MEETING OF THE BOARD OF TRUSTEES

OF THE

UNIVERSITY OF ILLINOIS

March 18, 1964



The annual meeting of the Board of Trustees of the University of Illinois was held in the Illini Union, Urbana, Illinois, on Wednesday, March 18, 1964, beginning at 10:30 a.m. The date of this meeting had been changed by vote of the Board from the second Tuesday, March 10, to the third Wednesday, March 18.

President Howard W. Clement called the meeting to order and asked the Secretary to call the roll. The following members of the Board were present: Mr. Howard W. Clement, Mr. Irving Dilliard, Mr. Earl M. Hughes, Mr. Wayne A. Johnston, Mr. Theodore A. Jones, Mr. Ray Page, Mr. Harold Pogue, Mr. Timothy W. Swain, Mrs. Frances B. Watkins. Governor Otto Kerner and Mr. Kenney E. Williamson were absent.

Also present were President David D. Henry, Executive Vice-President and Provost Lyle H. Lanier, Dean Jack W. Peltason of the College of Liberal Arts and Sciences and Former Acting Provost, Vice-President Norman A. Parker, Chicago Undergraduate Division, Vice-President Joseph S. Begando, University of Illinois at the Medical Center, Chicago, Director C. S. Havens of the Physical Plant, Mr. C. E. Flynn, Assistant to the President and Director of Public Information, Mr. James J. Costello, Legal Counsel, Dr. Shannon McCune, Consultant to the President and to the Executive Vice-President and Provost, Mr. Earl W. Porter, Assistant to the President (Reports and Projects), Mr. Vernon L. Kretschmer, Director of Auxiliary Services, Mr. Donald C. Neville, Assistant to the Director of the Physical Plant; and the officers of the Board, Mr. R. R. Manchester, Treasurer, Mr. H. O. Farber, Comptroller, and Mr. A. J. Janata, Secretary.

ELECTION OF OFFICERS

The Board took up the special order of business for the annual meeting and Mr. Clement called for the election of officers.

President of the Board

Mr. Johnston nominated Mr. Clement; Mr. Pogue seconded the nomination.

Mr. Clement asked the Board to elect a temporary chairman for this election.

On motion of Mr. Johnston, Mr. Page was elected Chairman, Pro

Tempore, by acclamation and took the chair.

On motion of Mr. Pogue, the nominations were closed and the Secretary was ordered to record the unanimous ballot of the Board for the election of Mr. Howard W. Clement as President. The ballot was so cast, and Mr. Clement was declared elected as President of the Board, to serve until the next annual meeting of the Board in March, 1965, or until his successor shall have been elected.

He took the chair and addressed the Board briefly, summarizing the issues which have confronted the Board and the developments of University programs to which the Board has been a party since he was first elected as President of the Board in 1962.

Secretary of the Board

Mr. Swain nominated Mr. A. J. Janata; Mrs. Watkins seconded the nomination.

On motion of Mrs. Watkins, the nominations were closed, and Mr. Janata was declared elected Secretary of the Board, to serve until the next annual meeting of the Board in March, 1965, or until his successor shall have been elected.

Comptroller of the Board

Mr. Pogue nominated Mr. H. O. Farber; Mr. Swain seconded the nomination.

On motion of Mr. Swain, the Secretary was instructed to record the unanimous ballot of the Board for the election of Mr. Farber as Comptroller. The ballot was so cast and Mr. Farber was declared elected Comptroller, to serve until the next annual meeting of the Board in March, 1965, or until his successor shall have been elected.

Executive Committee

Mr. Pogue nominated Mr. Wayne A. Johnston and Mrs. Frances B. Watkins to serve as members of the Executive Committee, with the President of the Board as Chairman; Mr. Swain seconded the nominations.

On motion of Mr. Swain, the nominations were closed and the Secretary was instructed to record the unanimous ballot of the Board for the elections of Mr. Johnston and Mrs. Watkins to the Executive Committee. The ballot was so cast and Mr. Johnston and Mrs. Watkins were declared elected members of the Executive Committee, to serve until the next annual meeting of the Board in March, 1965, or until their successors shall have been elected.

DELEGATION OF SIGNATURES

Mr. Johnston offered the following resolution and moved its adoption:

Resolved, that the President and the Secretary of the Board of Trustees of the University of Illinois are authorized to delegate the signing of their names as President and Secretary, respectively, to vouchers to be presented to the Auditor of Public Accounts, and to warrants drawn on the Treasurer of the University, under the following conditions.

The President of the Board of Trustees is authorized to delegate to L. M. Dahlenburg, to R. N. Parker, and to E. M. Snyder in Urbana, to J. E. Osborn, to W. E. Cowart, and to H. O. Albers in Chicago, and to Edward F. Lis and to Helen Culbertson in Springfield, authority to sign his name as President of the Board of Trustees to vouchers against the Auditor of Public Accounts; and to C. C. De Long, to R. W. Zimmer, and to R. F. Wood in Urbana, and to J. E. Osborn, to W. E. Cowart, and to H. O. Albers in Chicago, authority to sign his name to warrants on the University Treasurer covering vouchers approved in accordance with regulations approved by the Board.

The Secretary of the Board of Trustees is authorized to delegate to Virginia J. Hendrix, to Catherine Cacioppo, to Earl W. Porter, to George H. Bargh, and to Everett G. Smith in Urbana; and to G. R. Moon, to Velma M. Davis, to Helen Wyle, to Margaret Mayer, and to Mrs. Antoinette Gyorke in Chicago, authority to sign his name as Secretary of the Board of Trustees to vouchers against the Auditor of Public Accounts and to warrants on the University Treasurer, covering vouchers approved in accordance with regulations of the Board. The Secretary of the Board of Trustees is also authorized to delegate to Addalein C. Hawk and to Lean C. Ryan in Springfield, authority to sign his name as Secretary of the Board of Trustees on vouchers against the Auditor of Public Accounts approved in accordance with the regulations of the Board. These authorizations are to continue in effect until the Auditor of Public Accounts has been supplied with specimen signatures of succeeding officers of this Board. And be it further

Resolved, that the First National Bank of Chicago as a designated depositary of R. R. Manchester, Treasurer of this corporation, be and it (including its correspondent banks) is hereby requested, authorized, and directed to honor checks, drafts, or other orders for the payment of money drawn in this corporation's name, including those drawn to the individual order of any person or persons whose name or names appear thereon as signer or signers thereof, when bearing or purporting to bear the facsimile signatures of the two following: Howard W. Clement, President, and A. J. Janata, Secretary; and the First National Bank of Chicago (including its correspondent banks) shall be entitled to honor and to charge this corporation for all such checks, drafts, or other orders, regardless of by whom or by what means the facsimile signature or signatures thereon may have been affixed thereto, if such facsimile signature or signatures resemble the facsimile specimens duly certified to or filed with the First National Bank of Chicago by the Secretary or other officer of this corporation. And be it further

Resolved, that the Auditor of Public Accounts is hereby authorized and directed to honor vouchers bearing facsimile signatures of the President and the Secretary of the Board of Trustees of the University of Illinois if such facsimile signatures resemble the facsimile specimens duly certified to or filed with the Auditor of Public Accounts by the Secretary.

The resolution was unanimously adopted.

STANDING COMMITTEES FOR 1964-65

The President of the Board appointed the following standing committees to serve during the year 1964-65, or until their successors have been appointed following the annual meeting of the Board of Trustees in March, 1965.

The President of the University is a member, ex officio, of all standing committees.

Agriculture

EARL M. HUGHES, Chairman WAYNE A. JOHNSTON HAROLD POGUE

Alumni

THEODORE A. JONES, Chairman EARL M. HUGHES MRS. FRANCES B. WATKINS

Athletic Activities

HAROLD POGUE, Chairman IRVING DILLIARD MRS. FRANCES B. WATKINS

Buildings and Grounds

HAROLD POGUE, Chairman IRVING DILLIARD EARL M. HUGHES WAYNE A. JOHNSTON TIMOTHY W. SWAIN KENNEY E. WILLIAMSON

Chicago Departments

MRS. FRANCES B. WATKINS, Chairman WAYNE A. JOHNSTON THEODORE A. JONES

Finance

KENNEY E. WILLIAMSON, Chairman THEODORE A. JONES TIMOTHY W. SWAIN

General Policy

WAYNE A. JOHNSTON, Chairman THEODORE A. JONES HAROLD POGUE TIMOTHY W. SWAIN MRS. FRANCES B. WATKINS KENNEY E. WILLIAMSON

Nonacademic Personnel Also representatives on the Civil Service Merit Board

Civil Service Merit Board
TIMOTHY W. SWAIN, Chairman
EARL M. HUGHES
HAROLD POGUE

Patents

TIMOTHY W. SWAIN, Chairman IRVING DILLIARD THEODORE A. JONES

Student Welfare and Activities IRVING DILLIARD, Chairman THEODORE A. JONES MRS. FRANCES B. WATKINS

State Universities Retirement System Representatives

EARL M. HUGHES HAROLD POGUE KENNEY E. WILLIAMSON

State Board of Higher Education Representatives HOWARD W. CLEMENT WAYNE A. JOHNSTON

MASTER PLAN FOR HIGHER EDUCATION IN ILLINOIS

Mr. Johnston offered the following resolution and moved its adoption:

The action of the Board of Higher Education on March 3, 1964, in approving a provisional Master Plan for Higher Education in Illinois is hereby endorsed by the Board of Trustees of the University of Illinois. This Board and the officers of the University have long urged that comprehensive planning for higher education in Illinois be undertaken on a professional basis.

The provisional plan is undergoing revision, at the direction of the Board of Higher Education, and the Trustees do not have the precise language of the revised plan and its official interpretation before them. However, it is the view of the Board of Trustees that the basic recommendations are consistent with the history of higher education in this state and with the main lines of professional opinion on the problems of higher education.

The main items of the provisional plan take into account the existing strengths of the institutions and provide flexible machinery for growth with effective planning and coordination. Moreover, the premises and guidelines are sound and the definition of the tasks incisive and accurate.

The construction inventory—including scope, costs, and priorities—requires further analysis; it appears to be inadequate for the tasks outlined. The estimates on operating costs are conservative. These reservations on the adequacy of the proposed financing, however, do not modify the essence of the plan and the

Board of Trustees commends the provisional recommendations to the attention of the people of the state.

This resolution was unanimously adopted.

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.

AWARD OF CERTIFIED PUBLIC ACCOUNTANT CERTIFICATES

(1) The Committee on Accountancy recommends that the certificate of Certified Public Accountant be awarded to the following candidates who passed the standard written examination given in November, 1963, and who have fulfilled all other legal requirements under Sections 1, 2, and 3 of the Illinois Accountancy Act of 1943 as amended.

CHARLES RICHARD BAERSON, Skokie, Illinois

Archie Joseph Bakay, Evanston, Illinois

GERALD TODD BALL, DeKalb, Illinois FREDERICK HENRY BALLUFF, JR., Broadview, Illinois

JOSEPH WILLIAM BEARD, Chicago, Illinois

ROGER LEIGHTON BECK, Chicago, Illinois

Jon Linn Beermann, Chicago, Illinois Robert George Duncan Bennett, Skokie, Illinois

ISIDORO BERKMAN, Chicago, Illinois Donald Hugh Bernstein, Chicago,

Illinois James Edwin Brands, Park Forest,

Illinois Landon Jay Brazier, Chicago, Illinois John DeVere Brockhouse, Park

Ridge, Illinois JAMES BARRY BRODY, Chicago, Illinois FRANK LAVERNE BROKAW, Skokie, Illi-

nois
ROBERT BORUCH BROMBERG, Chicago,

Illinois
MARCARET MARY GORNY BUTSHACK

MARGARET-MARY GORNY BUTSBACK, Chicago, Illinois

RONALD JOSEPH CARLSON, AUTOTA, Illinois

RICHARD JOHN CARROLL, Chicago, Illinois THOMAS STEPHEN CARROLL, Chicago,

Illinois PAUL BENTON CARTER, Park Forest,

Illinois Jerry Edwin Chancellor, Chicago,

Illinois LEON ROY CHEESBROUGH, Chicago, Illinois Horn Chen, Chicago, Illinois

CHARLES DELBERT CHRISTENSEN, JR., Chicago, Illinois

ROBERT STERLING CLOW, Naperville, Illinois

MARTIN DAVID COHEN, Lincolnwood, Illinois

Sidney Henry Cohen, Chicago, Illinois

EDWARD JOHN COMAN, JR., Chicago, Illinois

James Samuel Cox, Park Forest, Illinois

Donald Eugene Craft, Rockford, Illinois

DAVID BRUCE DAHL, Skokie, Illinois WILLIAM JOSEPH DEKOKER, Rockford, Illinois

ROBERT JOSEPH DELACRUZ, Chicago, Illinois

WILLIAM ROBERT DELANO, Park Ridge, Illinois

David Lawrence DeMotte, Villa Park, Illinois

Joseph John Devereux, Chicago, Illinois

WILLIAM ROBERT DOUGLAS, Skokie,
Illinois

GILBERT DAVID DRUKER, Chicago, Illinois

JOSEPH CHARLES DUBOW, Chicago, Illinois

DAVID WILLARD DUSENDSCHON, Danville, Illinois

RICHARD JOHN EGAN, Northbrook, Illinois

MAURICE MONTE EGERT, Chicago, Illinois

RUDOLPH PATRICK ENGSTROM, Villa Park, Illinois THOMAS GEORGE ERRICO, Highland Park, Illinois

VICTOR MILES EVANS, Siluis, Illinois LARRY DOUGLAS EWALD, Rochelle, Illi-

JERRY DAYNE FARR, Henry, Illinois DAVID ALLEN FELTS, Villa Park, Illinois

DAVID ROBERT FELTS, Decatur, Illinois Yvon Evelyn Fermazin, St. Charles, Illinois

RICHARD MATTHEW FIGURA, Chicago, Illinois

KENNETH NORMAN FINFER, Chicago, Illinois

Bruce Harold Fossler, Evanston, Illinois

RICHARD IVES FREMGEN, Wheaton, Illinois

Donald Charles Freund, Crystal Lake, Illinois

BARRY ALAN FRIEDMAN, Chicago, Illinois

MARTIN BERNARD FRIEDMAN, Des Plaines, Illinois

Plaines, Illinois Ronald Allen Friedman, Chicago,

Illinois Gerald Frishman, Chicago, Illinois Maribelle Gannon, Chicago, Illinois Raymond Walter Garrigan, Chicago,

Illinois LAWRENCE GERBER, Chicago, Illinois JAMES LOUIS GLASSCOCK, Park Ridge, Illinois

ALAN JOEL GLAZER, Chicago, Illinois DAVID GLICKSTEIN, Chicago, Illinois EARL DONALD GOLDENBERG, Chicago,

Illinois STUART RUSSELL GOLDSAND, Chicago, Illinois

ROGER EDWIN GORLICKI, Chicago, Illinois

PAUL JAMES GRIFFITHS, Palatine, Illinois

John Miller Groom, Evanston, Illinois RAYMOND MARTIN GROTHAUS, Chicago Heights, Illinois

EDWIN JOHN GUNLOCK, Chicago, Illinois

RONALD RAY GUTHOFF, Normal, Illinois

WAYNE WILLIAM HAACK, Cicero, Illinois

RAYMOND ALOYSIUS HAFERTEPE, Stone Park, Illinois

RICHARD JAMES HALL, Downers Grove, Illinois

Geoffrey William Hands, Lake Forest, Illinois

RICHARD DEE HANKS, Decatur, Illinois DAVID PAUL HARTMAN, Chicago, Illinois SEAN JOSEPH HASTINGS, Chicago, Illinois

JOHN JAMES HAUGHEY, Chicago, Illinois THOMAS EDWIN HAUPT, Chicago, Illi-

Frank Kenneth Heap, Evanston, Illinois

Allen Roy Hochfelder, Chicago, Illinois

Paul Herman Hoffmeister, Chicago, Illinois

Arnold Sherwin Horwich, Skokie, Illinois

JAMES PAUL HUBER, Chicago, Illinois Joseph Frank Hugery, Chicago, Illinois

LARRY DEAN INHELDER, Chicago, Illinois

WARREN ALLEN IRELAND, Hinsdale, Illinois

Norman Louis Israel, Chicago, Illinois

JAMES KENT JEANBLANC, Franklin Grove, Illinois

Robert Joseph Jirovec, Cleveland, Ohio

ALAN HARRY JOHNSON, Evanston, Illinois

MICHAEL IRVING KAPLAN, Chicago, Illinois

RICHARD LEE KEYSER, Champaign, Illinois

RONALD DEAN KINDWALL, Evanston, Illinois

HAROLD NORMAN KLOPMAN, Chicago, Illinois

JAMES BERNARD KNOLL, Park Forest,
Illinois

ROBERT EDWIN KOLB, Riverside, Illinois JAMES MITCHELL KOLTVEIT, Rock Island, Illinois

MARTIN JÉRRY KOZAK, Chicago, Illinois DAVID CHARLES KRAKAUER, Highland Park, Illinois

PAUL FRIESTAD KRIES, Westchester, Illinois

RONALD DANIEL KUBACKI, Oak Park, Illinois

DENNIS WADE KUEBER, Homewood, Illinois

LAWRENCE FRANCIS KUNKLER, Villa Park, Illinois

Jeffrey Mayer Kuznitsky, Chicago, Illinois

ROBERT JOSEPH LADECKY, Chicago, Illinois

DAVID LEE LANDSITTEL, Chicago, Illinois

GEORGE HENRY LANE, Chicago, Illinois Lyle Joseph Laveau, Park Forest, Illinois THEODORE MAX LAWRENCE, Harrisburg, Illinois

John Bernard Lechner, Chicago, Illi-

HENRY GERALD LEE, Springfield, Illinois

MILLER BENTON LEE, Mount Prospect, Illinois

BILLY LEE LEGG, Springfield, Illinois HOWARD LEON, Chicago, Illinois MARVIN IRA LEVINE, Chicago, Illinois LESTER WALTER LINCKE, Riverdale,

Illinois Joanne Josephine Lipinski, Chicago,

Illinois
WILLIAM BURKE LIVEY, Morton, Illinois
EDWIN ARNOLD LOHMEIER, Chicago,

Illinois THOMAS JOSEPH LOOBEY, Lincoln, Illi-

nois
DAVID JAMES LYONS, Chicago, Illinois
MARTIN LEO MARENERE Chicago

MARTIN LEO MADENBERG, Chicago, Illinois

Donald Emery Malcom, Belleville, Illinois

Neal Alan Mancoff, Chicago, Illinois Lawrence Manelis, Skokie, Illinois Raymond Peter Marschak, Chicago, Illinois

LESLIE ROBERT MARSHALLSAY, Rockford, Illinois

ROBERT LEO MARTI, Highland, Illinois BRUCE WILLIAM MATSON, Roselle, Illinois

ROBERT LEE McAdams, Chicago, Illinois

Joseph Ignatius McCabe, Jr., Chicago, Illinois

Edward Stephen McGowan, Bloomington, Illinois

SHERMAN JAMES MILLER, Peoria, Illinois

JAMES CURT MINGLE, Pekin, Illinois DONALD WARREN MOODY, Elmhurst, Illinois

Joseph Francis Mooney, Park Forest, Illinois

GEORGE NEWELL MORGAN, Elgin, Illinois

LLOYD BARRY MORGAN, Chicago, Illi-

ALLEN RAY MORRIS, Park Forest, Illinois

LARRY DEAN MULCAHY, Evanston, Illinois

Louis Gene Munin, Chicago, Illinois Enid Nader, Chicago, Illinois

CLARK MORROW NELSON, La Grange, Illinois

JAMES NEWELL O'CONNOR, Zion, Illi-

John Joseph Owens, Chicago, Illinois

MARTIN JAMES PALUGA, Chicago, Illinois

STANLEY HOWARD PANTOWICH, Chicago, Illinois

ROBERT JAMES PAUSIG, Rockford, Illinois

CARL LYLE PETERSON, Lombard, Illinois THOMAS EDWARD PETERSON, Chicago, Illinois

MORTON B. PHILIP, Chicago, Illinois JOHN ASHBEL PORTER, Bellwood, Illi-

WILLIAM CREGO PRESCOTT, Rockford, Illinois

RICHARD EDWARD PYBURN, Downers Grove, Illinois

RICHARD MALCOLM RADWAY, Chicago, Illinois

Lawrence Sherwin Revsine, Chicago, Illinois

Donald Leo Reynolds, Jr., Evanston, Illinois

Madeline Jeanette Roberts, Chicago, Illinois

WILLIAM EDWARD ROBINSON, Franklin Park, Illinois GORDON LEE ROSENBERGER, Chicago,

GORDON LEE ROSENBERGER, Chicago,
Illinois

RICHARD JOSEPH ROTH, Olney, Illinois JERALD LEON ROTHCHILD, Lincolnwood, Illinois

Sanford Rubens, Chicago, Illinois John Lee Rumsfield, Park Ridge, Illinois

TIMOTHY JOHN RYAN, Chicago, Illinois EDWIN JOSEPH RYDEL, Chicago, Illinois MANDEL TOBY SCHENK, Chicago, Illinois

ERWIN JACOB SCHMIDT, Oak Park, Illinois

GARY JAY SCHWARTZ, Chicago, Illinois Roy Irwin Schwartz, Chicago, Illinois

SAMUEL ALLEN SCHWARTZ, Chicago, Illinois

WILLIAM AUGUST JOHN SCHWARTZ, Chicago, Illinois

DAVID BRUCE SELIG, Chicago, Illinois GERALD J. SENESCU, Chicago, Illinois LESTER SHAPIRO, Chicago, Illinois

LESTER SHAPIRO, Chicago, Illinois THOMAS JOSEPH SHEEHY, Chicago, Illinois

LLOYD EDWARD SHEFSKY, Chicago, Illinois

THOMAS ALBERT SKALITZKY, Oak Lawn, Illinois

Janet Wood Skoglund, Lincolnwood, Illinois

WILLIAM KEITH SMUTNY, Chicago, Illinois

RICHARD RAY SNYDER, Oak Park, Illinois

JOSEPH HENRY SOBIESKI, Chicago, Illinois

RICHARD CHARLES SPINGOLA, Chicago, Illinois

GUSTAV ALFRED STRASSBURGER, Chicago, Illinois EDWARD LEON STREIT, Crystal Lake,

Illinois

JOSEPH ROGER TARDIF, Berkeley, Illi-

Stephen Martin Taxe, Chicago, Illi-

JAMES ORRIN TEETER, Westchester, Illinois

DONALD RICHARD TELKAMP, Lake Zurich, Illinois

Melvin George Thomas, Chicago, Illi-

IAN THOMSON, Evanston, Illinois JOHN CULLEN TRUE, Chicago, Illinois NEAL ROBERT TYSON, Chicago, Illinois TERRY DOUGLAS UDDENBERG, Chicago, Illinois

CHARLES WILLIAM VOIGTS, Joliet, Illinois

JOHN THOMAS WALSH, Chicago, Illi-

JAMES JOSEPH WARD, Park Ridge. Illinois

RAYMOND MARION WEEKS, Aurora. Illinois

VAN EMAN WELLS, Mount Prospect. Illinois

IRVING WILLIAM WENDT, Chicago, Illinois

MERRILL JOEL WERTHEIMER, Chicago, Illinois

DONALD DEAN WHITE, North Riverside, Illinois

JAMES WINIKATES, Chicago, Illinois HAROLD DON WIRTH, Peoria, Illinois JOHN HUBERT WOLTER, Hinsdale, Illi-

nois DALE WRIGHT, Edward Western Springs, Illinois

RICHARD EUGENE YANKE, SR., Elmhurst, Illinois

Frank Mortimer Young, Oak Park, Illinois

JAMES NICHOLAS ZALOUBEK, Downers Grove, Illinois

RICHARD HUEBNER ZEDER, Wilmette, Illinois

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

Name

RONALD JOSEPH HARLOW THOMAS ANDREW KINCANON GLEN RICHARD OSTDIEK GEORGE HALLETT SHELTON RUSSELL URQUHART

Address

New York, New York Centralia, Illinois Morton Grove, Illinois Wilmette, Illinois Wilmette, Illinois

State from Which They Obtained Certificates

New York Virginia Nebraska Louisiana New York

I concur.

