTEES

October 17

Member

THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ILLINOIS

Attest;______Secretary

By..... President

Member

ARTICLE THREE

MISCELLANEOUS

SECTION 3.1. Application of Bond Proceeds. The Board of Trustees hereby determines that Project G will become revenue producing on or about September 30, 1964 and therefore that portion of the proceeds of the 1962 Series B Bonds and 1962 Series C Bonds representing the interest accrued on such Bonds to the date of payment therefor shall, together with an amount equal to the interest to accrue on such Bonds through September 30, 1964 be deposited with the Trustee in the Bond and Interest Sinking Fund account as required by Section 6.01 of the Resolution.

The balance of said proceeds of the 1962 Series B Bonds and 1962 Series C Bonds shall, as required by Section 6.01 of the Resolution, be deposited in a bank or banks which are members of the Federal Deposit Insurance Corporation and shall be accounted for as one or more separate funds. The application of the funds in such accounts and the disposition thereof shall in all respects comply with all the terms and provisions of Article Six of the Resolution, subject to the terms and provisions of any contract or agreement permitted by or contemplated in said Article Six between The Board of Trustees and any original purchaser of such Bonds.

SECTION 3.2. Exchanges of 1962 Series B Bonds and 1962 Series C Bonds. Notwithstanding the provisions of Section 2.08 of the Original Resolution the University may, in addition to any other charges permitted to be made upon the exchange or transfer of bonds, charge to the holders of any fully registered 1962 Series B Bonds and 1962 Series C Bonds presented for exchange for coupon Bonds, the actual costs of printing new coupon Bonds for the purpose of making such exchange. However, 1962 Series B Bonds and 1962 Series C Bonds originally issued in fully registered form at the time of initial delivery thereof may be exchanged without charge for coupon Bonds by the initial purchaser of such Bonds.

SECTION 3.3. Interpretation and construction. This Sixth Supplemental Resolution is supplemental to and is adopted in accordance with Sections 2.06 and 4.02 of the Resolution. In all respects not inconsistent with this Sixth Supplemental Resolution, the Resolution is hereby ratified, approved and confirmed, and all of the definitions, terms, covenants and restrictions of the Resolution shall be applicable to the additional Bonds authorized by this Sixth Supplemental Resolution and the proceeds thereof except as otherwise expressly provided. All of the terms and provisions of this Sixth Supplemental Resolution shall be deemed to be part of the terms and provisions of the Resolution, and the Resolution and this Sixth Supplemental Resolution shall be read, taken and construed as one and the same instrument. In executing or authenticating any Bond authorized by this Sixth Supplemental Resolution the Trustee and each officer, agent or employee of the University shall be entitled to all of the privileges and immunities afforded to them under the terms of the Resolution.

SECTION 3.4. Resolution Effective on Passage. This resolution shall become effective upon its passage.

1962]

STATE OF ILLINOIS COUNTY OF CHAMPAIGN } ss.

I,, do hereby certify that I am the duly elected, qualified and acting Secretary of The Board of Trustees of the University of Illinois, and as such official have charge and custody of the minutes and records of said Board of Trustees.

I further certify that the attached resolution is a true, correct and exact copy of the original resolution adopted by The Board of Trustees of the University of Illinois at its legally convened meeting held on the 17th day of October, 1962, all as appears of record in my office.

Secretary as aforesaid.

CONTRACTS FOR CONSTRUCTION OF ILLINOIS STREET RESIDENCE HALLS

(24) The Director of the Physical Plant and the Vice-President and Comptroller recommend awards of contracts for the construction of the Illinois Street Residence Halls (for 1,210 single undergraduate students) in the area between Illinois and Green Streets and east of the Student-Staff Apartments in Urbana, the award in each case being to the lowest bidder:

General — Kuhne-Simmons Company, Inc., Champaign	3 639 870
Elevator — Otis Elevator Company Chicago Food Service Equipment — Century Equipment	183 381
Plumbing — Nu-Way Plumbing Service, Inc., Chicago	190 696 429 500
Heating, Piping, and Refrigeration Borg, Inc., Chicago	353 730
Ventilating — R. H. Bishop Company, Champaign	197 844
Thermal Insulation — General Insulation, Inc., Peoria	69 900
Temperature Control — Minneapolis-Honeywell Regulator Company, Chicago	35 961
Electrical — Art-O-Lite Company, Inc., Galesburg	407 880
Total	\$5 508 762

Funds will be available from the proceeds of revenue bonds to finance the construction of these halls, which are being sold today.

Submitted herewith is a report from the Physical Plant Department on this project including a schedule of bids received, a copy of which is being filed with the Secretary of the Board for record.

I concur in these recommendations.

On motion of Mr. Swain, these contracts were awarded, as recommended, by the following vote: Aye, Mr. Clement, Mr. Dilliard, Mr. Hughes, Mr. Johnston, Mr. Pogue, Mr. Swain, Mrs. Watkins, Mr. Williamson; no, none; absent, Mr. Kerner, Mr. Wilkins.

