ANNUAL REPORTS

Report of the Board of Government 1977-1978

To the Boston Society of Civil Engineers Section, American Society of Civil Engineers

Pursuant to the requirements of the Bylaws, the Board of Government presents its report of the year ending April 13, 1977.

The following is a statement of membership in the Section:

Honorary		10
Assigned ASCE members		2022
Subscribers:		
Members		1323
Associate Members		574
Student Chapters		9
Summary of .	A dditions	
New Members		.11
New Associate Members		33
_		•
Summary of Los.	s of Members	
Deaths		14
Resignations		16
Dropped	49	
Life Memb	perships	
Life Members	•	233
Members becoming eligible	April 13, 1977	. 19
Honorary Members	hip is as follows:	
John B. Babcock 3rd	elected	January 2, 1969
Charles O. Baird, Jr.	elected	January 2, 1969
Arthur Casagrande	elected	February 1, 1975
Ralph W. Horne	elected	February 1, 1965
Karl R. Kennison	elected	February 7, 1951
George R. Rich	elected	March 19, 1973

The following members have been lost through death:

John A. Volpe

elected

January 29, 1968

, ,	
Arthur B. Appleton	February 1977
Penneth M. Cline	January 1977
Robert T. Colburn	May 1976
Herman G. Dresser	January 1977
Chester J. Ginder	January 1976
Reuben M. Haines	1976
Leslie J. Hooper	1977
Gordon G. Howie	September 1976
Charles E. Knox	November 1976
Robert S. Larsen	August 1976
Mark Linenthal	February 1976
Theodore R. Mottola	January 1977
Frederick N. Weaver	August 1976
Howard J. Williams	January 1977
Harold Zoller	February 1977
	•

MEETINGS OF THE SECTION

November 2, 1976	With Geotechnical Group — "Relationships of Soil Structure to the Engineering Properties of Soils", speaker, Prof. D. H. Borowicka. Held at Harvard University. Attendance 40.
December 1, 1976	With Structural Group — "Progressive Collapse", speaker, Dr. E. V. Leyendecker. Held at MIT Faculty Club. Attendance 57.
January 19, 1977	With Transportation Group — "The Future of the Highway", speaker, John J. Carroll. Held at Nick's Restaurant. Attendance 80.
February 2, 1977	With Hydraulics Group — "Hydro-Thermal Model Studies, Dickey-Lincoln School Lakes Project", speakers, Richard J. DiBuono and Mark S. Dortch. Held at Parsons Laboratory, MIT. Attendance 22.
March 2, 1977	With Construction Group — "Preparations of Plans and Specifications Under the Commonwealth's Bid Statutes", speaker, Peter B. McGlynn, Esquire. Held at Red Coach Grill. Attendance 22.
April 13, 1977	Annual Meeting of BSCE Section ASCE — Address of retiring BSCES President Bertram Berger. Guest Speakers: William R. Gibbs, President-Elect ASCE; and Charles W. Wyckoff on "The Loch Ness Monster." Held at MIT Faculty Club. Attendance 156.

The Technical Groups of the Section also held many other meetings during the year. Annual reports of the various groups were presented at the Annual Meeting of the Section and are published in the *Journal*.

PERMANENT FUND*

The Permanent Fund was established under the Bylaws, Article 10, and is the recipient of all money received as entrance fees. Under certain circumstances income from the Permanent Fund may be transferred to the Current Fund. However, no such transfer was made this year. The Treasurer's report gives details of the year's transactions. Book value of the Fund as of September 30, 1976 was \$81,893.89.

FUNDS ESTABLISHED BY GIFT OR BEQUEST TO THE BOSTON SOCIETY OF CIVIL ENGINEERS*

JOHN R. FREEMAN FUND. In 1925 the late John R. Freeman, a Past President and Honorary Member of the Boston Society of Civil Engineers, made a gift to the Society of securities which were established as the "John R. Freeman Fund." The income from this Fund is to be particularly devoted to the encouragement of young engineers. Mr. Freeman suggested several uses, such as the payment of expenses for experiments and compilations to be reported before the Society; for underwriting meritorious books or publications pertaining to the hydraulic science or art; or a portion to be devoted to a yearly prize for the most useful paper relating to hydraulics contributed to the Society; or establishing a traveling scholarship every

^{*}Details regarding the value and income of these funds are given in the Treasurer's Report.

third year open to members of the Society for visiting engineering works, a report of which would be presented to the Society. Book value of the Fund as of September 30, 1976 was \$63,032.85.

EDMUND K. TURNER FUND. In 1916 the Society received a bequest of \$1000 from Edmund K. Turner, a former member, the income of which is to be used for Library purposes. Book value of the Fund as of September 30, 1976 was \$3,407.08.

ALEXIS H. FRENCH FUND. A bequest of \$1000 was received in 1931 from the late Alexis H. French, a Past President of the Society. The income from the Fund is "to be devoted to the Library of the Society." Book value of the Fund as of September 30, 1976 was \$3,369.96.

CLEMENS HERSCHEL FUND. This Fund was established in 1931 by a bequest of \$1000 from the late Clemens Herschel, a Past President and Honorary Member of the Society. The income from this Fund "is to be used for presentation of prizes for papers which have been particularly useful and commendable and worthy of grateful acknowledgement." Book value of the Fund as of September 30, 1976 was \$2,176.67.

DESMOND FITZGERALD FUND. The Desmond Fitzgerald Fund, established in 1910 by a bequest of \$2000 from the late Desmond Fitzgerald, a Past President and Honorary Member of the Society, provided that the income from this Fund shall "be used for charitable and educational purposes." The Board voted on April 13, 1964 to use the income of this Fund to establish a Boston Society of Civil Engineers' Scholarship in Memory of Desmond Fitzgerald, and that it be given to a student in Civil Engineering at Northeastern University. Book value of this Fund as of September 30, 1976 was \$5,824.70.

Subsequent to September 30, 1976, it was voted to accept the recommendation of the Committee at Northeastern University, that the current scholarship award of \$200 be given to Edward Raymond Panasci. Presentation was made at the 1977 Student Chapter Night meeting of the Society held at Merrimack College on March 3, 1977.

EDWARD W. HOWE FUND. This Fund, a bequest of \$1000, was received in 1933 from the late Edward W. Howe, a Past President of the Society. No restrictions were placed on the use of this bequest, but the recommendation of the Board of Government was "that the Fund be kept intact, and that the income be used for the benefit of the Society and its members." Book value of the Fund as of September 30, 1976 was \$3,723.59.

WILLIAM P. MORSE FUND. This Fund, a bequest of \$2000, was received in 1949 from the late William P. Morse, a former member of the Society. No restrictions were placed on the use of this bequest, but the recommendation of the Board of Government was "that the Fund be kept intact, and that the income be used for the benefit of the Society and its members." Upon recommendation of the Committee appointed by the President, the Board voted on April 5, 1954 "to appropriate from the income of this Fund a scholarship to be known as the Boston Society of Civil Engineers' Scholarship in Memory of William P. Morse, and that it be given to a Civil Engineering student at Tufts University." Book value of the Fund as of September 30, 1976 was \$5,398.99.

Subsequent to September 30, 1976, it was voted to accept the recommendation of the Committee at Tufts University, that the scholarship award of \$200 be given to Robert L. Wolchok. Presentation was made at the 1977 Student Chapter Night meeting of the Society held at Merrimack College on March 3, 1977.

FRANK B. WALKER FUND. This Fund, a bequest of \$1000, was received in 1961 from Mary H. Walker, wife of Frank B. Walker, a Past President of the Society. No restrictions were placed on the use of this bequest, but the recommendation of the Board of Government was "that the Fund shall be kept intact and the income be used for the benefit of the Society and its members." Book value of the Fund as of September 1976 was \$1,680.96.