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

APPOINTMENTS TO THE BOARD OF DIRECTORS OF THE ATHLETIC ASSOCIATION

(2) Submitted herewith are nominations for appointments to the Board of Directors of the Athletic Association of the University of Illinois, to become effective as of today and to continue until the next annual meeting of the Board of Trustees of the University of Illinois in 1965, or until the successors of these Directors have been appointed.

Faculty

PAUL M. VAN ARSDELL, Professor and Head of the Department of Finance in the College of Commerce and Business Administration (reappointment; has served since 1961).

GEORGE W. WHITE, Professor and Head of the Department of Geology (reappointment; has served since 1962).

LESLIE A. BRYAN, Professor of Management and Director of the Institute of Aviation (reappointment; Director Bryan is also the University of Illinois Faculty Representative in the Western Intercollegiate Conference, and his appointment as a faculty representative on the Board of Directors of the Athletic Association is an ex officio assignment).

H. S. STILLWELL, Professor and Head of the Department of Aeronautical and Astronautical Engineering (new appointment).

Alumni Association

GEORGE R. CATLETT, Class of 1939; partner in the firm of Arthur Andersen and Company, Certified Public Accountants, 120 South LaSalle Street, Chicago (reappointment; Mr. Catlett has been serving on the Board since March, 1961).

CHARLES C. DADANT, Class of 1941, Member of the firm of Dadant and Sons, Inc., Hamilton (reappointment; Mr. Dadant has been serving on the Board since March, 1963).

CHARLES H. STOTZ, Class of 1939, Executive Secretary, West Suburban Young Men's Christian Association, La Grange (new appointment).

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

HONORARY DEGREES

(3) The University Senates have recommended that honorary degrees be conferred upon the following and on the occasions indicated.

Adlai Ewing Stevenson, United States Representative to the United Nations, and former Governor of Illinois, the degree of Doctor of Humane Letters, to be conferred at the Honors Day Convocation on May 1, 1964, at which Ambassador Stevenson will give the Honors Day address.

VIRGIL MELVIN HANCHER, President of the State University of Iowa, the degree of Doctor of Arts, to be conferred at the Commencement Exercises for graduates of the colleges at the Medical Center in Chicago on June 11, 1964,

at which President Hancher will give the Commencement address.

W. Albert Noves, Jr., Distinguished Professor of Chemistry, Retired, at the University of Rochester; former Head of the Department of Chemistry, former Dean of the Graduate School, and former Acting Dean of the College of Arts and Sciences at the University of Rochester; and now Professor at the University of Texas, the degree of Doctor of Science, to be conferred at the Commencement Exercises at Urbana-Champaign on June 13, 1964. Dr. Noyes will deliver the Commencement address on June 13. He is the son of the late Dr. William Albert Noyes, Sr., who was Head of the Department of Chemistry and Chemical Engineering from 1907-26.

Ludwig Mies van der Rohe, distinguished architect, former Director of the School of Architecture at the Illinois Institute of Technology, now retired, the degree of Doctor of Fine Arts, to be conferred at the Commencement Exercises at Urbana-Champaign on June 13, 1964.

I concur in the recommendations of the Senates.

On motion of Mr. Dilliard, these degrees were authorized, as recommended.

APPOINTMENTS TO THE FACULTY

- (4) 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. PAUL CHUNG, Assistant Professor of Prosthodontics, College of Dentistry, on two-fifths time, for six months from February 1, 1964, at a salary of \$2,200.

2. ROBERT O. CRUMMEY, Assistant Professor of History, beginning September 1, 1964, at an annual salary of \$7,400.

 Anthony J. Diekema, Assistant Dean of Admissions and Records, Medical Center, beginning August 1, 1964, at an annual salary of \$12,000.

4. ROBERT W. EDWARDS, Assistant Professor of Architecture, beginning March

1, 1964, at an annual salary of \$8,000.

5. MARGARET Y. GEORGE, Assistant Professor of Social Sciences, Chicago Undergraduate Division, for the second semester of 1963-64, at a salary of \$3,500.

6. EMILY S. GIRAULT, Assistant Professor of Secondary and Continuing Educa-

tion, beginning September 1, 1964, at an annual salary of \$8,600.

7. WILLIAM J. GREEK, Clinical Assistant Professor of Public Health, College of

Dentistry, beginning February 1, 1964, without salary.

8. J. Francis Hartmann, Research Professor of Neurobiology, College of Medicine, for one year from September 1, 1964, without salary.

9. Hans Hennecke, Visiting Associate Professor of Germanic Languages, for the second semester of 1963-64, at a salary of \$5,000.

10. Solomon B. Levine, Professor of Labor and Industrial Relations, 45 per cent time, on indefinite tenure, and Director of the Asian Studies Program, 55 per cent time, from March 1, 1964, through August 31, 1965, at an annual salary of \$14,300. This appointment is a change in status to formalize his assignment as Director of the Asian Studies Program which he has been administering on a temporary basis since September 1, 1963.

11. WILLIAM A. LONGACRE II, Visiting Assistant Professor of Anthropology, for the second semester of 1963-64, at a salary of \$3,750.

12. ALUN O. MORRIS, Visiting Assistant Professor of Mathematics, for one year from September 1, 1964, at an annual salary of \$8,500.

- 13. Joseph P. Murtha, Associate Professor of Civil Engineering, on one-half time, and Director of the Water Resources Center, Graduate College, on one-half time, beginning March 1, 1964, at an annual salary of \$10,200. This appointment is a change in status to include his assignment as Director of the Water Resources Center in the Graduate College, recently established by the Board of Trustees.
- 14. John A. Tesk, Assistant Professor of Engineering Sciences, Chicago Undergraduate Division, beginning February 1, 1964, at an annual salary of \$8,250.

 15. WILMOT A. THORNTON, Assistant Professor of Zoonotic Ecology, Department
- of Veterinary Pathology and Hygiene, and Associate Member of the Center for Zoonoses Research, beginning May 15, 1964, at an annual salary of
- \$10,500.

 16. COLIN G. Webb, Assistant Extension Editor with rank of Assistant Professor, College of Agriculture, Agricultural Experiment Station, and Cooperative Extension Service in Agriculture and Home Economics, for one year from 1964 to 1964 March 1, 1964, at a salary of \$10,000.

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

DEANSHIP OF THE COLLEGE OF LIBERAL ARTS AND SCIENCES

(5) On nomination of a special committee appointed for this purpose, and after consultation with the Executive Committee of the College of Liberal Arts and Sciences, I recommend the appointment of Dr. Robert W. Rogers, Professor and Head of the Department of English, as Professor of English on indefinite tenure and Dean of the College of Liberal Arts and Sciences beginning July 1, 1964, at an annual salary of \$23,500 on a twelve-month service basis. The appointment as Dean will be from July 1, 1964, through August 31, 1965, which is consistent with the statutory provisions of biennial tenure of deans, such appointments usually coinciding with the fiscal biennium.

The Executive Vice-President and Provost and the Acting Dean of the

Graduate College support this recommendation.

On motion of Mr. Swain, this appointment was approved.

DEANSHIP OF COLLEGE OF EDUCATION

(6) Following consultations with a search committee² appointed to make recommendations of candidates for the position of Dean of the College of Education and with the Executive Committee of the College, I recommend the appointment of Dr. Rupert N. Evans, presently Professor of Vocational and Technical Education and Associate Dean of the College, as Dean of the College of Education beginning September 1, 1964, at an annual salary of \$20,000 on a twelve-month service basis.

Dr. Evans will continue to hold the rank of Professor on indefinite tenure. The appointment as Dean is for one year from September 1, 1964; and thereafter

¹ Professors Max H. Fisch, Department of Philosophy, Chairman; Edward H. Davidson, Department of English; Ralph T. Fisher, Jr., Department of History; Donald R. Hodgman, Department of Economics; Herbert A. Laitinen, Department of Chemistry and Chemical Engineering; and John R. Laughnan, Department of Botany.
² Professors J. Thomas Hastings, Department of Educational Psychology and Office of Educational Testing, Chairman; R. Will Burnett, Department of Secondary and Continuing Education; Lloyd G. Humphreys, Department of Psychology; John E. McGill, Department of Elementary Education; Joseph B. Casagrande, Department of Anthropology; and B. Othanel Smith, Bureau of Educational Research.

subsequent appointments as Dean will be for two-year periods consistent with the standard, statutory biennial tenure for college deans.

The appointment of Professor Evans will fill the vacancy which will be created by the retirement of Dean Alonzo G. Grace at the end of the current

academic year.

The Executive Vice-President and Provost and the Acting Dean of the

Graduate College concur in this recommendation.

On motion of Mr. Page, this appointment was approved.

HEADSHIP OF THE DEPARTMENT OF SLAVIC LANGUAGES AND LITERATURES

(7) The Dean of the College of Liberal Arts and Sciences recommends the appointment of Dr. Lew R. Micklesen, presently Visiting Professor at the University of Colorado, as Professor on indefinite tenure and Head of the Department of Slavic Languages and Literatures beginning September 1, 1964, at an annual salary of \$17,000.

This appointment will fill the vacancy created by the resignation of Professor R. E. Matlaw, and is submitted after consultation with all appropriate members of the faculty of the Department. It is concurred in by the Acting Dean of the Graduate College and the Executive Vice-President and Provost.

I recommend approval.

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

HEADSHIP OF THE DEPARTMENT OF PHILOSOPHY AT THE CHICAGO UNDERGRADUATE DIVISION

(8) The Dean of the College of Liberal Arts and Sciences at the Chicago Undergraduate Division and the Vice-President for the Division recommend the appointment of Dr. (Mrs.) Ruth B. Marcus, presently a National Science Foundation Fellow (on leave of absence as Associate Professor at Roosevelt University), as Professor of Philosophy on indefinite tenure and Head of the Department of Philosophy at the Chicago Undergraduate Division beginning September 1, 1964, at an annual salary of \$15,000 on a nine-month (academic year) service basis.

This appointment is unanimously recommended by a special search committee¹ and is submitted after consultation with appropriate members of the Department. The Executive Vice-President and Provost and the Acting Dean of the Graduate

College concur.

I recommend approval.

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

CHAIRMANSHIP OF THE DEPARTMENT OF ARCHITECTURE AT THE CHICAGO UNDERGRADUATE DIVISION

(9) The Dean of the College of Architecture and Art and the Vice-President for the Chicago Undergraduate Division recommend the appointment of Donald D. Hanson, presently Associate Professor in the Department of Architecture at Urbana, as Associate Professor of Architecture on indefinite tenure and Chairman of the Department of Architecture at the Chicago Undergraduate Division for one year, beginning September 1, 1964, at an annual salary of \$13,100 for services during each academic year.

This appointment will fill the vacancy created by the retirement of Professor H. B. McEldowney, Head of the Department and Assistant Dean of the College, at the end of the second semester. The recommendation is submitted after consultation with the appropriate members of the faculty of the Department of Architecture and is concurred in by the Acting Dean of the Graduate College and the Executive Vice-President and Provost.

I recommend approval.

On motion of Mr. Swain, this appointment was approved.

¹ Stanley L. Jones, Professor of History; Kenneth M. Madison, Professor of Biology; Mrs. Sandra L. Bartky, Instructor in Philosophy; all at the Chicago Undergraduate Division; and Bernard J. Diggs, Professor and Chairman of the Department of Philosophy at Urbana.

SABBATICAL LEAVES OF ABSENCE, 1964-65

(10) I recommend that the following members of the staff be given sabbatical leaves of absence during the academic year 1964-65 in accordance with the provisions of the University of Illinois Statutes and on the terms and for the periods indicated.

In accordance with the established procedure, the programs of research, study, and travel for which leaves are requested have been examined by the University Research Board, which advises the President in such matters, and by the Executive Vice-President and Provost, who concurs.

College of Agriculture

Administration

CECIL D. SMITH, Assistant Dean of the College of Agriculture with rank of Professor, six months beginning July 1, 1964, full pay.

Department of Agricultural Economics

NORMAN G. P. KRAUSZ, Professor of Agricultural Law, six months beginning August 1, 1964, full pay.

Department of Agricultural Engineering

WENDELL BOWERS. Associate Professor of Agricultural Engineering, six months beginning October 1, 1964, full pay.

Donald G. Jedele, Associate Professor of Agricultural Engineering, full year

beginning September 1, 1964, one-half pay, or six months beginning January 1, 1965, full pay; full-year leave contingent upon receipt of supplementary financial aid.

Department of Agronomy

SAMUEL R. ALDRICH, Professor of Soil Fertility Extension, six months beginning

July I, 1964, full pay.

ROBERT DALE SEIF, Associate Professor of Biometry, six months beginning September 1, 1964, full pay.

Department of Dairy Science

ROBERT W. TOUCHBERRY, Professor of Genetics, six months beginning February 1, 1965, full pay.

MEYER J. WOLIN, Associate Professor of Bacteriology, full year beginning September 1, 1964, one-half pay; leave contingent upon receipt of supplementary financial aid.

Department of Horticulture

Frank W. Owen, Associate Professor of Horticulture, six months beginning September 1, 1964, full pay.

Department of Plant Pathology

ARTHUR L. HOOKER, Professor of Plant Pathology and of Agronomy, full year beginning September 1, 1964, one-half pay.

College of Commerce and Business Administration

Department of Accountancy

GERALD D. BRIGHTON, Associate Professor of Accountancy, first semester, full

DONALD H. SKADDEN, Professor of Accountancy, second semester, full pay.

Department of Economics

DWIGHT P. FLANDERS, Professor of Economics, second semester, full pay.

HORACE M. GRAY, Professor of Economics, second semester, full pay.

WILLIAM A. NEISWANGER, Professor of Economics, second semester, full pay.

Department of Finance

ROBERT A. HEDGES, Associate Professor of Finance, second semester, full pay.

College of Education

DAVID P. AUSUBEL, Professor of Educational Psychology, Bureau of Educational Research, first semester, full pay.

Kenneth B. Henderson, Professor of Secondary and Continuing Education,

second semester, full pay.

HENRY F. KAISER, Professor of Educational Psychology, Bureau of Educational Research, and Professor of Psychology, six months beginning March 1, 1965, full pay.

MERLE M. OHLSEN, Professor of Educational Psychology, first semester, full pay.

College of Engineering

Coordinated Science Laboratory

DANIEL ALPERT, Director of Coordinated Science Laboratory and Professor of Physics, six months beginning January 1, 1965, full pay.

RICHARD M. BROWN, Research Professor in the Coordinated Science Laboratory and Research Professor of Physics and of Electrical Engineering, six months from October 1, 1964, full pay, or full year from September 1, 1964, one-half pay.

Department of Electrical Engineering

WILLIAM R. ASHBY, Professor of Electrical Engineering, six months from September 1, 1964, one-half pay.

GEORGES A. DESCHAMPS, Professor of Electrical Engineering, first semester, full pay.

LADISLAS GOLDSTEIN, Professor of Electrical Engineering, first semester, full pay.

Department of Mechanical and Industrial Engineering

GEORGE W. HARPER, Professor of Mechanical Engineering, second semester, full

Department of Physics

FELIX T. ADLER, Professor of Physics and of Nuclear Engineering, second

semester, full pay.
FREDERICK C. Brown, Professor of Physics, full year beginning September 1, 1964, one-half pay; leave contingent upon receipt of supplementary financial

RUDOLF HAAG, Professor of Physics, first semester, one-half pay.

JAMES S. KOEHLER, Professor of Physics, second semester, full pay.

RALPH O. SIMMONS, Associate Professor of Physics, second semester, full pay.

College of Fine and Applied Arts

Department of Architecture

GRANVILLE S. KEITH, Professor and Chairman of Department of Architecture, second semester, full pay.

HAROLD C. YOUNG, Associate Professor of Architecture, first semester, full pay.

Department of Art

GLENN R. BRADSHAW, Professor of Art, first semester, full pay.

NICHOLAS BRITSKY, Professor of Art, full year beginning September 1, 1964, one-half pay, or second semester, full pay; full-year leave contingent upon receipt of supplementary financial aid.

James D. Hogan, Professor of Art, second semester, full pay. NICOLA ZIROLI, Professor of Art, first semester, full pay.

Department of City Planning and Landscape Architecture

WALTER M. KEITH, Professor of Landscape Architecture and Director of Robert Allerton Park, first semester, full pay.

School of Music

DOROTHY E. CLARK, Associate Professor of Music and Counselor in the Student Counseling Service, second semester, full pay. Hubert Kessler, Professor of Music, second semester, full pay.

EVERETT D. KISINGER, Associate Professor of Music and Assistant Director of University Bands, second semester, full pay.

JACK H. McKenzie, Associate Professor of Music and of Bands, first semester. full pay.

Souling Stravinsky, Professor of Music, second semester, full pay. Ludwig E. Zirner, Professor of Music, second semester, full pay.

College of Journalism and Communications

Department of Advertising

HUGH W. SARGENT, Associate Professor of Advertising, full year beginning September 1, 1964, one-half pay.

Institute of Communications Research

CHARLES E. OSGOOD, Research Professor and Director of the Institute of Communications Research and Professor of Psychology, first semester, full pay.

Department of Journalism

GLENN HANSON, Associate Professor of Journalism, second semester, full pay.

Institute of Labor and Industrial Relations

WALTER H. FRANKE, Associate Professor of Labor and Industrial Relations, full year beginning September 1, 1964, one-half pay, or six months from September 1, 1964, full pay; full-year leave contingent upon receipt of supplementary financial aid.

MILFERD LIEBERTHAL, Associate Professor of Labor and Industrial Relations, six months from September 1, 1964, full pay.

HARRY C. TRIANDIS, Associate Professor of Labor and Industrial Relations and

of Psychology, full year beginning September 1, 1964, one-half pay.

College of Law

George T. Frampton, Professor of Law, second semester, full pay. Eugene F. Scoles, Professor of Law, full year beginning September 1, 1964, one-half pay, or second semester, full pay; full-year leave contingent upon receipt of supplementary financial aid.

College of Liberal Arts and Sciences

Department of Botany

WILSON N. STEWART, Professor of Botany, second semester 1964-65, and first semester 1965-66, one-half pay, or first semester 1965-66, full pay; full-year leave contingent upon receipt of supplementary financial aid.

Department of Chemistry and Chemical Engineering

JOHN C. BAILAR, JR., Professor of Inorganic Chemistry, second semester, full pay. THEODORE L. BROWN, Associate Professor of Inorganic Chemistry, full year, onehalf pay.

JOHN M. CLARK, Assistant Professor of Biochemistry, full year beginning February 1, 1965, one-half pay; or second semester 1964-65, full pay.

RICHARD S. JUVET, JR., Associate Professor of Analytical Chemistry, full year

beginning September 1, 1964, one-half pay.

Kensal E. Van Holde, Associate Professor of Physical Chemistry, full year beginning September 1, 1964, one-half pay; leave contingent upon receipt of supplementary financial aid.

Department of English

WALTER J. CHAMBERLIN, Assistant Professor of Business English, second semester, full pay.

WILLIAM M. CURTIN, Assistant Professor of English, full year beginning September 1, 1964, one-half pay.

