TEXAS TECHNOLOGICAL COLLEGE

LUBBOCK, TEXAS

MINUTES OF BOARD OF DIRECTORS MEETING

1958-1959

VOLUME II

MINUTES OF BOARD OF DIRECTORS MEETING APRIL 11, 1959

- 1404. The Board of Directors met in a regular meeting in the Office of the President, Texas Technological College, Lubbock, Texas, on Saturday, April 11, 1959, at 9:30 a.m. The following Directors were present: Chairman Watkins, Vice Chairman Lindsey, Mr. Callaway, Mr. Hinn, Mr. Linebery, Mr. Orme, Mr. Wall and Mr. Wooldridge. In addition, President Jones, Academic Vice President Giesecke, Vice President and Comptroller Pennington and Secretary Wells were present.
- 1405. Upon motion made by Mr. Hinn, seconded by Mr. Lindsey, the Board, by a unanimous vote, approved the Board Minutes of March 24, 1959.
- 1406. Upon motion made by Mr. Orme, seconded by Mr. Callaway, the Board, by a unanimous vote, approved the Agenda under the date of April 4, 1959 (Items No. 1329 through No. 1403). A copy of the approved Agenda is attached and made a part of the Minutes. Attachment No. 1.
- 1407. President Jones introduced Dr. John R. Bradford, Dean of the School of Engineering, who presented a report on the program for the School of Engineering. A copy of the report is attached and made a part of the Minutes. Attachment No. 2.
- 1408. Upon motion made by Mr. Hinn, seconded by Mr. Orme, the Board, by a unanimous vote, accepted the invitation extended to the Members of the Board of Directors by Dr. Charles Bates Thornton, President of Litton Industries, Incorporated, to visit the Los Angeles Area on June 29 and 30, 1959.
- 1409. The Board authorized Dr. John R. Bradford, Dean of the School of Engineering, to proceed with plans for Members of the Board of Directors, College officials and several interested citizens of the City of Lubbock to visit the Holloman Air Force Base on May 1, 1959 or April 30, 1959 for the purpose of inspecting research facilities at the Base.
- 1410. President Jones presented a summary report on the operations of the Group Hospital Medical Surgical Insurance provided by the Pilot Life Insurance Company to the students of Texas Technological College on a voluntary basis for the fiscal year, 1958-59. He stated that Mr. Clem B. Simpson, District Manager, Pilot Life Insurance Company, 1926 19th Street, Lubbock, Texas, had submitted a summary of the operations since September 16, 1958. He reported that 1,540 students enrolled in the insurance program; that \$6,507.26 in claims had been paid to students; and that the records in the local office indicated that four claims had been denied because such claims were not covered in the master contract.
- 1411. Upon motion made by Mr. Hinn, seconded by Mr. Lindsey, the Board, by a unanimous vote, accepted the bid of Cain and Cain Construction Company, 4001 South Expressway, Fort Worth, Texas, as the best bid for the Stadium Expansion Project. Their base bid was \$1,766,500.00 and Alternate No. 2 which was accepted, in the amount of \$6,500.00, making a contract bid of \$1,773,000.00. A copy of the bid tabulation is attached and made a part of the Minutes. Attachment No. 5.

Representatives of the Athletic Committee, the Building Committee, the Finance Committee of the Board, the Athletic Council and the Athletic Department recommended the acceptance of Cain and Cain Construction Company bid.

- 1412. Upon motion made by Mr. Orme, seconded by Mr. Wall, the Board, by a unanimous vote, approved the following schedule for calculating the fees for the Architects and Engineers on the Stadium Expansion Project:
 - 1. The estimated cost of the old construction, in the amount of \$250,000.00, be calculated at two (2%) per cent.
 - 2. The cost over and above the \$250,000.00, on which architectural fees are to be calculated, at six (6%) per cent.

1412. (Continued) Mr. W. H. Myers, a representative of the firm of Hedrick and Stanley, Architects and Engineers, T & P Building, Fort Worth, Texas, stated that this arrangement would be entirely acceptable to his firm and that he would be glad to furnish the Board with a letter confirming the arrangements as outlined above.

1413. Upon motion made by Mr. Hinn, seconded by Mr. Callaway, the Board, by a unanimous vote, awarded a contract in the amount of \$1,773,000.00, to Cain and Cain Construction Company, 4001 South Expressway, Fort Worth, Texas, for the Stadium Expansion Project and authorized the Chairman to execute the contract and all other necessary documents related thereto. The amount of the contract included a base bid of \$1,766,500.00 plus Alternate No. 2 for \$6,500.00. A copy of the contract is attached and made a part of the Minutes. Attachment No. 6.

1414. Upon motion made by Mr. Orme, seconded by Mr. Callaway, the Board of Directors, by a unanimous vote, approved the Waiver of Notice and Consent to Special Meeting of said Board to be held at 9:30 a.m., on the 11th day of April, 1959, and do warrant the holding of such meeting and to the transaction of any and all business that may come before such meeting, including the passage of a resolution authorizing issuance of \$1,300,000.00 Texas Technological College Athletic Stadium Revenue Bonds, Series 1959 and Series 1959-A; and approved incorporating the Waiver of Notice and Consent to Special Meeting in the Board Minutes. A copy of the Waiver of Notice is attached. Attachment No. 7.

1415. Upon motion made by Mr. Hinn, seconded by Mr. Lindsey, the Board, by a unanimous vote, approved a Resolution authorizing the issuance of captioned bonds by the Board of Directors of Texas Technological College, designated as Texas Technological College Athletic Stadium Revenue Bonds, Series 1959 and Series 1959-A, in the amount of \$1,200,000.00 to provide funds for the purpose of calling for payment and refunding of the \$230,000 outstanding par value Athletic Stadium Revenue Bonds, Series 1952-B, dated May 1, 1952, the negotiation of refinancing of the \$100,000.00 outstanding Athletic Stadium Revenue Bonds, Series 1952-A, dated May 1, 1952, and to provide funds for the purpose of constructing and initially equipping certain phases of the project, and to provide funds for other permanent improvements required to complete the Stadium Expansion Project and authorized the Secretary to record the same in the Board Minutes. The Bond Caption is given below:

"A RESOLUTION BY THE BOARD OF DIRECTORS OF TEXAS TECHNOLOGICAL COLLEGE PROVIDING FOR AND AUTHORIZING THE ISSUANCE OF \$100,000 'TEXAS TECHNOLOGICAL COLLEGE ATHLETIC STADIUM REVENUE BONDS, SERIES 1959', BEARING INTEREST AT THE RATE OF 5% PER ANNUM, FOR THE PURPOSE OF PAYING OFF, REFUNDING, REFINANCING AND CANCELLING \$100,000 'TEXAS TECH-NOLOGICAL COLLEGE ATHLETIC STADIUM REVENUE BONDS, SERIES 1952-A', DATED MAY 1, 1952; THE ISSUANCE OF \$1,200,000 'TEXAS TECHNOLOGICAL COLLEGE ATHLETIC STADIUM REVENUE BONDS, SERIES 1959-A', BEARING INTEREST AT THE RATE OF 4-1/4% PER ANNUM, FOR THE PURPOSE OF PAYING OFF, REFUNDING, REFINANC-ING AND CANCELLING \$230,000 'TEXAS TECHNOLOGICAL COLLEGE ATHLETIC STADIUM REVENUE BONDS, SERIES 1952-B', DATED MAY 1, 1952, AND FURTHER IMPROVING, ENLARGING, EXTENDING AND EQUIP-PING THE COLLEGE'S ATHLETIC STADIUM AT A COST NOT EXCEEDING \$970,000, AS AUTHORIZED BY THE LAWS OF THE STATE OF TEXAS; PRESCRIBING THE FORM OF SAID BONDS; PROVIDING THAT THE REQUIREMENTS OF ALL THE SAID SERIES 1959 AND 1959-A BONDS SHALL CONSTITUTE A FIRST LIEN ON AND PLEDGE OF THE NET REVENUES TO BE DERIVED FROM THE OPERATION OF SAID ATHLETIC STADIUM, FROM ACTIVITIES IN CONNECTION THEREWITH AND FROM FOOTBALL AND BASKETBALL GAMES IN WHICH SUCH INSTITUTION PARTICIPATES AWAY FROM SAID INSTITUTION AS WELL AS AT SAID INSTITUTION AFTER DEDUCTING ONLY CERTAIN OPERATING, MAINTE-NANCE AND ADMINISTRATION EXPENSES; PROVIDING FOR THE SUB-SEQUENT ISSUANCE OF BONDS ON A PARITY WITH THOSE HEREIN AUTHORIZED AND PRESCRIBING THE CONDITIONS UNDER WHICH SUCH MAY BE ISSUED; PROVIDING CERTAIN COVENANTS PERTAINING TO THE BONDS HEREIN AUTHORIZED AND THE FUNDS FROM WHICH SAME ARE TO BE PAID; PROVIDING THAT THE HOLDERS OF SAID BONDS SHALL NOT HAVE THE RIGHT TO DEMAND PAYMENT OUT OF SOURCES OTHER THAN

1415. (Continued)

THOSE SPECIFIED; ENACTING OTHER PROVISIONS INCIDENT AND RELATING TO THE SUBJECT AND PURPOSE OF THIS RESOLUTION; AND PROVIDING THAT THIS RESOLUTION SHALL BECOME EFFECTIVE IMMEDIATELY UPON ITS PASSAGE AND ADOPTION."

A copy of the Resolution is attached and made a part of the Minutes. Attachment No. 8.

1416. The contract between the City of Lubbock, Texas, and Texas Technological College for Electric Power Service will expire on August 31, 1959. Upon motion made by Mr. Linebery, seconded by Mr. Lindsey, the Board, by a unanimous vote, authorized Mr. M. L. Pennington, Vice President and Comptroller, to request bids for Electric Power Service for the period September 1, 1959 through August 31, 1960 and to have the bids ready to present to the Board on Monday, June 1, 1959. (Re: Item No. 1723, Board Minutes of June 3, 1957)

1417. Upon motion made by Mr. Hinn, seconded by Mr. Callaway, the Board, by a unanimous vote, appropriated from the Unappropriated Balance, the sum of \$9,000.00 to a special account Tuition Scholarship for Participants in Summer Institute Programs for Teachers of Chemistry and Biology for the 1959 Summer Institute Programs and authorized the closing of the account and returning of the unencumbered funds to the Unappropriated Balance on July 1, 1959.

1418. Upon motion made by Mr. Orme, seconded by Mr. Lindsey, the Board, by a unanimous vote, approved a contract between the United States of America and Texas Technological College whereby the College will furnish research and development services in connection with "Optical Transmission of the Atmosphere" on a cost-reimbursable basis at an estimated cost of \$9,999.54. This contract has been assigned No. DA-23-072-ORD-1423 (College Account No. 3159). A copy of a letter from Lt. Col. Norman C. Pardue, U. S. Army Ordnance District, Saint Louis, Missouri, is attached and made a part of the Minutes. Attachment No. 4.

1419. The following memorandum is included in the Minutes for record purposes only.

The Building Committee of the Board accepted the recommendation of the Campus Planning Committee that a specific presentation for the Agricultural Plant Sciences Facilities be delayed until the Board Meeting on June 1, 1959.

1420. Upon motion made by Mr. Hinn, seconded by Mr. Lindsey, the Board, by a unanimous vote, approved the recommendations of the Building Committee that the preliminary and final plans and specifications for the steam generating system housing be accepted, subject to a further study of the ventilation problem and material samples; authorized the Vice President and Comptroller to advertise for bids; authorized the Building Committee of the Board to accept the bids and to award a contract to the successful bidder; and authorized the Chairman to execute the contract for the Board.

1421. Upon motion made by Mr. Hinn, seconded by Mr. Lindsey, the Board, by a unanimous vote, approved the recommendation of the Building Committee that (1) the schematics for the Chemical Engineering and Nuclear Reactor Building be approved, and that (2) the recommendations of the Campus Planning Committee that full preliminary plans and specifications, including elevations and studies of economics and needs, be presented to the Board at the meeting to be held on June 1, 1959.

The Campus Planning Committee was requested to review the schematics again and determine whether or not it would be feasible to increase the laboratory space allocated to Chemical Engineering.

1422. Upon motion made by Mr. Hinn, seconded by Mr. Lindsey, the Board, by a unanimous vote, approved the recommendations of the Building Committee (1) that the schematics for the Computer - Architecture Building be approved; and (2) that fully developed preliminary plans, including the specific site, be presented for Board consideration on June 1, 1959.

1423. Upon motion made by Mr. Hinn, seconded by Mr. Lindsey, the Board, by a unanimous vote, approved the recommendations of the Building Committee that (1) the following equipment be purchased for the old and new portions of the Textile Engineering Building:

New Portion

Departmental Equipment ---- \$6,260.00 General Building Equipment --- 3,522.60

Total New Portion ----- \$ 9,782.50

Old Portion

Departmental Equipment ---- \$9,469.00 General Building Equipment --- 2,802.50

Total Old Portion ----- 12,271.50

Grand Total ----- \$22,054.00

and, (2) that the equipment for the New Portion be purchased from the Constitutional Building Amendment Funds and charged to the funds allocated for equipment; and (3) that the equipment in the Old Portion be purchased from the Local Building Funds.

1424. The following memorandum is included in the Minutes for records purposes only.

The Building Committee of the Board accepted the recommendation of the Campus Planning Committee that action on the proposed Home Management House and Nursery School facilities be deferred until the construction program has been developed further in order that there may be a more accurate determination of funds available.

1425. Upon motion made by Mr. Hinn, seconded by Mr. Lindsey, the Board, by a unanimous vote, approved the recommendations of the Building Committee of the Board, that Mr. M. L. Pennington, Vice President and Comptroller, be authorized to negotiate with Pitts, Mebane and Phelps, Architects and Engineers, 1872 Calder Street, Beaumont, Texas, on the basis of a five (5%) per cent fee for architectural and engineering services on the Library project. The Building Committee emphasized the fact that the prevailing rate paid by the College is five (5%) per cent, while the prevailing rate in some places in Texas is six (6%) per cent. The Committee felt that every attempt should be made to negotiate a contract with the architectural firm selected for the Library project, on a five (5%) per cent fee, since the College has already employed and paid a Library Consultant for certain studies and a great deal of the preliminary planning on the Library project will be done by the Supervising Architect and his staff.

In event the firm of Pitts, Mebane and Phelps is not interested in considering the Library project on a flat five (5%) per cent basis, Mr. Pennington was authorized to negotiate with other firms in the order listed on the priority list presented to the Building Committee on April 10, 1959. The Board, by the same motion approved the idea of one central Library; the site west of the Student Union; construction of the modular type with free standing and open stocks, low ceilings, airconditioning, excellent lighting and other features as outlined by the Library Consultant. (Priority list: (1) Pitts, Mebane and Phelps; (2) Pierce and Pierce; (3) Hedrick and Stanley; (4) Page, Sutherland and Page; and (5) George L. Dahl)

1426. Upon motion made by Mr. Hinn, seconded by Mr. Lindsey, the Board, by a unanimous vote, approved the recommendations of the Building Committee that the Mechanical Engineering Shops be L-shaped and attached to the north end of the East Engineering Building with two stories in front, if possible, in order to conform to the construction across the esplanade; and authorized the presentation of full preliminary plans (including elevations) and specifications to the Board of Directors on June 1, 1959.

1427. Mr. Wall made a motion that the Secretary of the Board write the City of Lubbock, enclosing a bill for the extension of Flint Street, and request prompt reimbursement for \$53,552.67. Mr. Orme seconded the motion. The motion was approved by a unanimous vote of the Board.

1428. Upon motion made by Mr. Wall, seconded by Mr. Orme, the Board, by a unanimous vote, authorized the Secretary to request, in the name of the Board, the City of Lubbock to install, at the earliest possible date, the proper signal light at the corner of College Avenue and Broadway to permit (1) a left turn from College Avenue, at Broadway, to enter the Texas Technological College Campus, and (2) to make a left turn from Broadway, at College Avenue, to leave the campus.

1429. The Board accepted the recommendation of the Building Committee that action on the Physical Plant Facilities be deferred and that the Campus Planning Committee give further consideration to a site location, including the area across Flint Street and west of the New Men's Dormitories.

1430. The following memorandum is included in the Minutes for record purposes.

The Building Committee of the Board delayed action on the proposed Printing Press Facilities until a definite decision has been made on the Physical Plant Facilities.

1431. The following memorandum is included in the Minutes for record purposes.

The Building Committee of the Board approved the recommendation of the Campus Planning Committee that the preparation of the report by the Agricultural Committee for the relocation of farm facilities be delayed until the arrival of the new Head of the Department of Animal Husbandry. (Dr. Ralph Marion Durham will assume the duties as Professor and Head of the Department of Animal Husbandry on May 1, 1959.)

1432. The following memorandum is included in the Minutes for record purposes.

The Building Committee of the Board approved the recommendation of the Campus Planning Committee that the final recommendation to the Board on the Science Addition be delayed until June 1, 1959, in order to provide additional time to organize and analyze the mass of existing information.

1433. Upon motion made by Mr. Hinn, seconded by Mr. Callaway, the Board, by a unanimous vote, accepted the report of the Building Committee that it is feasible to issue revenue bonds to finance the addition to the Student Union and authorized the architects to proceed with preliminary work on the plans and specifications for the addition to the Student Union. The architects are to be advised that the total addition is not to exceed a cost of \$1,000,000.00 and that the building is to be planned without a bowling alley and without a swimming pool. Mr. M. L. Pennington, Vice President and Comptroller, is to continue his investigation to determine the best method of financing, including the possibility of securing the financing from the Home and Housing Finance Agency.

1434. Upon motion made by Mr. Hinn, seconded by Mr. Orme, the Board, by a unanimous vote, approved the recommendation of the Building Committee that full preliminary plans and specifications for the Women's Gymnasium be presented to the Board of Directors on June 1, 1959 and that the site adjacent to the President's home be used for the Women's Gymnasium.

1435. President Jones gave a brief report on pending legislation which was of interest to the Board of Directors of Texas Technological College. He reported on Senate Bill No. 42, House Bill No. 216, Senate Bill No. 372, House Bill No. 747, Senate Bill No. 353, Senate Bill No. 313 and House Bill No. 763.