RALPH W. HORNE FUND. This Fund, a bequest of \$3000, was received June 29, 1964, from the Directors of Fay, Spofford and Thorndike, Inc., the income from which shall be devoted to a prize or certificate to be awarded annually to a member designated by the Board of Government to have been outstanding in unpaid public service in municipal, state or federal elective or appointed posts; or in philanthropic activity in the public interest. Members of BSCES only are eligible for the award. Book value of the Fund as of September 30, 1976 was \$4,987.09.

THOMAS R. CAMP FUND. This Fund, a bequest of \$10,000, was received January 15, 1971, from the Directors of Camp, Dresser and McKee, Inc., to establish the "Thomas R. Camp Fund", the income to be used to support an annual Thomas R. Camp lecture or lectures on outstanding recent developments or proposed or completed research in the sanitary engineering field. The income from the Fund, over and above that needed to support the annual lecture, should be added to the Fund, but could be used otherwise at the discretion of the Board of Government of the Boston Society of Civil Engineers Section of the American Society of Civil Engineers. Book value of the Fund as of September 30, 1976 was \$12,296.69.

LECTURE FUND. The Lecture Fund was established in 1969 for the purpose of providing money for special lectures sponsored by the Society. Book value of the Fund as of September 30, 1976 was \$5,592.59.

KARL R. KENNISON FUND. This Fund is comprised of two irrevocable trusts established in behalf of the Society by Karl R. Kennison. These trusts consist of shares of the Massachusetts Fund, the Massachusetts Company, Inc., trustee. On March 31, 1977 these trusts included the following:

Trust=#4315 Market Value --- \$3,723.43 Trust=#4444 Market Value --- \$5,401.86

After Mr. Kennison's death net income shall be paid to the Society for a Hydraulic Lectureship Fund to be used for various public lectures on this subject, and the Board may withdraw the principal on written demand or make changes in the use of the Fund as it may determine are warranted.

PRIZES

A number of prizes and awards are recommended for presentation at the Annual Meeting. For the list of awards and recipients, refer to the minutes of the Annual Meeting.

COMMITTEES

The usual special committees dealing with the activities and conduct of the Society were appointed. The reports of the committees were presented at the Annual Meeting April 13, 1977. The Board wishes to express its appreciation of the excellent work done by the officers of the

Groups and by the Committees of the Section.

Bertram Berger President

Edward B. Kinner Secretary

BOSTON SOCIETY OF CIVIL ENGINEERS SECTION AMERICAN SOCIETY OF CIVIL ENGINEERS

Report of the Treasurer For The Fiscal Year October 1, 1975 to September 30, 1976

FINANCIAL STANDING

The financial standing of the Section is summarized in the three tables which accompany this report.

TABLE I Condensed Statement of Condition

TABLE II Condensed Statement of Income and Expenditures

TABLE III Portfolio of Investments and Projected Yield

SOCIETY INVESTMENTS

The Boston Safe Deposit and Trust Company continues as Custodian of our portfolio of securities and has furnished us with an annual summary account. No changes in the portfolio were authorized by the Section. The custodial contract was not changed although the Board of Government voted in 1975 to give the Custodian full discretionary powers for making portfolio changes subject to regular, periodic review by the Investment Committee. An attempt will be made to achieve this change in 1976-1977.

SECTION BANK DEPOSITS

The Section liquidated inactive bank accounts as follows:

First National Bank checking account		\$ 2,099.31
Union Warren Savings Bank (old Mass. Section		3,215.52
Scholarship Fund)		
First Federal Savings and Loan		3,948,73
-	•	\$ 9 263 56

These funds were deposited in a savings account at the Suffolk Franklin, as reported below.

INVESTMENT FUNDS INCOME ACCOUNT

	Debit	Credit	Balance
Balance 10/1/75	-	-	\$ 1,771.85
Bond Interest Income	_	\$ 2,663.75	· -,
Dividend Income	-	8,075.52	
Transfer to Investment Income Account	\$10,830.04	_	
Custodian Charges	1,181.08		
-	\$12,011.12	\$10,739.27	\$ 500.00

INVESTMENT INTEREST ACCOUNT (Interest Bearing)

Available for Investment, pending investment Draws interest from use as commercial credit Custodian receives compensation from this account

	Debit	Credit	Balance
Balance 10/1/75	-	_	\$12 140 42
Income from Interest	0	\$ 920.27	\$12,149.42
Transfers	_	10,830.04	_
Fees to 9/30/76	\$ 46.32		
	\$ 46.32	\$11,750.31	\$23,853.41

INVESTMENT FUNDS PRINCIPAL ACCOUNT (Non-interest Bearing)

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	Debit	Credit	Balance
Balance 10/1/75			\$ 482.99
Balance 9/30/76			\$ 482.99

SAVINGS ACCOUNT (First Federal Savings and Loan)

This account was considered cash available for investment and operating expenses, maintained to earn interest on surplus checking funds. Account liquidated 9/76 and added to savings account in Suffolk Franklin.

	Debit	Ci	edit	Balance	
Balance 10/1/75	-		_	\$ 3,754.41	
Interest to 9/76		\$	194.32		
Balance Transferred to Suffolk Franklin				\$ 3,948.73	

SAVINGS ACCOUNT (Union Warren Savings Bank)

Formerly Mass. Section student loan account, liquidated 9/76 and added to savings account in Suffolk Franklin

		Debit	C	redit	Balance
Balance 10/1/75				_	\$ 3,048.36
Interest to 9/76	•		\$	167.16	
Balance Transferred to Suffolk Franklin					\$ 3,215.52

SAVINGS ACCOUNT (Suffolk Franklin)

	Debit	Credit	Balance
Balance 10/1/75	_	_	0.00
Transfer from First Federal	_	\$ 3,948.73	` -
Transfer from Union Warren	_	3,215.52	_
Transfer from First National	_	2,099.31	_
Interest to 9/30/76		19.37	
Balance 9/30/76	0.00	\$ 9,282.93	\$ 9,282.93

CHECKING ACCOUNT (First National Bank of Boston)

Became inactive with switch to NOW account; account liquidated and funds transferred to savings account at Suffolk Franklin - \$2,099.31

CURRENT FUND ACCOUNT - Operating Account Section

	Debit	Credit	Transfer	Balance
Balance 10/1/75	-	-	,	\$ 3,000.00
Office Expenses	\$35,723.52	_		
Meeting Expenses	10,938.55	_		
Publications Expenses	13,753.24	_		
Received from Secretary & Interest	-	\$54,330.31		
Trans. from Lectures			\$ 6,085.00	
	\$60,415.31		Balance	\$ 3,000.00

PERMANENT FUND

The permanent fund receives its prorated portion of investment income and all entrance fees for local membership. It pays its prorated portion of service charges to custodian.

D-al-V-l 10/1/75	Debit	Credit	Book Value
Book Value 10/1/75		_	\$77,167.21
Custodian Service Charges	\$ 512.00	-	-
Interest and Dividends	-	\$ 4,863.68	_
Entrance Fees	 	375.00	
	\$ 512.00	\$ 5,238.68	
Book Value 9/30/76			\$81,893.89

JOHN R. FREEMAN FUND

The Freeman Fund receives its prorated portion on the investment income and pays its prorated portion of the service charges to the custodian. The cost of the Freeman lecture is paid from this fund.

·	Debit	Credit	Book Value
Book Value 10/1/75	_	_	\$61,561.23
Custodian Service Charges	\$ 408.45	-	
Interest and Dividends	_	\$ 3,880.07	
Freeman Prize	2,000.00		
	\$ 2,408.45	\$ 3,880.07	,
Book Value 9/30/76			\$63,032.85

THOMAS R. CAMP FUND

The Camp Fund receives its prorated portion of the investment income and pays its prorated portions of the service charges to the custodian. The cost of the Camp Memorial Lecture is paid from this fund.