DONALD JOSEPH HOGAN, Assistant Professor of English, full year beginning September 1, 1964, one-half pay.

WILLIAM H. McBurney, Associate Professor of English, full year beginning September 1, 1964, one-half pay.

TACK STILLINGER, Associate Professor of English, full year beginning September 1, 1964, one-half pay.

Department of Entomology

CLYDE W. KEARNS, Professor and Head of the Department of Entomology, full year beginning September 1, 1964, one-half pay.

Department of Geology

RALPH E. GRIM, Research Professor of Geology, full year beginning September 1, 1964, one-half pay.

Department of Germanic Languages and Literatures

P. M. MITCHELL, Professor of German, full year beginning September 1, 1964, one-half pay.

Department of History

RALPH T. FISHER, Jr., Professor of History and Director of Center for Russian Language and Area Studies, full year beginning September 1, 1964, one-half

Department of Mathematics

COLIN R. BLYTH, Professor of Mathematics, first semester, full pay.

WILLIAM W. Boone, Professor of Mathematics, first semester, full pay.

Joseph L. Doob, Professor of Mathematics and Member of the Center for

Advanced Study, full year beginning September 1, 1964, one-half pay.

Franz E. Hohn, Professor of Mathematics, full year beginning September 1, 1964, one-half pay.

Department of Microbiology

JOHN W. DRAKE, Assistant Professor of Microbiology, full year beginning September 1, 1964, one-half pay.

Department of Philosophy

CHARLES E. CATON, Assistant Professor of Philosophy, second semester, full pay. HARRY M. TIEBOUT, JR., Associate Professor of Philosophy, first semester, full

Department of Physiology and Biophysics

HOWARD S. DUCOFF, Associate Professor of Physiology, full year beginning August 1, 1964, one-half pay.

ROBERT E. JOHNSON, Professor of Physiology and Director of the University Honors Programs, full year beginning September 1, 1964, one-half pay.

Department of Psychology

RAYMOND B. CATTELL, Research Professor of Psychology, January 1 through

April 30, 1965, full pay.
WILLIAM E. KAPPAUF, Professor of Psychology, full year beginning September 1, 1964, one-half pay, or second semester, full pay; full-year leave contingent upon receipt of supplementary financial aid.

LEIGH M. TRIANDIS, Associate Professor of Psychology, second semester, onehalf pay.

Department of Speech and Theatre

WEBSTER L. SMALLEY, Assistant Professor of Speech and of Radio and Television, second semester, full pay.

College of Physical Education

Department of Physical Education for Men

ALFRED W. HUBBARD, Professor of Physical Education for Men, second semester, full pay.

Jane Addams Graduate School of Social Work

JENNETTE R. GRUENER, Professor of Social Work, full year beginning September 1, 1964, one-half pay.

Donald E. Lathrope, Associate Professor of Social Work, first semester, full

pay.

Executive Vice-President and Provost's Office

JAMES F. KAMMAN, Clinical Counselor and Supervisor of Testing with rank of Associate Professor, Student Counseling Service, full year beginning September 1, 1964, one-half pay.

Chicago Undergraduate Division

DANIEL K. Andrews, Assistant Professor of Finance, second semester, full pay. Louis A. Berman, Associate Professor of Psychology and Counselor, Student Counseling Service, full year beginning September 1, 1964, one-half pay, or six months beginning September 15, 1964, full pay; full-year leave contingent

upon receipt of supplementary financial aid.

Louis Broussard, Assistant Professor of English, second semester, full pay.

Sidney F. Glassman, Professor of Biological Sciences, first semester, full pay. ROSALIND A. KLAAS, Assistant Professor of Chemistry, second semester, full pay. VIVIAN C. LIPMAN, Assistant Professor of Psychology, first semester, full pay. ALGIS PABARCIUS, Assistant Professor of Civil Engineering, second semester, full pay.

Chicago Medical Center

NORMAN R. Alpert, Associate Professor of Physiology, six months beginning January 1, 1965, full pay.

Clarence A. Johnson, Associate Professor of Biological Chemistry, six months

beginning January 1, 1965, full pay.

EDITH K. MACRAE, Associate Professor of Anatomy, full year beginning September 1, 1964, one-half pay.

AKIRA OMACHI, Associate Professor of Physiology, six months beginning January

1, 1965, full pay.

EARL W. RENFROE, Professor of Orthodontics, full year beginning January 1, 1965, one-half pay; leave contingent upon receipt of supplementary financial aid.

NATALIE R. SELTZER, Assistant Professor of Medical Social Work, full year beginning September 1, 1964, one-half pay; or six months beginning January 1, 1965, full pay; full-year leave contingent upon receipt of supplementary financial aid.

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

APPOINTMENTS TO CENTER FOR ADVANCED STUDY

(11) Upon recommendation of the Executive Committee of the Center for Advanced Study, and with the concurrence of the Acting Dean of the Graduate College and the Executive Vice-President and Provost, I submit the following nominations for appointments to the Center for Advanced Study for the period and for the program of research or study as indicated.

Members

For Five-Year Terms Beginning September 1, 1964

Sol Spiegelman, Professor of Microbiology (new appointment).
Professor Spiegelman was born December 14, 1914, in New York City and received his undergraduate education at College of the City of New York. He received the Ph.D. degree in cellular physiology from Washington Uni-

versity in 1943. He served as Instructor and Assistant Professor in Bacteriology in the Washington University School of Medicine, 1945-48, was a Special Fellow of the United States Public Health Service 1948-49, and came to the University of Illinois as Professor of Bacteriology (later Microbiology) in 1949. Professor Spiegelman has received several recognitions and awards, including the Pasteur Award of the Illinois Society of Microbiologists in 1963 and selection as one of two United States biologists invited by the Pope to attend an international conference in the Vatican in 1961. He is a member of many scientific societies and has served on several committees of the National Institutes of Health. He recently delivered the Jesup Lectures at Columbia University, an honor bestowed on a select group

of scholars.

John Bardeen, Professor of Electrical Engineering and of Physics (reappoint-

JOSEPH L. DOOB, Professor of Mathematics (reappointment).

JULIAN H. STEWARD, Research Professor of Anthropology (reappointment).

Associate Members

Alfredo Ang, Associate Professor of Civil Engineering, for one year from September 1, 1964; to develop basic mathematical approaches to general behavioral theories of nonlinear solids, including hardening plasticity and thermoplasticity.

ARTHUR E. BARKER, Professor of English, first semester; to complete a study of the theological context and the psychological, ethical, and poetic implica-

tions of John Milton's theory of religious experience.

MARGARET CHANDLER, Professor of Sociology, Chicago Undergraduate Division, for the academic year 1964-65; to make a statistical analysis and interpretation of research data being collected currently in Japan concerning Japanese industry and industrial management.

EVELYN FRANK, Professor of Mathematics, Chicago Undergraduate Division, for the academic year 1964-65; to prepare a scholarly treatise on numerical

continued fractions.

GEORGIANA JAGIELLO, Assistant Professor of Medicine, Medical Center, for the academic year 1964-65; to study meiotic divisions of the human spermatocyte and oocyte in normal and pathological states.

J. ROBERT KELLY, Professor of Music, first semester; an extension of his Associate Membership to complete an opera to be entitled "The White Gods" based on the conquest of Aztec, Mexico, by Cortez.

DAVID LAZARUS, Professor of Physics, for one year from September 1, 1964, on

one-half time in the Center; to study the processes surrounding the formation and motion of point defects in solids with particular emphasis on their role in diffusion studies, nuclear magnetic resonance, internal friction, and microvolt potentiometry.

LEE A. RUBEL, Associate Professor of Mathematics, first semester; to study the Riemann Hypothesis and to attempt to generalize the Nevanlinna theory of meromorphic functions, one of the major tools in mathematical analysis.

Sundaram Seshu, Professor of Electrical Engineering and Research Professor in the Coordinated Science Laboratory, for the academic year 1964-65; to carry on research in the fields of self-repairing machines and sequential machines.

MICHIO SUZUKI, Professor of Mathematics, first semester; to carry on studies aimed at the ultimate goal of classifying all the finite simple groups.

NELSON WAX, Professor of Electrical Engineering and Research Professor in the Coordinated Science Laboratory, for the academic year 1964-65; to study the theory of driven nonlinear oscillators and to complete a study of asymptotic coding bounds and decipherability in codes.

On motion of Mr. Hughes, these appointments were approved.

APPROPRIATION FOR RESIDENCES AT DIXON SPRINGS EXPERIMENT STATION

(12) The Executive Vice-President and Provost and the Vice-President and Comptroller recommend an appropriation of \$14,000 to remodel two residences at the Dixon Springs Experiment Station, one of which will be in lieu of a new residence for the Superintendent for which the Board of Trustees approved the employment of an architect on September 19, 1962.

I concur.

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

CONTRACT AND APPROPRIATION FOR AIR-CONDITIONING INSTALLATION IN LABOR AND INDUSTRIAL RELATIONS BUILDING

(13) The Director of the Physical Plant and the Vice-President and Comptroller recommend award of a contract for \$38,753 to the Reliable Plumbing and Heating Company, Champaign, the lowest bidder, for completion of air conditioning installations in the Institute of Labor and Industrial Relations Building, subject to an appropriation of funds for this work.

The Committee on Nonrecurring Appropriations has approved in principle funds for the project. The Physical Plant Department has estimated that \$41,700

will be needed for the contract now being recommended plus other costs. I recommend award of this contract and assignment of \$41,700 from the

General Reserve.

On motion of Mr. Swain, this contract was awarded, and the requested assignment of funds was approved, by the following vote: Aye, Mr. Clement, Mr. Dilliard, Mr. Hughes, Mr. Johnston, Mr. Jones, Mr. Page, Mr. Pogue, Mr. Swain, Mrs. Watkins; no, none; absent, Mr. Kerner, Mr. Williamson.

CONTRACT FOR LABORATORY EQUIPMENT IN RESEARCH AND EDUCATIONAL HOSPITALS

(14) The Director of the Physical Plant and the Vice-President and Comptroller recommend award of a contract for \$3,335 to the Metalab Equipment Company, Chicago, Illinois, the lowest bidder, for furnishing and setting in place laboratory equipment in the Research and Educational Hospitals.

This work is being done to complete remodeling for teaching and patient

care in the Department of Pediatrics in the addition to the Hospitals.

Funds are available in state capital appropriations to the University.

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

CONTRACT FOR PAINTING HEATING PLANT AT CONGRESS CIRCLE

(15) The Director of the Physical Plant and the Vice-President and Comptroller recommend award of a contract for \$11,788 to William S. Alt and Son, Chicago, the lowest bidder, for finish painting of the heating plant under construction at Congress Circle.

Funds are available in the state capital appropriations to the University for

1963-65 from the Universities Building Fund and have been released.

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

CLAIM FOR ADDITIONAL COMPENSATION

(16) In 1961 a contract was awarded to F. R. Inskip, doing business as F. R. Inskip and Company, for air-conditioning installations in the construction of the Physics Building and the work is now completed. The contractor has asserted

that he is entitled to additional compensation under the contract on the ground that actions taken by the University required him to do work that was different from or not specified in the contract documents, and thereafter he filed suit in the Circuit Court of Champaign County claiming damages in the amount of \$31,443.93. Negotiations have proceeded with respect to the work in question, and the contractor has now agreed to accept the sum of \$5,950 in full payment and satisfaction of all of his claims against the University under the contract.

The Vice-President and Comptroller, the Director of the Physical Plant, and the Legal Counsel are of the opinion that said amount is reasonable in view

of the work performed and recommend that a final settlement between the University and the contractor be approved and authorized on the basis stated.

Funds are available in the state capital appropriations to the University from

the Universities Building Fund.

I concur.

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

CONTRACT FOR CIVIL ENGINEERING BUILDING STORM SEWER DIVERSION

(17) The Director of the Physical Plant and the Vice-President and Comptroller recommend award of a contract for \$16,459.25 to Clancy Construction Company, Urbana, the lowest bidder, for construction of a storm sewer diversion around the Civil Engineering Building site, a necessary improvement incidental to construction of the new building.

Funds are available in the state capital appropriations to the University for

1963-65 and have been released.

I concur.

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

ADDITION TO CONTRACT FOR CONSTRUCTION OF ADMINISTRATION BUILDING ADDITION

(18) The Director of the Physical Plant and the Vice-President and Comptroller recommend an increase of \$15,412.50 in the contract with Kuhne-Simmons Company, Inc., for construction of the Administration Building Addition to include installation of condensate piping between the mechanical equipment room in the east basement of the addition and the proposed location of the cooling towers on the roof of the Administration Building West.

Funds are available in the construction budget for this project.

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

ESTATE OF ANNA M. GULICK, DECEASED

(19) On February 19, 1964, the Board approved joining with Northwestern University in instituting a suit to contest the documents admitted to probate as the Last Will and Testament of Anna M. Gulick. Subsequent negotiations involving the University, Northwestern University, the decedent's heirs, the executor of the estate appointed by the Probate Court, and legatees and beneficiaries under the various documents have resulted in a proposal that the University accept \$8,750 in full settlement of all rights it may have in the estate.

The Legal Counsel states that in his opinion the settlement proposal is reasonable in view of the nature of the legal questions involved, the size of the estate, and the expenses that would necessarily be incurred if the University proceeded with the litigation. He recommends that acceptance of the settlement

proposal be authorized.

I concur.

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

EMPLOYMENT OF ARCHITECTS AND ENGINEERS AT URBANA-CHAMPAIGN

(20) The Director of the Physical Plant and the Vice-President and Comptroller recommend the employment of the following firms for the services and at the fees indicated:

Delbert R. Smith, Scott L. Seaton, and Milan A. Olach, a partnership doing business as Smith, Seaton, and Associates, Urbana, for miscellaneous architectural services on remodeling or other project work which does not justify separate architectural contracts. The contract will terminate June 30, 1965. The fee for services on any specific project shall not exceed \$5,000 without prior approval of the board. The firm will be paid the time card costs of professional employees plus 100 per cent for overhead and commission. Payments will be from funds budgeted for the construction of remodeling

projects assigned to the architect.

Carroll-Henneman and Associates, Urbana, for engineering services for modern-Davenport Hall, and the Natural History Building. The fee will be in accordance with Schedule "A" of mechanical and electrical fees of the Illinois Society of Professional Engineers. The work will include field investigations, cost estimates, plans and specifications, and general supervision of construction vision of construction,

The Vice-President and Comptroller recommends an assignment of \$10,000 from the General Reserve for the cost of these services. An appropriation for the actual remodeling work will be requested after bids have been taken.

I concur.

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

EMPLOYMENT OF ARCHITECTS AND ENGINEERS FOR PLANNING AT CONGRESS CIRCLE, CHICAGO

(21) The Director of the Physical Plant and the Vice-President and Comptroller recommend the employment of the following architectural and engineering firms for the projects and at the fees indicated:

Site Development and Coordinating Services for Phase II of Congress Circle-Skidmore, Owings, and Merrill, Chicago, at actual cost of services of technical personnel employed, plus 150 per cent of such costs for overhead and commission. Technical personnel will include partners and all others assigned to the project exclusive of general office employees. The University will reimburse the firm for other expenses incurred at actual costs, including travel, subsistence, and fees of special consultants when authorized. These terms are the same as those in the contract for site development and coordinating services for Phase I.

Heating Plant Addition—Sargent and Lundy, Consulting Engineers, Chicago.

This fee will be on the same basis and terms as the standard charges for

previous work.

Funds for these services estimated to cost approximately \$390,000 are available from the state capital appropriations to the University from the Universities

The Committee on Buildings and Grounds has been consulted and supports these recommendations.

I concur.

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

EMPLOYMENT OF ARCHITECTS FOR PLANS AND PLANNING TO COMPLETE ARCHITECTURAL STUDIES, CONGRESS CIRCLE, CHICAGO

(22) The Director of the Physical Plant and the Vice-President and Comptroller

recommend that the Illinois Building Authority be requested to purchase, acquire, and lease to the University plans and planning to complete architectural studies at Congress Circle, Chicago, including specifications and bid documents, from the following firms for the buildings, and at fees indicated as a per cent of the estimated cost of construction, all in accordance with the Illinois Building Authority Act and under terms approved by the Comptroller and the Director of the Physical Plant.

Skidmore, Owings, and Merrill, Chicago -

Classroom Units: 3.375 per cent, or a fee of 4½ per cent for services through construction

Architecture Building: 4.5 per cent, or a fee of 6 per cent for services through construction

Engineering and Science Office Building: 4.125 per cent, or a fee of 5½ per cent for services through construction

Engineering and Science Laboratory Addition: 3.75 per cent, or a fee of 5 per cent for services through construction

Library Addition: 3.75 per cent, or a fee of 5 per cent for services through construction

Harry Weese and Associates, Chicago — Physical Education Building: 4.125 per cent, or a fee of 5½ per cent for services through construction

Completion of the above studies was declared to be in the public interest by the General Assembly in 1963, and the funding will be by the Illinois Building Authority through the sale of bonds.

I concur.

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

LEASES WITH THE ILLINOIS BUILDING AUTHORITY

(23) The Board of Trustees on February 19, 1964, authorized the Comptroller and Secretary of the Board to execute the necessary documents to permit the Illinois Building Authority to proceed with certain University projects which the Seventy-third General Assembly of the state of Illinois had declared to be in the public interest.

The Illinois Building Authority has since forwarded to the University forms of the leases which it requests be used for these projects, and it is requested that the Board of Trustees take specific action to approve the same. Copies of said lease forms are presented herewith and are being filed with the Secretary of the

Board for record.

The leases relate to the following University projects and are on the terms indicated:

arcarca .				Annual	
				Rent Due September 1.	
Project	Legislative Declaration	Amount of IBA Bonds	Rent Due May 1, 1964	1965, and Each Year Thereafter	Total Rental Payments
A. Movable Equipment	\$ 4 799 500	\$ 4 912 032	\$ 751 541	\$486 290	\$ 7 559 601
B. Civil En- gineering			450.000	206 240	T 024 050
Building C. Land for	4 216 000	4 351 411	479 090	306 340	7 831 250
Building Sites	1 000 200	1 032 302	113 656	72 675	1 857 856
D. Planning Congress Circle					
Campus	900 000	928 901	102 272	65 395	1 671 752
Total	\$10 915 700	\$11 224 646	\$1 446 559	\$930 700	\$18 920 459

Funds for the rental payments under the leases during the current biennium,

1963-65, are available from appropriations made by the General Assembly.

The Vice-President and Comptroller, the Director of the Physical Plant, and the Legal Counsel recommend that the Comptroller and Secretary of the Board of Trustees be given specific authorization to execute these leases in substantially the form presented in this meeting and that the following resolution be adopted.

Resolution

WHEREAS in accordance with the Illinois Building Authority Act, the Seventythird General Assembly of the State of Illinois has declared it to be in the public interest that certain buildings and other facilities be provided for and on behalf of The Board of Trustees of the University of Illinois; and
WHEREAS the Illinois Building Authority has requested the University of

Illinois to enter into the following leases in order to provide said buildings and

facilities;

Now, therefore, be it and it is hereby resolved by The Board of Trustees of the University of Illinois as follows:

Section 1. That The Board of Trustees of the University of Illinois hereby authorizes the Comptroller and Secretary of this Board of Trustees to execute, acknowledge, and deliver in the name and on behalf of this corporation leases with the Illinois Building Authority in substantially the forms presented to this meeting for the following buildings and facilities:

A. Equipment for University of Illinois buildings constructed from the Universities Building Fund requiring an initial rental payment May 1, 1964, of \$751,541, annual rental payments September 1, 1965, and each year thereafter of \$486,290, with total rental payments of \$7,559,601.

B. Construction of a Civil Engineering Building at Champaign-Urbana, Illinois, requiring an initial rental payment May 1, 1964, of \$479,090, annual rental pay-

ments September 1, 1965, and each year thereafter of \$306,340, with total rental payments of \$7,831,250.

C. Land for building sites in Champaign-Urbana, Illinois, requiring an initial rental payment May 1, 1964, of \$113,656, annual rental payments September 1, 1965, and each year thereafter of \$72,675, with total rental payments of \$1,857,856.

D. Plans and planning to complete architectural studies, Congress Circle, Chicago, requiring an initial rental payment May 1, 1964, of \$102,272, annual rental payments September 1, 1965, and each year thereafter of \$65,395, with total rental payments of \$1,671,752.

On motion of Mr. Swain, authority was given as recommended, and the foregoing resolution was adopted by the following vote: Aye, Mr. Clement, Mr. Dilliard, Mr. Hughes, Mr. Johnston, Mr. Jones, Mr. Page, Mr. Pogue, Mr. Swain, Mrs. Watkins; no, none; absent, Mr. Kerner, Mr. Williamson.

TRANSFER OF JURISDICTION OF PROPERTY FOR ADDITION TO WATER RESOURCES BUILDING

(24) The Board of Trustees on February 19, 1964, authorized the Comptroller and Secretary of the Board of Trustees of the University of Illinois to transfer to the Illinois Building Authority certain property for an addition to the Water Resources Building.

The Illinois Building Authority has since requested that the Board of Trustees and the Department of Registration and Education jointly transfer said real estate and jurisdiction thereof to the Illinois Building Authority pursuant to the Illinois Building Authority Act so that the addition to the Water Resources Building can be constructed thereon.

The Seventy-third General Assembly has declared the construction of such addition for and on behalf of the Department of Registration and Education to be in the public interest.

The Department of Registration and Education has agreed that said real

estate and jurisdiction thereof is to be returned to the University when the terms of the Department's lease with the Illinois Building Authority have been complied with.