1436. Upon motion made by Mr. Wall, seconded by Mr. Lindsey, the Board, by a unanimous vote, directed that all contacts with the Architects and Contractors go through the regular and established channels of procedure for the College. President Jones was instructed to promptly notify the Athletic Council and Athletic Department of the procedure as it will apply to the Stadium Expansion Program.

1437. Upon motion made by Mr. Linebery, seconded by Mr. Lindsey, the Board, by a unanimous vote, authorized Mr. W. D. Watkins to sign the diplomas for the 1959 Spring Graduating Class as Chairman of the Board.

1438. Upon motion made by Mr. Wall, seconded by Mr. Hinn, the Board, by a unanimous vote, jointly and severally expressed their appreciation to Dr. G. E. Giesecke, Academic Vice President, for his contribution to Texas Technological College, to the community and to higher education during his tenure of office.

1439. Upon motion made by Mr. Orme, seconded by Mr. Hinn, the Board, by a unanimous vote, approved making the Address delivered by Dr. G. E. Giesecke, Academic Vice President, at the Faculty Dinner on Friday evening, April 10, 1959, a part of the Board Minutes. A copy of the Address entitled A Look Ahead is attached. Attachment No. 3.

1440. The Board adjourned at 12:05 p.m., until its next regular meeting on Monday, June 1, 1959, in the Office of the President, Texas Technological College, Lubbock, Texas, at 9:30 a.m.

Roy Wells, Secretary

JRW: jd

April 13, 1959

ATTACHMENTS:

- The Agenda, Item No. 1406. 1.
- 2. Report by Dr. John R. Bradford, Dean of the School of Engineering, Item No. 1407.
- Address delivered by Dr. G. E. Giesecke, Academic Vice President, 3. on Friday evening, April 10, 1959 to the Faculty, Board and Guests, Item No. 1439.
- 4. Research Contract No. DA-23-072-ORD-1423, "Optical Transmission of the Atmosphere" on a cost-reimbursable basis at an estimated cost of \$9,999.54 (Mr. Gott), Item No. 1418.
- 5. Tabulation of bids on the Stadium Expansion Project, Item No. 1411.
- 6. Contract with Cain and Cain, Construction Contractors, for the Stadium Expansion Project, Item No. 1413.
- 7. Waiver of Notice and Consent to Special Meeting, Item No. 1414.
- 8. Resolution authorizing the issuance of \$1,300,000.00 Texas Technological College Athletic Stadium Revenue Bonds, Series 1959 and Series 1959-A, Item No. 1415.

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I, J. Roy Wells, the duly appointed and qualified Secretary of the Board of Directors, hereby certify that the above and foregoing is a true and correct copy of the Minutes of Texas Technological College Board of Directors Meeting on April 11, 1959.

(SEAL)

Roy Wells, Secretary April 13, 1959

TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

April 4, 1959

TO THE HONORABLE MEMBERS OF THE BOARD OF DIRECTORS OF TEXAS TECHNOLOGICAL COLLEGE

Gentlemen:

I am submitting herewith the Agenda for Texas Technological College for consideration of the Board of Directors at a meeting to be held in Lubbock, Texas, on April 11, 1959:

RECOMMENDED ACTIONS

Office of the Auditor

- 1329. Accept the resignation of Mrs. Rose R. Clark, Clerk-Typist in the Office of the Auditor, at an annual salary of \$2,460.00, effective at the close of the day, February 19, 1959. (Budgeted salary \$2,460.00 for 12 months)
- 1330. Employ Mrs. Irma N. Vernon as Clerk-Typist in the Office of the Auditor, at an annual salary of \$2,460.00, effective April 1, 1959 through August 31, 1959, vice Mrs. Rose R. Clark, resigned. (Budgeted salary \$2,460.00 for 12 months)
- 1331. Lapse the unencumbered balance in the amount of \$273.33 from the budgeted appropriation for Clerk-Typist in the Office of the Auditor. This amount will be appropriated to the Extra Clerical Help Account. (Budgeted salary \$2,460.00 for 12 months)
- 1332. Appropriate from the Unappropriated Balance, the sum of \$273.33 to the Extra Clerical Help Account in the Office of the Auditor. This amount has been lapsed from the budgeted appropriation for Clerk-Typist in the Office of the Auditor.
- Revise the contract of Mrs. Beulah Francis Roth, Voucher Clerk in the Office of the Auditor, from "an annual salary of \$2,580.00" to "an annual salary of \$2,700.00", effective April 1, 1959 through August 31, 1959. The additional funds in the amount of \$50.00 required for this contract will be paid from lapsed funds.
- 1334. Revise the contract of Mrs. Murl Lavonne Wilson, Secretary in the Office of the Auditor, from "an annual salary of \$2,580.00" to "an annual salary of \$2,700.00", effective April 1, 1959 through August 31, 1959.

 The additional funds, in the amount of \$50.00, required for this contract will be paid from lapsed funds. (Budgeted salary \$2,580.00 for 12 months)
- 1335. Appropriate from the Unappropriated Balance, the sum of \$1,500.00 to the Extra Clerical Help Account, Office of the Auditor. These funds will be used to employ additional registration help and extra help in the Voucher Section of the Office of the Auditor.

General Services (Alumni Affairs) 1336. Accept the resignation of Mrs. Katherine Stevens as Clerk-Typist in General Services (Alumni Affairs), at an annual salary of \$2,580.00, effective at the close of the day, May 19, 1959. (Budgeted salary \$2,580 for 12 months)

General Expense (Telephone Service)
1337. Appropriate from the Unappropriated Balance, the sum of \$350.00 to the Part-time Help Account in General Expense (Telephone Service).

Lectures, Clinics and Conferences
1338. Approve an honorarium in the amount of \$230.00 to Dr. Peyton N. Rhodes, President, Southwestern at Memphis, Memphis, Tennessee, for his services as guest lecturer on April 12 and 13, 1959. This will be paid from Lectures, Clinics and Conferences, Account No. 1044.

Chemistry and Chemical Engineering 1339. Appropriate from the Unappropriated Balance, the sum of \$97.00 to the Student Assistants Account in the Department of Chemistry and Chemical Engineering.

Chemistry and Chemical Engineering 1340. Approve an honorarium in the amount of \$185.00 to Dr. James L. Hall, Michigan State University, Department of Chemistry, East Lansing, Michigan, for his services as Consultant in the Department of Chemistry and Chemical Engineering on April 10 and 11, 1959. This is to be paid from the Department of Chemistry and Chemical Engineering Maintenance, Equipment and Travel Account.

Government

1341. Appropriate from the Unappropriated Balance, the sum of \$65.00 to the Maintenance, Equipment and Travel Account in the Department of Government. This is to be used to pay the travel expense of Dr. Cecil Johnson, Assistant Professor of Government to Albuquerque, New Mexico.

Home Economics Education

1342. Employ Mrs. Kathryn Bradbury as Secretary in the Department of Home Economics Education at an annual salary of \$2,600.00, effective April 1, 1959 through August 31, 1959, vice Mrs. Louise Humphries Climer, resigned. (Budgeted salary \$2,600.00 for 12 months)

1959 SUMMER SCHOOL

Foreign Languages

1343. Appoint Dr. Harley Dean Oberhelman as Assistant Professor of Foreign Languages (one-half time), at a salary of \$450.00, for the period June 2, 1959 to July 14, 1959. This salary will be paid from lapsed funds.

Dormitory Supervision

1344. Employ Mrs. Willisene Pilant Hoyer as Resident Hostess in Knapp Hall, Dormitory Supervision, at a salary of \$375.00 plus apartment in Knapp Hall for self and daughter and meals for self only while the dining hall in Horn Hall is in operation, for the period, June 1, 1959 through August 15, 1959. (Budgeted salary \$450.00 for 3 months--Horn Hall Budget)

1345. Employ Mrs. Emily Yates Burden as a Counselor in Horn Hall at a salary of \$500.00 plus apartment in Horn Hall and meals during the time the dining hall is in operation, effective June 1, 1959 through August 31, 1959. (Budgeted salary \$500.06--Drane Hall)

1050 60 PIPOPP

1959-60 BUDGET

Chemistry

1346. Delete Item No. 1123, Board Minutes of March 24, 1959, appointing Mr. Ts'un Chang as a Teaching Fellow in the Department of Chemistry for the 1959-60 Academic Year.

1347. Delete Item No. 945, Board Minutes of February 14, 1959, appointing Mr. Howard Otis Hughes as a Teaching Fellow in Chemistry for the Academic Year, 1959-60.

1348. Delete Item No. 1286, Board Minutes of March 24, 1959, appointing Mr. David C. Sikes as a Teaching Fellow in Chemistry for the Academic Year, 1959-60.

Government

1349. Appoint Mr. Clyde Joye Wingfield as an Assistant Professor of Government, at a salary of \$5,500.00 for nine months, effective September 16, 1959 through June 15, 1960. (1959-60 Budget)

Journalism

1350. Appoint Dr. David R. Bowers as an Assistant Professor of Journalism at a salary of \$6,000.00 for nine months, effective September 16, 1959 through June 15, 1960. (1959-60 Budget)

1351. Delete Item No. 1291, Board Minutes of March 24, 1959, appointing Mr. Robert Lealon Lambert as a Teaching Fellow in Marketing for the 1959-60 Academic Year. (1959-60 Budget)

1958-59 BUDGET

Consulting Work

1352. Approve incorporating in the Minutes for record purposes the approval by Dr. George Heather, Dean of the School of Business Administration, to Dr. F. L. Mize, Professor and Head of the Department of Management, to serve as a Consultant to the Great Western Drilling Company and its affiliates. This work will be on a professional fee basis and will be so arranged that it will not interfere with the performance of his duties at the College. This is in keeping with Article VIII B of the Tenure Policy approved by the Board of Directors on November 8, 1957.

Library

1353. Revise the contract of Miss Charlotte Monasch, Assistant Catalog Librarian, from "one-half time at an annual salary of \$1,850.00" to "full time at an annual salary of \$3,700.00", effective April 13, 1959 through August 31, 1959. (Budgeted salary \$3,700.00 for 12 months)

1354. Lapse the unencumbered balance in the amount of \$521.83 from the budgeted appropriation for Assistant Catalog Librarian. (Budgeted salary \$3,700.00 for 12 months)

Animal Husbandry Herds and Flocks
1355. Accept the resignation of Mr. Homer Herschel Bales, Farm Repairman in the Department of Animal Husbandry Herds and Flocks, at an annual salary of \$2,800.00, effective at the close of the day, March 20, 1959. (Budgeted salary \$2,900.00 plus one quart of milk per day and two dozen eggs per week; Re: Item No. 1156, Board Minutes of March 24, 1959)

1356. Approve the sale of seventy-eight (78) steers through the Nored-Hutchens Commission Company, Fort Worth, Texas, to Swift and Company, Fort Worth, Texas, on March 16, 1959, for a net price of \$21,803.12:

77 steers 82,020 lbs. @ \$27.25 cwt	\$ 22,350.43 226.20
Subtotal	\$ 22,576.63
Less Expenses:	
Marketing Expenses \$ 99.78 Trucking Expense 580.23 Commission 93.50	\$
Subtotal	\$ 21,803.12
Less Cost of 60 Steers (Texas Agricultural Experiment Station)	\$ 13,601.40
Net Proceeds to the College	\$ 8,201.72

Through a cooperative agreement with the Texas Agricultural Experiment Station of the Texas A & M College System, the Station purchased sixty (60) steers with the understanding that they were to be reimbursed by a Cashier's Check from the proceeds of the sale. A check in the amount of \$13,601.40 has been issued to the Texas Agricultural Experiment Station and \$8,201.72, which represents the net proceeds to Texas Technological College from the sale, has been deposited in Income Account No. 63.

The Department of Animal Husbandry Herds and Flocks purchased twenty (20) steers from the Departmental Maintenance Account (cost of 20 steers \$4,534.10), and paid for the cost of the feed for the 20 steers from Departmental Maintenance (cost of feed \$1,526.18), with the understanding Animal Husbandry Herds and Flocks

(Continued) that an amount equal to the actual cost of the twenty (20) steers and feed for these steers would be appropriated to the Departmental Maintenance Account following the sale.

1357. Appropriate from the Unappropriated Balance, the sum of \$6,060.28 to the Department of Animal Husbandry Herds and Flocks Maintenance, Equipment and Travel Account. This is in keeping with Item No. 1356, Board Minutes of April 11, 1959.

Building Maintenance

- 1358. Lapse the sum of \$185.90 from the budgeted appropriation for Maintenance, Equipment and Travel in the Department of Building Maintenance. This amount will be appropriated to the line item for "Secretary".
- 1359. Appropriate from the Unappropriated Balance, the sum of \$185.90 to the line item "Secretary" in the Department of Building Maintenance.
- 1360. Accept the resignation of Mr. Marion William Herman, Carpenter Foreman in the Department of Building Maintenance, at an annual salary of \$3,500.00, effective at the close of the day, March 31, 1959. (Budgeted salary \$3,500.00 for 12 months)
- 1361. Revise the contract of Mr. Arthur Johnson Bilberry, Department of Building Maintenance, from "Carpenter at an annual salary of \$3,120.00" to "Carpenter Foreman at an annual salary of \$3,400.00", effective April 1, 1959 through August 31, 1959, vice Mr. Marion William Herman, resigned. (Budgeted salary \$3,500.00 for 12 months)

Campus Security - Traffic

- 1362. Accept the resignation of Mr. Roswell Leonard Bartley, Security Officer in Campus Security Traffic, at an annual salary of \$3,120.00, plus \$120.00 uniform allowance, effective at the close of the day, March 31, 1959. (Budgeted salary \$3,120.00 plus \$120.00 for uniform allowance)
- 1363. Employ Mr. S. O. Boyd as a Security Officer, at an annual salary of \$3,120.00 plus \$120.00 uniform allowance, effective April 1, 1959 through August 31, 1959, vice Mr. Roswell L. Bartley, resigned. (Budgeted salary \$3,120.00 plus \$120.00 uniform allowance for 12 months)

Inventory Deletion

- 1364. Approve the deletion of the Feeder Hog Garbage Building, Building No. 185, at a carrying value of \$1,882.06, from the inventory.
- 1365. Approve the deletion from the inventory of a DeLaval Separator, Inventory No. 8557, at an inventory carrying value of \$900.00 and a DeLaval Clarifier, Inventory No. 8551, at an inventory carrying value of \$1,533.85 from the inventory of the Dairy Industry Creamery. Both items were purchased in October, 1949, and are worn-out.

Organized Research (Account No. 3121A)
1366. Employ Mr. Robert Simpson as a Research Assistant on the research project "Effects of Radiation Upon Cognitive Functions", at a salary of \$250.00 for the period April 1, 1959 through May 31, 1959. This salary is to be paid from the budgeted appropriation for Senior Investigator on Research Grant B-673(C4), Account No. 3121A.

Organized Research (Account No. 3154A)
1367. Accept the resignation of Miss Mary L. Hering as a Research Fellow on the Research Corporation Grant (Account No. 3154A), effective June 1, 1959. (Re: Item No. 1190, Board Minutes of March 24, 1959)

Dormitory Systems (Office of the Director of Food Service)
1368. Employ Mrs. Ruth S. Smith as a Special Assistant in the Office of the Director of Food Service, at an annual salary of \$4,000.00 plus meals, effective April 6, 1959 through May 31, 1959. (New position -- this salary will be paid from Dormitory Funds.)

Gift (Southwest Collection, Account No. 3205)
1369. Accept a cash gift in the amount of \$10.00 from Dr. and Mrs. Seymour V. Connor, Lubbock, Texas, for the Southwest Collection in memory of Mrs. Mary Vernita Stewart Haley. The funds have been deposited to Account No. 3205, Southwest Collection.

- Gift (Southwest Collection, Account No. 3205)

 1370. Accept a cash gift in the amount of \$10.00 from Dr. and Mrs.

 Clifford B. Jones, Lubbock, Texas, for the Southwest Collection in memory of Mrs. Mary Vernita Stewart Haley. The funds have been deposited to Account No. 3205, Southwest Collection.
- 1371. Accept a cash gift in the amount of \$10.00 from Dr. and Mrs. W. C. Holden, Lubbock, Texas, for the Southwest Collection in memory of Mrs. Mary Vernita Stewart Haley. The funds have been deposited to Account No. 3205, Southwest Collection.
- Gift (Scholarship, Account No. 3438)
 1372. Accept a cash gift in the amount of \$100.00 from the Fiji Foundation of Texas, c/o Mr. A. H. McCullough, Treasurer, 1101 Davis Building, 1309 Main Street, Dallas, Texas, for a scholarship award for Lambda Tau Chapter of Phi Gamma Delta. The funds have been deposited to Fiji Foundation--Phi Gamma Delta Lambda Tau, Account No. 3438.
- Gift (Scholarship, Account No. 3444)
 1373. Accept a cash gift in the amount of \$500.00 from Mrs. Roscoe
 Wilson, 4710 21st Street, Lubbock, Texas, for the renewal of the Roscoe
 Wilson Memorial Scholarship in Foreign Languages. The funds have been
 deposited to the Foreign Languages Special Account, No. 3444.
- Out-of-State Leaves: I recommend your approval of the following Out-of-State Leaves without loss of pay by the staff members listed below:
- 1374. Grant permission to Dr. Carolyn L. Attneave, Assistant Professor in the Department of Psychology, to go to Urbana, Illinois, April 1, 1959 through April 3, 1959, to attend conference with staff of Institute for Research on Exceptional Children at the University of Illinois in order to strengthen course offerings, particularly Psychology 4329 and the Institute for Counselors; at no expense to the College.
- 1375. Grant permission to Mr. Cecil Ayers, Associate Professor in the Department of Agronomy, to go to State College, Mississippi, April 25, 1959 through May 3, 1959, to attend the 1959 Short Course for Seedsmen at the Regional Seed Research Laboratory, State College, Mississippi, to study new methods and equipment for seed processing for use in cleaning and processing various classes of seed produced on the Agronomy Farm at Texas Technological College; expenses to be paid from Agronomy Farm, Account No. 1300.
- 1376. Grant permission to Dr. Lowell L. Blaisdell, Assistant Professor of History, to go to Denver, Colorado, from April 22, 1959 through April 25, 1959, to attend the Meeting of the Mississippi Valley Historical Association; at no expense to the College.
- 1377. Grant permission to Mr. Derl Len Brooks, Instructor in the Department of Biology, to go to Wilburton, Oklahoma, April 16, 1959 through April 19, 1959, to attend the annual meeting of The Southwestern Association of Naturalists for the purpose of presenting a paper entitled "The Nasal Mites of Some West Texas Flycatchers"; at no expense to the College.
- 1378. Grant permission to Dr. Earl D. Camp, Associate Professor in the Department of Biology, to go to Ias Vegas, New Mexico, June 20, 1959 through June 28, 1959, to be Instructor on field trip for participants in the Summer Institute for High School Teachers of Biology as a part of the Texas Technological College Summer School Program; expenses to be paid from Summer Institute for High School Teachers of Biology, Account No. 3034.
- 1379. Grant permission to Mrs. Ila Mae Carpenter, Instructor in Mathematics, to go to Bowling Green, Ohio, from May 5, 1959 through May 10, 1959, to accompany student as a Chaperon to the Kappa Mu Epsilon National Convention and to secure the latest information in the teaching of Mathematics which will be used in helping to improve the program in Mathematics at Texas Technological College; expenses to be paid from the Department of Mathematics Maintenance, Equipment and Travel Account.