EXECUTIVE SESSION

At this point, on motion of Mr. Swain, an executive session was ordered for consideration of the following matters of business.

PURCHASE OF PROPERTIES

The property consists of a lot 50 feet by 157 feet and is improved with a two-story and basement frame dwelling. The improvement will eventually be removed and the land will be a part of the site for the construction of an addition to the East Chemistry Building. Possession will be not later than July 1, 1963, and and taxes will be prorated.

The sale prices are within University appraisals and have been reviewed with the Buildings and Grounds Committee which recommends these purchases.

Funds are available in the state capital appropriations to the University for 1961-63 from the Universities Building Fund and have been released. I concur.

On motion of Mr. Pogue, purchase of these properties, at the prices indicated, was authorized by the following vote: Aye, Mr. Clement, Mr. Dilliard, Mr. Hughes, Mr. Johnston, Mr. Pogue, Mr. Swain, Mrs. Watkins, Mr. Williamson; no, none; absent, Mr. Kerner, Mr. Wilkins.

RECOMMENDATIONS OF THE UNIVERSITY PATENT COMMITTEE

(2) The University Patent Committee submits, with the concurrence of the University Research Board, the following reports and recommendations relating to patentable inventions by members of the staff.

Group A. It is the judgment of the Committee that the inventions in this group have little possibility of commercial development and the recommendation in each case is that the University's rights in the invention be released as indicated.

1. Flash light source—Robert K. Swank, Graduate Student in Physics, inventor. The purpose of the flash lamp is to produce a focused spot of light of high intensity and short duration, repetitive at about one flash per second, with

all flashes of equal intensity. The features of this arrangement are low stray inductance with high light gathering efficiency and operation in an atmosphere of nitrogen. In concurrence with various members of the Department of Physics, the Committee recommends that the rights in this invention be released to the sponsoring agency, the United States Air Force.

2. Contour-tracing pattern recognizer — Paul Weston, Research Assistant in Electrical Engineering, inventor. This device consists of an oscilloscope, a photomultiplier which receives light from the oscilloscope face and a special feedback circuit connecting the photomultiplier to the oscilloscope. It is impossible to exhaustively enumerate the methods which are applicable to this process. In concurrence with the head of the department and the inventor, the Committee recommends that the rights in this invention be released to the sponsoring agency, the United States Navy.

3. Agitator-incubator for aseptic culturing of virus-infected cells and tissue in liquid media — H. H. Thornberry, Professor of Plant Pathology, inventor. The apparatus was constructed to provide the growth of isolated plant tissue cultures under aseptic conditions in a chemically defined liquid medium with controlled temperature and aeration by agitation. In concurrence with the head of the department, the Committee recommends that the rights in the invention he released to the inventor.

4. Automatic recording light-scattering instrument — Hiroshi Mizukami, Graduate Student in Biophysics, inventor. The light-scattering instruments are designed so as to measure the ratio of the intensity of incident light I_0 and that of scattered light from a sample cell I. In general, the angular dependence of scattered light is measured with rotating either a photomultiplier or a minor system around the cell manually. After study and report by the University of Illinois Foundation, the Committee recommends release of the rights in this invention to the sponsoring agency, the United States Public Health Service.

5. Iron core electromagnet with windings of miobium – G. B. Yntema, Research Associate in Physics (1954), inventor. There are two potentially novel features in this design – the use of superconducting windings and the use of iron to augment the field possible with superconducting windings. After study and report by the University of Illinois Foundation, the Committee recommends the release of the rights of the University in this invention to the inventor.

6. Methods for generating hypersonic waves in liquids — Floyd Dunn, Associate Professor of Electrical Engineering, inventor. The novel features of the invention lie in the fact that the quarter wave matching sections of two methods considered enable a sufficiently high electric field gradient to be developed over the thickness of the piezoelectric plate such that the plate vibrates and thereby produces sound waves in the contiguous liquid. After study and report by the University of Illinois Foundation, the Committee recommends release of the rights of the University to the sponsoring agency, the United States Navy.

7. Non-contacting device for accurately locating the spin axis direction of a rotating object — Howard W. Knoebel, Research Associate Professor in the Coordinated Science Laboratory, and A. T. Nordsieck, Research Professor in the Coordinated Science Laboratory, inventors. The device employs two diametrically opposite photoelectric, magnetic, or electrostatic transducers which scan the surface of the rotating object and produce electrical signals in accordance with random surface texture or pattern material applied to the surface of the rotating object. After study and report by the University of Illinois Foundation, the Committee recommends that the rights of the University be released to the sponsoring agency, the United States Army Signal Corps.

Group B. In the judgment of the Committee, the inventions in this group are potentially patentable and may have some value. The Committee therefor recommends that the University's rights be released to the University of Illinois Foundation for further study, development, and possible patentable application.