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Book Value 10/1/75		_		_	\$11,640.28
Custodian Service Charges	\$	77.23		-	_
Interest and Dividends		-	\$	733.64	
	\$	77.23	\$	733.64	
Book Value 9/30/76					\$12,296.69

BORING DATA FUND

No change in fund this fiscal year. Balance \$1,595.81

TECHNICAL GROUP LECTURE FUNDS

Established by vote of the Board of Government in 1976. Each Group receives 50% of surplus from lecture series sponsored by Group. Expenditures to be approved by Board of Government in advance. Funds unexpended after two years to return to current fund.

Structural Group			
Earthquake Lecture Series	Income	\$	12,379
•	Expenses	•	6,543
	Surplus	\$	5,836
Available for approved expense	-		
10/1/76 - \$2,918.00			
Environmental Group			
Camp Lecture Series	Income	\$	7.081
	, Expenses		2,747
•	Surplus	\$	4,334
Available for approved expense			
10/1/76 - \$2,167.00	•		
Geotechnical Group			
Deep Foundations	Income	\$	2,057
	Expenses	-	1,888
	Surplus	\$	169
Available for approved expense		•	
10/1/76 - \$84.00			

Respectfully submitted, Saul Namyet, Treasurer

TABLE I CONDENSED STATEMENT OF CONDITION ASSETS, LIABILITIES & FUNDS

November 30, 1976

Δ	5	2	FΊ	ΓS

ASSETS	•				
	BOOI	K VALUE	MARKET VALUE		
	9-30-76	10-1-75	9-30-76	10-1-75	
Suffolk Franklin NOW	\$ 18,743.90	\$ 14,683.54	\$ 18,744	\$ 14,683	
Suffolk Franklin Savings	9,282.93		9,283		
Petty Cash .	24.00	30.00	24	30	
Boston Safe Deposit					
Bonds	52,684.69	52,684.69	41,767	37,227	
Stocks	118,832.23	118,832.23	164,525	126,366	
Cash	982.99	2,254.84	983	2,255	
Invested Income	23,853.41	12,149.42	23,853	12,150	
Boston Safe Subtotal	196,353.32	185,921.18	231,128	177,998	
Total Assets	\$224,404.08	\$200,634.72	\$259,179	\$192,710	
LIABILITIES & FUNDS				٠	
Permanent	\$ 81,893.89	\$ 77,167.21	\$ 96,470	\$ 73,860	
Freeman	63,032.85	61,561.23	74,608	58,924	
Turner	3,407.08	3,225.22	4,014	3,087	
Fitzgerald	5,824.70	5,715.02	6,861	5,473	
French	3,369.96	3,190.07	3,970	3,054	
Herschel	2,176.67	2,060.44	2,564	1,972	
Howe	3,723.59	3,524.81	4,386	3,374	
Morse	5,398.99	5,300.10	6,360	5,073	
Walker	1,680.96	1,591.25	1,980	1,523	
Horne	4,987.09	4,720.86	5,874	4,517	
Lectures	5,592.59	5,294.03	6,588	5,068	
Camp	12,296.69	11,640.28	14,485	11,142	
Invested Funds Total	\$193,385.06	\$184,990.52	\$228,160	\$177,067	
Continuing Education Fund	\$ 3,551.23	\$ 1,158.70	\$ 3,551	\$ 1,159	
Boring Data Fund	1,595.81	1,595.81	1,596	1,596	
Student Loan	2,786.98	4,286.98	2,787	4,287	
Current Fund	3,000.00	3,000.00	3,000	3,000	
Petty Cash	.24.00	30.00	24	30	
Group Lectures	19,163.59	4,631.22	19,163	4,631	
Special Funds & Misc.	(574.28)	_	(574)	_	
Corpus	1,471.76	941.49	1,472	941	
Subtotal	\$ 31,019.09	\$ 15,644.20	\$ 31,019	\$ 15,645	
Total	\$224,404.15	\$200,634.72	\$259,179	\$192,712	

TABLE II CONDENSED STATEMENT OF INCOME AND EXPENDITURES DISTRIBUTION OF FUNDS FISCAL YEAR OCT. 1, 1975 - SEPT. 30, 1976

Fund Name	Book Value 10-1-75	Interest & Dividends		Receipts	Transfer		Custodian Charges		Expend.	Transfer	Book Value 9-30-76
Permanent	\$ 77,167.21	\$ 4,863.68	\$	375.00	174115/01	Q.	512.00			y	\$ 81,893.89
Freeman	61,561.23	3,880.07	Ψ	313.00		Ψ	408.45	\$	2,000.00		63,032.85
Turner	3,225.22	203.26					21.40	Ψ	2,000.00		3,407.08
Fitzgerald	5,715.02	360.20					37.92		212.60		5,824.70
French	3,190.07	201.00					21.17		212.00		3,369.96
Herschel	2,060.44	129.91					13.68				2,176.67
Howe	3,524.81	222,17					23.39				3,723.59
Morse	5,300.10	334.05					35.16		200.00		5,398.99
Walker	1,591.25	100.27					10.56		200.00		1,680.96
Horne	4,720.86	297.55					31.32				4,987.09
Lecture	5,294.03	333.68					35.12				5,592.59
Camp	11,640.28	733.64					77.23				12,296.69
Subtotals	\$184,990.52	\$11,659.54	\$	375.00		\$	1,227.40	\$	2,412.60		\$193,385.06
Continuing Ed.	\$ 1,158.70		\$	4,828.00				\$	2,435.47		\$ 3,551.23
Boring Data	1,595.81		•	_				-	_		1,595.81
Student Loan	4,286.98			2,500.00					4,000.00		2,786.98
Current Fund	3,000.00			4,330.31					60,415.31	6,085.00	3,000.00
Petty Cash	30.00			-					<i>'</i> –	,	24.00
Group Lectures	4,631.22		3	33,243.05					12,625.68	(6,085.00)	19,163.59
Spec Fund & Misc	-			4,906.50					5,480.78	,	(574.28)
Corpus				•					,		1,471.76
Subtotals			\$ 9	99,807.86				\$	84,957.24	0	\$ 31,019.09
Totals			\$10	00,182.86				\$	87,369.94	0.	\$224,404.15

TABLE III PORTFOLIO OF INVESTMENTS

Description	. Boòk Value	Current Total Value	Estimated Income
UTILITY: Florida Power Corp, 1st Mtg. 3\% 7/1/84 Florida Power Corp, 1st Mtg. 3\% 7/1/86 Georgia Power Corp, 1st Mtg. 3\% 12/1/77 Orange & Rockland Utils Inc 1st Mtg 6\% 10/1/97	\$ 1,017.50 5,037.59 5,154,60 9,950.00	\$ 723.75 3,521.85 4,784.35 7,381.20	\$ 31.25 193.75 168.75 650.00
Total Utility INDUSTRIAL:	\$ 21,159.69	\$ 16,411.15	\$ 1,043.75
Flintkote Co Deb 4%% 4/1/81 Total Industrial	\$ 10,450.00 \$ 10,450.00	\$ 8,750.00 \$ 8,750.00	\$ 462.50 \$ 462.50
FINANCIAL: Associates Invt Co Deb 5\%% 8/1/79 Marine Midland Corp Deb 5\% 7/15/89 Total Financial	\$ 6,000.00 5,000.00 \$ 11,000.00	\$ 5,587.50 3,100.00 \$ 8,687.50	\$ 307.50 250.00 \$ 557.50
MUNICIPAL: . Montreal CDA 6% 1/15/87 Total Municipal	\$ 10,075.00 \$ 10,075.00	\$ 7,918.70 \$ 7,918.70	\$ 600.00 \$ 600.00
TOTAL BONDS	\$ 52,684.69	\$ 41,767.35	\$ 2,663.75
PREFERRED STOCK: International Tel & Teleg Corp PFD Total Preferred Stock	\$ 1,534.39 \$ 1,534.39	\$ 8,265.75 \$ 8,265.75	\$ 481.50 \$ 481.50
COMMON STOCK: General Motors Corp Boise Cascade Corp Grace WR & Co Warner Lambert Co McGraw Edison Co Saul B F Real Estate Invt Tr Clark Equp Co Newmont Mng Corp International Business Machines Corp Exxon Corp Texaco Inc American Tel & Teleg Co	\$ 9,130.92 9,801.84 156.00 9,937.25 14,211.26 10,500.00 12,286.76 12,548.53 11,803.73 1,977.26 1,515.72 4,332.42	\$ 12,473.75 4,676.25 113.00 13,600.00 11,600.00 1,562.50 17,000.00 12,500.00 17,726.63 22,200.00 13,275.00 15,031.25	\$ 663.00 139.20 6.80 400.00 600.00 0.00 640.00 800.00 567.00 1,120.00 944.00 950.00
Illinois Power Co New England Elec Sys Total Common Stock	11,591.06 \$ 7,505.09 \$117,297.84	6,625.00 7,876.00 \$156,259.38	550.00 665.88 \$ 8,045.88
GRAND TOTALS	\$171,999.91	\$206,775.47	\$ 11,191.13