- Out-of-State Leaves
 1380. Grant permission to Mr. Duane A. Crawford, Assistant Professor of Petroleum Engineering, to go to Tulsa, Oklahoma, from May 16, 1959 through May 19, 1959, to attend the Sexennial International Petroleum Exposition and to secure materials and ideas for use in the teaching of Petroleum Engineering Courses at Texas Technological College; expenses to be paid from the Department of Petroleum Engineering Maintenance, Equipment and Travel Account.
- 1381. Grant permission to Mrs. Luta P. Eaves, Assistant Professor of Accounting, to go to New Orleans, Louisiana, from April 3, 1959 through April 5, 1959, to attend Top Management Decision Making Laboratory to be held at the Tulane Computer Center and to secure information and ideas to be used in the Machine Accounting Courses and the Computer Center at Texas Technological College; expenses to be paid from the Department of Accounting Maintenance, Equipment and Travel Account.
- 1382. Grant permission to Mr. John E. George, Teaching Fellow in the Department of Biology, permission to go to Wilburton, Oklahoma, from April 16, 1959 through April 19, 1959, to attend the meeting of The Southwestern Association of Naturalists; at no expense to the College.
- 1383. Grant permission to Dr. Howard E. Golden, Professor in the Department of Marketing, to go to Lawton, Oklahoma, April 3, 1959 through April 6, 1959, to attend Annual Convention of Texas - Oklahoma District Circle K and to participate in the program; at no expense to the College.
- 1384. Grant permission to Dr. R. C. Goodwin, Dean of the School of Arts and Sciences, to go to Ann Arbor, Michigan, June 19, 1959 through June 29, 1959, to attend the Institute on College and University Administration at the University of Michigan to study basic problems of administration to improve the function of the Office of the Dean of Arts and Sciences; partial expenses to be paid from Office of the Dean of Arts and Sciences Maintenance, Equipment and Travel Account.
- 1385. Revise Item No. 461, Board Minutes of November 21, 1958 granting permission to Dr. Lawrence L. Graves, Associate Professor of History to go to Galveston, Texas, to read from "March 26, 1959 through March 29, 1959" instead of "March 27, 1959 through March 29, 1959".
- 1386. Grant permission to Dr. Emmett Hazlewood, Professor and Head of the Department of Mathematics, to do active duty with the United States Air Forces from noon Monday, March 23, 1959 through March 24, 1959 (one and one-half days), without loss of pay. This is in keeping with Article 5769b-1, Revised Civil Statutes, (H. B. No. 761, Fifty-third Legislature, 1953).
- 1387. Grant permission to Mr. Nolon Henson, Jr., to go to Albuquerque, New Mexico, from April 8, 1959 through April 10, 1959, to take the American Institute of Physics Club group on a tour of Sandia Research Laboratory at Albuquerque, New Mexico, and the Laboratory at Los Alamos, New Mexico; at no expense to the College.
- 1388. Grant permission to Mr. John R. Hunter, Instructor in Agronomy, to go to Woodward, Oklahoma, to accompany the Agronomy 438 class to the United States Southern Great Plains Field Station at Woodward, Oklahoma; at no expense to the College.
- 1389. Grant permission to Dr. Cecil Johnson, Assistant Professor of Government, to go to Albuquerque, New Mexico, from April 16, 1959 through April 18, 1959, to attend a Conference on International Education Exchange Opportunities for University and College Professors under the Fulbright and Smith-Mundt Acts and to secure essential information for advising Texas Technological College students and faculty concerning study and research abroad under this program; expenses to be paid from the Department of Government Maintenance, Equipment and Travel Account.
- 1390. Grant permission to Mr. Henry J. Johnson, Farm Employee, Department of Animal Husbandry, to go to Stillwater, Oklahoma, March 24, 1959 through March 25, 1959, to pick up Midland Bermuda sprigs purchased by the College as a part of regular duties as Farm Employee; expenses to be paid by Animal Husbandry Herds and Flocks Maintenance, Equipment and Travel Account.

Out-of-State Leaves

- 1391. Grant permission to Mr. Philip Johnson, Associate Professor of Petroleum Engineering, to go to Tulsa, Oklahoma, from May 11, 1959 through May 15, 1959, to visit the Phillips Petroleum Company research laboratories at Tulsa, Oklahoma; at no expense to the College.
- 1392. Grant permission to Dr. P. Merville Larson, Professor and Head of the Department of Speech, to go to Cleveland, Ohio, from May 5, 1959 through May 10, 1959, to accompany selected students from Speech 235 and 318 to a National Debate and Public Speaking Meet sponsored by Delta Sigma Rho, national honorary forensics society; partial expenses to be paid from the Department of Speech Maintenance, Equipment and Travel Account and partial expenses to be paid from the Forensic Activities Account No. 9340.
- 1393. Grant permission to Mr. Nelson H. Longley, Director of the Student Union, to go to Miami Beach, Florida, April 7, 1959 through April 12, 1959, to attend the National Association of College Unions Convention in order to attend workshops and conferences relating to management and program trends and to interview candidates for the position of Program Director, expenses to be paid from Student Union Current Operations, Account No. 2043.
- 1394. Grant permission to Dr. William M. Perel, Assistant Professor of Mathematics, to go to Bowling Green, Ohio, from May 5, 1959 through May 10, 1959, to accompany, as sponsor and faculty advisor, a group of students to the National Convention of Kappa Mu Epsilon, the national mathematics honorary and to gather information to help improve the program at Texas Technological College; expenses to be paid from the Department of Mathematics Maintenance, Equipment and Travel Account.
- 1395. Grant permission to Dr. Florence Phillips, Dean of Women, Office of the Dean of Student Life, to go to Tempe, Arizona, from March 29, 1959 through April 3, 1959, to attend the National Intercollegiate Association of Women Students Convention in Tempe, Arizona; to interview prospective candidates for the position of Assistant Dean of Women in Charge of Women's Activities at Texas Technological College; and to obtain ideas and information to be used in planning a better program for the women students at Texas Technological College; expenses to be paid from the Office of the Dean of Student Life Maintenance, Equipment and Travel Account.
- 1396. Grant permission to Dr. Vernon Proctor, Assistant Professor in the Department of Biology, to go to Xilitla, Mexico, June 20, 1959 through June 28, 1959, to be Instructor on field trip for participants in the Summer Institute for High School Teachers of Biology as a part of the Texas Technological College Summer School Program, expenses to be paid from Summer Institute for High School Teachers of Biology, Account No. 3034.
- 1397. Grant permission to Mr. Jimmie T. Rodgers, Assistant Professor of Petroleum Engineering, to go to Tulsa, Oklahoma, from May 16, 1959 through May 19, 1959, to attend the Sexennial International Petroleum Exposition and to secure information, materials and ideas which will be used to improve the courses in Petroleum Engineering at Texas Technological College; expenses to be paid from the Department of Petroleum Engineering Maintenance, Equipment and Travel Account.
- 1398. Grant permission to Mr. Chester Rowell, Assistant Professor in the Department of Biology, to go to Las Vegas, New Mexico, June 20, 1959 through June 28, 1959, to be Instructor on field trip for participants in the Summer Institute for High School Teachers of Biology as a part of the Texas Technological College Summer School Program; expenses to be paid from Summer Institute for High School Teachers of Biology, Account No. 3034.
- 1399. Grant permission to Mr. Chester Rowell, Assistant Professor in the Department of Biology, to go to Xilitla, Mexico, July 11, 1959 through July 19, 1959, to be Instructor on field trip for participants in the Summer Institute for High School Teachers of Biology as a part of the Texas Technological College Summer School Program; expenses to be paid from Summer Institute for High School Teachers of Biology, Account No. 3034.

Out-of-State Leaves
1400. Grant permission to Mr. J. P. Smith, Manager of PanTech Farms, to
go to Miles City, Montana, June 12, 1959 through June 19, 1959, to address the 4th Annual Meeting of Performance Registry International on the subject "Gain Test Results, PanTech Farms", expenses to be paid from PanTech Farms - Current Operations, Account No. 2035.

1401. Grant permission to Dr. R. W. Strandtmann, Professor in the Department of Biology, to go to Xilitla, Mexico, June 20, 1959 through June 28, 1959, to be Instructor on field trip for participants in the Summer Institute for High School Teachers of Biology as a part of the Texas Technological College Summer School Program; expenses to be paid from Summer Institute for High School Teachers of Biology, Account No. 3034.

1402. Grant permission to Dr. Donald W. Tinkle, Assistant Professor in the Department of Biology, to go to Xilitla, Mexico, July 11, 1959 through July 19, 1959, to be Instructor on field trip for participants in the Summer Institute for High School Teachers of Biology as a part of the Texas Technological College Summer School Program; expenses to be paid from Summer Institute for High School Teachers of Biology, Account No. 3034.

1403. Grant permission to Mr. W. Martin Voyles, Farm Employee, Department of Animal Husbandry, to go to Stillwater, Oklahoma, March 24, 1959 through March 25, 1959, to pick up Midland Bermuda sprigs purchased by the College as a part of regular duties as Farm Employee; at no expense to the College.

Respectfully submitted,

E. N. President

ENJ: jd

SCHOOL OF ENGINEERING

A Report Submitted to the Board of Directors of
Texas Technological College

by

John R. Bradford, Dean

April 11, 1959

The importance of engineering education is written into the first section of the bill by which the Thirty-Eighth Legislature approved the establishment of Texas Technological College. In the bill, the authors point out that the commercial development of the State depends largely upon the opportunities for students to receive thorough training in the fields of engineering and manufacturing. Since the opening of the College in September of 1925, the School of Engineering has made every effort to adhere to the aims of the enabling act by offering engineering science programs that allow its graduates to become professional men and useful citizens of the highest degree. The success of the school is exemplified by its extraordinary growth and the successful attainments of its graduates.

When Tech opened in the fall of 1925, with an engineering faculty of only two staff members, a tradition of having more enrollment than was expected began. Immediately three staff members were added, and the following year the staff was increased to a total of nine. During the first year the entire engineering school was housed in what is now known as the Textile Engineering Building. The total floor space allocated to engineering that year comprised less than 10,000 square feet. Offices were made by partitioning some of the laboratories, and class rooms were even formed by putting temporary walls in the facade of the cloister on the south side of the Textile Building.

The year 1928 marks the beginning of important progress in the development of the Engineering School. The first graduating class, consisting of three members, received their diplomas in June, 1928, and the West Engineering Building, the first major addition of facilities, was occupied in the Fall of that year.

Now, only three decades past our first major advancements, the Engineering School occupies some 130,000 square feet of space, has an

expected 1959 graduating class close to 400, has registered more than 2,800 students during the year, and the full time staff has grown to 85 in number.

An indication of the growth pattern of the Engineering School can be gained from the enrollment data given in Table I.

TABLE I
Undergraduate Enrollment - School of Engineering

1925-26	313	1942-43	815
1926-27	365	1943-44	411
1927-28	305	1944-45	355
1928-29	403	1945-46	493
1929-30	478	1946-47	1,766
1930-31	449	1947-48	1,981
1931-32	343	1948-49	1,822
1932-33	333	1949-50	1,532
1933-34	369	1950-51	1,154
1934-35	435	1951-52	990
1935-36	445	1952-53	1,086
1936-37	560	1953-54	1,254
1937-38	738	1954-55	1,521
1938-39	817	1955-56	1,905
1939-40	884	1956-57	2,441
1940-41	810	1957-58	2,745
1941-42	762	1958-59	2,627

The School of Engineering at Tech has experienced an increase in enrollment almost unprecedented in the Southwest. This phenomenal growth during the past 7-8 years, exceeding even the massive enrollment influx following World War II, is the result of many factors. Some of these factors which will, in turn, influence our future growth are:

- (1) The effectiveness of the promotional program extolling the virtues of the engineering profession,
- (2) The tremendous growth in population and economic development of the West Texas area, including the City of Lubbock, as well as the many smaller communities of the South Plains, with the resulting unparalleled enrollment increase considerably greater than that experienced by other schools,
- (3) The constantly increasing percentage of college-age youth now attending college, and
- (4) The disproportionate but greater general population immigration toward the West and the Southwest.

Enrollment in the School of Engineering at Tech dropped by only 4.3 percent this fall from the 1957-58 figure as compared to a nation-

wide decrease of 5.2 percent in undergraduate engineering enrollment. The net loss in engineering at Tech was 118 students. Interestingly enough, the net decrease in freshman enrollment in the Department of Petroleum Engineering was exactly 100 students, thus accounting for practically the entire drop of enrollment in the School of Engineering. This drastic decrease in the enrollment in Petroleum Engineering is probably due to the facts that the economic recession of 1957 seriously affected the petroleum industry and that most students in petroleum engineering come from families connected with this industry.

It cannot be known at this time where these students are. Many are undoubtedly out of school, but it is also highly probable that an appreciable number may have entered junior colleges and will eventually come to Texas Technological College for their upper class work. This is a pattern that has been followed by students in increasing numbers over the past several years. It is likewise a pattern which is proving quite beneficial to the School of Engineering as a whole since the junior colleges perform an excellent screening program and many of them furnish well prepared upperclassmen to us.

In the fall of 1958, there was a total of 217,732 students registered in undergraduate engineering work in 153 institutions accredited by the Engineers' Council for Professional Development. Tech now has over 1.3 percent of all these students enrolled nationwide in engineering on the undergraduate level, and ranks 28th in size. The impending "tidal wave" of students now in the elementary and secondary schools will certainly increase our size immeasureably in the years to come.

During the past thirty years, the School of Engineering has awarded over 3,500 degrees as shown in Table II, and is eminently proud of its graduates and of their many accomplishments. From coast to coast, and even across the seas, Tech Engineering alumni have risen to places of prominence as leaders of the engineering profession. Tech Engineers have made outstanding contributions to the nation and have brought honor and fame to their Alma Mater by the attainment of such positions as President of one of the nation's largest textile mills, Project Engineer of the X-15 manned-space rocket, Director of Research of El Paso Natural Gas, Head of Product Development for IBM, Vice President of Continental Oil Company, and as members of the Texas Tech Board of Directors.

TABLE II

Degrees Awarded - School of Engineering

	26	1944	3	1928
	20	1945	19	1929
	30	1946	22	1930
	128	1947	39	1931
	176	1948	30	1932
	362	194 9	35	1933
	385	1950	7+74	1934
	271	1951	24	1935
	195	1952	43	1936
	158	1953	57	1937
	144	1954	62	1938
	147	1955	60	1939
	162	1956	81	1940
	232	1957	89	1941
	309	1958	98	1942
(estimate)	400	1959	84	1943

For the past thirty-four years, the faculty, now totaling 85 full time staff members, has been the heart and soul of the School of Engineering. It has been, and must always be. Unfortunately Tech has been unable to maintain a strong nucleus of top-flight professors in Engineering and our attempts to recruit replacements and additions of high caliber have met with many failures. Salaries in the School of Engineering are well below the national earnings for the average engineer as shown in the January, 1959, publication of "Professional Income of Engineers -- 1958". The efforts during the past several years of the Administration and of the Board to improve the salary picture have been most heartily appreciated and have in turn supplied a real boost to the morale of the faculty. There is still, however, a long road to travel before Tech can become competitive salarywise even with the schools of the Southwest.

The academic program offered by the School of Engineering has seen considerable change since the doors of the College were first opened in 1925. Every effort has been made to keep abreast with the latest developments. Even so, the basic objectives are still the same-to provide the student with an integrated and broad knowledge of enduring fundamentals upon which he can establish a professional career. Toward this end each engineering curriculum emphasizes basic concepts, analytical techniques, and experimental methods rather than routine skills. To provide the proper training for the engineer, the basic sciences of

mathematics, physics, and chemistry, with emphasis on mechanics, thermodynamics, electricity and magnetism are deemed most necessary. Humanistic courses, such as English, government, history, economics, etc. are also emphasized to add breadth of learning to the program.

Engineering is far from static, for engineering is essentially a creative profession. It has played a dominant role in building American industrial superiority, in developing the principle of mass production, and in giving the American people the highest standard of living in the world today. The extension of our knowledge of basic science has opened doors to vast new areas of engineering endeavor, and has expanded the foundations underlying many of the existing engineering fields.

Among the many current discussions of educational policy now taking place nationwide, none is more complex than that dealing with trends in Engineering Education. Increased awareness of the American Public to rapid advancements in the scientific education made by countries threatening our national security has placed new emphasis on engineering training which has accelerated many changes in the engineering programs.

It is well recognized by the engineering profession that curricular revisions have been somewhat too slow to keep pace with the rapid advancements of the past decade. However, a clear understanding of the objectives of a professional education must precede any attempt to specify the content of an engineering curriculum. No one disputes the new status of research or the need to enlarge the professional group of applied scientists completely trained to work on these new frontiers. However, it is important that in the reshaping our undergraduate curriculum to meet these new demands we do not do so to the disadvantage of other facets of the profession.