The Vice-President and Comptroller and the Director of the Physical Plant recommend that the resolution adopted on February 19, 1964, regarding this transaction be rescinded and that the following resolution be adopted.

I concur.

Resolution

Whereas the Seventy-third General Assembly of the State of Illinois has declared it to be in the public interest that the Illinois Building Authority construct an Addition to the Water Survey Building in Champaign, Illinois, for and on behalf of the Department of Registration and Education of the State of Illinois; and

WHEREAS for that purpose it will be necessary for the Illinois Building Authority to acquire the real estate and jurisdiction thereof upon which said Addition

to the present Water Survey Building will be located; and

WHEREAS The Board of Trustees of the University of Illinois, a public corporation of the State of Illinois with its principal office in Urbana, Illinois, has been requested by the Director of the Department of Registration and Education to join with that Department in transferring to the Illinois Building Authority jurisdiction of the real estate for the construction of the Addition to the Water Survey Building.

Now, therefore, be it and it is hereby resolved by The Board of Trustees of

the University of Illinois as follows:

Section 1. That the Comptroller and Secretary of The Board of Trustees of the University of Illinois be and they are authorized to execute, acknowledge, and deliver in the name and on behalf of this corporation an instrument of transfer of jurisdiction of the following described property to the Illinois Building Authority, to wit:

Situated in the State of Illinois, the County of Champaign, the City of Champaign, in the NE 1/4 NW 1/4 of Section 18, Township 19 North, Range 9 East of the third principal meridian; being a part of Block 1 of J. S. Wright's addition to the City of Champaign and being more fully bounded and described as follows:

Beginning at the NW corner of said Block 1, said corner being the intersection of the East property line of Sixth Street and the South property line of Springfield Avenue, both in the City of Champaign, and being marked with an iron pipe monument; thence easterly along the South property line of said Springfield Avenue, a distance of 106.3 feet to a corner, said corner being marked with an iron pipe monument; thence southerly along a line parallel to the East property line of said Sixth Street, a distance of 71.0 feet to a corner; thence easterly along a line parallel to the South property line of said Springfield Avenue, a distance of 1.3 feet to a corner; thence southerly along a line parallel to the East property line of said Sixth Street, a distance of 61.0 feet to a corner, said corner being marked with a cross cut in the concrete pavement; thence westerly along a line parallel to the South property line of said Springfield Avenue, a distance of 107.6 feet to a corner on the East property line of said Sixth Street, said corner being marked with a cross cut in concrete; thence northerly along the East property line of said Sixth Street, a distance of 132.0 feet to the place of beginning, containing 0.32 acres, more or less:

in such terms as will permit said Illinois Building Authority to construct thereon an Addition to the present Water Survey Building and lease the same to the Department of Registration and Education of the State of Illinois.

On motion of Mr. Hughes, the resolution adopted February 19, 1964, regarding this transaction was rescinded and the above resolution was adopted by the following vote: Aye, Mr. Clement, Mr. Dilliard, Mr. Hughes, Mr. Johnston, Mr. Jones, Mr. Page, Mr. Pogue, Mr. Swain, Mrs. Watkins; no, none; absent, Mr. Kerner, Mr. Williamson.

TRANSFER OF JURISDICTION OF PROPERTY FOR CONSTRUCTION OF CIVIL ENGINEERING BUILDING

(25) The Illinois Building Authority has requested the Board of Trustees of the University of Illinois to transfer the real estate and jurisdiction thereof which constitutes the site of the Civil Engineering Building to be constructed by the Authority for the University under a lease agreement heretofore authorized by the Board.

At the October 26, 1963, meeting, the Board authorized the acquisition of a portion of the site from the city of Urbana with appropriated funds. The Vice-President and Comptroller and the Director of the Physical Plant request authorization to complete such acquisition from general contract reserves instead of appropriated funds.

The Vice-President and Comptroller, the Director of the Physical Plant, and the Legal Counsel also recommend the adoption of the following resolution to

authorize the transfer requested by the Illinois Building Authority.

I concur.

Resolution

Whereas the Seventy-third General Assembly of the State of Illinois has declared it to be in the public interest that the Illinois Building Authority construct a Civil Engineering Building in Urbana, Illinois, for and on behalf of The Board of Trustees of the University of Illinois; and

WHEREAS for that purpose it will be necessary for the Illinois Building Authority to acquire the real estate and jurisdiction thereof upon which said Civil

Engineering Building will be located; and

WHEREAS The Board of Trustees of the University of Illinois, a public corporation of the State of Illinois with its principal office in Urbana, Illinois, has been requested by the Illinois Building Authority to transfer the real estate and jurisdiction thereof for the construction of the Civil Engineering Building.

Now therefore, be it and it is hereby resolved by The Board of Trustees of

the University of Illinois as follows:

Section 1. That the Comptroller and Secretary of The Board of Trustees of the University of Illinois be and they are authorized to execute, acknowledge, and deliver in the name and on behalf of this corporation an instrument of transfer of jurisdiction of the following described property to the Illinois Building Authority to wit:

Tract 1:

Lot Three (3), Lot Four (4), Lot Five (5), Lot Six (6), Lot Seven (7), and Lot Eight (8) in Block Fifty-one (51) of the Seminary Addition to Urbana, situated in the City of Urbana, in the County of Champaign, and State of Illinois; and also

Tract 2:

That portion of Romine Street and Alley situated in the City of Urbana, in the County of Champaign, and State of Illinois vacated by an ordinance entitled "An Ordinance Vacating a Portion of a Street and an Alley" adopted by the City Council of the City of Urbana, Illinois on the twentieth day of January, A.D., 1964 and bounded and described as follows:

Commencing at the Northwest (NW) corner of Lot Five (5) in Block Fiftyone (51) of the Seminary Addition to Urbana, situated in the City of Urbana, in the County of Champaign and State of Illinois, and thence West (W) sixtysix feet (66') along the South (S) line of Main Street extended to a point, thence South (S) along a line parallel to the West (W) property line of Lots Five (5) and Six (6) in Block Fifty-one (51) of the Seminary Addition to Urbana Two Hundred Eighty and Five Tenths feet (280.5'), more or less, to a point on the North (N) property line of Stoughton Street extended West (W), Sixty-six feet (66') West (W) of the Southwest (SW) corner of said Lot Six (6), and thence East (E) Sixty-six feet (66') along the North (N) property line of Stoughton Street extended West (W) to the Southwest (SW) corner of said Lot Six (6) in Block Fifty-one (51) of the Seminary Addition to Urbana, thence North (N) One Hundred Thirty-two feet (132') more or less, along the West (W) property line of said Lot Six (6) to the Northwest corner (NW) of said Lot Six (6), thence East (E) One Hundred Ninety-

eight feet (198') more or less, along the North (N) property line of Lots Six (6), Seven (7), and Eight (8) in Block Fifty-one (51) of the Seminary Addition to Urbana to the Northeast (NE) corner of said Lot Eight (8), thence North (N) Sixteen and One Half feet (16½') more or less, to the Southeast (SE) corner of Lot Three (3) in Block Fifty-one (51) of the Seminary Addition to Urbana these West (W) close the South (S) property line. inary Addition to Urbana, thence West (W) along the South (S) property line of Lots Three (3), Four (4), and Five (5) in Block Fifty-one (51) of the Seminary Addition to Urbana One Hundred Ninety-eight feet (198') more or seminary Addition to Orbana One Hundred Ninety-eight feet (198') more or less, to the Southwest (SW) corner of said Lot Five (5) in Block Fifty-one (51) of Seminary Addition to Urbana, thence North (N) along the West (W) property line of said Lot Five (5) in Block Fifty-one (51) of the Seminary Addition to Urbana, One Hundred Thirty-two feet (132'), more or less, to the Northwest (NW) corner of said Lot Five (5) in Block Fifty-one (51) of Seminary Addition to Urbana, the point of beginning; subject to easements to the City of Urbana. Illinois upon and under the above described tract for to the City of Urbana, Illinois upon and under the above described tract for the maintenance and repair of all sewers and drains which are located on or under the surface of any part of the above described tract and subject to easements to all public utilities, their successors and assigns to operate, maintain and renew and reconstruct their facilities as now operated and maintained in, over, or under the above described tract.

Being the site upon which the Illinois Building Authority is to construct and complete the Civil Engineering Building.

On motion of Mr. Page, authority was given as recommended, and the foregoing resolution was adopted by the following vote: Aye, Mr. Clement, Mr. Dilliard, Mr. Hughes, Mr. Johnston, Mr. Jones, Mr. Page, Mr. Pogue, Mr. Swain, Mrs. Watkins; no, none; absent, Mr. Kerner, Mr. Williamson.

CONTRACTS FOR CONSTRUCTION OF THE CIVIL ENGINEERING BUILDING, PHASE 1

(26) Submitted herewith is a report from the Physical Plant Department of the bids received on February 21 and February 28, 1964, for construction of the Civil Engineering Building, Phase 1, a copy of which is being filed with the Secretary of the Board for record.

In accordance with the Illinois Building Authority Act, the Seventy-third General Assembly of the state of Illinois declared the expenditure of \$4,216,000 for the construction of a Civil Engineering Building at Champaign-Urbana which will be financed by the Illinois Building Authority to be in the public interest. The funds for construction will be provided by the issuance and sale of bonds by the Illinois Building Authority, which bonds will be serviced and retired from revenues from the lease of the facility to the University, and for which lease rental payments the University has received an appropriation. Additional funds are available from a grant from the National Institutes of Health.

The Board has heretofore authorized the transfer of jurisdiction of the building site to the Illinois Building Authority and the execution of a lease of the property back to the University. The lease provides that the Illinois Building Authority will construct the building and the construction bids received should now be assigned to the Authority and recommendations made as to the awards. Accordingly, the Vice-President and Comptroller, the Director of the Physical Plant Department, and the Legal Counsel recommend the adoption of the following

resolution.

I concur.

Resolution

Be It, and It Hereby Is, Resolved by this Board of Trustees of The Board of Trustees of the University of Illinois, a public corporation of the State of Illinois, that the bids received on February 21 and February 28, 1964, for the construction of Civil Engineering Building, Phase 1, and all rights thereunder, including but not limited to, the right to contract with the bidder, be and they hereby are, assigned to the Illinois Building Authority; and this Board of Trustees recommends to the Illinois Building Authority that contracts for construction of a

Civil Engineering Building, Phase 1, be awarded by the Illino as follows:	is Buildin	g Authority
Division I		
General — Pathman Construction Company, Chicago Base bid	983 793	
IA. Assignment of other contracts	45 000	
IB. Storage mezzanine	4 000	
IC. Change in finish of aluminum louvers	750	
ID. Change in finish of aluminum fascia	2 200	
IE. Add dumbwaiter	3 500	
IG. Changing to gray plate glass	500 7 000	
Deductive alternate for: IF. Substituting Adams and Westlake windows		
for those specified in base bid	$-14\ 000$	
		\$2 0 32 743
Division II Electrical — G. L. Wilsky, an individual doing business as Downtown Electric, Urbana		
Base bid	345 325	
	1 200	
IIC. Installing public address system	500	
IID. Wiring for added mezzanine IIF. For adding "Message Available" system Deductive alternates for:	5 900	
IIB. Substitute day brite fixtures for those		
specified	8 000	
IIE. Substitute fuse type main switch board for	11 000	
breaker type	<u>-11 000</u>	334 525
Division III		334 323
Plumbing Work — Economy Plumbing and Heating Compa Skokie	iny, Inc.,	
Base bid	• • • • • • • • • • • • • • • • • • • •	231 869
Division IV	~	
Heating and Air Conditioning Work—Ideal Heating Chicago		377 777
Division V Ventilating Work — Mellish and Murray Company,		
Chicago	251 000	
Base bid		
VA. Increased air conditioning capacity Deductive alternate for:		
VF. Prefabricated boiler stack in lieu of steel stack.	-2700	
Dill III		249 900
Division VI		
Temperature Control Work — Johnson Service Company, Urbana		
Base bid		39 000
Division VII		5, 500
Laboratory Equipment Work — Duralab Equipment Cor-		
poration, Brooklyn, New York		
Base bid	248 500	
	-	

T			-
Deductive	~	ltarnatac	+~+.

VIIB. Substitute Alberene stone tops for serpen-		
tine tops	-4 718	
VIIC. Substitute Labline environment rooms for		
hot pack rooms	-27500	
		216 282
Total		\$3 482 006

The Board of Trustees further recommends to the Illinois Building Authority that all contracts other than the contract for general work be assigned to the contractor for general work, making a total for such contract \$3,482,096, and that an agreement be entered into with the Pathman Construction Company, Chicago, for the assignment of these other contracts for \$45,000 which amount is included in the aforesaid contract price, being the amount bid by that Company for service charge for supervision of other contracts assigned to the general contractor.

On motion of Mr. Swain, the foregoing resolution was adopted by the following vote: Aye, Mr. Clement, Mr. Dilliard, Mr. Hughes, Mr. Johnston, Mr. Jones, Mr. Page, Mr. Pogue, Mr. Swain, Mrs. Watkins; no, none; absent, Mr. Kerner, Mr. Williamson.

PURCHASES

(27) 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 recommendations are presented in two categories: purchases from Institutional Funds and purchases from Appropriated Funds (i.e., from state appropriations to the University). The former term is used here to designate funds received by the University under contracts with the United States government; contracts with private corporations and other organizations, from foundation grants, and grants from corporations and other donors; and University revolving funds authorized by law.

Purchases from Institutional Funds

Purchases from Institutional Funds			
Item	Department	Vendor	Cost
Pressure reaction vessel for performing chemical reactions under pressure	Biological Chemistry, Chicago	American Instrument Co., Inc., Barrington	\$ 2 968 00 delivered
One spectrophotometer and accessories	Biological Chemistry, Chicago	Fisher Scientific Co., Chicago	5 588 30 delivered
Research services for a study of effi- cient use of medical manpower	Office of Research in Medical Education, Chicago	American Institute for Research, Pittsburgh, Pa.	20 316 00
One indicating type automatic differential retractometer	Medical Physiology, Chicago	Phoenix Precision Instrument Co., Inc., Philadelphia, Pa.	4 377 00 f.o.b. Chicago
300 mouse cages with tops	Medical Research Laboratory, Chicago	Hoeltge, Inc., Cincinnati, Ohio	3 180 00 delivered
One lot of metal furniture for workshop, study areas, library, and offices, in the Department of Medical Education, to consist of eleven work tops with base cabinets up to 26 ft. in length, twenty-one desks, and six files	Medicine, Chicago	Desks, Inc., Chicago	8 437 60 delivered and installed
Thirty microscopes less trade-in of thirty used microscopes	Illini Bookstore, Chicago	Aloe Scientific Division, Schiller Park	5 670 00 delivered

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Item Linens consisting 0 250 dozen sheets, 850 dozen towels, 500 dozen wash cloths, 76 dozen pads, 200 dozen pillow cases, 50 dozen dish cloths, 50 dozen bed pan covers	Department Physical Plant, Chicago	Vendor Kansas City White Goods, \$\foatstyreap\$ Kansas City, Mo. 150 dozen sheets 500 dozen bath towels 200 dozen pillow cases 50 dozen bed pan covers Haag Brothers, Skokie 100 dozen sheets 100 dozen surgical towels 40 dozen pads	2 491 20
		Will Ross, Inc., Milwaukee, Wis. 500 dozen wash cloths 250 dozen towels 50 dozen dish cloths Mills Hospital Supply,	1 182 50 115 20
		Chicago 36 dozen pads	10 524 40)
279 CO fire extinguishers and 266 water-pressurized fire extinguishers for Congress Circle campus	Congress Circle	Walter Kidde & Co., Inc., Chicago	delivered 8 498 54
One gas chromatograph, dual column, with flame and thermal conductivity detectors, temperature programmer, recorder with integrated disc, hydrogen generator and one 10 milliliter gas-tight syringe, to be used in studies of spray residues from herbicides and pesticides on farm land	Agricultural Engineering	Wilkens Instrument & Research Inc Walnut Creek, Calif.	5 946 05 f.o.b. delivered
Services for depreservation, preparation for ferrying, and ferrying services of two federal surplus C47 airplanes from Davis Monthan Air Force Base, Tucson, Arizona, to the University of Illinois-Willard Airport	Institute of Aviation	Aero Services, Inc., Tucson, Ariz.	2 634 00 f.o.b. delivered
One D.C. milliammeter, 1-ma to 10 amps One current probe, 1 mv/ma ± 1% at 1 KC; One digital voltmeter, four-digit, accuracy ± 0.05% ± 1 digit One audio distortion analyzer, 20 cps to 20 KC (Item 4) All for student instruction	Institute of Aviation	Hewlett-Packard Co., c/o Crossley Associates, Inc., Chicago	2 565 00 f.o.b. shipping point
One oscilloscope, dual-trace sampling, with timing unit and passive probes, 2 my/cm to 200 my/cm calibrated sensitivity, bandwidth 1 kmc	Botany	Tektronix, Inc., Park Ridge	3 434 00 f.o.b. Beaverton, Ore.
One gas chromatograph, single column double oven type, with flame-ionization detector, thermal conductivity detector, wheatstone bridge and oven with inlet splitter, to be used for the investigation of the role of long chain aliphatic and aromatic aldehydes as they effect the chemiluminescent quantum yield of bacterial enzyme	Chemistry and Chemical Engineering	Wilkens Instrument & Research, Inc., Walnut Creek, Calif.	2 639 57 f.o.b. delivered
One accessory system to expand the EPR spectrometer system originally approved for purchase on February 19, 1964	Chemistry and Chemical Engineering	Varian Associates, Palo Alto, Calif.	4 115 00 f.o.b. delivered
One x-ray generator and control, 5 kv, 50 ma One tube, x-ray diffraction, four-win-	Chemistry and Chemical Engineering	Philips Electronic Instruments, Chicago	4 950 00 f.o.b. delivered
dow, fine-focus One preparative centrifuge, refrigerated, vacuum type with one high capacity angle rotor head and one swinging bucket rotor, for use in the purification and separation of crystalline particle inclusions by the Biochemistry Division of the Department of Chemistry and Chemical Engineering	Chemistry and Chemical Engineering	Spinco Division, Beckman Instruments, Inc., Palo Alto, Calif.	9 751 00 f.o.b. delivered
One signal converter and generator, output both sinusoidal and step-signal, two-pen variable speed electronic recorder, frequencies 1-cps to 1-cph, ranges 1-5 milliamps and 10-50 milliamps	Chemistry and Chemical Engineering	Procedyne Associates, Inc., New Brunswick, N.J.	2 783 50 f.o.b. delivered

Item	Department	Vendor	Cost
Two oscilloscopes, time base "A" 0.1 microseconds/cm to 5 seconds/cm, time base "B" 2 microseconds/cm to 1 second/cm Six scope probes One wide-band plug-in unit DC-14 mc	Coordinated Science Laboratory	Tektronix, Inc., Park Ridge	\$ 3 537 00 f.o.b. Beaverton, Ore,
One dual trace plug-in unit DC-15 mc			
One recorder, data tape, four simultaneous data record channels at selectable speeds of 30, 15, 33%, or 1 ½ inches per second plus one voice record and playback channel at same selectable speeds and four simultaneous playback channels at selectable speeds of 30 or 1 ½ inches per second	Coordinated Science Laboratory	Minneapolis-Honeywell Regulator Co., Chicago	8 795 00 f.o.b. delivered
166 sheets glass epoxy laminate, 2 oz. copper clad on both sides, coated with protective plastic and sealed in polyethylene bags	Digital Computer Laboratory	The Mica Corp., Chicago	2 726 28 f.o.b. delivered
Fifty sheets glass epoxy laminate, 2 oz. copper clad on one side, coated with protective plastic and sealed in polyethylene bags			
5,000 transistors type SM-1660 (selected 2N967)	Digital Computer Laboratory	Motorola Semiconductor Products, Inc., Chicago	3 000 00 f.o.b. Phoenix, Ariz.
1,500 diodes, type 1N3730	Digital Computer Laboratory	Raytheon Co., Franklin Park	2 835 00 f.o.b. delivered
2,000 connectors, printed circuit, 0.078- 22 pin, double sided phosphor bronze wire wrap terminals	Digital Computer Laboratory	Cinch Manufacturing Co., Chicago	3 360 00 f.o.b. Chicago
1,900 transformers, special for memory systems, per Digital Computer Lab- oratory specifications	Digital Computer Laboratory	Wabash Magnetics, Inc., Wabash, Ind.	3 180 00 f.o.b. delivered
Furniture for various lounge areas in the new College of Education Build- ing as follows: twenty-six arm chairs, six sofas, twenty-eight side chairs, nine tables	Education	Marshall Field & Co., Chicago	5 028 60 f.o.b. delivered
Classroom furniture for use in the elementary education laboratory classrooms and other classrooms in the new College of Education Building as follows: 283 fiberglass chairs with ganging feature and large folding writing surface, ninety-five fiberglass stacking chairs, thirty trapezoidal tables, eleven rectangular tables, four half round tables, five teachers desks	Education	Mackin Sales Co., Momence	11 317 05 f.o.b. delivered and set in place
One television tape recorder, transis- torized, portable, and designed to record and play back standard EIA television signals or closed circuit industrial signals One set extra video heads	Education	Ampex Corp., Elmhurst	12 210 16 f.o.b. delivered
Lounge furniture for the new College of Education Building consisting of the following: five upholstered sofas, eight upholstered lounge chairs, seventeen occasional tables, two coffee tables	Education	Weger Institutional Designs, Lansing, Mich.	5 709 66 f.o.b. delivered
One antenna model support tower system including a transmitting antenna polarization mount	Electrical Engineering	Antlab, Inc., Worthington, Ohio	14 815 00 f.o.b. delivered
One wide-range receiving system for the study of antenna patterns, used, with frequency range of 30 mc to 100 gc, with automatic frequency and automatic gain controls, thirty-day new equipment warranty on receiver, less backward wave oscillator	Electrical Engineering	Scientific-Atlanta, Inc., Atlanta, Ga.	5 200 00 f.o.b. Atlanta, Ga.