ANNUAL REPORTS OF COMMITTEES

Annual Report of Action Program-Professional Practice Committee, 1976-1977

This is the second full year of operation of the committee which derived from the Action Program Committee of the Massachusetts Section ASCE and the Professional Practice Committee of BSCE. The committee consisted of the following representatives:

David E. Thompson
Dominic D'Eramo
David Gardner
Frank Killilea
Howard Perkins
Ara Shrestinian

Committee Chairman/Geotechnical Group
Structural Group
Environmental Group
General Membership
General Membership

The committee was active during the past year, particularly in areas requiring interprofessional contact between the engineering societies and state government. Major activities of the Committee were as follows:

- In conjunction with the Geotechnical and Construction Groups, the Committee sponsored a
 meeting on the subject of Mediation Arbitration. The meeting was in the form of a lecture by
 Mr. John Gnaedinger of Soil Testing Services, Northbrook, Illinois. The lecture was followed by prepared discussions presented by Mr. Gerald Olanoff, Attorney at Law, Ms.
 Nancy Ferguson, American Arbitration Associates and Mr. Eric O'Neill, Franki Foundation Co. The meeting was held at the Red Coach Grill in Boston on January 13, 1977.
- 2. On April 5, 1977, the Committee co-sponsored a meeting with the Western Branch. The speaker was Russel C. Jones, Dean of Engineering at the University of Massachusetts Amherst Campus. Dean Jones spoke on the subject of "Professionalism and Ethics for the 1980's". The meeting was held at the Sheraton Sturbridge Inn.
- 3. The Committee worked with MSPE and the Interprofessional Steering Committee to cosponsor or support legislation in the fields of procurement of professional services, prompt payment for professional services, granting enforcement powers to the engineering board of registration and in other matters of state legislation.
- 4. The Committee worked with the Massachusetts Society of Professional Engineers to provide recommendations to the Governor on qualified appointments to the Board of Registration of Professional Engineers and Land Surveyors.

Since much of the legislative action and recommendations undertaken by the Committee will not be finalized for many months, it is recommended that the succeeding committee continue liaison with interprofessional groups and keep abreast of relevant legislative activities.

Respectfully submitted, David E. Thompson, Chairman

Annual Report of Advertising Committee, 1976-1977

The Advertising Committee program for the past year consisted of the following:

Two lists of potential advertisers were compiled, one having about one hundred engineering firms and the other about seventy five companies from industry. A letter was composed for each group urging support of our organization through advertising or professional cards in our publications. A review of the advertising rates was made and a new rate schedule for the Journal and the Forum was developed. The new rate schedule was incorporated into a "return-order form" to be included with the letters which were mailed out early in 1977.

Response to the letters was not too gratifying, possibly because of the general downturn in business during the severe winter.

I feel that the low-key approach taken this year was appropriate, considering the state of the economy. However, if business continues to improve, a more aggressive approach with personal contacts by phone or otherwise would be more productive, especially with the industry advertisers.

Respectfully submitted, John P. Hurney, Chairman

Annual Report of ASCE-AGC Liaison Committee

The following is the Annual Report of the BSCES representatives on the Joint ASCE/AGC Committee.

The Joint Committee held meetings on March 18, April 15, May 20, September 16, October 21, November 18, and December 16, 1976, each of about three hours. Although meetings would normally have been held in January and February, they were cancelled while discussions were held concerning the desirability of the Joint Committees which the AGC participates in. This matter is still under consideration by the AGC.

The primary matter considered in these meetings has been a review of the NSPE's Standard General Conditions of the Construction Contract 1910-8 (1974 Edition). The review has been completed. We have forwarded our recommendations to the ACEC/NSPE Joint Contract Documents Committee for consideration during its current review of 1910-8.

Respectfully submitted, W. W. Wilson, Chairman

Annual Report of Associate Member Forum, 1976-1977

As a result of the recommendations of the Task Force on Younger Members, the Board of Government voted to deactivate, indefinitely, the Associate Member Forum. Consequently, meetings of the Associate Member Forum were not held this past year.

The Associate Member Forum was informed that its nomination of Mr. Richard Scranton for the 1976 Edmund Friedman Young Engineer Award for Professional Achievement was accepted by the ASCE Committee on Younger Members. Mr. Scranton, a long time member of the BSCES AMF, received the award at the National ASCE meeting held in Philadelphia in October 1976.

Respectfully submitted, David L. Freed, Chairman

Annual Report of Auditing Committee 1976-1977

The Auditing Committee met with the Treasurer on two occasions during the fiscal year to ascertain the financial condition of the Society and to review the records and accounts of the Secretary and Treasurer. As a result of the review in October 1976, the Auditing Committee recommended that a professional accounting firm be engaged to accomplish the following:

- 1) Verify the balance sheets as of September 30, 1976.
- 2) Set up a new bookkeeping system and accounts ledger.
- 3) Assist the Treasurer in problems regarding preparation of financial statements.

As a result of the Auditing Committee's recommendation, the Board of Government voted to engage the firm of Kaplan & Foreman, (Warren Foreman), Certified Public Accountants, who

prepared a balance sheet for the date of September 30, 1976 (copy of which is attached).

The Auditing Committee recommends that Mr. Foreman be engaged once again during the fiscal year ending September 30, 1977.

CASH BASIS BALANCE SHEET 9/30/76

(from Kaplan & Foreman)

	9/30/76
Cash In Banks	\$ 28,026.83
Cash on Deposit-Boston Safe Deposit & Trust Co.	982.99
Petty Cash	24.00
Bonds	52,684.69
Preferred Stock	1,534.39
Common Stocks	117,297.84
Boston Safe Deposit & Trust CoInvested Income acct.	
Cash	2,853.41
Commercial Credit Notes	21,000.00
TOTAL ASSETS	\$224,404.15
FUNDS & CORPUS	
(Twelve Funds) Special Funds	193,385.06
Continuing Education Fund	3,551.23
Boring Data Fund	1,595.81
Current Fund	3,000.00
Student Loan Fund	2,786.98
Lecture Series	25,248.59
Corpus	(5,163,52)
TOTAL FUNDS & CORPUS	\$224,404.15

Respectfully submitted, Paul J. Bourque and William S. Zoino

Annual Report of Thomas R. Camp Fund, 1976-1977

The 1977 Thomas R. Camp Lecture was held on Wednesday, March 30, 1977 at the MIT Faculty Club. Dr. Rolf Eliassen, Chairman of the Board of Metcalf and Eddy, Inc., was the 1977 Camp Lecturer. Dr. Eliassen presented a paper on "The Treatment of Sludge by High Energy Electrons." The lecture, attended by 38 persons, was well received.