Engineering curricula at Texas Tech have been under constant study and revision and new courses and new methods have been employed. It is the belief of the School of Engineering that our present programs are thoroughly adequate to allow our graduates to compete favorably with engineering graduates throughout the United States. As has already been stated, the philosophy behind each of our curricula is to maintain a well balanced, up-to-date program based on an adequate amount of science and mathematics. However, it is also a part of this same philosophy to offer the student sufficient experimental and specialized subject matter to

develop the less easily measured but highly important skill, sometimes called "horse-sense", so necessary in making sound judgements and decisions in his professional career. These are the qualities that will distinguish the builders of industry in the future -- even as they have in the past. The philosophy leaves to graduate training the task of producing the highly specialized scientist-engineer.

To assure our status, a Faculty Committee on Engineering Education was recently appointed to study in detail each engineering curriculum now offered on the Tech campus. It is hoped that this self-study of the engineering curricula will enable us to present recommendations for any changes that are essential to maintain a first-class engineering school. It is likewise hoped that some serious attempt at experimentation in engineering education for the superior student will be recommended by the Committee. The work of this Committee involves imaginative attention to long-range problems of the future on which an immediate attack is not practical, and to the many other lesser problems on which immediate steps can be effective. Work in both areas will represent real progress. The Committee indeed has its work cut out for it, for the coming years are certain to be fruitful for the School of Engineering at Texas Tech.

This past September seven departments in the School of Engineering were inspected by a team, designated by the Engineers' Council for Professional Development, of which Dean George F. Brannigan of the University of Arkansas was Chairman. At the annual meeting of the Engineers' Council for Professional Development held on October 10, 1958, the following action was taken with regard to the engineering curricula of Texas Tech:

Chemical Engineering NOT TO ACCREDIT

Civil Engineering Reaccredit for 3 years

Electrical Engineering Reaccredit for 3 years

Industrial Engineering Reaccredit for 3 years

Mechanical Engineering Reaccredit for 3 years

Petroleum Engineering ACCREDIT FOR 3 YEARS

Textile Engineering Reaccredit for 1 year

ECPD accreditation without conditional provisions is granted for a period of 5 years. In no department was the Tech program strong enough to merit full accreditation.

Two primary criticisms of the Department of Chemical Engineering were the bases for the non-accreditation at this time. First, the department has no autonomy of its own, and is not a part of the School of Engineering. Second, the amount of laboratory space (6,400 square feet) is less than one-half of that normally required for the current student enrollment. Unfortunately, present plans for the new Chemical Engineering building are so limited in scope that the recommended minimum laboratory space of at least 12,800 square feet will not be met. It may, therefore, be another decade before we can look forward to an accredited Chemical Engineering Department. Because certain weaknesses existed in the several programs, the three year accreditation period was granted as indicated above. The low professorial salary scale, the complete lack of travel monies for professional society attendance, the extremely low departmental maintenance budgets, and the obvious absence of secretarial help were the major criticisms outlined in the reporting letter. The one year accreditation of Textile resulted from the somewhat questionable status of Textile Engineering as a continuing curriculum.

During January of this year, representatives of the National Architectural Accrediting Board visited the Department of Architecture for the purpose of inspection for reaccreditation. Action of the inspection committee was most favorable, and it is anticipated that accreditation will be continued for five years. Final action will be taken on the committee's recommendations at the Annual Meeting of the NAAB on June 18-20, 1959.

In the field of graduate education, the School of Engineering is entering a new era of its existence. The Master of Science in Chemical Engineering and the Master of Science in Electrical Engineering have been a part of our graduate program since 1933 and 1947, respectively. Effective next September, graduate work will be added in the Departments of Civil Engineering and Mechanical Engineering. Our efforts in the development of graduate work in Nuclear Technology and in Computer Design and Analysis have been most encouraging. The first-year work in Nuclear Engineering has already attracted seven graduate students, and interest is high among the graduating seniors to enter the program next fall. The overall design of the proposed nuclear reactor has been completed and the Reactor Safeguards Committee of the Atomic Energy

Commission has approved the location of a nuclear reactor of the proposed type on the Tech campus. The working agreement with the Nuclear Laboratories of Convair-Ft. Worth has already produced many benefits over and above those items specified in the contract. In addition, through this association, advanced technical knowledge and know-how has been made available to us which will allow maximum utilization of our building dollar and the best possible planning of our Nuclear Center.

The work in computer operation, design and analysis has been greatly strengthened by the recent acquisition of two small computers on loan from the U.S. Air Force. Our entry into the field of data processing has been materially expedited by the research contract with the Computer Division of Holloman Air Force Base. This area of study is one which we have ignored much too long. As a result, the School of Engineering, as well as the College as a whole, now finds itself in a somewhat precarious and obsolescent position. If and when adequate computational facilities are provided by Tech, informal discussions with the personnel of Holloman lead us to believe that extensive enlargement of the present research contract will ensue.

The need for additional equipment in all of our laboratories is rapidly becoming critical. Although the state legislature made available \$150,000 in the 1957-1959 appropriation for engineering instructional equipment (by some standards this is considered appreciable), the amount allocated does not go far toward purchasing present day laboratory equipment and facilities. To best illustrate this point, consider the expense in the development of the Nuclear Engineering Laboratory. During the past year Tech received approximately \$97,000 from the Office of Reactor Development of the Atomic Energy Commission for initiating laboratory work in nuclear technology. To date we have expended approximately \$60,000 of this grant for equipment now in use in the nuclear laboratory. In addition to the grant-in-aid for the equipment, the Atomic Energy Commission has loaned to Texas Tech almost 3 tons of pure natural-uranium fuel slugs valued at over \$100,000 along with \$8,000 worth of plutonium-beryllium neutron sources for use in our sub-critical assembly. Before the year is complete at least another \$20,000 will be spent for auxiliary equipment in this laboratory, and this is but one laboratory in one curriculum. This isolated example well illustrates the enormity of the task that faces the college and the School of Engineering.

A strong graduate program in Engineering is of paramount importance. One of the underlying philosophies of higher education is that the close correlation of teaching, graduate study, and research is essential to the effective operation of any institution of higher learning. In today's world -- one in which technological advance remains almost the final frontier for man to conquer -- institutions like Texas Technological College have more responsibility than ever before to see that this philosophy is incorporated into administrative policy.

General concepts are difficult to convey, and none is more difficult than that of basic research in science and engineering. Yet, there are few subjects so deeply related to our present and future vitality and strength as a Nation. Inherent in any graduate program is the concept of basic research. The School of Engineering is no exception. Good research efforts must be encouraged and financed if our graduate program in Engineering is to succeed. Early in 1957, efforts were made to start a program to finance an Engineering Research Institute. It was unfortunate that these efforts were not continued, especially in view of the fact that later the same year, on October 4, Sputnik roared into the skies and the "space age" was upon us. In the intervening two years, precious time and, undoubtedly, many hundred thousands of dollars of possible research contracts, have been lost by Tech. During the past several months a new agency has been under discussion -- the Institute of Science and Engineering -- for the purpose of aiding our research efforts. This Institute should be given top priority in any consideration dealing with our graduate program in the sciences and engineering and should, as soon as present fund-raising programs permit, have strong industrial and financial support.

RESEARCH -- this is the key to the future of Texas Tech. We have labored now for thirty-three years and have built a college reknown for its undergraduate education. The next three -- and thirty -- must be devoted to an intensive prosecution of graduate efforts supported by research -- research that is basic, applied, and developmental; research that is sponsored and unsponsored; research that is big in scope, and research that is limited but powerful in its impact.

An outstanding engineering faculty, dealing with carefully selected students, performing academic and research efforts in adequate physical facilities -- these are the continuing goals for which we strive.

Respectfully submitted,

John R. Bradford

A LOOK AHEAD

Dinner Honoring Retired Faculty Texas Technological College April 10, 1959

G. E. Giesecke

Ever since I have known that I was to speak this evening, I have been aware of an elusive feeling of uneasiness. This feeling seemed to stem from the notion that, in accepting the kind invitation of the Faculty Club to speak, I might have promised more than I could deliver.

A few days ago our colleague, Dr. Fallon, related an incident which sharply illuminates the dilemma in which I sensed I had placed myself by accepting. Because this incident, at the same time, points a moral which has more than passing significance, I should like to share it with you.

It was late Saturday afternoon, and Mr. Schultz, the butcher, had had an extremely good day. Virtually everything was sold from his counters. In the bird department, there was only one fryer left. Just before closing time one of his good customers came in, Mrs. Smith.

She rushed in and said, eagerly, "Do you have any chickens left, Mr. Schultz?"

"Yes, I have, Mrs. Smith. What would you like?"
"I'd like a nice fryer."

Mr. Schultz reached into the barrel where the last fryer was, pretended to pick out a good one, raised the lone bird up high, laid it on the scale, and said, "That one weighs 1 pound and 15 ounces, Mrs. Smith."

Mrs. Smith said, "Don't you have any bigger ones?"

Schultz took the bird off the scale, lowered it into the barrel, stirred and fumbled around down there for a moment, brought it up again, laid it proudly on the scale, and said, "Yes, this one weighs 2 pounds and 6 ounces."

"Very nice," said Mrs. Smith. "I'll take both of them."

With the great esteem all of us have for our honored guests this evening, I think you will understand why, having accepted the invitation, I had the feeling that I might not be able to deliver the goods which our honored guests have a right to expect--like Mr. Schultz' good customer.

Before applying the moral of this anecdote to higher education, I should like to read from a current letter in which one of our honored guests announces her intention to give up the strenuous life next July. It states superbly, I think, why there are teachers, and it probably expresses what is in the hearts of all our honored guests this evening.

". . . it seems I have served almost a lifetime in the school room, and now I feel the need to be out from under the constant strain. I can honestly say that I have enjoyed every minute of my teaching experience. . . Needless to say I will miss greatly the association with students. . . I consider that the reward is beyond expression in words for having had a very small part in the shaping of the lives and the education of thousands of fine young men who are scattered all over the world in many fields of work. And I am indeed grateful to have had such a wonderful opportunity."

There is little that I can add to that which has already been said to and about our honored guests. They know of the deep affection we all hold for them. They know that it has been a privilege to work with them--some of us for many years, some for shorter periods of time. They--and we--have been reminded of the service they were able to render to the many young men and young women who came under their influence. And we have been told of the part they played in the building of this young, vigorous institution which only now is barely beginning to attain maturity.

For these reasons, the person who would say something at this point in the proceedings must speak of other things.

Because our honored colleagues have devoted their lives to learning, they will be the first among us to accept the thought that the past is always prelude. And, I believe, they also subscribe to that philosophy which considers the mature years as that part of life for which the earlier years have been preparation.

In this family gathering of Board and faculty, I would ask that you let us think together, intimately and informally, for a little while about the beginning mature years of the institution which has brought our lives together into intimate association—in work and play, in joy and sadness, in fulfillment and frustration. I ask that we do this because I believe that our honored guests would prefer that we show them that we intend to work just as hard at the perfection of the maturing institution as they have worked at bringing it to its present stature.

May I here bring in a very personal expression. While Mrs. Giesecke's and my association with you in the experience of your work and play, your joy and sadness, your fulfillment and frustration, will have been all too brief, this shared experience has been no less intense and deep; and our departure from your circle will bring great sadness to our hearts. But this sadness can never obscure our joy and our gratitude in your generosity and in your affection, nor our pride in what we have accomplished together.

If I now have the temerity to essay a look ahead, I ask you to remember that I know that I am not suddenly become clairvoyant. Rather, I speak as one of the family who is deeply devoted to the family and who wishes to see it become ever stronger, ever more useful, ever more prosperous. I may say some things with which some of you disagree, but that is as it should be in a democracy and, especially, as it should be in a university which would serve the lofty ideals of democracy. The essence of the search for truth is the freedom to dissent. As Goethe said in many different ways, it is the unending search for truth which makes life worth living; if ever the moment comes which satisfies a man completely and which he would freeze into eternity, in that moment will he lose his soul.

l. First, I believe that all education in America, and particularly higher education, is being moved into a role that is quite new in our history. It is being moved into this role slowly and almost imperceptibly, as the American people, in the time-consuming but solid ways of a society that tries to be democratic, face up to the realities of today's world. Let me explain this.

If I may simplify greatly, until World War II the American people believed in education because they wanted their children to have a better chance in life than their parents. Our form of government, our society, seemed to be quite secure behind our oceans, and likely to continue without serious challenge; and so our main objective was to provide the individual young person with the chance so to equip himself that he might achieve greater success than had earlier generations. We considered this "progress."

In World War II we found ourselves in bitter contest with evil forces which could, conceivably, destroy us. Because losing this contest simply

did not enter our heads, we set about the job of winning it--and that meant, primarily, creating better and more abundant instruments of technological warfare than our opponents. But, along the way, we discovered something for the first time, namely, that the nation had more than just a casual stake in the refined intelligence of the individual citizen; that our survival might just depend upon whether we had the proper quality of intelligence in the right quantity at the right time. You recall how our nation pushed the education of our young men and women during the War.

My point is that here, for the first time, education became a vital part of general public policy aimed at survival in a gigantic struggle; it became more than how much formal learning the individual might want in his efforts to make a success of his personal life.

For the first few years after the War, the whole nation was much too busy getting back to normalcy and educating the veterans to give much thought to such matters. Then, the great debate over education began. While in some ways it took on a character of which I, as an educator, am not proud, it still served the extremely useful purpose of making the American people think about education in the context of the new role of world leader in which they found themselves.

Then, Sputnik roared into the skies. That little sphere saw to it that the great debate ended in some significant conclusions: that this puzzling and bothersome thing called the Cold War is indeed another struggle for survival; that this struggle might well last for generations; that the principal object and the principal instrumentality of this struggle is the mind of man; that the intelligence and the character of our people are indeed our primary resource; and that we had better determine the requirements of an educational system that will give us the quality and quantity of intelligence we need in order to survive.

By this time, the significance of these things has pretty thoroughly penetrated the thinking of the American people about education. Probably not yet in so many words, they realize that the identification and education and utilization of our native intelligence is, in the immediate danger, second only in importance to defense strength, and that in the long haul the development of our intelligence promises to be the deciding factor in the struggle with the forces of tyranny. In a word, in the

short time between the beginnings of World War II and today (less than 20 years), education in America has become a major instrument of public policy. I do not believe that it will ever again be less. This is the new role into which I see education, and particularly higher education, being moved.

2. Second, in this new role of chief contributor to the intellectual leadership of the American people (and, consequently of the free world), we in higher education are being given an awesome responsibility. We will need to think and work, with a prayer in our hearts, as we have never done before. Incidentally, when we visited with a few of the faculty of the Free University of Berlin last summer, Mrs. Giesecke and I sensed something of the excitement and the responsibility of this role; right in front of the Iron Curtain, that is the role which those colleagues described as being theirs.

If I am right in this analysis of the kind of service which the American people will expect increasingly of their colleges and universities, there is one fact and one consequence which we need to keep ourselves terribly sensitive to.

The fact is that once a society as large and complex as ours makes up its mind to do something, the resultant force is mighty. This force, like every other force, needs to be guided and channeled; depending upon its direction, it will accomplish the desired good, or it may lead to something quite different.

The consequence is that we in higher education must be vitally and actively concerned with the direction of this mighty force. If we let our responsibility for its direction go by default, we will strengthen the innate tendency, characteristic of every large, social effort, to become monopolistic and bureaucratic and, therefore, monolithic. A very great danger, as the free world tries to combat the materialistic tyranny of the unfree world, is the danger of becoming like the very thing we are trying to combat. By setting the highest example of which we are capable, we can do much to assure that the American people's faith in education does not become aborted into cynical disillusionment and selfish political advantage. Such an outcome would indeed be tragic, and very cruel to the hopes of all men of good will.

The reverse side of this consequence is that we in education must

learn to become more critical of our own efforts; we must make certain that our own house is in order before we criticize. This new role demands the highest of us in creativity, integrity, and statesmanship. If we are unable, in our combined knowledge and wisdom, to come up with the right kind of leadership for the vast force being mobilized under the banner of education, it will not be long until someone starts telling us what to do and how to do it. We all can think of examples of this.

Let me now, in short order, call attention to a few other things which, in my judgment, follow from the premise I have just laid, and if Texas Tech is to respond fully to this new challenge to provide the highest order of leadership.

- 1. First, I believe that Texas Tech can not much longer ignore the fact that the word "technological" in its name is a handicap; that a name needs to be found which more accurately reflects its true nature and destined role. Those of us who try to recruit top-quality faculty and graduate students, and who strive to bring the College into vital and meaningful contact with the significant intellectual (and financial!) currents of our day, can each cite examples to show that our present family name invariably causes confusion and misunderstanding among those who do not know us. There is no valid reason why this needs to remain so.
- 2. Second, one of the charming and lovable things about this College is that it still tries to feel and act like a small college; that is where a good part of its friendliness and warmth comes from.

At the same time, that is also where a number of its aches come from. The fact is that it is no longer a small college, whether we measure it in terms of numbers of people or in terms of the complexity of what it does. Those of us who have been trying to help it do better what it is supposed to do, know that we have been able to improve the processes by which we communicate internally and make decisions. If the role I think I see ahead for the College is at all accurate, then these processes of communicating and decision making will require a good deal of systematic attention.

3. Third, I think the faculty needs to get started on the critical study of our programs which we have long promised ourselves. Reasons for making this analysis are getting more imperative every day. What justification is there for the assumption that the education we are dispensing

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contains the elements which the world of 10 and 20 years hence will demand of Americans? Can we be sure that the imperfections, of which we all are aware, are the product of something other than sterility and habit?

During the past 50 years, the dominant movement in higher education has been towards specialization and towards professionalization. This is as true of the liberal arts as it is of the major in fly casting--to invent one exaggerated example. In the process of becoming so specialized, could it just be that we have forgotten how to educate the heart, the spirit, the sensibilities? Indeed, may we have largely forgotten that this side of man even exists?

At least one of our armed services is trying to appraise the course and the consequences of a cold war that may last 50 years, and the requirements which the successful waging of a long cold war will demand of the American people. With confidence in our ability to hold our own in the technological aspects of the cold war, this armed service is now seriously debating these questions: is it in the traditions and the character of the American people to muster the necessary tenacity and spiritual strength over such a long period of time? are our opponents gambling that we do not have them? and is the cold war, therefore, the logical way of attacking us in our greatest weakness? will we, in other words, reach the point where we break spiritually under the prolonged strain, and conveniently give up the struggle?