Item	Department	Vendor	Cost
One ultra-high vacuum system consisting of ion pump and control, internal heater and control titanium sublimation pump and control, three sorption pumps, three liquid nitrogen containers, bakeout heater, bakeable roughing valve, bell jar joist, stainless steel frame, 6-inch isolation valve, cryogenic shroud, base-plate and well, pyrex bell jar, rotary motion triggered discharge gauge and control, and 2 kva power supply	Electrical Engineering Research Laboratory	ULTEK Corp., Palo Alto, Calif.	\$ 15 468 50 f.o.b. delivered
One plasma jet heater capable of operating at power levels from 2 kw to 80 kw continuously with low contamination of the jet flame by electrode erosion and capable of operating on nitrogen, argon, helium, and simulated air [Note: This purchase will be made from the content of the capable of	Mechanical and Industrial Engineering om both Institutions	Giannini Scientific Corp., Western Springs al Funds, \$5,475.00, and	f.o.b. delivered
Funds, \$5,475.00, for a total of \$10	,950.00.)		
One gas chromatograph, including com- bination flame and electron-capture detector, dual differential electrom- eter linear temperature programmer, effluent splitter and dual channel re- corder, to be used for biological anal- yses of sugar derivatives and sulphur compounds	Microbiology	Wilkens Instrument & Research, Inc., Chicago	4 402 75 f.o.b. delivered
One crystal growing furnace modified for continuous operation at 1,700° centigrade, including two sight parts for research work on metallic carbide crystals	Mining, Metallurgy, and Petroleum Engineering	NRC Equipment Corp., Newton Highlands, Mass.	10 120 00 f.o.b, delivered
Helium gas, approximately 600,000 cubic feet, for the period April 1, 1964, through June 30, 1965	Physics	Air Reduction Co., St. Louis, Mo.	36 000 00 f.o.b. delivered
One computer of average transients, four inputs, input impedance 20,000 ohms, maximum signal input ± 3 volts, 400 analysis points of address. analysis times 31.5 milliseconds to 16 seconds, memory capacity 108-1	Physiology and Biophysics	Mnemotron Division of TMC, Minneapolis, Minn.	9 966 00 f.o.b. delivered and installed
One flowmeter, dual channel, electro- magnetic, plus an option to buy two additional accessory channels if the initial tests of the basic equipment warrant expansion of the operational capacity	Theoretical and Applied Mechanics	Beta Corp. of St. Louis, St. Louis, Mo.	4 250 00 f.o.b. delivered
Four electronic instrumentation lab- oratories Six workbench cabinet units for above	Industrial Education	Heath Co., Benton Harbor, Mich.	4 500 00 f.o.b. Benton Harbor, Mich.
50,000 pounds anhydrous ammonia to be furnished and applied on approxi- mately 500 acres of corn land at the Dixon Springs Experiment Station, Simpson	Dixon Springs Experiment Station	Hy-Yield Fertilizer Co., Murphysboro	3 875 00 f.o.b. delivered and spread
Furniture for Orchard Downs apartments: 180 beds, 180 chests, 145 dining tables, 200 side chairs, 180 lounge chairs, 356 end tables	Housing Division	Associated Service & Supply Co., Chicago	40 282 78 f.o.b. Gardner, Mass.
Furniture for Illinois Street Residence Halls, Graduate Residence Halls, and family housing units in Orchard Downs: 176 student desks with trapezoidal tops, 650 student desks with rectangular tops, 592 single beds	Housing Division	Joerns Furniture Co., Stevens Point, Wis.	82 647 12 f.o.b. delivered
China, fully vitrified, for the Illinois Street Residence Halls and for Central Food Stores stock: 910 dozen dinner plates, 9½ in.; 1,300 dozen salad plates, 6½ in.; 339 dozen cups, 7½ oz.; 590 dozen saucers, 5¾ in.; 1,544 dozen soup nappies, 6½ in.; 1,907 dozen sauce dishes, 5 in.; 360 dozen cups, special mug	Housing Division	E. A. Hinrichs & Co., Lincolnwood	35 545 88 f.o.b. delivered

Item	Department	Vendor	Cost
Furnish and install carpeting in the Pine Lounge and Browsing Room of Illini Union (North)	Illini Union	Chicago Carpet & Fabric Co., Chicago	\$ 4 500 00 f.o.b. delivered and installed
1,000 stacking chairs with upholstered seats and backs for the Illini Union	Illini Union	S. Buckman Furniture & Supply Co., Spring Valley	20 942 60 f.o.b. delivered
Steel office furniture to provide for anticipated requirements for new buildings under construction at Urbana and at the Medical Center and for storeroom stocks	Office Supply Storeroom	Weber, Hilmer, & Johnson, Inc. (distributor), Chicago Group A The Globe Wernicke Co. (manufacturer), Cincinnati, Ohio Group B	7 795 99 (154 016 65) f.o.b,
			delivered
Wood office furniture for administra- tive offices in the new Education Building: eleven desks, six credenzas, one office table, two conference ta- bles, ten conference arm chairs	Office Supply Storeroom	Rogard's, Champaign	4 642 86 f.o.b. delivered
Print and bind 5,000 copies of Black Hawk: An Autobiography, by Donald Jackson, approximately 176 pages, trim size 5½ in. by 8 in.	University Press	North Central Publishing Co., St. Paul, Minn.	2 390 70 f.o.b. delivered
Print and bind 2,500 copies <i>Urban Land Use Planning</i> , by Stuart Chapin, Jr., trim size 7 in. by 9½ in., approximately 482 pages per copy	University Press	Pantagraph Printing & Stationery Co., Bloomington	7 418 40 f.o.b. delivered
Fifteen tons fertilizer, high nitrogen content fertilizer, analysis 38-0-0	Physical Plant	Kahn Brothers Co., Chicago	4 567 05 f.o.b. delivered
One refuse packer, hydraulically operated, with a capacity of 150 cubic yards per hour One refuse container, 33 cubic yard capacity, modified to operate with above refuse packer	Physical Plant	Coleman & Associates, Rockford	7 301 00 f.o.b. delivered
Purchases	from Appropria	ted Funds	
Two each controlled-environment plant growth chambers with walkway, complete with one humidifying system consisting of water vaporizer solenoid-actuated; two electronic humidity dual controls; two dehumidifying systems consisting of heating and cooling coils; and two each two-pen wet and dry bulb recording recorders, to be delivered and installed in the Engineering Science Building at Congress Circle	College of Liberal Arts and Sciences, Congress Circle	Sherer-Gillett Co., Marshall, Mich.	18 670 00 delivered and installed
Electronic language laboratory equipment for installation at Congress Circle Classroom Bullding in eight rooms, consisting of 105 student booths complete with headset microphones and dial positions; two language consoles, one sixty-position and one fifteen-position; console switchracks; power supply units; program cabinets; twenty reel-to-reel program machines and two remote record series; and including dismantling, relocation, and integrating into new system of existing language laboratory now located at Navy Pier	College of Liberal Arts and Sciences, Congress Circle	Watland, Inc., Chicago	62 561 00 delivered and installed

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Item	Department	Vendor	Cost
Furnish and install thirteen pieces of machine equipment, complete with	Physics, Congress Circle	Alta Products Co., Chicago	\$ 136 37
accessories, at Congress Circle Cam- pus, consisting of the following: one		Adams & Nelson, Chicago	390 00
each precision toolmakers' lathe, tur- ret milling machine, band saw, bench		Barrett-Christie Co., Chicago	341 00
grinder, electric treating furnace, surface grinding machine, disc sander,		Don G. Beck Co.,	4 507 37
drill press, power hacksaw, arbor		Chicago Boyd Wagner Co.,	1 081 61
press, precision filing machine, sur- face plate and stand		Chicago Brown & Sharpe	5 210 00
		Manufacturing Co., Providence, R.I.	
		Grand Tool & Supply Co., Chicago	309 60
		Monarch Machine	11 765 00
		Tool Co., Oak Park	11 765 00 delivered
			and installed
(Note: This purchase will be made for Funds, \$1,602.76, for a total of \$23,740	rom both Appropriat).95.)	ed Funds, \$22,138.19, and	Institutional
One lawn sprinkler system	Physical Plant,	Andrew McCann,	3 155 00
Six recorders, tape, two-track, 33/4 and	Chicago Education	Chicago Bilbo Electronics, Inc.,	installed 6 706 50
7½ in. per second, standard rack mount professional studio quality, 30	Jacobson	Springfield	f.o.b. delivered
to 15,000 cps			denvered
Twelve plug-in microphone pre-amp- lifiers			
Eighteen dissecting microscopes, with inclined binocular bodies and three	Entomology	Lukas Microscope Service, Skokie	6 636 60 f.o.b.
objective revolving nosepieces, for a		SAURIC	delivered
maximum magnification of 90X; less trade-in of twenty obsolete micro-			
scopes One cooling tower, furnished and set in	Mechanical and	Binks Manufacturing Co.,	4 185 00
place with capacity of 700 gallons per	Industrial	Chicago	f.o.b.
minute water flow, approximately 15 degree temperature rise, 85 degree	Engineering		delivered and set
leaving water temperature, and 75 degree wet bulb temperature; tower			in place
to be capable of withstanding 40 pounds per square foot snow load and			
100 miles per hour wind load			
Eight pianos, grand, ebony finish, various sizes; less trade-in of nine grand	Music	Peoria Musical Instrument Co.,	t
pianos of similar type and size		Peoria Four pianos	9 200 00
		Emerson Piano House, Inc Decatur	2.,
		One piano	3 995 00
		Riley Music, Champaign	
		Two pianos Clifford V. Lloyde Piano (3 962 00 Co.,
		Champaign One piano	1 890 00
		•	(19 047 00) f.o.b.
			delivered
Film tank service and approximately 402 cartons of x-ray solutions for two	Radiology	Philip A. Hunt Chemical Corp.,	9 140 90 delivered
automatic x-ray film processing units for the period beginning July 1, 1964,		Chicago	
through June 30, 1965, subject to renewal for one year by mutual agree-			
ment			
One instructional apparatus, including a turbofan project with power sup-	Theoretical and Applied	Scott Aviation Corp., Boca Raton, Fla.	3 120 83 f.o.b.
ply, smoke generator and nozzle, and one force moment balance project for	Mechanics		delivered
study of fluid dynamics			
Rental of caps, gowns, and hoods for faculty members and graduating stu-	Committee on Commencement	Collegiate Cap & Gown Collegiate Cap & C	0.,6 750 00
dents for the June 13, 1964, Com- mencement; estimated number of		E. R. Moore Co., Chicago	3 192 50
costumes required for the Urbana		Cincago	(9 942 50)
and Chicago campuses: 1,833 bachelors, 362 masters, 317 doctors			f.o.b. delivered
(Ph.D.), 195 doctors (M.D.), 95 doctors (D.D.S.)			
•			

Item	Department	Vendor	Cost
Print and bind 35,000 copies of Undergraduate Courses, 1964-65, trim size 6 in. by 9 in., approximately 240 pages per copy	University Press	R. R. Donnelley & Sons Co., Inc., Chicago	\$10 400 00 f.o.b. delivered
Print and bind 800 copies of Index Verborum in Ciceronis Rhetorica, by Kenneth M. Abbott, approximately 1,184 pages	University Press	Cushing-Malloy, Inc., Ann Arbor, Mich.	4 683 00 f.o.b. delivered
One tractor, 1964, with power steering, four-speed reversing transmission, three-point hitch assembly, all weather steel cab with electric windshield wipers, heater, and defroster, power take off unit, and V-type snow plow with hydraulic ram type lift system; less trade-in of 1952 utility tractor and V-type snow plow	Physical Plant	Economy Implements, Inc., Urbana	3 100 00 f.o.b. delivered
One lot of steel laboratory furniture consisting of the following items: twenty base units, two two-student tables, one student physics table, four alberene stone sinks, one carbonized birch pegboard, and five wall storage cabinets with sliding glass doors, to be used in the remodeling of a laboratory in the Floriculture Building	Physical Plant	Laboratory Furniture Co., Inc., Mineola, N.Y.	3 132 00 f.o.b. delivered
Eleven automobiles, 1964 model, four-door sedans with automatic transmissions and V-8 engines, less tradein of eight 1962, two 1961 model four-door sedans with automatic transmission and six cylinder engines, and one 1961 model compact, four-door sedan with automatic transmission and six cylinder engine	Physical Plant	Courtesy Motor Sales, Inc., Chicago (Ford) Six automobiles University Ford, Champaign (Ford) Three automobiles Rhodes Chevrolet, Farmer City (Chevrolet) Two automobiles (Total	6 230 00 3 276 00 2 800 00 12 306 00) f.o.b.
			delivered

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

COMPTROLLER'S REPORT OF CONTRACTS

(28) The Comptroller's report of contracts executed during the period February 1 to 29, 1964.

1 to 29, 1964.		Amount to be Paid to the	E ssective
With Whom	Purpose	University	Date
Association of Iron and Steel Engineers	Shelling of crane wheels	\$42 526 00	November 6, 1963
Chicago Copper & Chemical Co.	Preparation and evaluation of fer- roelectric barium titanate	2 500 00	January 6, 1964
The Hammond Lead Products Co.	Reaction kinetics and solution mech- anisms in glaze-body systems	2 500 00	February 7, 1964
Lincoln Park District	Appraisal of the recreation areas and facilities of city and park districts	700 00	October 10, 1963
Superintendent of Public Instruction	Conduct demonstration and experi- mental projects in the field of ed- ucation of gifted children	123 453 00	November 22, 1963
Superintendent of Public Instruction	Conduct centers, experimental pro- jects, and institutes in the field of education of gifted children	126 098 00	January 14, 1964
United States Air Force AF-AFOSR-588-64	Matrix isolation and mass spectro- metric studies of species produced in a shock tube	48 388 00	January 1, 1964
United States Air Force AF-AFOSR-599-64	Experimental aspects of the polaron	26 176 00	February 1, 1964
United States Air Force AF41(609)-2185	Cardiovascular effects of refeeding stress	24 936 00	December 1, 1963
United States Atomic Energy Commission AT(11-1)-1342	Studies on (1) binding of radionuclide metals in the chromosomes of plant cells; (2) genetic consequences of this binding; (3) maize meristem activity and base analog effects on mutation in corn	25 257 00	December 1, 1963

Wat When	Posterio	Amount to be Paid to the	Effective
With Whom United States Department of	Purpose Theory of expectations applied to musical listening	University \$ 37 907 00	Date February 1, 1964
Health, Education and Welfare OE-4-10-105			
United States Navy NOw 64-0178-d	Modes of fracture of composite materials	40 521 00	January 14, 1964
United States Navy N123-(953)35240A	Nonlinear discrete and sample-data control systems	14 999 00	January 15, 1964
Total		\$515 961 00	
	_	Amount to be Paid by the	Effective
With Whom Ice Capades, Inc.	Purpose Presentation of "Ice Capades"	University 70 per cent of	Date December 6, 1963
Space Craft, Inc. (sub-	(seven performances) Electron density and collision fre-	gross proceeds \$ 12 756 00	January 17, 1964
contract with National Aeronautics and Space Administration, NSG-504)	quency in the lower regions of the ionosphere	¥ 12 730 00	January 17, 1901
State's Attorney of Champaign County	Payment for services rendered by local governmental units (108 properties located in Champaign County)	28 716 00	January 23, 1964
State's Attorney of Champaign County	Payment for services rendered by local governmental units (Student-Staff Apartments)	3 214 00	January 23, 1964
Total	_	\$44 686 00	
	Leases	Amount to be	
*****	.	Amount to be Paid by the	Effective
With Whom International Business Machines Corp.	Purpose Rental of office machines, four items: \$76.80 to \$4,713.60	University \$ 5 750 00	Date September, October, and November, 1963
International Harvester	Rental of farm machinery, two items: \$335.00 and \$2,117.00	2 452 00	October 7, 1963
Mrs. Rosemund Lowry (renewal)	Rental of premises at 1007 S. Fifth Street, Champaign, from Feb- ruary 1, 1964, to June 15, 1964 for student housing (one semester)	2 475 00	February 1, 1964
MacCarthy Ford Tractor Sales, Inc.	Rental of farm machinery: one trac- tor and one loader with attach- ments	670 00	July 17, 1963
Massey-Ferguson, Inc.	Rental of farm machinery, eight items: \$2.50 to \$863.75	1 139 00	December, 1963
George Skafidas, Elizabeth McGarry, and Sam F. Skafidas (renewal)	Rental of one building at 2004 Third Avenue, Rock Island, from July 1, 1963, to June 30, 1965, for Divi- sion of Services for Crippled Chil- dren	3 000 00 (125,00 per month)	July 1, 1963
University of Illinois Foundation (renewal) (sublease with Bailey & Himes, Inc.)	Rental of entire second floor of building at 606½ East Green Street, Champaign, September 1, 1963, to June 30, 1965, for radio station WILL	5 296 00 (240.71 per month)	September 1, 1963
University of Illinois Foundation (renewal) (sublease with Hayes Building Account)	Rental of premises at 704 South Sixth Street, Champaign, from July 1, 1963, to June 30, 1965, for Physical Plant Department and Audio-Visual Aids	18 907 00 (\$708.33 for July and August, 1963; \$795.00 for balance of period)	July 1, 1963
University of Illinois Foundation (renewal) (sublease with Chester E. Keller, receiver for Corrubia property)	Rental of second floors at 601, 603, and 605 East Green Street, Cham- paign, from July 1, 1963, to June 30, 1965, for Architectural Divi- sion	14 400 00 (\$600.00 per month)	July 1, 1963
University of Illinois Foundation (renewal) (sublease with Tom and Josephine Merlo)	Rental of second floor at 611 and 613 East Green Street, Champaign, from September 1, 1963, to June 30, 1965, for Audio-Visual Aids	6 380 00 (\$290.00 per month)	September 1, 1963
Total		\$60 469 00	

Contract Changes

	Contract Changes		
With Whom	Purpose	Amount to be Paid to the	Effective Date
	-	University	
Agricultural Chemicals Division	Evaluation of a series of chlorinated hydrocarbon compounds as in- secticides	\$ 2 500 00	December 20, 1963
Merck & Co., Inc.	Growth stimulants in swine	3 000 00	July 1, 1963
Soft Phosphate Research Institute, Inc.	Phosphate utilization	4 000 00	January 29, 1964
United States Air Force AF19(628)-2391	Electromagnetic wave interaction techniques	29 997 00	December 18, 1963
United States Air Force AF33(657)-7422	High temperature resistant inorganic structural adhesives with metals	1 200 00	February 4, 1964
United States Air Force AF33(657)-10474	Electromagnetic and ferret recon- naissance antenna techniques	210 000 00	October 31, 1963
United States Army DA-49-193-MD-2222	Experimental ketosis in man	30 914 00	January 31, 1964
United States Army DA-49-193-MD-2481	Chemistry and mechanism of action of potential antiviral agents	34 999 00	January 7, 1964
United States Atomic Energy Commission AT(11-1)-903	Genetic/isotopic studies using the microbial degradation of terpenoid compound	23 230 00	January 1, 1964
United States Atomic Energy Commission AT(11-1)-1018	Pattern recognition and data han- dling problems arising in the anal- ysis of bubble chamber photo- graphs of high energy particle events	327 737 00	January 1, 1964
United States Atomic Energy Commission AF(11-1)-1018	Pattern recognition and data han- dling problems arising in the anal- ysis of bubble chamber photo- graphs of high energy particle events	47 263 00	January 7, 1964
United States Atomic Energy Commission AT(11-1)-1142	Kinetic isotope effects and related chemical kinetic problems	35 640 00	February 1, 1964
United States Atomic Energy Commission AT(11-1)11195	Elementary particle interactions in the high energy region	150 000 00	January 7, 1964
United States Atomic Energy Commission AT(11-1)-1198	Understanding the nature of materials, predominantly solids	217 000 00	January 3, 1964
United States Atomic Energy Commission AT(11-1)-1198	Understanding the nature of materials, predominantly solids	1 076 000 00	January 17, 1964
United States Navy NObs-77137	Evaluate the effects of subfactors as weld geometry undercutting and welding conditions on fatigue behavior of Hy-80-steels	1 310 00	February 3, 1964
United States Navy Nonr-1834(29)	Develop techniques and instrumen- tation for measuring acoustic at- tenuation	11 994 00	December 6, 1963
Total	·	2 206 784 00	
Adjustments Made in 1963-64 Cost-Plus Contracts			
With Whom	Purpose	Amount	Date
George S. Grimmett & Co.	Seventeen items: \$129.69 deduct to \$580.00	\$1 818 00	January and February, 1964

George S. Grimmett & Co. (Plastering)	Seventeen items: \$129.69 deduct to \$580.00	\$1 818 00	January and February, 1964
, ==: 5,	Summary		
	e Universitye University		

This report was received for record.