Respectfully submitted, Frederic C. Blanc Chairman, Environmental Group

Annual Report of Clambake Committee, 1976-1977

The annual clambake was held this year on 29 July 1976. Late afternoon rain forced removal of the bake from the Middlesex Fells Reservation to covered facilities at the Stoneham Skating Rink. Approximately 100 people attended the bake which was catered by Woodman's Inc. of Essex, Mass. A four-course meal was served, topped off by lobster or chicken.

Respectfully submitted, David L. Freed, Chairman

Annual Report of Constitution and Bylaws Committee, 1976-1977

During the past year, in response to several inquiries by the President, the committee reviewed and reported to the Board of Government on the interpretation of portions of the Constitution and Bylaws.

Respectfully submitted, Max D. Sorota and Saul Namyet

Annual Report of Continuing Education Committee, 1976-1977

The Continuing Education Committee offered the professional engineers refresher course in September-October 1976 and February-March 1977. Total attendance was sixty. The spring session was given in the engineering building at MIT to encourage gratis student attendance. The chairman of the committee continues to sit on the Boston Architectural Center's continuing education committee where course offerings are reflecting a greater interface between the architectural and engineering disciplines.

Respectfully submitted, Ronald E. Sharpin

Annual Report of Dinner Dance Committee, 1976-1977

The 15th Annual Dinner Dance was held at the 57 Restaurant on October 23, 1976. One hundred and forty members and guests enjoyed the dinner and dancing to the music of the George Graham Orchestra.

The 16th Annual Dinner Dance has not been scheduled as of this time.

Respectfully submitted, Frank J. Cullati, Chairman

Annual Report Disadvantaged Youth Committee, 1976-1977

The 1976-77 BSCES Disadvantaged Youth Committee was composed of the following members:

Leroy M. Cahoon Walter J. Hickey Robert F. Pelletier Richard J. Scranton Bruce Tobiasson

During the past year the committee undertook three major activities, two of which were associated with the committee's continuing effort to place "Disadvantaged Youth" with local engineering firms.

The first activity was sponsoring the attendance of two local high school juniors to the Notre Dame Summer Program for minority youth, promoted by the National ASCE Committee on Minority Programs. Both youths were funded by the Northeastern University College of Engineering, for which Northeastern University received a Certificate of Appreciation.

At the conclusion of the past year, the Disadvantaged Youth Committee attempted to expand its program of placing "Disadvantaged Youth" in positions with local engineering firms and encouraging their educational development. Accordingly, communications were established with the local sections of the American Institute of Industrial Engineers, the American Society of Mechanical Engineers, the American Institute of Chemical Engineers and the

Institute of Electrical and Electronic Engineers. The intent was to establish a joint committee or network of cooperating committees from several local professional societies. By pooling committed job opportunities it appeared possible to run a training program (through the Opportunities Industrialization Center of Boston), in basic technical skills, thus relieving some of the present training burden from participating firms. Although officers of these societies spoke encouraging words, after considerable delay no cooperation followed.

Accordingly, the committee has decided to continue its own program. A proposal seeking entry level positions (with the promise of educational development and commensurate advancement) is presently being circulated to approximately fifty engineering firms in the Boston area (see Enclosure). It is hoped that improved economic conditions will aid the success of this program.

Respectfully submitted, Richard J. Scranton, Chairman

(Editor's Note: Copies of the enclosures mentioned may be obtained from the Chairman.)

Annual Report of John R. Freeman Fund Committee, 1976-1977

The Committee cooperated with the editor of the *Journal* in working out final arrangements with the University of Iowa Press for joint publication of Hunter Rouse's Freeman Hydraulics Prize book Hydraulics in the United States, 1776-1976. The book was published in the 4 issues of Volume 63 of the Journal, comprising 178 pages or 56% of the total number of Journal pages (317). The Committee authorized payment of \$860.97 to the University of Iowa Press, half the cost of the compositions they made available to BSCES as camera-ready copy

The Tenth John R. Freeman Memorial Lectures — Peter S. Eagleson, Lecturer — were announced. They will be given at MIT for five consecutive weeks, April 12, 20, 26, May 3 and 10, 1977, on the subject — The Annual Water Balance, An Introduction to New and Powerful Methods of Hydrology.

On November 16, 1976, representatives of various BSCES-ASCE Student Chapters and the Hydraulics Group were guests of the Committee, at a dinner meeting at MIT's Stratton Student Center. Potential student/faculty interest in the forthcoming Memorial Lectures was explored and the history and significance of the Freeman Fund was explained.

Respectfully submitted, Lee Marc G. Wolman, Chairman

Annual Report of History and Heritage Committee, 1976-1977

On July 2nd, 1976, the Hoosac Tunnel was dedicated as a National Historic Civil Engineering Landmark with impressive ceremonies at North Adams, Mass. Particularly noteworthy was the participation of ASCE and BSCES, and also the Engineering Institute of Canada and the Canadian Council of Professional Engineers. Dr. Robert Legget, prominent Canadian scholar and consulting engineer, gave the address. The arrangements were ably handled by Gary S. Brierley of our Committee.

On October 20th the committee presented to ASCE the nomination of the Minot's Ledge Lighthouse off Cohasset for designation as a National Historic Civil Engineering Landmark. We are awaiting action on this nomination.

Three additional nominations are in the process of preparation: Dry Dock No. 1 at the Charlestown Navy Yard and Dry Dock No. 1 at the Norfolk, Virginia Naval Shipyard, this being a cooperative effort with the Virginia Section/ASCE; the Tremont Street Subway Tunnel in Boston; and the Harvard Stadium in Cambridge.

An effort is being made to inventory Massachusetts engineering sites that have local significance even though they may not qualify for national recognition. To date the response to the request that members send in their suggestions has been slow. The Committee should give greater attention to this activity in the coming year.

Respectfully submitted, H. H. Holly, Chairman

Annual Report of Ralph W. Horne Fund Award Committee, 1976-1977

This is the Eleventh Annual Report of the Ralph W. Horne Fund Award Committee which was formed in 1964 when the Boston Society of Civil Engineers received from Fay, Spofford & Thorndike, Inc. a grant of \$3,000 to finance recognition of an individual member of the Society having been outstanding in unpaid public service in municipal, State or Federal elective or appointive posts, or in philanthropic activity in the public interest.

Dr. Robert V. Whitman was nominated for this year's award in recognition of his unpaid public service rendered primarily to the Town of Lexington, Massachusetts. The Committee's

nomination was approved by the Board of Government on 21 March 1977.

Respectfully submitted, Harl P. Aldrich, Chairman

Annual Report of Investment Committee, 1976-1977

The Investment Committee met with the Investment Consultant, Mr. Richard Moss of the Boston Safe Deposit and Trust Company in March to review the policy being pursued. Mr. Moss has been reducing the proportion of Common Stock and increasing the bond holdings. The Committee agreed that the results were satisfactory.

Details of investments as of September 30, 1976 are included in reports of the Treasurer and

Auditing Committee.

Bertram Berger Charles C. Ladd Saul Namyet

Annual Report of Key Man Committee, 1976-1977

The Key Man Committee acts as a line of rapid communication between the Society and its members in local firms. Its primary purpose is to remind members of upcoming meetings or events of the Society.

At present there are 65 firms or institutions with key men tied into the committee and the effectiveness in boosting attendance at society functions appears to be quite satisfactory.

Respectfully submitted, Robert M. Fitzgerald, Chairman

Annual Report of BSCES Representative to the Massachusetts Construction Industry Council

The Massachusetts Construction Industry Council (MCIC) is an organization of thirty-one construction industry professional societies and trade associations representing engineers, contractors, architects, suppliers and surety companies. MCIC was organized to provide a unified voice for the Construction Industry in Massachusetts.