Viewing the performance under present conditions of its officers in the light of these considerations, this branch of the armed services is about ready to conclude that the specialist officer will not provide the wise and stable leadership which the foreseeable future demands. They are very seriously considering taking in officers having a solid humanistic schooling and outlook on life, including as many specialists as will be needed to tend the mighty engines of destruction.

We in education need to examine our own assumptions and habits in the light of such considerations as these.

Near the end of his life, Darwin had this to say:

"If I had my life to live over again, I would have made it a rule to read some poetry and listen to some music at least every week. . . The loss of these tastes is a loss of happiness, and may possibly be injurious to the intellect, and more probably to the moral character, by enfeebling the emotional part of our nature."

4. Fourth, I want to tell you briefly of something which may be worth thoughtful attention as the effort is made to reappraise our educational thinking.

This year, by chance, twice I engaged in "bull sessions" with several of our current student leaders, both times discussing contemporary educational theory and practice in the light of what our young people think they see ahead in their lifetime. The imaginativeness and the acuity of their questions were as provocative as they were surprising. I believe it would well repay the effort to try to find a way to incorporate the best thinking of students into formulations of educational policy. There need be no fear that this would mean putting students in charge of curriculum making. Students might well have quite a bit to contribute, for example, to the effort to increase student desire to learn.

5. Fifth, and finally, there is one other inference to be drawn from the new leadership role which I think I see for higher education. It is the obvious one of providing leadership for the entire educational endeavor in the area in which a given institution functions. The facts of geography make this inference particularly pertinent to Texas Tech.

For the most part, the several levels of the educational establishment--elementary and secondary schools, junior college, senior college, graduate school--have gone their own ways, quite oblivious to each other. Standing as it does at the apex of this structure, and in view of the great variety of knowledge and talent at its disposal, the senior college with its substantial graduate school is in the position to exercise great and good influence over the entire establishment. It has the obligation to do as much.

This obligation does not give it the right, however, to try to make over every other level in its own image. If it does try to do this, it will fail, and it should fail. The simple facts are that the public schools, for example, when higher education washes its hands of responsibility for them as happened not too many years ago, are apt to go down foolish side-roads, and that higher education, when it is out of touch with the public schools, can only sit and wring its hands over the quality of student it gets and over the anti-intellectual climate. Each without the other is incomplete; working together, they complement each other. There are hopeful signs that this kind of working relationship between the different levels is becoming a reality.

One could cite many, many other consequences which follow from the major premise with which I began this discussion. You could name them as well as I: the urgent need to search for new knowledge in all fields of learning; the upgrading of standards for the appointment, retention, and promotion of faculty; the critical study of standards of admission and academic performance; the improvement of the quality of instruction; the attraction and development of students with superior abilities; the extension and strengthening of graduate work.

None of these issues is new. I am sure that some of them have been discussed in every faculty meeting which our honored colleagues have ever attended.

What I believe is new is that, at long last and under the duress of the struggle for survival, the American people are beginning to take us seriously in what we have been saying about the nature and promise of higher education; that they are getting ready to support higher education as they have not supported it before; and that we had better get ourselves ready now to meet their high expectations, lest we find ourselves in the fix of Mr. Schultz at the close of a busy Saturday.

U. S. ARMY ORDINANCE DISTRICT, ST. LOUIS 4300 GOODFELLOW BOULEVARD ST. LOUIS 20, MISSOURI

Mr. Colowick/mw/537

ORDEM-LC 280/8-1423

March 31, 1959

Texas Technological College Lubbock Texas

Contract No. DA-23-072-ORD-1423 Procurement No. 2201

Gentlemen:

The United States of America hereby accepts your offer on the terms stated in your proposal of 3 November 1958, as amended by letters of 18 February 1959, 18 March 1959, and 23 March 1959 to furnish research and development services in connection with "Optical Transmission of the Atmosphere" on a cost-reimbursable basis at an estimated cost of \$9,999.54.

As stated in your proposal, your offer is accepted with the understanding that the Agreement between you and the United States of America shall be embodied within a reasonable time after the date of this letter in a single instrument Contract Form DD 351, as amended to date of mailing hereof and which shall contain all articles required by Federal Law, Armed Services Procurement Regulations, Army Procurement Procedure or Executive Order, together with the standard optional articles contemplated by the terms of your proposal.

This Contract shall hereafter bear Contract No. DA-23-072-ORD-1423. O.M.S. No. 5750.21.811 OBR (DA-5B99-01-004) is being issued to cover this Contract. The sums payable under this Contract are chargeable to Allotment No. A21X2040 P5730 905-4229 (S23-072) R&DA, the available balance of which is sufficient to cover these amounts.

You are directed to proceed immediately with the furnishing of the above in order that the delivery schedule outlined in your proposal may be strictly maintained. D. O. rating C-9e is assigned to this Contract.

The Contracting Officer signing this letter on behalf of the United States of America is acting pursuant to the authority granted by Section 2304 (a)(5) of Title 10, U. S. Code, Public Law 1028, 84th Congress.

/s/ Norman C. Pardue

NORMAN C. PARDUE Lt. Col. Ord. Corps Contracting Officer HEDRICK AND STANLEY ARCHITECTS-ENGINEERS FORT WORTH, TEXAS Job No. 5171

TABULATION OF BIDS

For

JONES STADIUM EXPANSION TEXAS TECH COLLEGE, LUBBOCK, TEXAS

BID DATE:

Friday. 2:00 P.M.

April 10, 1959

,							2.00	
NAME OF CONTRACTOR	BASE PROPOSAL "A"	BASE PROPOSAL "B"	BASE PROPOSAL "C"	ALTERNATE NO. 1	ALTERNATE NO. 2	DAYS TO COMP. "A"	DAYS TO COMP. "B"	DAYS TO COMP. "C"
Brown and Root, Inc.	No Bid	No Bid	\$1,99 1, 000	+\$133,000	+ \$ 6,000	135	465	465
Farnsworth and Chambers	No Bid	No Bid	1,830,000	+ 123,000	+ 7,000	150	270	515
Butcher & Sweeney Const. Co.	\$371,215	\$1,443,862	1,807,997	+ 132,000	+ 5,978	135	285	495
Cain and Cain	410,690	1,377,500	1,766,500	+ 125,500	+ 6,500	As Spec	As Spec	As Spec
Templeton-Cannon Gen. Contr.	426,370	No Bid	1,978,480	+ 130,950	+ 7,000	200	No Bid	700
Charles Ramsey and Company	426,000	1,397,400	1,785,900	+ 125,000	+ 12,500	240	360	5 70

STATE OF TEXAS (COUNTY OF LUBBOCK (

THIS AGREEMENT made the 13th day of April, 1959, by and between the Board of Directors, Texas Technological College, Lubbock, Texas, acting herein by and through W. D. Watkins, Abilene, Taylor County, Texas, Chairman of the Board of Directors, hereinafter called the Owner, and Cain and Cain, of Fort Worth, Tarrant County, Texas, represented by Owen E. Cain, Partner, hereinafter called the Contractor.

WITNESSETH, that the Owner and the Contractor for the considerations hereinafter named agree as follows:

ARTICLE 1. SCOPE OF THE WORK: The Contractor shall furnish all the material and equipment and shall perform all the work for the Expansion of Jones Stadium on the campus of Texas Technological College, such work to include all phases of the work as covered in the Drawings, Specifications and Addenda listed hereinafter in Article 8, prepared by Hedrick and Stanley, Architects-Engineers, of Fort Worth, Tarrant County, Texas, hereinafter called the Architects, and such work shall be performed in such manner as to receive the complete approval of said Architects and of the Supervising Architect of Texas Technological College.

ARTICLE 2. CONTRACT SUM: The Owner shall pay to the Contractor for the full performance of the contract subject to additions and deductions provided therein, in current funds, the sum of One Million Seven Hundred Seventy Three Thousand Dollars and no cents (\$1,773,000.00).

It is recognized that the Contractor's Base Proposal "C" was One Million Seven Hundred Sixty Six Thousand Five Hundred Dollars and no cents (\$1,766,500.00) and that Alternate 2 in the amount of Six Thousand Five Hundred Dollars and no cents (\$6,500.00) was offered by the Contractor and accepted by the Owner for the installation of alternate seat lifting devices as described in Paragraphs B-4 and H-6 of Division 62, in lieu of standard seats as specified in Base Proposal "C". Alternate No. 1 was not accepted by the Owner.

ARTICLE 3. COMPLETION OF THE CONTRACT: Work on this contract shall be commenced immediately after the Contractor has been notified in writing by the Owner or Architects and all work covered under Base Proposal "A"

shall be completed by September 25, 1959, and work covered under Base Proposal "B" shall not be commenced before November 16, 1959, and shall be completed by September 16, 1960. The Contractor further agrees that the Owner may retain the sum of \$250.00 for each day after September 25, 1959, for work under Base Proposal A and September 16, 1960, for work under Base Proposal B, Sundays and holidays included, that the work remains uncompleted, this sum being agreed as a proper measure of liquidated damages which the Owner will sustain, per diem, by the failure of the Contractor to complete the work as set forth above.

ARTICLE 4. METHOD OF PAYMENT: There being no default on the part of the Contractor existing, the Owner shall make payments to the Contractor on certificate of the Architect approximately every thirty (30) days, it being understood that payments shall be made upon ninety per cent (90%) of the value of labor and material in the work and materials suitably stored at the site, with the provision that no payment ever shall be made which in the judgment of the Architect will leave less than an amount sufficient to complete the work.

ARTICLE 5. COMPLETION AND FINAL PAYMENT: Upon completion of the entire work as certified by the Architects there shall be paid to the Contractor within thirty (30) days the amount necessary to complete payment of the entire amount of the contract sum stipulated in Article 2, together with approved additions and deductions subject to the terms of the Contract and the General Conditions.

Before this final certificate is issued, the Contractor shall submit evidence satisfactory to the Architect showing payment for all labor and material used or furnished for use in the work, whether secured by a lien or not, and whether furnished by the Contractor or Sub-contractors, and that all obligations of the Contractor under the Contract, Plans, Specifications and General Conditions have been fully performed.

ARTICLE 6. The Contractor shall comply with and conform to all labor laws of the State of Texas and the various acts amendatory and supplementary thereto and to all laws, or strances, as a legal requirements applicable thereto.

ARTICLE 7. BOND: The Contractor shall provide to the Owner a Surety Bond from a reputable bonding company in the full amount of the Contract

Board Minutes April 11, 1959 Attachment No. 6 Page 3

Sum, payable to W. D. Watkins, Abilene, Taylor County, Texas, Chairman of the Board of Directors, Texas Technological College, Lubbock, Texas, covering the full and faithful performance of the contract and the payments of all obligations arising thereunder.

ARTICLE 8. CONTRACT DOCUMENTS:

- 1. General Conditions, Special Conditions and Specifications covering all phases of the work, bound together under cover entitled, "General and Mechanical Specifications for Jones Stadium Expansion for Texas Technological College, Lubbock, Texas," further identified as Hedrick and Stanley's Job No. 5171, dated February 24, 1959.
- Addendum No. 1 to the specifications, dated April 2, 1959, containing six (6) pages.
- Addendum No. 2 to the specifications, dated April 6, 1959, containing one (1) page.
- 4. Addendum No. 3 to the specifications, dated April 8, 1959, containing one (1) page.
- 5. Drawings: Site Work Drawings: Sheet No. P-1, dated February 24, 1959.

Architectural Drawings: Title Sheet and Sheets No's. A-1 through A-21, dated February 24, 1959.

Structural Drawings: Sheets No's. S-1 through S-12, dated February 24, 1959.

Mechanical Drawings: Sheets No's. M-1 through M-11, dated February 24, 1959.

Electrical Drawings: Sheets No's. E-1 through E-9, dated February 24, 1959.

Sound System Drawings: Sheets No's. ES-1 and ES-2, dated February 24, 1959.

All drawings titled "Jones Stadium Expansion".

IN WITNESS WHEREOF, the parties hereto have executed this agreement the day and year first above written.

OWNER:

BOARD OF DIRECTORS
TEXAS TECHNOLOGICAL COLLEGE

ATTEST:

By /s/ W. D. Watkins
W. D. Watkins, Chairman

/s/ J. Roy Wells Secretary

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CONTRACTOR:

CAIN AND CAIN

By /s/ Owen E. Cain
Partner

The proposal of Cain and Cain, dated April 10, 1959, shall be incorporated and become a part of this agreement.

OWNER:

BOARD OF DIRECTORS
TEXAS TECHNOLOGICAL COLLEGE

By /s/ W. D. Watkins
W. D. Watkins, Chairman

CONTRACTOR:

CAIN AND CAIN

By /s/ Owen E. Cain Partner

BOND

WHEREAS, by an Agreement dated the 13th day of April, 1959, Cain and Cain, as Contractor, entered into a contract with Texas Technological College, as Owner, for the performance of certain work or expansion of a certain structure upon certain real estate in the City of Lubbock, Lubbock County, Texas, subject to the approval of Hedrick and Stanley, Architects-Engineers, said work and structure being more particularly described in such contract, a copy of which is hereto annexed:

NOW, THEREFORE, KNOW ALL MEN, that we, Cain and Cain, Contractor, as aforesaid, as Principal, and Fidelity and Deposit Company of Maryland, hereinafter called Surety or Sureties, are held and firmly bound unto Texas Technological College, Owner as aforesaid, and to Sub-Contractors, workmen, mechanics, and materialmen in the sum of One Million Seven Hundred Seventy-Three Thousand Dollars (\$1,773,000.00) for the payment of which, in lawful money of the United States, we do jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns, firmly by these presents: Condition that said Cain and Cain, Contractor as aforesaid, shall fully perform such contract in accordance with the terms thereof, the plans and specifications, and General Conditions, and satisfy all claims and demands in favor of such Owner and such Sub-Contractors, workmen, mechanics, and materialmen arising thereunder or in connection therewith, under the terms of this contract, plans, specifications, and General Conditions, or under the laws of the United States, or of any State thereof, and will indemnify the Owner against expense and damage and reimburse the Owner in outlay occasioned by default of the Contractor and it is understood that action may be maintained upon this bond by any or all beneficiaries hereunder.

It is understood that no alteration in the terms of the contract, or in the plans and specifications and General Conditions, or work to be done thereunder, nor any indulgence or forebearance by the Owner or other beneficiaries hereunder, or extension of time for payment or performance shall affect the liability of the Surety or Sureties hereon, whose undertaking shall be construed by the same rules applying to the undertaking of the Principal, and whose defenses hereunder shall be only such defenses as

Board Minutes April 11, 1959 Attachment No. 6 Page 6

might be available to the Principal, and it is provided that no final settlement between Owner and Contractor shall abridge the right of any beneficiary hereunder whose claim may be unsatisfied.

WITNESS OUR HANDS, this 18th day of April, 1959.

CAIN AND CAIN

By /s/ Owen E. Cain

FIDELITY AND DEPOSIT COMPANY OF MARYLAND

By /s/ Paul P. Cooper, Jr.
Attorney-In-Fact

ACCEPTED this 18th day of April, 1959.

TEXAS TECHNOLOGICAL COLLEGE

By /s/ W. D. Watkins

Power of Attorney

FIDELITY AND DEPOSIT COMPANY OF MARYLAND KNOW ALL MEN BY THESE PRESENTS: That the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, a corporation of the State of Maryland, by WM. M. C. GRIFFITH, Vice-President, and M. A. KELLY Assistant Secretary, in pursuance of authority granted by Article VI, Section.2, of the By-Laws of said Company, which reads as follows: pany, which reads as ioliows:

"The President, or any one of the Executive Vice-Presidents, or any one of the additional Vice-Presidents specially authorized so to do by the Board of Directors or by the Executive Committee, shall have power, by and with the concurrence of the Secretary or any one of the Assistant Secretaries, to appoint Resident Vice-Presidents, Resident Assistant Secretaries and Attorneys-in-Fact as the business of the Company may require, or to authorize any person or persons to execute on behalf of the Company any bonds, undertakings, recognizances, stipulations, policies, contracts, agreements, deeds, and releases and assignments of judgments, decrees, mortgages and instruments in the nature of mortgages, and also all other instruments and documents which the business of the Company may require, and to affix the seal of the Company thereto." does hereby nominate, constitute and appoint PAUL P. COOPER, JR., OF DALLAS, TEXAS..... its true and lawful agent and Attorney -in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: ANY AND ALL BONDS AND UNDERTAKINGS....... THIS POWER OF ATTORNEY DOES NOT INCLUDE BONDS ON BEHALF OF INDEPENDENT EXECUTORS AND BONDS ON BEHALF OF COMMUNITY SURVIVERS And the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Company, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the Company at its office in Baltimore, Maryland, in their own proper persons. The said Assistant Secretary does hereby certify that the aforegoing is a true copy of Article VI, Section 2, of the By-Laws of said Company, and is now in force. IN WITNESS WHEREOF, the said Vice-President and Assistant Secretary have hereunto subscribed their names and affixed the Corporate Seal of the said FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 18TH day of AVEUST , A.D. 19 52 FIDELITY AND DEPOSIT COMPANY OF MARYLAND ATTEST: (SIGNED) By. WM. M. C. GRIFFITH M. A. KELLY (SEAL) Assistant Secretary Vice-President STATE OF MARYLAND CITY OF BALTIMORE On this 18TM day of AURUST, A.D. 19 52, before the subscriber, a Notary Public of the State of Maryland, in and for the City of Baltimore, duly commissioned and qualified, came the above-named Vice-President and Assistant Secretary of the Fidelity and Deposit Company of Maryland, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and they each acknowledged the execution of the same, and being by me duly sworn, severally and each for himself deposeth and saith, that they are the said officers of the Company aforesaid, and that the seal affixed to the preceding instrument is the Corporate Seal of said Company, and that the said Corporate Seal and their signatures as such officers were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporation. IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal, at the City of Baltimore, the day and year C. E. RUPPERSBERGER (SIGNED) (SEAL) Notary Public Commission Expires. MAY 4, 1953 CERTIFICATE

L1419-Ctf.