1. Transistorized digital-to-analog converter — William J. Kopek, Research Assistant in the Coordinated Science Laboratory, and Jack Stifle, Research Assistant in the Coordinated Science Laboratory, inventors. This device utilizes switching techniques whereby constant voltage or constant current generators are switched into or out of a coupling network, and the sum of the voltages or currents produced by these generators at the output is the analog representation of the input digital level. (Under United States Army Signal Corps Contract.) 2. Internally reflecting confocal resonant system — Don F. Holshouser, Associate Professor of Electrical Engineering, inventor. This resonator is generally composed of two opposing reflecting elements with the active medium, either a crystal or a gas, filling the region between. It is useful for frequencies in which wavelengths are short compared to physical dimensions. (Under United States Air Force Contract.)

3. Magnetic pulse integrator — James L. Divilbiss, Research Associate in the Coordinated Science Laboratory, inventor. The principle advantages of this circuit are (1) very large count ranges are possible; (2) nondestructive interrogation; (3) greater independence of setting pulse amplitude for a specified count range; (4) greater temperature independence; (5) device can be incremented both positively and negatively; and (6) count range — i.e., the number of set pulses required to bring the output to a specified level — can be adjusted without changing the setting pulse amplitude. (Under United States Army Signal Corps Contract.)

4. High temperature, high vacuum brazeable electrical feedthrough — Nicholas Vassos, Electronics Technician in the Coordinated Science Laboratory, inventor. The electrical feedthrough is a molybdenum sheet and molybdenum pin isolated electrically with Corning 1720 or Corning 1723 alumina silicate glass. (Under United States Army Signal Corps Contract.)

(Under United States Army Signal Corps Contract.) 5. Disposable tissue grinder — Deam H. Ferris, Associate Professor of Veterinary Pathology and Hygiene and Senior Member in the Center for Zoonoses Research, inventor. The novel feature is the disposability of the device since the time involved in cleaning and sterilizing the traditional mortar and pestle or tissue grinder greatly limits their use in multiple specimens or in the field. (Under United States Public Health Service Grant.)

Group C.

1. Passive element resonant levitation servo — Howard W. Knoebel, Research Associate Professor in the Coordinated Science Laboratory, inventor. This is a device to suspend objects in electric or magnetic fields without need of amplifiers. The principle is to use the characteristics of a resonant circuit to reverse the slope of the relationship between distance and field intensity. The technique is equally applicable to magnetic and electric field levitation devices.

The Committee has been advised by the University of Illinois Foundation that there is little likelihood of commercial development. The inventor does not wish to have the rights released to him and it is therefore recommended that the University's rights be released to the United States Army Signal Corps.

I concur in these recommendations.

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

REQUEST FOR RETURN OF GIFT

(3) Mrs. Nellie Voight Freeman of Mattoon, Illinois, a former member of the Board of Trustees, transferred a farm to the University by a deed recorded January 18, 1960, subject to the retention of a life estate in Mrs. Freeman and an additional life estate in her daughter, Mrs. Bernadine Freeman Bailey, 253 East Delaware Place, Chicago 11, Illinois. The land is located about seven miles north of Mattoon and includes approximately 218 acres. Mrs. Freeman passed away on October 14, 1962, and is survived by her daughter, Mrs. Bailey.

The deed provides that the farm is to be retained by the University for not less than fifty years after the deaths of the life tenants and is to be operated as an "example of good farming practice in the community in which it is located." During such period the income is to be used for educational purposes and thereafter the University may dispose of the property, retaining the proceeds of any sale of the farm as a perpetual endowment fund for the same purposes.

Prior to Mrs. Freeman's death, the University received the following request from the attorney for the two life tenants:

"Because of difficulties in leasing the land for farming, since prospective tenants are not interested in leasing the land and investing in improvements to farm the land because of the title which depends upon the uncertainty of the two life estates with the remainder in the University of Illinois, Mrs. Freeman would appreciate the return of her gift by the reconveyance of

the land to her, and will express her gratitude by making other gifts to the University of Illinois."

Subsequently the Legal Counsel advised the attorney that in his opinion compliance with the request for reconveyance was not within the power of the Board of Trustees as it would constitute a gift of public property without consideration other than an indefinite and unenforceable promise of future gifts. It was suggested to the attorney that the feasibility of the University joining with the life tenants in a lease to a prospective tenant be explored, but this alternative was not acceptable to the attorney, who requested that the matter be presented to the Board of Trustees for action, which request was repeated after the death of Mrs. Freeman.

The Legal Counsel states that he remains of the opinion that the Board has no legal right to comply with the request for reconveyance of the property since such would constitute a prohibited gift of public property. The Vice-President and Comptroller, and the Legal Counsel, therefore, recommend that the request be denied but that the attorney for the life tenants be advised of the University's continuing willingness to cooperate in solving the problem of securing tenants by joining in the negotiation of leases.

I concur.

On motion of Mr. Pogue, the foregoing recommendation was accepted and adopted as the action of the Board.

On motion of Mr. Swain, the Board adjourned.

A. J. JANATA Secretary HOWARD W. CLEMENT President