During the past year MCIC has met monthly to discuss various topics of interest and to

formulate courses of action on matters directly or indirectly affecting the construction industry. Some of the major topics discussed and actions taken on these matters were as follows:

Seabrook, N.H. Nuclear Power Plant. MCIC participated in various hearings and news release programs, sent letters of endorsement to a number of governmental agencies and representatives to urge the continuation of construction of this important facility.

House Bills 1681, 1682 and Senate Bill 916. Representatives of MCIC presented testimony at hearings, prepared letters of opposition and met with Senate President Harrington and representatives of the Speaker of the House to register MCIC's opposition to these bills dealing with the State Building Code.

MCIC presented testimony at hearings and sent letters to legislators and officials indicating MCIC's support of offshore exploration and development of possible oil deposits off the Massachusetts and New England shores.

MCIC supported the Citizens for Clean Water in their campaign for improvement of water quality of Massachusetts waters through the construction of water pollution abatement facilities.

New State Sanitary Code. MCIC representatives met with the Secretary of Environmental Affairs and various representatives of state agencies to review the effect the proposed revisions to the sanitary code could have on the construction industry. Objections to the code, as raised by MCIC and others, were considered, and the proposed code revisions are being reevaluated by state agencies.

MCIC's annual meeting was held at the Marriott Hotel in Newton on April 7, 1977. Principal speakers were Governor Dukakis and several key Cabinet Secretaries. Governor Dukakis and his Secretaries spoke on the status of various construction related programs in the Common wealth and responded to numerous questions from MCIC members and their guests.

Respectfully submitted, William E. Mackey, Jr., Delegate John J. Cusack, Alternate BSCES Representatives to MCIC

Annual Report of Massachusetts Engineers Council Representative, 1976-1977

The Massachusetts Engineers Council Representative provides representation of ASCE at MEC meetings and activities in order to keep abreast of matters of mutual concern. Council meetings were held monthly during the last year with lectures and discussions on matters of legislation, the economy, business management, and technical matters. ASCE representation was provided at meetings of interest.

The MEC Representative will become a member of the BSCES Action Program — Professional Practice Committee during the coming year.

Annual Report of Membership Committee, 1976-1977

This year the membership committee has focused its attention primarily on developing an effective membership recruitment program which when pursued will significantly contribute to increased membership in both ASCE and BSCES. More specifically, committee efforts have been concentrated in three areas: (1) college seniors who will soon be graduates, and recent graduates; (2) non-subscribing ASCE-BSCES members within the district; and (3) civil engineers within the district who are non-members of ASCE-BSCES.

Procedures for attaining additional membership in each of the three potential membership categories were established and are now being implemented. To date, this has included beginning work on the preparation of an informational pamphlet about BSCES as related to benefits

to be derived and its role within ASCE. Contact has been maintained with ASCE headquarters for coordination and informational guidance, also with the student chapter committee to determine effective means of contacting college seniors and recent graduates. We also worked on segregating non-subscribing members from those who are subscribing, and finally, contacting all regional employers of a significant number of civil engineers and determining the availability of potential members.

This committee is hopeful that once these actions are completed and followed by individual contact via letter, telephone or other means as appropriate, that a fruitful recruitment program will be achieved. It will be this committee's objective in the coming year to pursue such a program.

Respectfully submitted, Philip J. Caruso, Chairman

Report of the Task Force Committee for the 1979 ASCE National Convention

At the Board of Government Meeting on May 24, 1976, the Board voted to establish a Task Force Committee for the 1979 ASCE National Convention. This special Task Force will be responsible for preparing and organizing the basic program and organizational structure for the National ASCE Convention to be held in Boston. The Convention will be held at the Sheraton-Boston Hotel, April 1-6, 1979.

The Committee met over the ensuing months to complete its assigned task and help General Chairman Bertram Berger designate and assign people to the permanent Convention Committee. The list of people willing to serve on the Committee was extensive and the last several committee meetings were spent refining the organization chart and selecting personnel for the various committees. To insure as broad a coverage as possible, it was decided to assign two people as co-chairmen for each committee.

The National Convention Committee as it now stands is as follows:

Convention Committees

General Chairman
Program Chairman
Technical Program
Professional Program
Luncheon & Keynote Speaker
Field Trips

Session Attendance Activities Chairman Student Program

Social Events
Local Excursions
Ladies' Programs

Hospitality

Committee

Transportation Finance Chairman Attendance

Publicity Exhibit Program History and Heritage

Graphic Layout

Chairman

B. Berger

E. Kinner, J. Cusack

J. Christian, T. Liu

S. Rossier, B. Campbell

C. Rogers, F. Perkins M. Weiss, A. Howard

S. Johnson, A. DiSarcina

R. Barton, B. Hogan

R. Scranton, L. Edgers, D. Deans

C. Parthum, D. Weiner, J. Lavin, K. Conway

W. Stickney, D. Gates

Mrs. B. Berger, Mrs. B. Hogan Mrs. E. Kinner, Mrs. H. Simpson, Mrs. M: Weiss, Mrs. J. Cusack

J. McDonald, L. DeMarsh S. Namyet, R. Bedard

P. Caruso, P. Trudeau

M. Gruenbaum, D. Baugh

J. Nitsche, R. Zallen

H. Holly

P. Fournier, G. Irish

It should be noted that the Convention Committee will be assisted by Al Turchick, ASCE Director of Technical Services, and Fred Favata, ASCE Convention and Exposition Manager. By the time this report is issued, the first organizational meeting of the entire committee will have been held at the Sheraton-Boston Hotel.

Respectfully submitted, Brian R. Hogan, George C. Wey, John J. Cusack, Martin Weiss, Cranston R. Rogers, Wallace E. Stickney

Paul Trudeau

Annual Report of the Newsletter Committee 1976-1977

During the past year, the FORUM Board of Editors published two issues of the FORUM. A third issue is in preparation and will be distributed during April.

While the FORUM is intended to be a quarterly publication, the lack of sufficient members on the Editorial Board in the early part of the year necessitated a reduced number of issues.

The FORUM was fortunate to have Robert R. Tillman, C. Scott Spielman, Sandra Johnson and Richard Gardner join the Editorial Board in the fall of 1976. Their additional enthusiasm and efforts have done much to restore the vitality which the FORUM has enjoyed from its beginning.

Mr. Spielman is recommended as Editor and Chairman of the Newsletter Committee for

1977-78. Current members of the Editorial Board will remain for the coming year.

Respectfully submitted, Paul J. Bourque, Editor

Annual Report of Nominating Committee, 1976-1977

The 1976-1977 Nominating Committee met on September 15, October 20, November 17 and December 2, 1976.

The recommended nominees for membership on National Committees of ASCE were submitted to the President of BSCES on December 15, 1976 as follows:

National Committee Recommended Nominee

Reporting to Professional Activities Committee

Professional Publications Hobart Holly

Education Division

Executive Committee Kenneth Leet

Member Activities Division

Executive Committee Robert Curran Sections and District Councils Thomas Liu

Younger Members

Professional Practice Division
Employment Conditions
Standards of Practice
Anthony DiSarcina
Charles Parthum

Engineering Management Division

Executive Committee Frank Perkins

The slate of officers for the April 1977 ballot, to serve for the year 1977-1978, was submitted to the President of BSCES on January 5, 1977 as follows:

President
Vice President
Treasurer
Secretary
Director
Director-Associate Member
Nominating Committee (Elect 2):

Charles C. Ladd
William S. Zoino
Saul Namyet
Leo Peters
Edward B. Kinner
Richard J. Scranton
Norman W. Bennett
Marvin Miller
Howard Perkins
Stanley Rossier
Paul Trudeau
Kentaro Tsutsumi

All nominees were contacted to obtain their consent prior to submission of their names. The rules for operation of the Nominating Committee were revised to a minor extent and adopted by the Committee on October 20; 1976.