INVESTMENT REPORT Report of the Finance Committee

(29) The Finance Committee reported the following changes in investments of endowment funds for the month of January, 1964:

1 001				
Purchase \$ 30 000 21 000 24/100 shares	U. S. Treasury bonds U. S. Treasury bonds Monsanto Chemical Co.	4 per cent 4	2/15/80 8/15/72	\$ 30 110 87 21 205 47 13 44

Report of the Comptroller

The Comptroller reports the following changes in investments of current and unexpended plant funds, over which he has authority as indicated:

Current Funds	•		
	oup (June 20, 1962)		
Purchase \$1 000 000	U. S. Treasury bills	2 /27 /64	\$004 720 17
500 000	U. S. Treasury bills	2/27/64 3/26/64	\$994 729 17 497 566 11
600 000	U. S. Treasury bills	4/30/64	594 133 33
500 000	Ford Motor Credit Corp. notes	9/15/64	486 222 22
200 000 100 000	Household Finance Corp. notes Harris Trust Certificates 3½ per cent	9/15/64 11/12/64	194 488 89 100 000 00
150 000	of Deposit	11/12/0*	100 000 00
Exchange	II S T	2/15/64 6	
\$ 500 000	U. S. Treasury 3½ per cent Certificates of Indebtedness due	2/15/64 for	
500 000	U. S. Treasury notes 3½ per cent	8/13/65	
Construction F	· · · · · · · · · · · · · · · · · · ·		
	licine-Pharmacy Building Auxiliary (Dec	ember 16, 1953)
Purchase			,
\$ 100 000	U. S. Treasury bills	4/23/64	\$ 99 115 28
25 000 75 000	U. S. Treasury bills U. S. Treasury bills	4/16/64 4/16/64	24 780 63 74 341 87
Sale	0. 3. Heasury bills	4/10/04	14 341 6/
\$ 75 000	U. S. Treasury bills	4/16/64	\$ 74 358 41
Assembly Hall (June 23, 1959, and March 17, 1962) Purchase			
\$ 30 000	U. S. Treasury bills	4/15/64	\$ 29 724 36
78 000	U. S. Treasury bills	4/16/64	77 342 24
Chicago — Cor Purchase	ngress Circle Union (June 19, 1963)		
\$ 70 000	U. S. Treasury bills	3/19/64	\$ 69 568 18
Illini Union and Health Center (December 21, 1960) Purchase			
\$ 17 000	U. S. Treasury bills	4/16/64	\$ 16 859 51
Orchard Downs (June 14, 1960) Purchase			
\$ 67 000	U. S. Treasury bills	4/16/64	\$ 66 446 32
Orchard Down	s Addition (May 24, 1962)		
Purchase			
\$ 70 000	U. S. Treasury bills	3/12/64	\$ 69 671 39
Pennsylvania Avenue Residence Halls (June 21, 1961) Purchase			
\$ 60 000	U. S. Treasury bills	4/16/64	\$ 59 498 33
Sinking Funds			
Housing Revenue Bonds (December 17, 1958; June 23 and October 21, 1959; June 14, 1960; June 21, 1961; and May 24 and October 17, 1962)			
Purchase	T. C. 70. 1.11	0/24/61	0.000 (14.00
\$ 704 000 12 000	U. S. Treasury bills	8/31/64 8/31/64	\$688 641 06 11 738 20
62 000	U. S. Treasury bills U. S. Treasury bonds 25% per cent	8/31/64 2/15/65	61 399 38
	d Health Center (December 21, 1960)	-, 10, 00	01 011 00
Purchase		0/24/64	# F 004 00
\$ 6 000	U. S. Treasury bills	8/31/64	\$ 5 881 08

Men's Residence Halls of 1956 (September 18, 1956) Purchase

\$ 14 000	U. S. Treasury bonds	$\frac{25}{8}$ per cent $3\frac{7}{8}$	2/15/65	\$ 13 855 65
2 000	U. S. Treasury notes		5/15/65	2 002 50

Women's Residence Halls of 1956 (September 18, 1956, and February 15, 1961)

Purchase

35 000 U. S. Treasury notes 35/8 per cent 2/15/66 \$ 34 770 31 14 000 U. S. Treasury notes 4 8/15/66 14 035 00

Men's Residence Halls of 1957 (March 12, 1957, and November 18, 1959)

\$ 81 000 U. S. Treasury notes 37% per cent 5/15/65 \$ 81 025 31 123 000 U. S. Treasury bonds 25% 2/15/65 121 750 78

On motion of Mr. Swain, this report was received for record.

EMPLOYMENT OF ARCHITECTS FOR LONG-RANGE STUDIES, URBANA-CHAMPAIGN

(30) The Director of the Physical Plant and the Vice-President and Comptroller recommend the employment of Harrison and Abramovitz, New York, New York, for architectural studies on long-range campus planning at Urbana-Champaign on special assignments as required. Compensation will be on a time cost basis for technical personnel at usual and customary hourly rates plus 150 per cent to cover overhead and profit.

Funds are available in the state capital appropriations to the University.

I concur.

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

PUBLISHED STATEMENTS OF PROFESSOR REVILO P. OLIVER

President Henry presented the following communications which were previously sent to the members of the Board of Trustees.

To the Members of the Board of Trustees:

On February 19 I reported to you that Mr. Revilo Oliver's widely publicized comments on President John F. Kennedy and the Federal Government had stimulated a massive public reaction which, in my view, required official notice.

You will recall that I stated that ordinarily the University takes no notice of a professor's comment or conduct as a citizen. His right to dissent, to express unorthodox views, and to criticize is protected by the tradition of academic freedom at the University of Illinois, in the academic world, and by the Statutes governing the University.

I also indicated, however, that observance of professional standards is expected, even within the protection of academic freedom, and that, in my view, Mr. Oliver's expressions on public affairs raised questions as to whether he has compiled with these expectations. I indicated further that since, by custom, the consideration of such questions is a matter for professionals, I would ask the Urbana-Champaign Senate Committee on Academic Freedom and Tenure to review the situation and give me their advice.

The Board of Trustees, by formal action, endorsed my statement as making the following points:

"1. Mr. Oliver did not speak for the University, its faculty, the administration, or this Board;

2. The University strongly supports the principles of academic freedom and established procedures which require that no action be taken without an opportunity for prior faculty consultation;

3. That the administration and the Board are now seeking faculty advice."

I now submit the report from the Urbana-Champaign Senate Committee on Academic Freedom and Tenure, unanimously adopted by that group, as follows:

March 6, 1964

President David D. Henry 355 Administration (W)

DEAR PRESIDENT HENRY:

In your letter of February 21 addressed to the Chairman of our Committee you asked the Committee to review the "expressions on public affairs" contained in your statement to the Board of Trustees and to give you our advice "- as to whether University action of any kind concerning them or toward Professor Oliver because of them is indicated."

We commend you for asking the faculty, as represented by this Committee, to give you its counsel, but your request poses a difficult question for the Committee. On the one hand we wish to be helpful to you and to support the policy that administrative officers of the University consult with the faculty before making decisions on issues of concern to the academic community; but on the other hand we are confronted with the fact that our current University statutes do not appear to give our Committee, or any other faculty body, the authority to consult with the President in situations of this kind. Furthermore the Committee on academic freedom must by provisions in our University statutes afford a hearing to any staff member who feels that his academic freedom is being jeopardized; and also conduct a hearing and make recommendations when asked by a staff member against whom charges have been filed by the President, when such charges relate to the academic freedom of the staff member. It can be argued therefore that any judgment made by this Committee in response to your request would impair the ability of the Committee to act impartially when and if asked by the staff member to conduct a hearing on his behalf.

Despite these considerations the Committee has decided that it should respond to your request. To do otherwise would create the impression that the academic community at the University of Illinois is not concerned and that though the President wished to have the counsel of the faculty he could not get it. We know the academic community at the University of Illinois is concerned, and we refuse to accede to the unhappy and anomalous conclusion that the President has no right to confer with a responsible faculty committee about problems of great concern to the University and on which he must make decisions. We wish there were clear channels for such consultation and we would note in passing that when

the proposed statutory revisions become effective such channels will exist.

The exercise of academic freedom rights and privileges by a faculty is not without its price to a university, but the benefits greatly outweigh the costs. The public frequently does not realize why academic freedom is such a cherished value, and is so zealously guarded, by the academic community of scholars. In the furtherance of a university's educational objectives of exploring new fields, developing and transmitting new ideas, pushing forward the frontiers of knowledge, in short, in the search for the eternal verities, administrative restraint on the scholar searching for these truths must be avoided. If, in the exercise of this protected freedom of research and expression, and despite the statutory admonition that a professor is expected to observe professional standards of "accuracy, forthrightness, and dignity befitting his association with the university and his position as a man of learning," abuses of this privilege occur, restraints on such abuses must normally be provided by the adverse judgment of the individual's professional colleagues. He must withstand the full glare of critical professional judgment and condemnation for unprofessional, undignified, unsupported, or offensive utterances. He must have the right to be as ungloriously wrong, and suffer the professional consequences thereof, as to be gloriously right and receive the acclaim of his professional colleagues therefore. Thus when abuses occur, and the public image of a great university is somewhat tarnished as a result thereof, it must be recognized that the larger gain is in the brighter image of the university presented to the scholarly world of an institution dedicated to the advancement of knowledge and learning, and one willing to pay the price for strict adherence to this ideal.

In view of these considerations, therefore, our Committee advises you:

1. That it approves your statement to the Board of Trustees on February 19, 1964.

2. That action of any kind concerning these expressions or toward Professor Oliver because of them is not indicated,

BRUCE L. HICKS
ROBERT W. JOHANNSEN
DRIVER B. LINDSAY
CHARLES H. BOWMAN
ELWOOD F. REBER
HAROLD W. HANNAH
E. B. McNatt, Chairman
Urbana-Champaign Senate Committee
on Academic Freedom and Tenure

It should be noted that my February 19, 1964, statement to the Board of Trustees, which the Committee has approved, contains the following paragraph:

"That Mr. Oliver's views are not shared by this academic community is certain. I believe my colleagues agree, as I said earlier, that his unsupported accusations, and his unreasoned and vitriolic attack on the character and patriotism of President Kennedy are beyond the bounds of good taste in public comment and the normal proprieties of public debate."

I concur in the advice of the Committee.

I would add that I deplore the nature and manner of Mr. Oliver's comments which to so many appear to violate the canon that a faculty member in exercising his freedom of speech as a citizen should be mindful "that accuracy, forthrightness, and dignity befit his association with the University and his position as a man of learning." This appraisal is widely shared but I do not believe that it is adequate grounds for my filing disciplinary charges against Mr. Oliver.

David D. Henry President

On motion of Mr. Johnston, the President's report was approved by the Board.

Mr. Dilliard voted "No" and asked that the following explanation of his vote be included in the record:

March 18, 1964

Mr. President: The Board of Trustees of the University of Illinois has before it at this time the most difficult, complex, distasteful, and embarrassing problem that has confronted the Board in the nearly four years since I was elected a Trustee. From coast to coast the good name of the University of Illinois has been associated inevitably with an outrageous attack on the loyalty of an assassinated President who, as it happens, almost lost his life in the heroic service of our country in World War II. After the first attack and since we took action concerning it at our February 19 meeting, the same member of the University's faculty has leveled a similar assault on the integrity of the Chief Justice of the United States. In each case the publication appeared in a magazine connected with the John Birch Society.

As a citizen of Illinois, as well as a member of this Board, I support fully the fundamental principle of academic freedom, founded on the historic American guarantee of freedom of mind and speech, with the widest possible latitude for every University of Illinois scholar to inquire and expound, in the light of his intelligence and of his learning, and according to his conscience. I also recognize, and, in so far as it may be my official duty to do so, I encourage the separate role of the university scholar as a participating citizen in a society of many differing attitudes and opinions. At the same time, I regard the academic man's search for truth, with its scrupulous documentation of supporting evidence as the indispensable hallmark of accurate and trustworthy research by the university teacher and scholar. Freedom of inquiry is both cherished and right and unshirkable responsibility. Nowhere is this more true than on a university faculty dedicated to the education of citizens and the advancement of knowledge.

I appreciate, in the statement before us the careful thought and earnest deliberation on the part of the President of the University and of its Committee on Academic Freedom and Tenure. However, the statement does not go far enough for me in three major respects:

First, it does not declare with sufficient fervor for me the devotion of the

University of Illinois to free inquiry and expression.

Second, it does not sufficiently for me disavow and disassociate the University of Illinois from the disgraceful reflections against the martyred President and the sitting Chief Justice of the United States who is now conducting an investigation

of that still shocking tragedy.

Third, it does not assert with sufficient force for me that a University of Illinois scholar, be his field Greek and Latin or current history and contemporary political science, has an obligation to back up his conclusions with weighed and tested facts. If there is proof let it be forthcoming in the spirit and method of true academic inquiry and scholarship. If proof is not forthcoming let that be established for all to see.

I know of no way to vote for the resolution before us and at the same time express what are to me these most important considerations which I have just

enumerated.

The vote I will cast is not in any way a criticism of the quality or sincerity of the statement before us. I admire both the quality and the sincerity. Neither will my vote constitute in any way an opinion in advance on any proceeding that may or may not arise later. And so with reluctance and for the reasons stated I will vote no. I request that this account of my position be a part of the record of the vote I cast in order that there be no misunderstanding.

IRVING DILLIARD

SECRETARY'S REPORTS

The Secretary presented for record the following lists: appointments to the faculty made by the President; appointments of fellows; resignations, declinations, cancellations, and terminations; leaves of absence; appointment changes in Athletic Association staff approved by the President.

APPOINTMENTS MADE BY THE PRESIDENT

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

ALLEN, JOHN W., Assistant in Economics, 1/2 time, \$1,137.51, and Research Assist-

ant in Finance, ½ time, \$1,050, February 1-June 15, 1964, supersedes (2-5-64).

Alsobrook, James M., Jr., Visiting Assistant Professor of Psychology, for two months from February 1, 1964, \$653.33 a month, and for five months from April 1, 1964, ½ time, \$490.00 a month, supersedes (3-3-64).

Atac, Muzaffer, Research Assistant in Physics (C), seven months from February 1, 1964, \$3,500 (2-6-64).

1, 1964, \$3,500 (2-6-64).

BAKRI, (MISS) MAARIB, Research Assistant in Botany, February 1-June 15, 1964, \$2,100 (2-6-64).

BARTHEL, HAROLD O., Associate Professor of Aeronautical and Astronautical Engineering (C), ½ time, two months from June 16, 1964, \$1,212; this is in addition to his present appointment (2-7-64).

BARTKY, SANDRA S., Instructor in Philosophy (Chicago Undergraduate Division), 5% time, to render service during the second semester of the academic year, 1963-64, \$2,500, supersedes (2-27-64).

Basu, Gobinda L., Research Associate in Chemistry, December 16, 1963-August 31, 1964, \$6,800 a year (2-7-64).

Bauer, Edward E., Professor of Civil Engineering (C), nine months from September 16, 1963, \$10,000, supersedes appointment dated July 24, 1963 (2-4-64).

BENKERT, KYLE G., Instructor in Architecture (Chicago Undergraduate Division), 1/2 time, to render service during the second semester of the academic year,

1963-64, \$2,000 (2-27-64).
BEZKOROVAINY, GEORGY, Research Assistant in Civil Engineering (C), February 1-June 15, 1964, \$2,300, supersedes (2-6-64).

BHAN, SURAJ, Research Associate in Metallurgical Engineering (C), ½ time, one year from September 1, 1964, \$3,500 (2-7-64).

BLAYLOCK, WILLIAM C., Assistant Professor of Spanish, to render service during the second semester of the academic year, 1963-64, \$3,350; and for the academic year beginning September 1, 1964, \$6,700, supersedes (3-3-64).

BLUMENTHAL, SHIRLEE, Instructor in English (Chicago Undergraduate Division),

to render service during the second semester of the academic year, 1963-64,

\$2,600 (2-24-64).

BOKENKAMP, ROBERT W., Instructor in General Engineering (C), ½ time, two months from June 16, 1964, \$934; this is in addition to his present appointment, and to his Summer Session appointment on ½ time (2-7-64).

BOROWSKI, JOSEPH F., Assistant in the Graduate School of Library Science, Summer Session of 1964, June 15-August 8, 1964, \$934 for the period (2-18-64). BOYER, PAUL, Research Assistant in Geology, June 15-June 30, 1964, \$233.33

(2-6-64).

BOYER, STANTON L., Research Assistant in Chemistry, seven months from February 1, 1964, \$3,004.19 (2-24-64).

BOYLE, MRS. JUDITH E., Research Assistant in Education (University High School Mathematics Project), ½ time, eight months from January 1, 1964, \$1,716.64, supersedes full-time appointment (2-6-64).

BRANDT, KENNETH D., Assistant in Medicine (Medicine), six months from January 1, 1964, without salary (2-14-64).

BURGES, ANTHONY W., Instructor in Geography (Chicago Undergraduate Division), 1/2 time, to render service during the second semester of the academic year, 1963-64, \$1,500 (2-27-64).

BURNS, KENNETH, Associate Professor of Speech and Theatre, Summer Session of 1964, June 15-August 8, 1964, \$1,956 for the period, supersedes previous Summer Session appointment on ½ time (2-11-64).

Cantwell, Frederick F., Assistant in Chemistry, ½ time, and Research Assistant in Chemistry, ½ time, February 1-June 15, 1964, \$2,100, supersedes (2-24-64).

Card, Leslie E., Professor of Animal Science (S), one month from February 1, 1964, \$500 (2-3-64).

Carper, Mrs. Gladys, House Director, Alpha House, five months from February

1, 1964, \$1,150; for the convenience of the University, she will also receive room and meals while the dining rooms are in operation (2-21-64).

CARR, KENNETH R., Instructor in Electrical Engineering (C), 17/100 time, \$450, and Instructor in Electrical Engineering (C) (Research), ½ time, to render service during the second semester of the academic year, 1963-64, supersedes (2-7-64).

CARSON, RAYMOND F., Graduate Resident Assistant, Weston Hall, ¼ time, February 1-June 30, 1964, \$225, and Assistant in Physical Education for Men, ¾ time, February 1-June 15, 1964, \$1,575, supersedes (2-4-64).

CASLER, DARWIN J., Assistant Professor of Accountancy, 1/2 time, two months from

June 16, 1964, \$1,000; this is in addition to his present appointment (2-4-64). CHANDRAN, RAMAN S., Research Assistant in Entomology, February 1-June 15, 1964, \$2,300, supersedes (2-6-64).

CHAPDU, ROBERT E., Instructor in English, Summer Session of 1964, 1/2 time, June

15-August 8, 1964, \$645 for the period (2-20-64).

CHEN, WAI-KAI, Research Associate in the Coordinated Science Laboratory (C), ½ time, seven months from February 1, 1964, \$3,050 a year, supersedes (2-11-64).

COHEN, LEONARD S., Research Assistant in Chemical Engineering (S), one month from February 1, 1964, \$541.67, supersedes (2-7-64).

COLE, DENNIS E., Registered Pharmacist in Hospital Pharmacy (Pharmacy), seven months from February 1, 1964, \$7,000 a year (2-8-64).

CONSIDINE, RICHARD H., Clinical Assistant in Medicine (Medicine), eight months from January 1, 1964, without salary (2-3-64).

CRACKEL, WALTER C., Research Assistant in Veterinary Physiology and Pharma-

cology (College of Veterinary Medicine), February 10-August 31, 1964, \$3,121.86 (2-25-64).

CROWDER, JAMES R., Research Assistant in the Coordiated Science Laboratory (C), seven months from February 1, 1964, \$3,616.69, supersedes (2-21-64).

Davis, Earl E., Visiting Instructor in Psychology, February 1-June 15, 1964, \$3,300, supersedes (2-7-64).

DAWSON, DAVID A., Project Assistant in the State Natural History Survey and in the Graduate College, six months from March 1, 1964, \$2,400 (2-17-64).

DAY, MRS. PHYLLIS M., Assistant in Education (University High School), February 1-June 15, 1964, \$2,650 (2-6-64).

DIEHL, DOROTHY M., Project Assistant in the State Natural History Survey and in the Graduate College, four months from March 1, 1964, \$1,140 (2-24-64).

Doty, Danney B., Instructor in Vocational and Technical Education, 1/4 time, February 1-June 15, 1964, \$750 (2-3-64).

DuBois, William R., Assistant in English, February 1-June 15, 1964, \$2,100,

supersedes (2-18-64).

EL-Ashry, Mohamed T., Research Assistant in Geology, June 16-June 30, 1964, \$233.33 (2-6-64).

Fair, Armor J., Instructor in Management (Chicago Undergraduate Division),

June 19-August 14, 1964, \$1,556; this is in addition to his present appointment (2-4-64).

Felton, Richard P., Instructor in Business English, Summer Session of 1964, 1/2 time, June 15-August 8, 1964, \$656 for the period (2-20-64).

Ferber, Mrs. Marianne A., Lecturer in Economics, February 1-June 15, 1964, \$888.89 a month (2-11-64).

Ferdman, Nadine, Research Assistant in Chemistry, seven months from February 1, 1964, \$3,004.19, supersedes (2-21-64).

Folsom, Angela T., Consultant in Psychology, 1/3 time, to render service during the second semester of the academic year, 1963-64, \$3,000 a year (2-11-64).

FRIEDLAND, SIGMUND W., Clinical Assistant in Medicine (Medicine), eight months from January 1, 1964, without salary (2-3-64).

Fumento, Rocco L., Assistant Professor of English, Summer Session of 1964, 1/2 time, June 15-August 8, 1964, \$889 for the period (2-20-64).

GARDNER, KARL E., Chief of Party and Adviser to the Principal of the Njala GARDNER, KARL E., Chief of Party and Adviser to the Principal of the Njala University College, for service under Contract USAID/AFE 132 at the Njala College, Sierra Leone, for one month beginning February 1, 1964, \$1,672.92; and Professor of Nutrition (Dairy Science), indefinite tenure, and Associate Dean of the College of Agriculture, beginning March 1, 1964, and continuing through August 31, 1965, \$18,250 a year, supersedes (2-12-64).