Board Minutes April 11, 1959 Attachment No. 6 Page No. 8

Job No. 5171 Jones Stadium Expansion Texas Technological College Lubbock, Texas

Cain and Cain Fort Worth, Texas April 10, 1959

GENERAL AND MECHANICAL PROPOSAL (REVISED)

Mr. M. L. Pennington Vice President and Comptroller Texas Technological College Lubbock, Texas

Dear Sir:

The undersigned, in compliance with your invitation for bids for the Expansion of Jones Stadium, Texas Technological College, Lubbock, Texas, having examined the plans and specifications, together with related documents, and all conditions surrounding the work, and being familiar with all aspects of the work, hereby proposes to furnish all labor, materials, equipment, and supplies to perform the work in accordance with the contract documents and in consideration of the conditions surrounding the work, within the time limits set forth herein and at the price or prices stated below. These prices are to cover all expenses incurred in performing the work under the contract documents, of which this proposal is a part.

I (or We) acknowledge receipt of the following addenda: 1, 2, and 3.

BASE PROPOSAL "A": For the construction of the Press Box, additional Toilet Facilities and items shown under the West Stands, Two Poles and Floodlights as shown on drawings, necessary extension of existing Mechanical and Electrical services and any items indicated as Proposal "A" on drawings and not mentioned specifically herein, I (or We) agree to perform this work for the sum of: Four hundred ten thousand six hundred ninety and no cents--Dollars (\$410,690.00).

BASE PROPOSAL "B": For Excavation, Relocation of East Stands, Construction of Stadium, the Athletic Building, Sound System, Floodlighting System, and all other items of work not included in Proposal "A" nor Alternates (See Drawings for complete details of Alternates), I (or We) agree to perform this work for the sum of: One million three hundred seventy seven thousand five hundred and no cents--Dollars (\$1,377,500.00).

BASE PROPOSAL "C": For combination Bid combining Proposal "A" and Proposal "B", I (or We) agree to perform all of the work for the following sum: One million seven hundred sixty six thousand five hundred and no cents--Dollars (\$1,766,500.00).

NOTES: Base Proposal "A" only is designated separately on drawings - all other items not designated as Proposal "A" shall be Proposal "B". It is the intent that all construction under Proposal "A" be 100% complete prior to the beginning of the 1959 Football Season, and all work under Proposal "A" to start at the completion of the 1959 Football Season, and to be complete prior to the first game of the 1960 Football Season. In reference to Proposals "B" and "C", the football playing field shall be graded and prepared ready for seeding and sodding, by the Owner, not later than May 15, 1960.

I (or We) agree to perform all work described in and shown on the following documents:

SPECIFICATIONS: Dated February 24, 1959.

SITE WORK DRAWINGS: Sheet No. P-1, dated February 24, 1959.

ARCHITECTURAL DRAWINGS: Title Sheet, Sheet Nos. A-1 thru A-21, dated February 24, 1959.

STRUCTURAL DRAWINGS: Sheet Nos. S-1 thru S-12, dated February 24, 1959.

Board Minutes April 11, 1959 Attachment No. 6 Page No. 9

MECHANICAL DRAWINGS: Sheet Nos. M-1 thru M-11, dated February 24, 1959.

ELECTRICAL DRAWINGS: Sheet Nos. E-1 thru E-9, dated February 24, 1959.

SOUND SYSTEM DRAWINGS: Sheet Nos. ES-1 and ES-2.

ALTERNATES: In compliance with the General Conditions, Article 46, entitled "Alternates", and with the express understanding that the Owner may accept such Alternates prior to such time as will entail extra cost in performance of said Alternates, the undersigned agrees to add to the Base Proposal, the sum or sums for work added for the following Alternates:

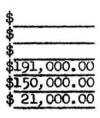
ALTERNATE No. 1: If North Stands, North Toilets and other work described as "Alternate No. 1" are added, I (or We) will ADD TO the Base Proposal "B" and (or) Base Proposal "C" the following sum: One hundred twenty five thousand five hundred and no cents--Dollars (\$125,500.00).

ALTERNATE No. 2: If alternate seat lifting devices as described in Paragraphs B-4 and H-6 of Division 62 are installed in lieu of standard seats as specified in Base Proposal, I (or We) will ADD TO the Base Proposal, the sum of: Six thousand five hundred and no cents--Dollars (\$6,500.00).

Upon receipt of notice of the acceptance of this bid, I (or We) will execute the formal contract within ten (10) days, and will deliver a Surety Bond in the amount of 100% of the Contract Price for the faithful performance of the contract.

The following information is required:

ARCHITECTURAL WORK SITE WORK STRUCTURAL WORK MECHANICAL WORK ELECTRICAL WORK SOUND SYSTEM



Names of successful subcontractors shall be furnished the Architect as soon as the contracts are let.

The undersigned further agrees to complete the work as specified in the Contract Documents as follows:

BASE PROPOSAL "A": Within as specified calendar days from the issuance of work order.

BASE PROPOSAL "B": Within as specified calendar days from the issuance of work order.

BASE PROPOSAL "C": Within as specified calendar days from the issuance of work order.

The undersigned agrees that the Owner may retain the sum of TWO HUNDRED AND FIFTY DOLLARS (\$250.00) from the amount of compensation to be paid the undersigned for each day after the above-mentioned date, Sundays and holidays included, that the work remains incomplete. This amount is agreed upon as the extent of damages the Owner will suffer as a result of the failure of the undersigned to complete the work at the stipulated time, and is not to be construed in any sense as a penalty.

Respectfully submitted,

CAIN AND CAIN

(Seal if Bid is by a Corporation)

By /s/ Owen E. Cain

4001 South Expressway

Fort Worth, Texas

WAIVER OF NOTICE AND CONSENT TO SPECIAL MEETING

DATED at Lubbock, Texas, this the 11th day of April,

1959.

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RESOLUTION AUTHORIZING ISSUANCE OF \$1,300,000 TEXAS TECHNOLOGICAL COLLEGE ATHLETIC STADIUM REVENUE BONDS SERIES 1959 AND SERIES 1959-A

THE STATE OF TEXAS
COUNTY OF LUBBOCK

TEXAS TECHNOLOGICAL COLLEGE

ON THIS, the 11th day of April, 1959, the Board of Directors of TEXAS TECHNOLOGICAL COLLEGE convened in session with the following members present:

W. D. WATKINS	CHAIRMAN
JAMES L. LINDSEY	VICE CHAIRMAN
P. C. CALLAWAY TOM LINEBERY DOUGLAS ORME HAROLD HINN C. I. WALL FLOYD A. WOOLDRIDGE	DIRECTORS
J. ROY WELLS	SECRETARY

the following being absent: J. EVETTS HALEY, constituting a quorum, when among other business transacted was the following:

The Chairman presented for consideration a resolution which was read in full by the Secretary, as follows:

"A RESOLUTION BY THE BOARD OF DIRECTORS OF TEXAS TECHNOLOGICAL COLLEGE PROVIDING FOR AND AUTHORIZING THE ISSUANCE OF \$100,000 'TEXAS TECHNOLOGICAL COLLEGE ATHLETIC STADIUM REVENUE BOND, SERIES 1959', BEARING INTEREST AT THE RATE OF 5% PER ANNUM, FOR THE PURPOSE OF PAYING OFF, REFUND-ING, REFINANCING AND CANCELLING \$100,000 'TEXAS TECHNOLOGICAL COLLEGE ATHLETIC STADIUM REVENUE BOND, SERIES 1952-A', DATED MAY 1, 1952; THE ISSUANCE OF \$1,200,000 'TEXAS TECHNOLOGICAL COLLEGE ATHLETIC STADIUM REVENUE BONDS, SERIES 1959-A', BEARING INTEREST AT THE RATE OF 4-1/4% PER ANNUM, FOR THE PURPOSE OF PAYING OFF, REFUNDING, REFINANCING AND CANCELLING \$230,000 'TEXAS TECHNOLOGICAL COLLEGE ATHLETIC STADIUM REVENUE BONDS, SERIES 1952-B', DATED MAY 1, 1952, AND FURTHER IMPROVING, ENLARGING, EXTENDING AND EQUIPPING THE COLLEGE'S ATHLETIC STADIUM AT A COST NOT EXCEEDING \$970,000, AS AUTHORIZED BY THE LAWS OF THE STATE OF TEXAS; PRESCRIBING THE FORM OF SAID

BONDS; PROVIDING THAT THE REQUIREMENTS OF ALL THE SAID SERIES 1959 AND 1959-A BONDS SHALL CONSTITUTE A FIRST LIEN ON AND PLEDGE OF THE NET REVENUES TO BE DERIVED FROM THE OPERATION OF SAID ATHLETIC STADIUM, FROM ACTI-VITIES IN CONNECTION THEREWITH AND FROM FOOTBALL AND BASKETBALL GAMES IN WHICH SUCH INSTITUTION PARTICIPATES AWAY FROM SAID INSTITUTION AS WELL AS AT SAID INSTITUTION AFTER DEDUCTING ONLY CERTAIN OPERATING, MAINTENANCE AND ADMINISTRATION EXPENSES; PROVIDING FOR THE SUBSEQUENT ISSUANCE OF BONDS ON A PARITY WITH THOSE HEREIN AUTHORIZED AND PRESCRIBING THE CONDITIONS UNDER WHICH SUCH MAY BE ISSUED; PROVIDING CERTAIN COVENANTS PERTAINING TO THE BONDS HEREIN AUTHORIZED AND THE FUNDS FROM WHICH SAME ARE TO BE PAID; PROVIDING THAT THE HOLDERS OF SAID BONDS SHALL NOT HAVE THE RIGHT TO DEMAND PAYMENT OUT OF SOURCES OTHER THAN THOSE SPECIFIED; ENACTING OTHER PROVISIONS INCIDENT AND RELATING TO THE SUBJECT AND PURPOSE OF THIS RESOLUTION; AND PROVIDING THAT THIS RESOLUTION SHALL BECOME EFFECTIVE IMMEDIATELY UPON ITS PASSAGE AND ADOPTION."

WHEREAS, in accordance with the provisions of Articles 2603c and 2909c, Vernon's Annotated Texas Civil Statutes, 1925, as amended, the Board of Directors of Texas Technological College has the power to construct, acquire, make additions to, improve, equip, manage and maintain an athletic stadium; to issue revenue bonds from time to time in such amount or amounts as it may consider necessary therefor, such bonds to be payable solely from the revenues authorized to be pledged for the purpose; to exercise complete discretion in fixing the form, conditions and details of such bonds; and to do any and all things necessary and convenient to carry out the purpose of said statutes, including the power to refinance such bonds whenever such action is found by the Board to be appropriate or necessary; and

WHEREAS, this Board, upon due investigation, has found and determined that it is necessary, feasible, desirable and for the benefit of the College, to issue revenue bonds in the amount, for the purposes, and under the terms and conditions hereinafter set forth, such bonds and interest thereon to be payable solely from the revenues and income hereinafter provided to be pledged to that purpose; and

WHEREAS, the College has now outstanding revenue bond indebtedness of the Athletic Stadium secured as aforesaid, represented by "Texas Technological College Athletic Stadium Revenue Bond, Series 1952-A", dated May 1, 1952, due May 1, 1987, bearing interest at the rate of 5% per annum, in the principal sum of \$100,000, payable to Clifford B. Jones and wife, Mrs. Audrey Jones, Lubbock, Texas, jointly or severally, as authorized by resolution of this Board passed and adopted May 26, 1952, of record in Volume 2, of the Minutes of the Board of Directors, and which Bond was issued for the purpose of paying off, refunding, refinancing and cancelling an equal amount of the indebtedness of the athletic stadium secured as aforesaid; and

WHEREAS, the College further has outstanding revenue bond indebtedness of the Athletic Stadium secured as aforesaid represented by "Texas Technological College Athletic Stadium Revenue Bonds, Series 1952-B", dated May 1, 1952, Numbers 46 to 275, inclusive, in denomination of \$1,000 each, due serially on May 1 of each of the years as follows: \$10,000 1960 to 1962, inclusive; \$17,000 1963; \$18,000 1964 and 1965; \$19,000 1966, \$20,000 1967 and 1968; \$21,000 1969; \$22,000 1970 and 1971; and \$23,000 1972, bearing interest at the rates of 3% and 3-1/2% per annum, issued for the purpose of further improving, enlarging, extending and equipping the athletic stadium, authorized by the aforesaid resolution of the Board of Directors, passed and adopted May 26, 1952, of record in Volume 2, of the Minutes of the Board of Directors; and

WHEREAS, the aforesaid \$100,000 Series 1952-A Bond was issued pursuant to an agreement between the Board of Directors of Texas Technological College and Clifford B. Jones and wife, Mrs. Audrey Jones, as set forth in the aforesaid authorizing resolution,

stipulating that the interest thereon should be paid to said parties so long as both are alive, and that at the death of either, such interest should be paid to the survivor, and that upon the death of the survivor, the bond should be surrendered to Texas Technological College, in accordance with that certain escrow agreement dated May 1, 1952, by and between the aforesaid parties and The Lubbock National Bank, Lubbock, Texas, and that upon surrender, said bond should be cancelled without payment of principal or further interest; and

WHEREAS, each of the aforesaid parties to said escrow agreement have now agreed and consented to the issuance of all of the bonds herein authorized and to the terms and conditions thereof and to ratably secure the same by a first lien on and pledge of the revenues herein designated, in such manner that no one bond shall have priority of lien over any other bond of the entire amount authorized, and have further agreed and consented to the substitution of the bond herein authorized to be issued to Clifford B. Jones and wife, Mrs. Audrey Jones for the bond heretofore issued to them, as aforesaid, and now held under the terms of the aforementioned escrow agreement; and

WHEREAS, all the said outstanding Series 1952-B bonds

Nos. 46 to 275 have been duly called for redemption on May 1,

1959 pursuant to the option of the College so to do as contained in
said bonds and in the resolution authorizing their issuance; and

will therefore be available for refinancing as herein contemplated;

and

WHEREAS, the Board of Directors has found and determined that it is feasible, practical and desirable to refinance the aforesaid \$100,000 Series 1952-A Bond as well as the aforementioned \$230,000 outstanding "Texas Technological College Athletic Stadium

Revenue Bonds, Series 1952-B", dated May 1, 1952, Numbers 46 to 275, inclusive, and also to issue \$970,000 Athletic Stadium Revenue Bonds for the purpose of further improving, enlarging, extending and equipping said athletic stadium under the terms and conditions hereinafter set forth and prescribed, therefore

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF TEXAS TECHNOLOGICAL COLLEGE:

SECTION 1: Authorization - Principal Amount - Designation. That in order to borrow the sum of \$1,300,000 for the purpose of paying off, refunding, refinancing and cancelling the existing indebtedness of the athletic stadium of Texas Technological College, known as "Texas Technological College Athletic Stadium Revenue Bond, Series 1952-A", dated May 1, 1952, due May 1, 1987, bearing interest at the rate of 5% per annum, in the principal sum of \$100,000; and for the purpose of paying off, refunding, refinancing and cancelling the existing indebtedness of the athletic stadium of Texas Technological College, known as "Texas Technological College Athletic Stadium Revenue Bonds, Series 1952-B", dated May 1, 1952, being Bond Numbers 46 to 275, inclusive, in denomination of \$1,000 each, due serially on May 1 of each of the years as follows: \$10,000 1960 to 1962, inclusive; \$17,000 1963; \$18,000 1964 and 1965; \$19,000 1966; \$20,000 1967 and 1968; \$21,000 1969; \$22,000 1970 and 1971; and \$23,000 1972, bearing interest at the rates of 3% and 3-1/2% per annum, and aggregating the principal sum of \$230,000; and for the additional purpose of further improving, enlarging, extending and equipping the College's Athletic Stadium at a cost of not exceeding \$970,000, the Board of Directors of Texas Technological College, by virtue of authority of law, have determined to provide for two series of revenue bonds to be designated "TEXAS TECHNOLOGICAL COLLEGE ATHLETIC STADIUM REVENUE BOND, SERIES 1959", in the principal sum of \$100,000 and "TEXAS TECHNOLOGICAL COLLEGE ATHLETIC

STADIUM REVENUE BONDS, SERIES 1959-A", aggregating the principal sum of \$1,200,000, said Series 1959 Bond being payable as to interest and said Series 1959-A Bonds being payable as to both principal and interest solely from and secured by a first lien on and plage of the revenues hereinafter designated for the purpose; the bonds of both series to be ratably secured in such manner that no one bond of either series shall have priority of lien over any other bond of either series.

SECTION 2: Series 1959 Bond - Date - Maturity -Interest-Place of Payment. That the bond to be known as "TEXAS TECHNOLOGI-CAL COLLEGE ATHLETIC STADIUM REVENUE BOND, SERIES 1959", shall be dated May 1, 1959, shall be in the denomination of ONE HUNDRED THOUSAND DOLLARS (\$100,000), shall mature May 1, 1987, and shall bear interest at the rate of FIVE PER CENTUM (5%) per annum, payable November 1, 1959, and semi-annually thereafter on May 1st and November 1st in each year until maturity of said bond, except as hereinafter provided. The said interest on said bond shall be payable to Clifford B. Jones and wife, Mrs. Audrey Jones, jointly, so long as both of them are alive and at the death of either, said interest will be paid to the survivor; that at the date of the survivor, the bond will be surrendered to Texas Technological College, in accordance with that certain escrow agreement entered into between the parties above mentioned and THE LUBBOCK NATIONAL BANK, Lubbock, Texas, as of the 1st day of May, 1959, providing that when so surrendered, the interest on said bond shall no longer be paid and said bond shall be cancelled without payment of any principal and providing further that in the event either of the said Mr. or Mrs. Jones survives the maturity date of said bond the principal amount thereof will be refunded so as to provide an extended maturity, the refunding bond to bear interest at the rate of 5% per annum but otherwise to conform with the covenants and conditions of the Series 1959 bond herein authorized; and that the interest on said bond shall be payable in lawful money of the United States of America, without exchange or collection charges at THE LUBBOCK NATIONAL BANK, Lubbock, Texas.

SECTION 3: Series 1959 Bond - Special Obligation. That the Series 1959 Bond shall constitute a special obligation of Texas Technological College and the owners and holders of said Series shall never have the right to demand payment out of any funds raised or to be raised by taxation or out of any funds other than those herein specifically provided.

SECTION 4: Series 1959 Bond - Execution. Said bond and the interest coupons appurtenant thereto may be executed by the imprinted facsimile signatures of the Chairman of the Board of Directors and Secretary, with the corporate seal of said Board affixed, and execution in such manner shall have the same effect as if such bond and coupons had been signed by the Chairman and Secretary in person by their manual signatures. Inasmuch as such bond is required to be registered by the Comptroller of Public Accounts of the State of Texas, only his signature (or that of a deputy designated in writing to act for the Comptroller) shall be required to be manually subscribed to such bond in connection with his registration certificate to appear thereon, as above provided; all in accordance with the provisions of Article 717j, Vermon's Annotated Texas Civil Statutes, as amended.