Respectfully submitted, Steve J. Poulos, Clerk

Report of the Operations Manual Committee, 1976-1977

An Operations Manual Committee was established by President Berger in May 1976. The purpose was to prepare a manual which would provide guidance to the management of the Section. The manual is intended to aid the Section officers, also committee and technical group chairpersons, in carrying out their work and in coordinating programs within the Section. The Committee has met approximately monthly and has worked closely with the Section committees and technical groups in developing the Manual. The Manual is currently undergoing final review and will be available for use during the Section year 1977-1978.

Members of the Committee are:

Edward B. Kinner, Chairperson
Bertram Berger, Member ex-officio
Charlotte Dalrymple, Executive Director
Ronald C. Hirschfeld
Charles C. Ladd
Thomas K. Liu
Charles A. Parthum
Howard Simpson
C. Scott Spielman
Max D. Sorota
William S. Zoino

Respectfully submitted, Edward B. Kinner, Chairperson

Annual Report of the Program Committee, 1976-1977

The Program Committee coordinates and manages the scheduling of all Section activities. The Committee is also responsible for the activities of the Key Man, Dinner Dance, Clambake and Annual Meeting committees.

The Section once again has had a very full and productive schedule of activities. In addition to the regular Technical Group meetings (totaling at least four during the year for each of the seven Technical Groups), the following additional lectures and meetings were held:

Hydraulics Group: First session of the five-part Tenth Freeman Lecture

Geotechnical Group: A five-part lecture series on Lateral Earth Pressures

Geotechnical Group Forum: Two lectures

Action Program/Professional Practice: A fall and winter Professional Engineers Refresher Course lecture series of eleven lectures each; also a joint meeting with the Western Massachusetts Branch

Structural Group: Cooperated with AISC and MIT in presenting a series of six lectures on practical steel design for buildings of two to twenty stories

Student Chapter Committee: Meeting at Merrimack College; Meeting at the University of Lowell

BSCES: Joint meeting with the American Society of Military Engineers, Massachusetts Society of Professional Engineers, and Society of Women Engineers, on November 18, 1976

Two of the six Transportation Group meetings were jointly sponsored with the Boston Transportation Group; one with the Northeastern University Student Chapter; and one with the Boston Transportation Group and the American Institute of Planners.

A successful Clambake and a Dinner Dance were held, as reported elsewhere.

Respectfully submitted, Howard Simpson, Chairman

Annual Report of Publications Committee

The following is a combined Annual Report of the Publications Committee and the Journal Editor for the period April 1976 to March 1977.

Papers Received	12
Papers Rejected or Withdrawn	1
Papers Accepted, Published or in Press	7
Papers under Review	4

Volume 63 of the Journal contained three technical papers; "Hydraulics in the United States, 1776-1976" by Hunter Rouse, the first Freeman Hydraulics Prize paper, published in four installments; two presidential addresses; and the usual proceedings and annual reports. Although there are a fair number of papers currently scheduled for publication or still under review, a continued effort should be made to solicit more papers from speakers at the Technical Group meetings. All too frequently, these meetings contain valuable information that remains unpublished.

The total number of subscriptions is approximately 1900, of which about 300 are from libraries, etc.

Respectfully submitted, Charles C. Ladd, Chairman Publications Committee Edward C. Keane Journal Editor

Annual Report of the Student Chapter Committee

The Student Chapter Committee, under the leadership of Chairman Paul Trudeau, had an active and successful year as evidenced by this report. Committee members included Professor Richard Scranton of Northeastern University, Daniel Maciborski of Camp, Dresser, and McKee, Roger Gardner of Geotechnical Engineers, Inc., Professor Lewis Edgers of Tufts University, Daniel Donahue of Metcalf & Eddy, and from Stone & Webster Engineering Corporation, Stanley Rossier and Paul Trudeau. Regular business included issuing Student Awards, Student Loans, correspondence with the ASCE Student Chapters in Massachusetts and sponsoring the Student Night Dinner Meeting at Merrimack College on March 3, 1977. In addition, because of its success the previous year, the Student Chapter Committee sponsored another Student Chapter Caucus which was held on August 13, 1976 at Worcester Polytechnic Institute.

The Student Chapter Caucus drew together representatives from the Student Chapters within the Boston Section. Following introductions, Professor Richard Scranton, a member of the National ASCE Committee on Student Chapters, and ASCE Student Chapter Faculty Advisor at Northeastern University, gave an excellent presentation on the use of student chapter activities as a supplement to the civil engineering students' technical education. Student chapter activities can be a means of developing the students' professional education by enhancing capabilities in such areas as initiative, administration, communication, attitude, ethics, salesmanship and social responsibility.

The caucus was well received, with over 25 persons, representing seven of the nine Student Chapters in Massachusetts, attending. As with last year's caucus, communication was the theme of this second Caucus. Following Professor Scranton's talk, small discussion groups were formed with representatives of different schools and the Student Chapter Committee. Judging from the lively group discussion, our goal of communication was well attained.

The Caucus provided an informal and relaxed atmosphere in which the students were able to exchange their own views and ideas. The Caucus made the Student Chapters aware of the existence of the BSCE Section and the easy route we provide for tapping some of its resources for Student Chapter activities. The Student Chapters were informed that articles regarding Chapter activities could be published in the *Forum*, the newsletter of BSCES/ASCE, as a means of communicating successful Chapter activities to each other and to the profession. Also, literature was distributed concerning possible field trips, BSCES and ASCE awards and prizes, and student loans.

The Student Chapter Committee also sponsored a Student Night dinner meeting at Merrimack College on March 3, 1977. Following the dinner and an introduction by Paul Trudeau, Bertram Berger, President of BSCES/ASCE, presented the following awards:

A WARDS

RECIPIENTS
David Blackman

Certificate of Appreciation to Northeastern University for sponsoring two minority students to the ASCE Summer Institute

ASCE Student Club Charter, Wentworth Institute

Thomas Billups

ASCE Certificates of Commendation to:

Northeastern University University of Lowell Merrimack College Richard Scranton Donald Leitch Vincent Turano ASCE Certificates for Outstanding Service to the Student Chapters: Northeastern University Tufts University University of Lowell

University of Massachusetts

Merrimack College

BSCES Desmond Fitzgerald Award (\$200)

BSCES William P. Morse Award (\$200)

BSCES Student Awards (\$25 and framed certificate):

SCHOOLS

Northeastern University Div. A.
Northeastern University-Div. B.
Tufts University
University of Lowell
Merrimack College
Massachusetts Institute of Technology
Worcester Polytechnic Institute
Southeastern Massachusetts University
University of Massachusetts
Wentworth Institute

BSCES Student Loans (\$1000)

Richard Scranton-Faculty Advisor Lewis Edgers-Faculty Advisor Donald Leitch-Faculty Advisor George McDonough-Contact Member

William Boyer-Faculty Advisor Lee Webster-Contact Member James Wesoloski-Assoc. Contact Member

Vincent Turano-Faculty Advisor James DeAngelo-Contact Member

Edward R. Panasci of Northeastern University

Robert L. Wolchok of Tufts Univ.

RECIPIENTS
Ronald Bessette
Michael Barnes
Martha M. Wyckoff
David C. Woodin
Christopher Hanrahan
Thomas C. Gooch
Herbert W. Holmes
Paul R. LaFrance
Daniel M. Carey
Thomas E. Billups

Edward R. Panasci of Northeastern University Stefanie Bekenstein of Tufts University

Guest speaker for the evening was Attorney Steven Comen of Snyder, Tepper & Berlin, who represent engineers, general contractors, and developers in litigation and arbitration. The subject of Mr. Comen's discussion was "Engineers and the Law - Practical Problems." The meeting was attended by approximately 170 students and 50 engineers representing the BSCE Section.