GARLINGHOUSE, BURTON A., Visiting Lecturer in Music, Summer Session of 1964, June 15-August 8, 1964, \$2,500 for the period (2-20-64).

GEORGOULIS, EVANGELOS A., Clinical Assistant in Medicine (Medicine), seven months from February 1, 1964, without salary (2-14-64).

GUBERT, DAVID B., Visiting Instructor in Music (Flute), February 1-June 15, 1964.

GILBERT, DAVID B., Visiting Instructor in Music (Flute), February 1-June 15, 1964, \$3,010.15 (3-3-64).

GOLDAN, PAUL D., Research Associate in Electrical Engineering (C), seven months

from February 1, 1964, \$8,500 a year (2-27-64).

GRIDLEY, Roy E., Assistant in English, ½ time, February 1-June 15, 1964, \$767, supersedes full-time appointment (2-7-64).

GRIEGO, RICHARD J., Research Assistant in Mathematics, June 16-August 15, 1964, \$933.32 (2-3-64).

GRITZ, NORMAN J., Instructor in Foreign Languages (Chicago Undergraduate Division), 34 time, to render service during the second semester of the aca-

Division), 34 time, to render service during the second semester of the academic year, 1963-64, \$1,875 (2-17-64).

Gruner, Barbara J., Research Assistant in Plant Pathology (C), January 16-August 31, 1964, \$3,256.96 (2-12-64).

Guither, Harold D., Chief of Party and Adviser on Agricultural Communications for service under Contract USAID/NESA-64 J, in the Ministry of Agriculture, Amman, Jordan, December 23 through December 30, 1963, and January 4, 1964, through December 31, 1965, \$12,000 a year; and Extension Editor, with the service of Agriculture, on indefinite tenure beginning rank of Associate Professor of Agriculture, on indefinite tenure beginning December 31, 1963, and continuing through January 3, 1964, at a salary of \$10,900 a year, and beginning January 1, 1966, at a salary to be determined

in the budget for 1965-66, supersedes (1-2-64).

HAILE, HARRY, Associate Professor of Germanic Languages and Literatures, Summer Session of 1964, June 15-August 8, 1964, \$2,334 for the period, supersedes previous Summer Session appointment (2-20-64).

HALEY, MRS. PAMELA V., Instructor in Medical Social Work (Medicine), 1/2 time,

six months from March 1, 1964, \$4,300 a year, supersedes (2-4-64).

HALFORD, GARY R., Instructor in Theoretical and Applied Mechanics (C), \$\frac{2}{3}\$ time, to render service during the second semester of the academic year, 1963-64, \$1,966.92, supersedes (2-6-64).

HART, HYMEN H., Assistant in English, February 1-June 15, 1964, \$2,200, super-

sedes (2-18-64).

HARTDAGEN, GERALD E., Instructor in History (Chicago Undergraduate Division), 1/2 time, to render service during the second semester of the academic year,

1963-64, \$1,300 (2-27-64).

HAY, RALPH C., Professor of Agricultural Engineering and Adviser to Dean of Agricultural Engineering Technology, for service under Contract AIDc-1258 at the U. P. Agricultural University, Pant Nagar, U. P.; India, for five months from February 1, 1964, \$16,000 a year; and Professor of Agricultural Engineering, College of Agriculture, indefinite tenure from July 1, 1964, supersedes (2-18-64).

HINDS, FRANK C., Assistant Professor of Animal Science (C and S), seven months

from February 1, 1964, \$9,400 a year, supersedes (2-6-64).

HOFFMAN, ALLEN, Clinical Instructor in Medicine (Medicine), one year from September 1, 1963, without salary (2-26-64).

HUDSON, JANETTE C., Assistant in Germanic Languages, February 1-June 15, 1964,

\$2,100 (2-25-64).

Hung, Mrs. Winifred H., Acquisition Assistant in the Library, seven months from February 1, 1964, \$3,208.31 (2-11-64).

IBUKI, KIMIO, Visiting Research Associate in the Digital Computer Laboratory, March 16-June 15, 1964, \$2,166.66 (2-25-64).

JAEGER, ROBERT T., Instructor in Architecture (Chicago Undergraduate Division), 1/2 time, to render service during the second semester of the academic year, 1963-64, \$2,000 (2-27-64).

Jones, Lawrence E., Research Assistant in Psychology, February 1-June 15, 1964, \$2,100 (2-7-64).

KACHRU, BRAJ B., Research Associate in Linguistics, October 16, 1963-August 31, 1964, \$6,100 a year, supersedes (2-7-64).

KAWATRA, M. P., Research Associate in Physics (C), three months from June 1, 1964, \$750 a month (2-21-64).

KIESERMAN, DAVID H., Assistant in the Division of General Studies, February 1-June 15, 1964, \$2,100, supersedes (2-18-64).

KILLIAN, THOMAS J., Instructor in Electrical Engineering (C), February 1-June 15, 1964, \$1,300, supersedes (2-6-64).

KINGERY, Ross A., Associate Editor of Engineering Publications, College of Engineering, one year from September 1, 1963, \$9,200, supersedes (2-3-64).

KLASSEN, FRANK H., Teacher Training Adviser, for service under Contract USAID/AFE at the Njala University College, Sierra Leone, for two years from March 1, 1964, \$12,100 a year, supersedes (2-26-64).

Krause, Albert H., Jr., Counselor in Student Affairs, Housing, Medical Center,

Chicago, 15/100 time, February 1-June 15, 1964, \$600 (2-24-64). KRIZAN, THOMAS F., Assistant Professor of Physical Education for Men. 34

time, June 16-August 6, 1964, \$1,325; this is in addition to his present appointment (2-4-64).

LANKARD, DAVID R., Research Assistant in Ceramic Engineering (C), seven

months from February 1, 1964, \$3,500 (2-3-64).

LATHRAP, DONALD W., Assistant Professor of Anthropology, two months from June 16, 1964, \$1,878; this is in addition to his present appointment (2-7-64).

LEARY, DENNIS J., Research Assistant in Civil Engineering (C), one month from February 1, 1964, \$600 (2-27-64).

LEGGETT, A. J., Research Associate in Physics (C), one year from September 1, 1964, \$8,000 (2-21-64).

Levy, Edward R., Instructor in English, 3/3 time, February 1-June 15, 1964, \$3,467, supersedes (2-28-64).

LISTON, WILLIAM T., Assistant in English, February 1-June 15, 1964, \$2,200,

supersedes (2-20-64). Liu, William Y., Serials , Serials Assistant in the Library, February 11-August 31, 1964, \$3,050.27 (2-11-64).

LOCKHART, JOHN, Assistant in Psychiatry (Medicine), one year from September 1. 1963, without salary (2-14-64).

LOFTUS, RICHARD J., Assistant Professor of English, Summer Session of 1964, 1/2 time, June 15-August 8, 1964, \$834 for the period (2-20-64).

MADISON, JAMES M., Instructor in Marketing (Chicago Undergraduate Division),

MADISON, JAMES M., Instructor in Marketing (Chicago Undergraduate Division), 1/2 time, to render service during the second semester of the academic year, 1963-64, \$1,550, supersedes (2-27-64).

MAGANINI, ROBERT J., Clinical Instructor in Surgery (Medicine), seven months from February 1, 1964, without salary (2-11-64).

MARTIA, DOMINIC F., Assistant in English (Chicago Undergraduate Division), February 1-June 15, 1964, \$2,200 (2-21-64).

MARX, WERNER, Assistant Professor of Germanic Languages and Literatures, Summer Session of 1964, June 15-August 8, 1964, \$1,589 for the period (2-11-64). (2-11-64).

MATSUMOTO, HIDEO, Research Associate in Pathology (Medicine), four months from February 1, 1964, \$6,100 a year, supersedes (2-18-64).

MATSUMOTO, YORMI, Research Assistant in Physiology and Biophysics, seven

months from February 1, 1964, \$3,004.19 (2-7-64).

Матидек, Mrs. Ida S., Head Resident, Busey Hall, January 26-March 15, 1964, \$480 a month; for the convenience of the University she will also receive an apartment and meals while the dining rooms are in operation (2-11-64).

McQuiston, Ian B., Research Assistant in Geology, June 16-June 30, 1964, \$233.33 (2-6-64).

Melhorn, Wilton N., Visiting Lecturer in Geology, Summer Session of 1964, June 15-August 8, 1964, \$2,000 for the period (2-20-64).

Miles, Maurice H., Research Associate in Metallurgical Engineering (C), six months from March 1, 1964, \$8,500 a year, supersedes (2-7-64).

MILLER, ARNOLD L., Assistant Professor of Psychology, ½ time, to render service during the second semester of the academic year, 1963-64, \$4,350 a year, supersedes (2-7-64).

MUELLER, HENRY L., Professor of Speech and Theatre, Summer Session of 1964, June 15-August 8, 1964, \$2,223 for the period, supersedes his previous Summer Session appointment (2-11-64).

MULVIHILL, RICHARD J., Instructor in Physical Education for Men, 1/2 time, two months from June 16, 1964, \$589; this is in addition to his present appointment (2-4-64).

NIEDERMAN, SARA C., Instructor in English (Chicago Undergraduate Division), ½ time, to render service during the second semester of the academic year, 1963-64, \$1,800 (2-24-64).

OPPENHEIMER, ZELDA V., Assistant in Foreign Languages (Chicago Undergraduate Division), February 1-June 15, 1964, \$2,500 (2-10-64)
ORTOLANO, THOMAS R., Research Associate in Chemistry, one year from September 1, 1964, \$6,800 (2-3-64).
Pantone, Anton M., Clinical Associate Professor of Radiology (Medicine), 1/4 time, five months from February 1, 1964, \$316.67 a month (2-11-64).

PARKER, ADAH D., Instructor in Recreation and Municipal Park Administration, Summer Session of 1964, 34 time, June 15-August 8, 1964, \$1,176 for the period, supersedes previous Summer Session appointment on 1/2 time (2-24-64).

Paul, Florence, Research Assistant in Animal Science (S), seven months from February 1, 1964, \$3,033.31, supersedes (2-17-64).

Penny, William J., Instructor in Physical Education for Men, 3/5 time, two months from June 16, 1964, \$733; this is in addition to his present appointment (2-4-64).

PFEIFER, ROBERT J., Research Assistant in Electrical Engineering (C), ½ time, seven months from February 1, 1964, \$1,545.81; and Assistant in Electrical Engineering (C), ½ time, February 1-June 15, 1964, \$1,084.10, supersedes

POLLOCK, MICHAEL L., Instructor in Physical Education for Men, 3/5 time, two months from June 16, 1964, \$840; this is in addition to his present appointment

Pu, Mrs. Lena Chang, Research Assistant in Mathematics, two months from June 16, 1964, \$933.32 (2-4-64).

RACSTER, RONALD L., Assistant in Finance, ½ time, \$1,050, and Research Assistant in Finance, ½ time, \$1,050, February 1-June 15, 1964, supersedes (2-6-64).

RAGADE, INDUKANTH S., Research Associate in Chemistry, January 27-August 31,

1964, \$6,100 a year, supersedes (2-11-64).
RAYNIAK, MRS. ELEANOR R., Registered Pharmacist in Hospital Pharmacy (Pharmacy), February 10-August 31, 1964, \$7,400 a year (2-27-64).
READ, MRS. MARGARET K., Assistant Editor in the Graduate College, February 17-

August 31, 1964, \$5,500 a year (2-26-64).

REILLY, ROBERT C., Assistant in Mathematics (Chicago Undergraduate Division),

February 1-June 15, 1964, \$2,400 (2-21-64).
ROBINSON, T. THACHER, Instructor in Mathematics, February 1-June 15, 1964, \$3,600 (3-3-64).

RODRIGUEZ, MANUEL V., Assistant in Anesthesiology, Department of Surgery (Medicine), January 24-June 30, 1964, without salary (2-27-64).

ROGERS, DONALD P., Professor of Botany, Summer Session of 1964, June 15-August 8, 1964, \$3,112 for the period (2-20-64).

Russell, Ronald L., Research Assistant in the Center for Zoonoses Research (College of Veterinary Medicine), five months from February 1, 1964, \$2,414.60 (2-25-64).

RYAN, DAVID G., Professor of Mechanical Engineering (C), ½ time, two months from June 16, 1964, \$1,523; this is in addition to his present appointment (2-7-64).

SABEL, CHARLES L., Instructor in Psychology (Chicago Undergraduate Division), to render service during the second semester of the academic year, 1963-64, \$2,850, supersedes (2-27-64).

SALOMON, LAWRENCE, Instructor in Art (Chicago Undergraduate Division), 2/3 time, to render service during the second semester of the academic year, 1963-64, \$2,000 (2-8-64).

SAMACHSON, JOSEPH, Assistant Professor of Biological Chemistry (Medicine), 24/100 time, seven months from February 1, 1964, \$3,000 a year, supersedes

nonsalaried appointment (3-3-64).

Saton, Mirsuo, Research Associate in Physics (С), one year from September 1, 1964, \$8,000 (2-7-64).

Savory, Paul B., Instructor in Radiology (Medicine), seven months from February Paul B., Instructor in Radiology (Medicine), seven months from February Paul B.

ruary 1, 1964, without salary (2-26-64).

Schloesser, Eckart, Research Associate in Plant Pathology (S), six months from March 1, 1964, \$6,100 a year (2-20-64). Schmitt, Ronald E., Assistant in Architecture, February 1-June 15, 1964, \$2,100

(2-1-64)

Schwarz, Enrique, Clinical Assistant Professor of Radiology, and Assistant Radiologist (Research and Educational Hospitals), College of Medicine, 1/10

time, seven months from February 1, 1964, \$1,520, supersedes (2-4-64).

Shaffer, Paul R., Professor of Geology, Summer Session of 1964, June 15July 25, 1964, \$2,667 for the period, supersedes previous Summer Session
appointment (2-20-64).

SHARMA, SUSHIL DUA, Visiting Assistant Professor of Psychology, 2/3 time, to render service during the second semester of the academic year, 1963-64, \$5,200 a year, supersedes (2-11-64).

SMITH, HELEN L., Visiting Lecturer in Social Sciences (Chicago Undergraduate Division), to render service during the second semester of the academic year, 1963-64, \$4,250 (2-17-64).

SPRENKLE, CASE M., Assistant Professor of Economics and Assistant Dean of the College of Commerce and Business Administration, ½ time, two months from June 16, 1964, \$1,078; this is in addition to his present appointment and to his Summer Session appointment on ½ time (2-4-64).

STEIN, HERBERT J., Assistant Professor of Electrical Engineering (Chicago Undergraduate Division), to render service during the second semester of the academic year, 1963-64, \$4,500 (2-12-64).

STEWART, DONALD C., Assistant Professor of English, Summer Session of 1964, 1/2

time, June 15-August 8, 1964, \$789 for the period (2-20-64).
STILLERMAN, JOSEPH J., Research Associate in Dentistry (Dentistry), 1/5 time, eight months from January 1, 1964, \$1,500 a year (2-18-64).

- Storm, Gerald L., Field Ecologist in the State Natural History Survey and in the Graduate College, 25 time, four months from February 1, 1964, \$312 a month, supersedes (3-3-64).
- TAKANO, TADAO, Instructor in Art (Chicago Undergraduate Division), 5/6 time, to render service during the second semester of the academic year, 1963-64, \$2,500 (2-24-64).
- TSALOFF, VICTOR N., Assistant in Radiology (Medicine), one year from September 1, 1963, without salary (2-3-64).
- TUTTLE, PRESTON H., Instructor in English, 2/3 time, to render service during the second semester of the academic year, 1963-64, \$2,267 (2-26-64).
- Vannoy, Joseph S., Research Assistant in Psychology, February 1-June 15, 1964, \$2,100, supersedes (2-24-64).
- von Lehmden, Alice A., Research Assistant in Electrical Engineering (C), seven months from February 1, 1964, \$3,616.69 (2-3-64).

 Wesley, Thomas D., Instructor in Dentistry (Dentistry), ½ time, January 13-August 31, 1964, \$3,750 a year (2-11-64).
- WESTEMEIER, RONALD L., Project Assistant in the State Natural History Survey and in the Graduate College, five months from February 1, 1964, \$2,166.65 (2-26-64).
- WHITE, GEORGE W., Professor of Geology, Summer Session of 1964, July 27-August 8, 1964, \$1,067 for the period, supersedes previous Summer Session appointment (2-20-64).
- WHITMER, ROGER G., Lecturer on Materials and Methods of Construction (Chicago Undergraduate Division), ½ time, to render service during the second semester of the academic year, 1963-64, \$1,500 (2-7-64).
- WOLFE, SHARON, Research Associate in the Institute of Communications Research (College of Journalism and Communications), and Research Associate in Psychology (College of Liberal Arts and Sciences), to render service during the second semester of the academic year, 1963-64, \$2,700, supersedes (2-11-64).

 YUDIN, FLORENCE L., Assistant in Spanish, February 1-June 15, 1964, \$2,100, supersedes (2-28-64).
- Zelan, Joseph, Instructor in Sociology (Chicago Undergraduate Division), to render service during the second semester of the academic year, 1963-64, \$3,000 (2-27-64).
- ZEWADSKI, ROBERT M., Instructor in Business English, Summer Session of 1964, 1/2 time, June 15-August 8, 1964, \$589 for the period (2-20-64).
- ZUKAUSKAS, O. EUGENIJA M., Assistant in Anesthesiology, Department of Surgery (Medicine), six months from January 1, 1964, without salary (2-14-64).

FELLOWS

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

- Adams, George-Ann, Vocational Rehabilitation Administration Fellow (Trainee)
- in Speech, seven months from February 1, 1964, \$1,200 (2-18-64).

 Brown, Frederick S., United States Public Health Service Fellow (Traince) in
- Chemistry, February 1-June 15, 1964, \$1,100 (2-12-64).
 DEARMOND, M. KEITH, United States Public Health Postdoctoral Fellow (Trainee) in Chemistry, in the Graduate College, seven months from February 1, 1964. \$3,791.62 (2-7-64).

- \$3,/91.02 (2-7-04).

 FRIEDLAND, JOAN M., United States Public Health Service Fellow (Trainee) in Chemistry, February 1-June 15, 1964, \$1,100 (2-4-64).

 FURUMOTO, HOWARD H., United States Public Health Service Fellow (Trainee) in Veterinary Medical Science, one year from January 16, 1964, \$6,000 (1-28-64).

 GALLUZZI, V. NICHOLAS, United States Public Health Service Fellow (Trainee) in Physiology and Biophysics, five months from February 1, 1964, \$1,110.85 (12-31-63).
- HOLMES, PETER K., United States Public Health Service Fellow (Trainee) in Microbiology, five months from February 1, 1964, \$1,333.35 (1-30-64). Hutson, Phillip L., Fellow in History, nine months from September 16, 1963,
- \$2,000; and two months from June 16, 1964, \$250, supersedes (2-3-64).
- KEMP, MARWIN K., United States Public Health Service Fellow (Trainee) in Chemistry, seven months from February 1, 1964, \$1,400 (1-31-64).

KNOPP, JAMES A., United States Public Health Service Fellow (Trainee) in Chemistry, seven months from February 1, 1964, \$1,575 (2-12-64).

Komatsu, Ryun, Keio-Illinois Exchange Fellow in Labor and Industrial Relations, February 1-June 15, 1964, \$750 (2-4-64).

LAURSEN, RICHARD A., United States Public Health Service Predoctoral Fellow in Chemistry, six months from February 1, 1964, \$1,100 (2-1-64).

LEIR, CHARLES M., Hoffman-LaRoche Teaching Fellow in Chemistry, February 1-

June 15, 1964, \$1,050 (2-18-64).

MAISCH, WELDON F., United States Public Health Service Fellow (Trainee) in Microbiology, five months from February 1, 1964, \$1,250 (1-28-64).

Musliner, Walter J., Hoffman-LaRoche Fellow in Chemistry, February 1-June 15, 1964, \$1,100 (2-14-64).

NIELSEN, LINDA A., Charles E. Merriam Fellow in Political Science, February 1-June 15, 1964, \$750 (2-1-64).

NING, ROBERT Y., Hoffman-LaRoche Teaching Fellow in Chemistry, February 1-June 15, 1964, \$1,100 (2-18-64).

Painter, Genevieve, Vocational Rehabilitation Administration Fellow (Traince) in Recreation and Municipal Park Administration, February 1-June 15, 1964,

\$900 (2-12-64).

SILVERGLADE, LEE B., United States Public Health Service Fellow (Trainee) in Oral Pathology, December 6, 1963-June 30, 1964, \$4,254, supersedes (12-16-63).

TAYLOR, PAUL L., United States Public Health Service Fellow (Trainee) in Veterinary Medical Science, one year from February 1, 1964, \$5,500 (2-3-64).

WANTLAND, LARRY, Lauterbach Memorial Fellow in Food Science, four months

from February 1, 1964, \$833.32 (2-12-64).
WILDE, CARROLL O., National Science Foundation Mathematics Institute Teaching

Fellow in Mathematics, February 1-June 15, 1964, \$1,155 (2-12-64).

RESIGNATIONS, DECLINATIONS, CANCELLATIONS, AND TERMINATIONS

Anner, George E., Professor of Electrical Engineering, Summer Session of 1964 -declination effective June 15, 1964.

ARLON, ARY J., Instructor in Art, Summer Session of 1964 - declination effective June 15, 1964.

BALLUFFI, ROBERT W., Professor of Physical Metallurgy - resignation effective September 1, 1964.

Bardos, Andras M., Teaching Fellow in Physics — resignation effective February 1, 1964

BUNGERT, WILLIAM C., Assistant in Elementary Education, Summer Session of 1964 - declination effective June 15, 1964.