SECTION 5: Series 1959 Bond - Form. That said Series 1959 bond shall be substantially in the following form:

UNITED STATES OF AMERICA

STATE OF TEXAS

COUNTY OF LUBBOCK

TEXAS TECHNOLOGICAL COLLEGE ATHLETIC STADIUM REVENUE BOND, SERIES 1959

\$100,000

FOR VALUE RECEIVED, the Board of Directors of Texas
Technological College, for and on behalf of Texas Technological

College, Lubbock, Texas, hereby acknowledges that it is indebted to and promises to pay to Clifford B. Jones, and wife, Mrs. Audrey Jones, Lubbock, Texas, jointly or severally, as hereinafter stated, the sum of

ONE HUNDRED THOUSAND DOLLARS

(\$100,000), on May 1, 1987, in lawful money of the United States of America, and to pay interest thereon from the date hereof at the rate of FIVE PER CENTUM (5%) per annum, payable November 1, 1959, and semi-annually thereafter on May 1st and November 1st in each year, and interest falling due prior to the maturity hereof shall be paid only upon presentation and surrender of coupons hereto appertaining as they severally become due; said interest being payable at THE LUBBOCK NATIONAL BANK, Lubbock, Texas, without exchange or collection charges to the owners and holders, and the said College is hereby held and firmly bound to apply the pledged appropriated revenues derived from its Athletic Stadium and all activities in connection therewith including also revenues from all football and basketball games or contests in which said institution participates away from said institution as well as at said institution to the prompt payment of the interest hereon as same matures, all as more specifically provided in the resolution authorizing the issuance of this bond.

THIS BOND, dated May 1, 1959, issued in the principal amount of \$100,000, constitutes a special obligation of the Board of Directors of Texas Technological College, and together with a series of bonds, known as "Texas Technological College Athletic Stadium Revenue Bonds, Series 1959-A", also dated May 1, 1959, aggregating in amount \$1,200,000 are obligations payable from and ratably and equally secured by a first lien on and pledge of the revenues aforesaid so that no bond of either series shall have priority of lien or payment over any other bond of either series.

The College expressly reserves the right to issue further and additional revenue bond obligations on all things on a parity with the bonds of the two series aforementioned and payable from and equally secured by a first lien on and pledge of the revenues aforementioned; PROVIDED, HOWEVER, that any and all such further bonds may be so issued only in accordance with and subject to the covenants, conditions, limitations and restrictions relating thereto which are set out and contained in the resolution authorizing this bond and to which said resolution reference is hereby made for more full and complete particulars.

THIS BOND is issued for the purpose of paying off, refunding, refinancing and cancelling the existing indebtedness of the athletic stadium of Texas Technological College, known as "Texas Technological College Athletic Stadium Revenue Bond, Series 1952-A", dated May 1, 1952, due May 1, 1987, bearing interest at the rate of 5% per annum, in the principal sum of \$100,000, the obligations thereof being payable solely from the "ATHLETIC STADIUM REVENUE BOND RETIREMENT AND RESERVE FUND" of said College created for that purpose, all as provided by the laws of the State of Texas, particularly Articles 2603c and 2909c, R.C.S. of Texas, and pursuant to a resolution passed by the Board of Directors of Texas Technological College, adopted on the 11th day of April, 1959, and duly recorded in the Minutes of said Board.

THE HOLDER hereof shall never have the right to demand payment of this obligation out of any funds raised or to be raised by taxation, or out of any funds other than those herein specifically provided.

IT IS HEREBY DECLARED AND REPRESENTED that in issuing this bond, the Board of Directors of Texas Technological College

covenants that so long as same remains outstanding and unredeemed (1) the said Athletic Stadium and all games, contests or events from which revenues are to be derived for the payment of the obligations of the College hereby represented will be maintained, operated and conducted efficiently, and (2) that the gross charges for the use of said Stadium and for admission to the said games, contests or events shall be maintained at all times so as to be sufficient to pay the reasonable cost of operating and maintaining the Stadium and said games, contests and events and to pay the interest on said bond as the same becomes due.

IT IS HEREBY CERTIFIED, RECITED AND DECLARED that all acts, conditions and things required to be done precedent to and in the issuance of this bond have been properly done, have happened and have been performed in regular and due time, form and manner as required by the laws of the State of Texas, and the resolution hereinabove mentioned; that this bond does not exceed any constitutional or statutory limitation; and that provision has been made for the payment of the interest on this bond by irrevocably pledging the revenues specified herein.

IT IS EXPRESSLY UNDERSTOOD AND AGREED between the Board of Directors and Clifford B. Jones and wife, Mrs. Audrey Jones, that the interest on this bond will be paid to the said Clifford B. Jones and Mrs. Audrey Jones, jointly, so long as both of them are alive, and that at the death of either, the interest will be paid to the survivor; that at the death of the survivor, this bond will be surrendered to Texas Technological College in accordance with that certain escrow agreement entered into between the parties above mentioned and THE LUBBOCK NATIONAL BANK, Lubbock, Texas, as of the 1st day of May, 1959, providing that upon the death of both

of the present holders hereof, said interest shall no longer be paid on said bond, and that this bond will be surrendered to the College for cancellation without payment of any principal.

IT IS FURTHER EXPRESSLY UNDERSTOOD AND AGREED between the aforementioned parties that in the event either of the said Mr. or Mrs. Jones survive the maturity date of this bond the principal amount thereof will be refunded so as to provide an extended maturity, the refunding bond to bear interest at the rate of 5% per annum but otherwise to conform to the covenants and conditions of this bond.

IN TESTIMONY WHEREOF, the Board of Directors of the Texas Technological College, has caused its corporate seal to be affixed hereto, and this bond and its appurtenant coupons to be executed with the imprinted facsimile signatures of the Chairman and Secretary of this Board in accordance with the provisions of Article 717j, Vernon's Annotated Texas Civil Statutes, as amended, the date of this bond in conformity with the resolution hereinabove mentioned being the first day of May, 1959.

,	Chairman
ATTEST:	
Secretary	
SECTION 6: Series 1959	9 Bond - Form of Coupons. That the
interest coupons attached to this	s bond shall be substantially as
follows:	
ON THE	DAY OF, \$
the Board of Directors of Texas	Technological College, Lubbock,
Texas, hereby promises to pay to	Clifford B. Jones and wife, Mrs.

Audrey Jones out of the funds specified in the bond to which this

coupon is attached, and in lawful money of the United States of

America, at THE LUBBOCK NATIONAL BANK, Lubbock, Texas, without

Comptroller of Public Accounts of the State of Texas.

SECTION 8: Series 1959-A Bonds - Date - Maturity - Option.

That the aforesaid bonds to be known as "TEXAS TECHNOLOGICAL COLLEGE

ATHLETIC STADIUM REVENUE BONDS, SERIES 1959-A", shall be dated

May 1, 1959, shall be numbered consecutively from One (1) to

Twelve Hundred (1200), both inclusive, shall be in denomination

of One Thousand Dollars (\$1,000) each, aggregating the principal

sum of ONE MILLION TWO HUNDRED THOUSAND DOLLARS (\$1,200,000) and

mature in accordance with the following schedule:

		MBERS clus <u>ive)</u>	MATU	JRI'	TY DATES	AMOUNTS
1	to	40	May	1,	1963	\$40,000
41	to	80	May	1,	1964	40,000
81	to	120	May	1,	1965	40,000
121	to	165	May	1,	1966	45,000
166	to	210	May	1,	1967	45,000
211	to	260	May	1,	1968	50,000
261	to	310	May	1,	1969	50,000
311	to	365	May	1,	1970	55,000
366	to	420	May	1,	1971	55,000
421	to	480	May	1,	1972	60,000
481	to	540	May	1,	1973	60,000
541	to	600	May	1,	1974	60,000
601	to	665	May	1,	1975	65,000
666	to	735	May	1,	1976	70,000
736	to	805	May	1,	1977	70,000
806	to	880	Мау	1,	1978	75,000
881	to	955	May	1,	1979	75,000
956	to	1035	May	1,	1980	80,000
1036	to	1115	May	1,	1981	80,000
1116	to	1200	May	1,	1982	85,000

PROVIDED, HOWEVER, that the Board of Directors reserves the right to redeem Bonds Numbered 311 to 1200, both inclusive, (maturing on May 1st in each of the years 1970 to 1982, both inclusive), in whole or in part, on May 1, 1969, or on any interest payment date thereafter, and in the redemption of said bonds in accordance with the terms thereof, the College shall, in addition to accrued interest to the date fixed for redemption, be obligated to pay the redemption values established as follows, to-wit: 103-1/2 for all bonds called for redemption on May 1, 1969 or on November 1, 1969; 103 for all bonds called for redemption on May 1, 1970 or on November 1, 1970; 102-1/2 for all bonds called for redemption on May 1, 1971 or on November 1, 1971; 102 for all bonds called for redemption on May 1, 1972 or on November 1, 1972; 101-1/2 for all bonds called for redemption on May 1, 1973 or on November 1, 1973; and par for all bonds called for redemption on May 1, 1974, or on any interest payment date thereafter; PROVIDED, FURTHER, that if less than all of any amount of bonds that may be redeemed as aforesaid are called for redemption, same shall be called and redeemed in inverse numerical order; PROVIDED FURTHER that at least thirty (30) days prior to any redemption date, a notice of intention, signed by the Secretary of the Board (specifying the serial numbers and amount of bonds to be redeemed) shall be filed with the FIRST NATIONAL BANK IN DALLAS, Dallas, Texas, and the FIRST NATIONAL BANK, Lubbock, Texas (the paying agents named in each of said bonds) and should any bond not be presented for redemption, pursuant to such notice, the same shall cease to bear interest from and after the date so fixed for redemption.

SECTION 9: Series 1959-A Bonds - Interest. That the said "TEXAS TECHNOLOGICAL COLLEGE ATHLETIC STADIUM REVENUE BONDS, SERIES 1959-A" shall bear interest from date until paid at the rate of

FOUR AND ONE-FOURTH PER CENTUM (4-1/4%) per annum, such interest to be evidenced by proper coupons attached to each of said bonds, and said interest shall be payable on May 1, 1960, and semi-annually thereafter on November 1 and May 1 in each year.

SECTION 10: Series 1959-A Bonds - Places of Payment.

That both principal and interest of said Series 1959-A bonds shall be payable in lawful money of the United States of America, without exchange or collection charges to the owners or holders at the FIRST NATIONAL BANK IN DALLAS, Dallas, Texas, or at the option of the holder at the FIRST NATIONAL BANK, Lubbock, Texas, upon presentation and surrender of the bonds or proper coupons.

SECTION 11: Series 1959-A Bonds - Execution. Said bonds and the interest coupons appurtenant thereto may be executed by the imprinted facsimile signatures of the Chairman of the Board of Directors and Secretary, with the corporate seal of said Board affixed, and execution in such manner shall have the same effect as if such bonds and coupons had been signed by the Chairman and Secretary in person by their manual signatures. Inasmuch as such bonds are required to be registered by the Comptroller of Public Accounts of the State of Texas, only his signature (or that of a deputy designated in writing to act for the Comptroller) shall be required to be manually subscribed to such bonds in connection with his registration certificate to appear thereon, as above provided; all in accordance with the provisions of Article 717j, Vernon's Annotated Texas Civil Statutes, as amended.

SECTION 12: Series 1959-A Bonds - Special Obligations.

That the Series 1959-A Bonds shall constitute special obligations of Texas Technological College and the owners and holders of said Series shall never have the right to demand payment of either

principal or interest out of any funds raised or to be raised by taxation or out of any funds other than those herein specifically provided.

SECTION 13: Series 1959-A Bond - Form. That the Series 1959-A bonds shall be substantially in the following form:

NO.____

UNITED STATES OF AMERICA

\$1,000.00

STATE OF TEXAS

COUNTY OF LUBBOCK

TEXAS TECHNOLOGICAL COLLEGE ATHLETIC STADIUM REVENUE BOND, SERIES 1959-A

FOR VALUE RECEIVED, the Board of Directors of Texas
Technological College, for and on behalf of Texas Technological
College, Lubbock, Texas, hereby acknowledges that it is indebted
to and promises to pay to bearer, as hereinafter stated, the sum
of

ONE THOUSAND DOLLARS

(\$1,000), on the 1st day of May, 19____, in lawful money of the United States of America, without exchange or collection charges to the owners and holders, and to pay interest thereon from date until paid at the rate of FOUR AND ONE-FOURTH PER CENTUM (4-1/4%) per annum, payable on May 1, 1960, and semi-annually thereafter on November 1st and May 1st in each year, upon presentation and surrender of the coupons hereto appertaining, as they severally become due.

BOTH PRINCIPAL and interest shall be payable at the FIRST NATIONAL BANK IN DALLAS, Dallas, Texas, or at the option of the owner or holder at the FIRST NATIONAL BANK, Lubbock, Texas, and the said College is hereby held and firmly bound to apply the pledged appropriated revenues derived from its Athletic Stadium

and all activities in connection therewith including also revenues from all football and basketball games or contests in which said institution participates away from said institution as well as at said institution to the prompt payment of the principal and interest on this bond at maturity, and to pay said principal and interest as same matures, all as more specifically provided in the resolution authorizing the issuance of this bond.

THIS BOND is one of a series of bonds dated May 1, 1959 in the aggregate principal amount of \$1,200,000, constituting special obligations of the Board of Directors of Texas Technological College, and together with a bond known as "Texas Technological College Athletic Stadium Revenue Bond, Series 1959", also dated May 1, 1959, in the principal sum of \$100,000 are obligations payable from and ratably and equally secured by a first lien on and pledge of the revenues aforesaid so that no bond of either series shall have priority of lien or payment over any other bond of either series.

The College expressly reserves the right to issue further and additional revenue bond obligations on all things on a parity with the bonds of the two series aforementioned and payable from and equally secured by a first lien on and pledge of the revenues aforementioned; PROVIDED, HOWEVER, that any and all such further bonds may be so issued only in accordance with and subject to the covenants, conditions, limitations and restrictions relating thereto which are set out and contained in the resolution authorizing this bond, and to which said resolution reference is hereby made for more full and complete particulars.

THIS BOND is one of a series of bonds of like tenor and effect, except as to number, right of prior redemption, and maturity, aggregating the principal amount of ONE MILLION TWO HUNDRED THOUSAND DOLLARS (\$1,200,000), numbered consecutively from One (1) to Twelve Hundred (1200), both inclusive, in denomination of ONE THOUSAND DOLLARS (\$1,000) each, issued for the purpose of paying off, refunding, refinancing, and cancelling TWO HUNDRED THIRTY THOUSAND DOLLARS (\$230,000) of the outstanding indebtedness of the College's Athletic Stadium, as evidenced by Bonds known as "Texas Technological College Athletic Stadium Revenue Bonds, Series 1952-B", dated May 1, 1952, and for the purpose of further improving, enlarging, extending and equipping the College's athletic stadium, at a cost of not exceeding \$970,000; all as provided by the laws of the State of Texas, particularly Articles 2603c and 2909c, R.C.S. of Texas, and pursuant to a resolution passed by the Board of Directors of Texas Technological College on the 11th day of April, 1959, and duly recorded in the Minutes of said Board.

AS PROVIDED in the resolution hereinabove mentioned, the Board of Directors reserves the right to redeem Bonds Numbered 311 to 1200, both inclusive, (maturing on May 1st in each of the years 1970 to 1982, both inclusive), in whole or in part, on May 1, 1969, or on any interest payment date thereafter, and in the redemption of said bonds in accordance with the terms thereof, the College shall, in addition to accrued interest to the date fixed for redemption, be obligated to pay the redemption values established as follows, to-wit: 103-1/2 for all bonds called for redemption on May 1, 1969 or on November 1, 1969; 103 for all bonds called for redemption on May 1, 1970 or on November 1, 1970; 102-1/2 for all bonds called for redemption on May 1, 1971 or on November 1, 1971; 102 for all bonds called for redemption on May 1, 1972 or on November 1, 1972; 101-1/2 for all bonds called for redemption on

May 1, 1973 or on November 1, 1973; and par for all bonds called for redemption on May 1, 1974, or on any interest payment date thereafter; PROVIDED, HOWEVER, that if less than all of the amount of bonds that may be redeemed as aforesaid are called for redemption, same shall be called and redeemed in inverse numerical order; and PROVIDED FURTHER, that at least thirty (30) days prior to any redemption date, a notice of intention, signed by the Secretary of the Board (specifying the serial numbers and amount of bonds to be redeemed) shall be filed with the FIRST NATIONAL BANK IN DALLAS, Dallas, Texas, and the FIRST NATIONAL BANK, Lubbock, Texas, and should any bond not be presented for redemption pursuant to such notice, the same shall cease to bear interest from and after the date so fixed for redemption.

THE HOLDER hereof shall never have the right to demand payment of this obligation out of any funds raised or to be raised by taxation or out of any funds other than those herein specifically provided.

this bond and the series of which it is a part, the Board of Directors of Texas Technological College covenants that so long as said bonds or any of said series remain outstanding and not redeemed, (1) the said Athletic Stadium and all games, contests or events from which revenues are to be derived for the payment of the obligations of the College hereby represented will be maintained, operated and conducted efficiently, and (2) that the gross charges for the use of said Stadium and for admission to the said games, contests or events shall be maintained at all times so as to be sufficient to pay the reasonable cost of operating and maintaining the Stadium and said games, contests, and events and to pay the interest and principal on said bonds as same becomes due.

EACH SUCCESSIVE HOLDER of this bond during such time as it is payable to bearer, and each successive holder of the coupons hereto attached, is conclusively presumed to forego and renounce his equities in favor of subsequent holders for value without notice, and to agree that this bond while so payable to bearer, and each of the coupons hereto attached, may be negotiated by delivery by any person having possession hereof, however such possession may have been acquired, and that any holder who shall have taken this bond or any of the coupons from any person for value without notice, thereby has acquired absolute title thereto, free from any defense enforceable against any prior holder and free from all equities and claims of ownership of any such prior holder. The College and its Board of Directors, and the paying agents hereinabove named shall not be affected by any notice to the contrary.