Colwell, Richard J., Assistant Professor of Music, Summer Session of 1964 declination effective June 15, 1964.

CREWS, JANICE M., Instructor in Speech (Chicago Undergraduate Division), Summer Session of 1964 - declination effective June 19, 1964.

CRUMLISH, BRIAN J., Research Associate in the Small Homes Council-Building Research Council—resignation effective February 16, 1964.

DIAMOND, DALE M., Research Associate in the Coordinated Science Laboratory termination effective December 1, 1963.

DJORUP, FRANS M., JR., Assistant Professor of Mathematics - resignation effective February 1, 1964.

EDWARDS, WILLIAM R., Research Associate in the State Natural History Survey and in the Graduate College - resignation effective February 1, 1964.

FLEMING, ROBBEN W., Professor of Law — resignation effective September 1, 1964. Fox, Ann M., Instructor in the Graduate School of Library Science, Summer Session of 1964—declination effective June 15, 1964.

Gallo, Frank, Assistant Professor of Art, Summer Session of 1964—declination

effective June 15, 1964. GIORDANO, CHARLES, Instructor in Germanic Languages and Literatures, Summer

Session of 1964—declination effective June 15, 1964. Gruner, Barbara J., Research Assistant in the State Water Survey and in the

Graduate College — termination effective January 1, 1964.
GUCKEL, HENRY, Research Associate in the Digital Computer Laboratory—resignation effective April 21, 1964, 12:00 noon.

GUNTER, FRANK E., Instructor in Art, Summer Session of 1964—declination effective June 15, 1964.

HALL, WILLIAM J., Professor of Civil Engineering, Summer Session of 1964—

declination effective June 15, 1964.

Hamilton, Jean A., Research Associate in Chemistry - resignation effective

February 1, 1964.

HARRISON, WILLARD W., C. S. Marvel Fellow in Chemistry — resignation effective February 19, 1964.

HILL, MRS. ROBERTA B., Research Associate in Nutritional Biochemistry, Department of Animal Science - resignation effective March 1, 1964.

HOEKMAN, THEODORE B., United States Public Health Service Fellow (Trainee) in Biophysics — resignation effective February 1, 1964.

HOGAN, JAMES J., Instructor in Electrical Engineering — resignation effective

March 1, 1964.

JACOBS, ALLAN E., Fellow in Physics — resignation effective June 16, 1964.

JERMO, BETTY L., Registered Pharmacist in Hospital Pharmacy (Pharmacy) —

resignation effective February 1, 1964.

KAHN, WALTER J., Instructor in Ophthalmology (Medicine) - resignation effective February 10, 1964.

KLEESE, WILLIAM R., United States Public Health Service Fellow (Trainee) in Biophysics — resignation effective February 1, 1964.

KODRAS, RUDOLPH, Assistant Professor of Veterinary Pathology and Hygiene, College of Veterinary Medicine, and of Veterinary Research, Agricultural

Experiment Station — resignation effective March 1, 1964.

Kord, Victor G., Instructor in Art, Summer Session of 1964 — declination effective June 15, 1964.

Lister, Basil M., National Science Foundation Institute Fellow in Mathematics —

resignation effective February 1, 1964.

McVAY, MILLARD S., Associate Professor of Electrical Engineering, Summer

Session of 1964 — resignation effective June 15, 1964.

Moses, Richard H., Instructor in Art, Summer Session of 1964 — declination effective June 15, 1964.

Munday, John C., United States Public Health Service Fellow (Trainee) in

Biophysics — resignation effective February 1, 1964.

MURRAY, RUBY H., National Institute of Mental Health Fellow (Trainee) in Social Work — cancellation effective February 1, 1964.

NILSSON, ANNA, Research Associate in Animal Science — resignation effective

March 1, 1964.

ORAN, CENAP, Assistant Professor of Civil Engineering - cancellation effective February 1, 1964.

Peck, Ralph B., Professor of Foundation Engineering, Department of Civil Engineering, Summer Session of 1964—declination effective June 15, 1964.

PFLEDERER, MARILYN R., Instructor in Music and Counselor in Teacher Education — resignation effective September 1, 1964.
Phillips, Burrill, Professor of Music—resignation effective September 1, 1964.

PHILLIPS, MONTE L., Instructor in General Engineering, Summer Session of 1964 resignation effective June 15, 1964.

RANKIN, CAROLYN, Milliken College Fellow in Education — resignation effective

February 1, 1964. REDENBO, JAMES M., United States Public Health Service Fellow (Trainee) in

Biophysics — resignation effective February 1, 1964.

REESE, MRS. MARY C., Associate Professor of Social Work — resignation effective

September 1, 1964.
Ross, O. Burr, Professor of Animal Science and Head of the Department resignation effective March 17, 1964.

Soja, Dorothy M., United States Public Health Service Fellow (Trainee) in Chemistry — resignation effective February 1, 1964.

STEINRAUF, LARRY K., Assistant Professor of Physical Chemistry — resignation

effective March 1, 1964.

SZILVASSY, IVAN P., United States Public Health Service Fellow (Trainee) in Veterinary Medical Science—resignation effective February 1, 1964. TROUSIL, ELAINE B., Research Assistant in Microbiology - resignation effective

February 10, 1964.

VAN DER LINDEN, RICHARD R., Research Assistant in Education - resignation effective February 1, 1964.

WAHL, F. MICHAEL, Assistant Professor of Geology, Summer Session of 1964declination effective June 15, 1964.

WICKS, ALBERT J., Charles E. Merriam Fellow in Political Science - resignation effective February 1, 1964.

LEAVES OF ABSENCE

GUNTHER, GOTTHARD, Visiting Research Associate Professor of Electrical Engineering, College of Engineering - leave of absence, without pay, from April 16 through July 31, 1964, so that he may accept an invitation to teach in Germany during the coming spring and summer.

Low, Mrs. Leone Y., Instructor in Mathematics — leave of absence, without pay,

from March I through August 31, 1964.

NAGEL, STUART S., Assistant Professor of Political Science—leave of absence, without pay, for one year from September 1, 1964, so that he may accept a fellowship at the Center for Advanced Study in the Behavioral Sciences at Palo Alto, California, in conjunction with a grant he has received from the American Council of Learned Societies for research.

Schlosser, Robert E., Associate Professor of Accountancy—leave of absence,

without pay, for one year from September I, 1964, so that he may undertake a professional assignment with the firm of Price Waterhouse and Company

in its training program.

STEINER, IVAN D., Professor of Psychology — leave of absence, without pay, for one year from September 1, 1964, so that he may accept an appointment as Visiting Professor of Psychology at the University of Wisconsin.

Tovar, Antonio, Professor of the Classics—leave of absence, without pay, for the second semester of the academic year 1964-65, for the purpose of travel

abroad and teaching at the University of Madrid.

Voss, JERROLD R., Assistant Professor of City Planning, in the Department of City Planning and Landscape Architecture—leave of absence, without pay, for one year from September 1, 1964, so that he may accept an appointment as Adviser to the Bandung Institute of Technology, Division of City and Regional Planning in Bandung, Indonesia, under the auspices of the Center for Urban Studies of Harvard University and United Nations Technical Board.

APPOINTMENT CHANGES IN ATHLETIC ASSOCIATION STAFF APPROVED BY THE PRESIDENT

BAKER, L. W., appointed Assistant Football Coach, February 1, 1964, at an annual salary of \$7,500 (vice William L. Tate).

FLETCHER, RALPH E., Assistant Football Coach, retired from active service March

1, 1964; will continue as Assistant Professor of Physical Education.

HART, JACK W., appointed Assistant Football Coach, March 1, 1964, at an annual salary of \$8,500 (vice Ralph E. Fletcher).

TATE, WILLIAM L., Assistant Football Coach, resigned February 8, 1964.

RECESS AND EXECUTIVE SESSION

President Clement announced that an executive session has been requested and was ordered for consideration of recommendations relating to property acquisitions and to patentable inventions, this session to be held after luncheon.

He also announced that the Honorable Robert C. Weaver, Administrator of the Housing and Home Finance Agency, Dean Allen S. Weller of the College of Fine and Applied Arts, and Professor Louis B. Wetmore, Head of the Department of City Planning and Landscape Architecture, would be guests of the Board at luncheon, and that Dr. Weaver would address the Board briefly.

On motion of Timothy W. Swain, the Board recessed.

When the Board reconvened in executive session, the same members

of the Board, officers of the Board, and officers of the University as recorded at the beginning of these minutes were present, except for Mr. Page, who asked to be excused.

The Board considered the following items of business.

PURCHASE OF LAND FOR RADIO DIRECTION-FINDING FACILITY

(1) Since April, 1957, the University has been leasing a forty-one acre tract of land four miles south of Bondville, Illinois, as a site for a radio direction-finding facility used by the Department of Electrical Engineering for research under a contract with the United States Navy. The lease provides for payments of annual rentals and liquidated damages, such payments being made from contract funds. The lease also includes an option to purchase the land at a price not to exceed \$18,245.

On October 26, 1963, the Board authorized purchase of 210 acres adjacent to the original forty-one acre tract for immediate expansion of the radio directionfinding facility which land has now been acquired. The United States government has provided all the necessary funds for operation, equipment, rental payments, and liquidated damages. The United States Navy has now requested the University to purchase the forty-one acre tract as a contribution to the research program. The legal description of this tract is:

The South half $(S\frac{1}{2})$ of the East half $(E\frac{1}{2})$ of the Northwest quarter $(NW\frac{1}{4})$ of Section two (2), and a strip of land sixteen and one-half $(16\frac{1}{2})$ feet wide providing access to the aforementioned forty (40)-acre tract from the paved road along the East side of said Section two (2), and said access strip to be located along the South edge of the North half (N½) of the Northeast quarter (NE¼) of Section two (2), and the East sixteen and one-half (16½) feet of the South sixteen and one-half (16½) feet of the Northeast quarter (NE1/4) of the Northwest quarter (NW1/4) of Section two (2), all in Township eighteen (18) North, Range seven (7) East of the Third Principal Meridian, and containing forty-one (41) acres more or less in the county of Champaign, and State of Illinois.

The Head of the Department of Electrical Engineering, the Chairman of the Research Board, and the Vice-President and Comptroller recommend the purchase of this tract from funds in the Contract Research Reserve.

I concur and request that the Comptroller and the Secretary of the Board be authorized to execute the necessary documents to complete this acquisition.

On motion of Mr. Swain, the purchase of this land, as recommended, was approved by the following vote: Aye, Mr. Clement, Mr. Dilliard, Mr. Hughes, Mr. Johnston, Mr. Jones, Mr. Pogue, Mr. Swain. Mrs. Watkins: no, none: absent, Mr. Kerner, Mr. Page, Mr. Williamson.

CONDEMNATION PROCEEDINGS FOR ACQUISITION OF PROPERTY AT 1301 WEST STOUGHTON STREET, URBANA, ILLINOIS

(2) University representatives have been negotiating for the purchase of the property at 1301 West Stoughton Street, Urbana, Illinois, a corner lot 66 feet by 100 feet, with a two and one-half story and basement frame house. The land area is needed as part of the site for expansion of the Digital Computer Laboratory

The owner's representative was informed that a recommendation would be made to the Board for the purchase of the property at a price of \$28,500, based on University appraisals, but the offer is not acceptable and the asking price re-

mains substantially in excess of the highest University appraisal.

The Director of the Physical Plant and the Vice-President and Comptroller therefore recommend that condemnation proceedings for the acquisition of the property be authorized. The Committee on Buildings and Grounds has been consulted and supports this recommendation.

Funds are available in the state capital appropriations to the University from

the Universities Building Fund.

I concur and recommend adoption of the following resolution:

Resolution Authorizing Condemnation of Property at 1301 West Stoughton Street, Urbana, Illinois

Be It, and It Is Hereby Resolved, Found, and Declared by this Board of Trustees of The Board of Trustees of the University of Illinois, a body corporate and politic and a public corporation of the State of Illinois, that the following-described real estate situated in the County of Champaign, in the State of Illinois, to-wit:

Lot One (1) in Block Fifty-four (54) of the Seminary Addition to the City of Urbana, situated in the City of Urbana, in the County of Champaign,

and State of Illinois is needed by the University of Illinois, an educational institution established and supported by the State of Illinois, for use as part of the site for expansion of the Digital Computer Laboratory, and for related educational purposes conducted and to be conducted by said University of Illinois and for the further expansion of the educational facilities of said University of Illinois and to enable said University of Illinois to discharge its duty to the people of said State and for public use; that funds have been appropriated by the General Assembly of the State of Illinois for the purchase of said land for said educational purposes; that this Board of Trustees has negotiated with the owners of said land through their duly authorized representatives for the purchase of said land at a price which this Board of Trustees considers fair and reasonable and which it finds constitutes the present market value of said land, but that said owner has refused to sell and convey said land, or any portion thereof, to said The Board of Trustees of the University of Illinois for such price and continues to refuse to sell and convey the same to it except for a consideration and price which this Board of Trustees deems unreasonable and excessive and is, therefore, unwilling and has refused to pay; and

Be It, and It Is Hereby Further Resolved, Found, and Declared by this Board of Trustees of The Board of Trustees of the University of Illinois that the compensation to be paid by it for said land can not be agreed upon between this Board of Trustees and the owners of said property and they and it are unable to agree upon the purchase price to be paid to said owners for the sale and conveyance of said land by said owners thereof to said The Board of Trustees of the

University of Illinois; and

Therefore, Be It, and It Is Hereby Further Resolved, Found, and Declared by this Board of Trustees of The Board of Trustees of the University of Illinois that because of said need of the University of Illinois for said land for the purposes hereinabove set forth and because the compensation to be paid to the owners thereof for such land can not be agreed upon between them and this Board of Trustees, it is necessary for The Board of Trustees of the University of Illinois to take said land and acquire title thereto through the exercise by it of the right of eminent domain conferred upon it by law and to have the compensation to be paid by it to the owners thereof and any and all other persons who may have any right, title or interest in and to said land determined in the manner provided by law for the exercise of said right and power of eminent domain; and

Be It, and It Is Hereby Further Resolved by this Board of Trustees of The Board of Trustees of the University of Illinois that the necessary and appropriate action be taken for the acquisition of title to said property by said The Board of Trustees of the University of Illinois and to have the compensation to be paid therefor determined by the institution and prosecution to completion of a proceeding in eminent domain in a court of competent jurisdiction and that the Legal Counsel of the University be, and he is hereby, authorized to proceed accordingly, to institute and prosecute an eminent domain proceeding in the name and on behalf of The Board of Trustees of the University of Illinois for the acquisition of said land and the determination of the compensation to be paid by it therefor, and to employ such special legal counsel, appraisers, and others as he may deem necessary or desirable to assist him in the institution and prosecution of said proceeding.

On motion of Mr. Johnston, the foregoing resolution was adopted by the following vote: Aye, Mr. Clement, Mr. Dilliard, Mr. Hughes, Mr. Johnston, Mr. Jones, Mr. Pogue, Mr. Swain, Mrs. Watkins; no, none; absent, Mr. Kerner, Mr. Page, Mr. Williamson.

PURCHASE OF PROPERTY AT 1301 WEST STOUGHTON STREET, URBANA, ILLINOIS

(3) Director Havens reported that University representatives contemplate further negotiations for the acquisition of this property through purchase, rather than through condemnation proceedings as authorized by the Board, and requested instructions.

On motion of Mr. Johnston, the purchase of this property, at a price not to exceed \$32,500, was authorized with the understanding that if the negotiations are successful and the property is purchased for this price, the condemnation proceedings will not be instituted. This action was taken by the following vote: Aye, Mr. Clement, Mr. Dilliard, Mr. Hughes, Mr. Johnston, Mr. Jones, Mr. Pogue, Mr. Swain, Mrs. Watkins; no, none; absent, Mr. Kerner, Mr. Page, Mr. Williamson.

RECOMMENDATIONS OF THE UNIVERSITY PATENT COMMITTEE

(4) The University Patent Committee submits, with the concurrence of the Chairman of the University Research Board, a series of recommendations relating to inventions.

That the rights of the University in the following inventions be released to the University of Illinois Foundation for further study, development, and possible patent application, subject to any rights that the United States government may have in each particular case:

- Series-fed logarithmically-periodic folded dipole antenna Keith G. Balmain, Research Assistant in Electrical Engineering, inventor; developed without the use of government funds. This is an antenna capable of covering a very wide range of frequencies with uniform characteristics. The novel feature of the invention is the use of folded dipole antenna elements connected in series with the wire (or wires) of a feeder.
- Transit automatic fare system Michael Blurton, Research Assistant in the Bureau of Economic and Business Research, inventor; developed without the use of government funds. This is a system of automatic passenger-operated fare collection and statistical data recording for bus transit, rail transit, or commuter railroad use.
- 3. Electrostatic impact probe for measurement of the mass flow of solid particles in a gas-solid suspension Robert C. Dimick, Research Assistant in Mechanical and Industrial Engineering, inventor; developed with the use of funds from a subcontract with the Project SQUID, Prime Contract No. Nonr-3623 (S-6) with the United States Navy. This invention consists of a probe for measuring the mass flow of solid particles suspended and transported by gas flow in a pipe or duct. Other uses for this probe would be to monitor the mass flow in the pneumatic transport of powdered coal or powdered materials used in manufacturing processes and to determine how well antistatic protection measures were working in the transport of explosive air-powdered grain mixtures in flour and feed mills.
- 4. Log-periodic cavity-slot antenna Paul E. Mayes, Associate Professor of Electrical Engineering, and V. A. Mikenas, Research Assistant in Electrical Engineering, inventors; developed with the use of funds from the United States Air Force, Contract No. AF 33(657)-10474. This invention was designed to meet the need for broadband antennas which do not protrude above a large conducting surface, for use in high-speed aircraft and missiles and for some applications on the earth's surface.
- 5. Reduced-length dipole and monopole antennas and antenna arrays Paul E. Mayes, Associate Professor of Electrical Engineering, and David T. Stephenson, Research Assistant in Electrical Engineering, inventors; developed with the use of funds from the United States Navy, Contract No. N123(953)30508A. This invention relates to a method of reducing the length of dipole and monopole antennas and, thereby, also reducing the size of certain antenna arrays which use dipole or monopole elements.

- 6. Log-periodic series-type folded dipole array Raj Mittra, Associate Professor of Electrical Engineering, and Marvin L. Wahl, Research Assistant in Electrical Engineering, inventors; developed with the use of funds from the United Air Force, Contract No. AF 33(657)-10474. It has been considered desirable to design a free-space model of a wideband antenna which has an impedance in the neighborhood of 300 ohms, such that it could be matched directly to a standard 300 ohm' line. A possible solution to this problem is the series loading of elements on the transmission line which, in effect, raises the input impedance of the antenna to a value larger than the characteristic impedance of the feed line itself.
- 7. Letter rack antenna Raj Mittra, Associate Professor of Electrical Engineering, and Marvin L. Wahl, Research Assistant in Electrical Engineering, inventors; developed with the use of funds from the United States Air Force, Contract No. AF 33(657)-10474. The antenna is a composite system consisting of a trough structure, which is coupled to another system made up of a series of loops, series loading an unbalanced transmission level. The heart of the present design is the coupling of the two systems, and the resulting antenna is considered to be a new device. Its important features are (a) flush mounting in aircraft bodies or flush with the ground, and (b) very broadband design (log-periodic).

That the rights of the University in the following inventions be released to the sponsoring agencies, since the possibility of commercial value is remote:

- 8. Automatic area compensator of constant stress cycling C. E. Feltner, Research Associate in Theoretical and Applied Mechanics, and J. A. Jackobs, Engineering Assistant in Theoretical and Applied Mechanics, inventors; developed under research sponsored by the United States Air Force, Contract No. AF 33(657)-8177. This invention is highly specialized and will probably be rarely used except in situations such as were encountered in carrying out the contract research.
- 9. Electro-optical modulation of radiation pattern, photo-electric devices, and electro-optical method of light modulation Gabor K. Ujhelyi, Research Assistant in the Digital Computer Laboratory, and Sergio T. Ribeiro, Research Associate in the Digital Computer Laboratory, inventors; developed under research sponsored by the United States Navy, Contract No. Nonr-1834(15). These inventions are in the area of lasers, in which the Government is very interested at the present time. The Navy is eager that applications be filed for patents; however, it is the opinion of the Director of the research and of the Committee that neither the University nor the Foundation should undertake the development of these devices at this time.

That the rights of the University in the following inventions be released to the inventor or inventors, since the possibility of commercial value is remote and since the United States government is not involved:

- 10. Short method for blood glucose determination Clarence A. Johnson, Sophie J. Presley, Jerome T. Paul, and Eugene J. Ranke, all from the Departments of Medicine and Biological Chemistry of the University at the Medical Center, inventors. The purpose of this study is to present a rapid, simple, and reliable colorimetric method for the determination of blood glucose, that may be used with or without the spectrophotometer; it represents a modification of the fluoran reaction.
- 11. Improved magnesium aluminate refractory compositions Tracy A. Willmore, Research Associate Professor of Ceramic Engineering, and Alfred W. Allen, Professor of Ceramic Engineering, inventors; developed under research supported by the Amsted Research Laboratory. This invention relates to the improvement of the high temperature properties (transverse strength, in particular) of refractory materials fabricated from magnesium aluminate. The Head of the Department of Ceramic Engineering states that it appears that only the sponsor could receive the principal commercial benefits, if any arise.

 I concur.

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

On motion of Mr. Swain, the Board adjourned.

A. J. JANATA
Secretary

Howard W. Clement President

Following adjournment of the Board, the Committee on General Policy and Committee on Buildings and Grounds met for work sessions.