IT IS FURTHER CERTIFIED, RECITED AND DECLARED that all acts, conditions and things required to be done precedent to and in the issuance of this bond have been properly done, have happened, and have been performed in regular and due time, form and manner as required by the laws of the State of Texas, and the resolution hereinabove mentioned; that this bond does not exceed any Constitutional or statutory limitations; and that provision has been made for the payment of the principal and interest of this bond and the series of which it is a part by irrevocably pledging the revenues specified herein.

IN TESTIMONY WHEREOF, the Board of Directors of the Texas Technological College, has caused its corporate seal to be affixed hereto, and this bond and its appurtenant coupons to be executed

with the imprinted facsimile signatures of the Chairman and Secretary of the Board in accordance with the provisions of Article 717j Vernon's Annotated Texas Civil Statutes, as amended, the date of this bond in conformity with the resolution hereinabove mentioned being the first day of May, 1959.

	Chairman
ATTEST:	
×	
Secretary	
V	8
SECTION 14: Series 1	1959-A Bond - Form of Coupons. That
the interest coupons attached	to this bond shall be substantially
as follows:	
NO ON THE_	DAY OF\$
*(unless the bond to which thi	is coupon pertains has been properly
called for redemption in accor	rdance with its terms), the Board of
Directors of Texas Technologic	cal College, Lubbock, Texas, hereby
promises to pay to bearer, out	t of the funds specified in the bond
to which this coupon is attach	ned, and in lawful money of the United
States of America, at the FIRS	ST NATIONAL BANK IN DALLAS, Dallas,
Texas, or at the option of the	e owner or holder at the FIRST NATIONAL
BANK, Lubbock, Texas, without	exchange or collection charges to the
owners or holders, the sum of	
	DOLLARS
(\$), said sum being	months' interest due that
day on "TEXAS TECHNOLOGICAL CO	OLLEGE ATHLETIC STADIUM REVENUE BOND,
SERIES 1959-A", dated May 1, 1	1959. Bond No
THE HOLDER HEREOF sha	all never have the right to demand
payment of this obligation out	t of any funds raised or to be raised

*NOTE TO PRINTER: The expression in parenthesis to be included only in coupons maturing November 1, 1969, and subsequent, pertaining to optional bonds, being Numbers 311 to 1200, inclusive

by taxation, or otherwise than stated in the bond to which this
coupon pertains.
Secretary Chairman
SECTION 15: Series 1959-A Bonds - Form of Comptroller's
Certificate. That the following certificate in substance shall be
printed on the back of each bond.
THE STATE OF TEXAS OFFICE OF COMPTROLLER REGISTER NO.
I HEREBY CERTIFY that there is on file and of record in
my office a certificate of the Attorney General of the State of
Texas to the effect that this bond has been examined by him as
required by law, and that he finds that it has been issued in
conformity with the Constitution and laws of the State of Texas,
and that it is a valid and binding special obligation of the Board
of Directors of Texas Technological College, and said bond has
this day been registered by me.
WITNESS MY HAND AND SEAL OF OFFICE, at Austin, Texas, this

Comptroller of Public Accounts of the State of Texas

SECTION 16: Pledge. The College, through its Board of Directors, and to the full extent required to meet its obligations hereunder hereby pledges all net income and revenues to be obtained and derived --

(a) from admissions to all athletic games, contests or other events conducted in the College's Stadium;

- (b) from any and all other sources relating to the said stadium including concession privileges, program sales, etc.;
- (c) from any and all football and basketball games or contests in which said institution participates away from said institution as well as at said institution;
- (d) from all other sources by which the College may be entitled to income from its basketball and football activities.
- (e) from any portion of matriculation fees allocated to football and basketball athletics.

Said College further covenants that commencing with the 1959 fall semester and thereafter, it will, but only if necessary, under the authority of Article 2909c of the Texas Civil Statutes, charge student stadium building use fees at such a rate, not to exceed \$5.00 per semester or summer session, as is from time to time require to meet the obligations and provisions of this resolution.

SECTION 17: Definition of Net Income and Revenues. As used herein the term "NET INCOME AND REVENUES" shall mean all income and revenues obtained or derived from the aforementioned pledged sources less only such part thereof as may be required to pay all necessary expenses reasonably incurred--

- (a) in the operation and maintenance of the College's Athletic Stadium physical properties and conducting its business affairs;
- (b) in the business affairs of the College's football and basketball teams including salaries of coaches, supplies and materials, conducting basketball and football games or contests and travel of football and basketball coaches and teams only to actual intercollegiate games or contests.

SECTION 18: Rates and Charges. That so long as any of the bonds herein authorized or any interest coupons pertaining thereto or any interest thereon shall be outstanding and unpaid

the Board of Directors of said College shall fix, maintain and collect rates charges and fees, including charges for admission to all athletic games, contests or other events conducted in the College's stadium and all other charges in connection therewith including those for concession privileges, programs, etc., which together with the revenues derived from all football and basketball games or contests in which said institution participates away from said institution as well as at said institution will provide all amounts required to meet the college's obligations under this resolution. It is recognized and provided however, that admission charges for intercollegiate basketball and football games or contests within the Southwest Conference must be those established by the Conference.

SECTION 19: Flow of Funds. All receipts, revenues and income of every nature derived from the sources set forth in Section 16 above shall be deposited in an account designated "ATHLETIC STADIUM REVENUE FUND" to be kept separate and apart from all other College Funds or accounts with the College's official depository, and such fund is hereby irrevocably pledged and appropriated and shall be employed only as follows:

- 1. For the payment of all necessary expenses reasonably incurred as provided for in sub paragraphs (a) and (b) of Section 17 above.
- 2. To the "Athletic Stadium Revenue Bond Retirement and Reserve Fund" hereinafter created and established for payment of the interest herein prescribed to be paid in connection with the Series 1959 Bond and the interest and principal herein prescribed to be paid in connection with the Series 1959-A bonds authorized by this resolution.

3. Surplus amounts remaining in the "Athletic Stadium Revenue Fund" after all requirements of paragraphs 1 and 2 of this Section 19 have been satisfied and after all deficiencies, if any, existing in the "Athletic Stadium Revenue Bond Retirement and Reserve Fund" have been remedied may be used for any proper College purpose now or hereafter permitted by law including the use thereof either for retiring in advance of maturity the Series 1959-A bonds according to the provisions for their prior redemption or for the purchase of such bonds on the open market at not exceeding the market value thereof.

Reserve Fund. A special fund is hereby established, created and designated as the "ATHLETIC STADIUM REVENUE BOND RETIREMENT AND RESERVE FUND" for the bonds herein authorized and shall be pledged to said bonds and used for no purpose other than for the payment of interest on the Series 1959 bond and the payment, redemption and retirement of the Series 1959-A bonds and the interest thereon in accordance with the terms and provisions of this resolution. For brevity the aforementioned fund may be herein elsewhere referred to as the "Bond Fund". All sums received from the purchasers of the bonds as accrued interest thereon to the date of delivery shall be placed in this fund. The entire net income and revenues to be derived as hereinbefore recited are hereby irrevocably pledged to the full extent necessary to provide all requirements of said Bond Fund, to-wit:

- 1. All amounts required to meet the interest as it becomes due each year with respect to the Series 1959 bond.
- 2. All amounts required to meet each installment of interest and principal as they respectively mature and fall due with respect to the Series 1959-A bonds.
- 3. All amounts required to provide \$95,000 as a reserve portion for such Bond Fund to be used in meeting the principal

and interest requirements of the bonds herein authorized if for any reason such are needed for that purpose.

In establishing such reserve the Bond Fund shall be supplemented by the sum of \$30,000 on or prior to May 1, 1960; \$30,000 on or prior to May 1, 1961 and \$35,000 on or prior to May 1, 1962. It is the College's purpose and intent, and it so covenants and agrees that the aforesaid \$95,000 reserve portion of the Bond Fund shall be continuously maintained in that amount which shall be in addition to all other amounts needed to pay and discharge the principal and interest of the bonds herein authorized as due, and that said reserve shall be maintained in the prescribed amount and that said Bond Fund shall be supplemented continuously as necessary to maintain such reserve until (1) all of said Series 1959-A bonds, together with the interest thereon have been fully paid and discharged (either at maturity or at the option of prior redemption reserved to the College) and the Series 1959 Bond has been surrendered and cancelled in accordance with its terms, or until (2) such time as the Bond Fund including the reserve portion thereof, shall contain amounts equal to the total interest requirements of the Series 1959 Bond to its maturity date and the interest and principal requirements of the Séries 1959-A Bonds then outstanding at their final maturity. In the event the income and revenues aforesaid, are insufficient in any year to permit the required deposits, then the amounts of any deficiency shall be added to the amount required to be deposited in said Bond Fund in the next year until all deficiencies are rectified.

SECTION 21: Security for Bond Fund. All funds herein provided for the bonds herein authorized shall be kept separate and apart from all other College Funds and (except for invested funds of the Reserve portion) shall be continuously secured by a

valid pledge of direct obligations of, or obligations unconditionally guaranteed by the United States of America, having a par value or market value when less than par, exclusive of accrued interest, at all times at least equal to the amount of money deposited in said Fund. All sums of money deposited in said Fund shall be held as a trust fund for the benefit of the holders of the bonds herein authorized, the beneficial interest in which shall be regarded as existing in the holders.

SECTION 22: Custodian of Bond Fund. The Custodian of the Bond Fund shall be the official College depository and all deposits above prescribed shall be placed in said Fund with said Custodian. Prior to each interest and principal maturity date it shall be the duty of the proper officers of the College to withdraw from said Fund and to place with the Paying Agent Banks money sufficient to pay the interest and principal installment to become due on such maturity date.

SECTION 23: Investment of Reserve Portion of Fund. The College depository is authorized to invest the Reserve portion of the Bond Fund in short term direct obligations of, or obligations unconditionally guaranteed by the United States of America, having maturities not in excess of ten (10) years from date of the making of such investments, as the Board of Directors may determine. Said obligations shall be held by the Depository, and if at any time uninvested funds shall be insufficient to permit payment of principal and interest maturities of the bonds herein authorized as heretofore directed, the said depository shall sell on the open market such amount of the securities as is required to pay the said bonds and interest when due, and shall give notice thereof to the Comptroller of the College. All money resulting from maturity of principal and/or interest of the securities in which the reserve funds are

invested may be re-invested or accumulated in said reserve portion of said bond fund and considered a part thereof to be used for, and only for the purposes hereinabove provided with respect to the reserve fund.

SECTION 24: Issuance of Additional Parity Bonds. College reserves the right to issue further parity bonds payable from the net income and revenues herein pledged for the payment of the bonds herein authorized. When issued in compliance with law and the terms and conditions hereinafter appearing, such additional bonds shall occupy a position of parity with and shall be equally and ratably secured by a first lien on and pledge of the aforementioned net revenues to the same extent as the two series of bonds authorized by this resolution. It is agreed and understood that the College shall have the privilege of issuing up to \$300,000 principal amount of revenue bonds on a parity with and secured in like manner as the bonds herein authorized, PROVIDED, HOWEVER, that if authorized and issued such bonds shall mature in amounts not to exceed \$5,000 in any of the years 1963 to 1966, inclusive; \$10,000 in any of the years 1967 to 1978, inclusive; \$15,000 in the years 1979 to 1981, inclusive; and \$115,000 in the year 1982, or in the alternative and at the option of the Board of Directors such bonds may be made to mature in amounts not to exceed \$100,000 in each of the years 1982 to 1984, inclusive. Such bonds to the amount of \$300,000 may be issued without further restrictions. The College further covenants, however, that no other additional bonds or other obligations payable from the net revenues herein pledged for the bonds herein authorized shall be issued on a parity therewith unless and until the following conditions have been met:

(a) That the College is not then in default as to any covenant, condition or obligation prescribed by this resolution.

- (b) That the applicable laws of the State of Texas in force at such time and which provide permission and authority for the issuance of such bonds, have been fully complied with;
- (c) That the College has secured from its Comptroller a certificate verified by the Auditor of the State of Texas, certifying that the net income and revenues pledged for the payment of the bonds herein authorized is, for the fiscal year immediately preceding the issuance and sale of such additional parity bonds, equal to at least one and one-half times (1-1/2) the total of (1) the average annual interest requirements of the Series 1959 bond (2) the average annual interest and principal requirements of the Series 1959-A bonds then outstanding, and (3) the maximum annual interest and principal requirements of the proposed parity bonds.

SECTION 25: Maintenance - Operation and Insurance. College covenants and agrees to maintain the Athletic Stadium in good condition and operate the same in an efficient manner and at reasonable cost and that so long as any of the bonds herein authorized are outstanding the College further agrees, through its Board of Directors, to keep such properties adequately insured against loss by fire, hail, flood, and/or tornado in a solvent insurance company or companies authorized to transact such business in the State of Texas. All moneys received from losses under such insurance policies, other than public liability policies, are hereby pledged as security for the bonds and shall be placed in the Bond Fund unless the proceeds are paid out in making good the loss or damage in respect of which such proceeds are received, either by replacing the property destroyed or repairing the property damaged, and adequate provision for making good such loss or damage made within ninety (90) days after the date of the loss.

SECTION 26: Records and Accounts. The Board of Directors, on behalf of the College, covenants and agrees that so long as any of the bonds herein authorized or any interest thereon remain outstanding and unpaid, it will maintain a complete system of records and accounts pertaining to the operation of the Athletic Stadium and other activities, the revenues of which are pledged to the payment of the bonds herein authorized, separate and apart from all other records and accounts, and in which complete and correct entries shall be made of the transactions relating to such properties and activities. The Auditor and Comptroller of the College are hereby instructed and directed to do any and all things necessary or convenient in reference to the keeping and maintaining of such books, records and accounts. The Board of Directors further agrees that following the close of any fiscal year and after the State Auditor's official audit, required by law, is completed the Comptroller of the College will furnish copies thereof promptly to the underwriters of the Series 1959-A bonds herein authorized, to-wit: First Southwest Company, Mercantile National Bank Building, Dallas, Texas and Rauscher, Pierce & Co., Inc., Mercantile Dallas Building, Dallas, Texas, also to any holder of the revenue bonds herein authorized upon his written request therefor.

SECTION 27: Further Covenants. The College through its Board of Directors further covenants and agrees by and through this resolution as follows:

- (a) That the Coilege has the lawful power to pledge the revenues supporting the two series of bonds herein authorized and has lawfully exercised said power under the Constitution and laws of the State of Texas.
- (b) That the two series of bonds herein authorized shall be ratably secured in such manner that no one bond shall have preference over any other bond of either of said two series.

- (c) That the two series of bonds herein authorized are special obligations of Texas Technological College and the holders shall never have the right to demand payment out of funds raised, or to be raised, by taxation or from any other source not herein designated, said obligations being payable solely from the pledge of net revenues and income authorized hereunder. None of the bonds shall be an indebtedness of the State of Texas.
- (d) That other than for the payment of the bonds herein authorized the income and revenues pledged to their payment have not been pledged in any manner to the payment of any other debt or obligation of the College and that said income and revenues are free and clear of all other encumbrances whatsoever.
- (e) That except under the provisions set forth in Section 24 of this resolution relating to parity bonds the College will not suffer any indebtedness on a parity with or superior to the bonds herein authorized and that if the facilities and activities whose income is pledged for the payment of the bonds herein authorized shall become liable for any other indebtedness the College will fix and maintain rates and collect charges sufficient to discharge such other indebtedness.

SECTION 28: Resolution to Constitute Contract. That the provisions of this resolution shall constitute a contract between Texas Technological College and the holder or holders from time to time of the bonds herein authorized to be issued, and after the issuance of any of said bonds, no change, variation or alteration of any kind of the provisions of this resolution shall be made, until all of the bonds issued hereunder shall have been paid and discharged in accordance with the terms thereof.

SECTION 29: Confirmation of Sale of Bonds. That the sale of the \$970,000 Series 1959-A bonds herein authorized for Stadium improvements is hereby confirmed to First Southwest Company and Rauscher, Pierce & Co. Inc., Dallas, Texas, at the price of par and accrued interest to date of delivery.

SECTION 30: Vice-President and Comptroller to Have Charge of Records and Bonds. That the Vice-President and Comptroller of the College shall be and is hereby authorized to take and have charge of all necessary records and orders pending investigation by the Attorney General of the State of Texas, and shall take and have charge and control of the bonds herein authorized pending their approval by the Attorney General and their registration by the Comptroller of Public Accounts of the State of Texas. It shall be the duty of the Vice-President and Comptroller of the College (or attorneys acting for the College) to submit the record of said bonds and the bonds to the Attorney General of the State of Texas for approval and thereafter to have the bonds registered by the Comptroller of Public Accounts.

The above resolution having been read in full, Director Hinn made a motion for its passage and adoption. Such motion was seconded by Director Lindsey and thereupon the question being called for, the Chairman put the motion to a vote of the members of the Board of Directors and the motion carried by all members present voting "AYE"; and none voting "NO".

The Chairman declared the motion carried and the resolution finally passed and adopted and the Secretary was instructed to record the same in the Minutes of the Board.

WITNESS THE SIGNATURES of the members of the Board of Directors of Texas Technological College, this the 11th day of April, 1959.

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Chateman, Board of Directors
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Vice-chairman
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ATTEST:

egretary, Board of Directors

(Seal)

CERTIFICATE OF SECRETARY

THE STATE OF TEXAS
COUNTY OF LUBBOCK

TEXAS TECHNOLOGICAL COLLEGE

I, the undersigned, Secretary of the Board of Directors of TEXAS TECHNOLOGICAL COLLEGE of Lubbock County, Texas, DO HEREBY CERTIFY that the above and foregoing is a true and correct copy of a resolution authorizing the issuance of \$1,300,000 "TEXAS TECHNOLOGICAL COLLEGE ATHLETIC STADIUM REVENUE BONDS", SERIES 1959 and SERIES 1959-A, dated May 1, 1959, (and Minutes pertaining to its adoption), passed and adopted by the Board of Directors on the 11th day of April, 1959, and which resolution appears of record in Volume _______ of the Minutes of said Board.

WITNESS MY HAND AND THE SEAL OF SAID COLLEGE, this the 11th day of April, 1959.

Secretary Board of Directors, Texas Technological College

(Corporate Seal)