In 1977 the Student Chapter Committee plans to continue its active role in assisting Student Chapters and bringing students into contact with BSCES. We feel the committee serves as an important link between the students and BSCES, since on many occasions, the Student Chapter Committee is the first exposure students have to BSCES and ASCE.

Respectfully submitted, Daniel A. Maciborski, Secretary

Report of Task Force on Younger Members, Summary Report, April, 1977

The Task Force on Younger members was created to determine whether the Section needed to maintain an exclusive "younger member" group. After several months of deliberation, the Task Force concluded that a formal "Associate Member Forum" or "Younger Member Group" with its own concomitant activities is NOT an appropriate organization for our Section for the following reasons:

1. The Section has deep historial roots, has general professional acceptance and, as a Section, operates a large and varied program of technical, professional, administrative and social activities. With some singular exceptions, it was difficult for the Task Force to describe an activity of a potentially long-term nature that had not been already tried by the Section in some manner. Rather than potentially duplicate programs solely for younger members, the Section should rather maximize the integration of younger members into regular Section activities.

2. The Section's Constitution requires that at least one member of the Board of Government be a younger member to assist the Board in receiving input regarding younger member viewpoints.

3. The Board of Government has adopted a general policy of encouraging that all Section activities, groups or committees include a younger member.

Anthony J. DiSarcina, Chairman

ANNUAL REPORTS OF TECHNICAL GROUPS

Annual Report of Computer Group, 1976-1977

The Executive Committee this year consisted of the following:

Chairman
Vice Chairman
Vice Chairman
Clerk
Member Executive Committee
Membe

The Computer Group held four meetings during the current year. All were held at the Ralph M. Parsons Laboratory for Water Resources and Hydraulics, M.I.T. and were called to order by the Chairman, Lewis Holzman.

October 20, 1976 - The guest speaker was Mr. Roy N. Freed of Powers & Hall. Mr. Freed addressed some of the legal questions related to the acquisition and use of computer technology. He touched upon the legal considerations of liability exposures of suppliers and users of hardware and software, protection of proprietary software programs, contracting for computer systems and software, taxation of computer related transactions and properties, and record-keeping requirements. Attendance, 16.

November 17, 1976 - The topic was that the appropriate objective of a process control system is to help the user do a better job of system operation. Our speaker was Dr. James H. Dillingham of Dillingham Associates, Inc. He spoke of his involvement in the installation of an adaptive control system to assist in the operation of a major water distribution system. Attendance, 11.

February 16, 1977 - The guest speaker was Mr. David Hayward, Manager of REMVEC (Rhode Island-Eastern Massachusetts-Vermont Energy Control). Mr. Hayward presented a description of the system of process control computers that are used to monitor and control the bulk power supply system in New England. He also gave us a glimpse of what is expected in the 1980s. Attendance, 11.

March 16, 1977 - The final meeting of the year. Officers for 1977-1978 were elected as follows:

Chairman James N. Jackson
Vice Chairman Salvatore Mazzota
Clerk Robert A. Wells, Jr.
Member Executive Committee Member Executive Committee
Member Executive Committee John D. Goodrich

The speaker was Dr. Neil Harper of Harper and Shuman, Inc. He described the computerbased financial management system which his firm provides to over fifty architectural and engineering offices. Dr. Harper indicated that knowledge of the fundamentals of such a system could lead computer personnel from staff to management positions. Attendance, 15.

> Respectfully submitted, Lewis H. Holzman, Chairman

Annual Report of Construction Group, 1976-1977

The Executive Committee this year consisted of the following:

Chairman Norman Bennett
Vice Chairman John Sullivan
Clerk Stephen G. Walker
Member Executive Committee Laimonis Rieksts
Member Executive Committee Samuel E. Rice, III
Member Executive Committee Joseph B. Kerrissey, Jr.

The construction group held the following meetings during the past year:

September 22, 1976 - a luncheon meeting was held at the Red Coach Grill, Stanhope Street, Boston, Massachusetts. Dr. Dov Kaminetzky of Feld, Kaminetzky & Cohen, New York, N.Y., spoke on the analysis and prevention of structural failures. Attendance, 40.

December 3, 1976 - a luncheon meeting was held at the Red Coach Grill, Stanhope Street, Boston, Massachusetts. Mr. Wilford Rose of Perini Corporation spoke on the Alaska Pipe Line. The talk was augmented by a film. Attendance, 17.

January 13, 1977 - a joint meeting with the Geotechnical Group was held at the Red Coach Grill, Stanhope Street, Boston, Massachusetts. John Gnaedinger of Soil Testing Services, Northbrook, Illinois spoke on "Mediation - Arbitration and Its Application to Construction Contracts." There were prepared discussions by Gerrald Olanoff, Esquire, of the firm of Corwin & Corwin, Ms. Nancy Ferguson, American Arbitration Association, and Mr. Eric O'Neill of Franki Foundation Corporation. Attendance, 70.

March 2, 1977 - an official BSCES meeting, held at the Red Coach Grill. The speaker was Peter McGlynn, Esquire, of the firm of Gadsby & Hannah, who discussed the various Massachusetts statutes governing the preparation of plans and specifications. Attendance, 22.

Nominations and elections for 1977 - 1978 will be held at the first regular business meeting in the Fall.

Respectfully submitted, Stephen G. Walker, Clerk

Annual Report of Environmental Group, 1976-1977

The Executive Committee this year consisted of the following members:

Chairman:
Vice Chairman:
Clerk:
Peter B. Knowlton
Member:
Warren H. Ringer
Member:
Benjamin J. Fehan
Member:
Steven H. Corr

Four meetings will have been held by the close of the 1976-1977 year, as follows:

November 10, 1976 - at Purcell's Restaurant in Boston. A discussion of "Archaeological Surveys and Environmental Construction Projects" was presented by Mr. Frank McManamon, Archaeologist for the Massachusetts Historical Commission, and Mr. Edward Bayon, Chief engineer for Tighe and Bond Engineers. The talk presented the archaeologists' vs. the engineers' view of what type of surveys should be performed, with some lively discussion. Attendance: 36.

January 12, 1977 - at Purcell's Restaurant in Boston. A two-member panel presented views on "Value Engineering." The panel consisted of Mr. Jerry Potamis of the Environmental Protection Agency and Mr. Ernest Leffel of Camp, Dresser & McKee. Mr. Potamis presented the current thinking at EPA concerning the format Value Engineering should follow, and Mr. Leffel presented a critique of Value Engineering and several examples of Value Engineered projects. Attendance: 31.

February 23, 1977 - at Purcell's Restaurant in Boston. The subject was "Septage Treatment by the Use of Rotating Biological Contactors," by Mr. John DeFilippi of Roy F. Weston Company. Mr. DeFilippi discussed the process used in the selection of rotating biological contactors in a system designed for the exclusive treatment of septage for the Towns of Wayland and Sudbury, Massachusetts. Attendance: 60.

March 30, 1977 — the Thomas R. Camp Lecture. The scheduled speaker is Dr. Rolf Eliassen, Chairman of the Board, Metcalf & Eddy, Inc., who will speak on "Treatment of Sludge by High Energy Electrons." The meeting will be held at the M.I.T. Faculty Club. This meeting is also the Environmental Group's Annual Meeting. The Nominating Committee of the Environmen-

tal Group has placed in nomination the following names for officers and Executive Committee for the coming year, to be voted on at this meeting.

Chairman: Frederic C. Blanc
Vice Chairman: Peter B. Knowlton
Clerk: Warren H. Ringer
Member: Benjamin J. Fehan
Member: Steven H. Corr
Member: Jerry Potamis

The twelve lectures presented as the Thomas R. Camp Lecture series during the 1975-76 season have been printed in loose-leaf form and are being distributed to those who registered for the lecture series.

Respectfully submitted, Peter B. Knowlton, Clerk

Annual Report of Geotechnical Group, 1976-1977

The following were officers of Geotechnical Group, 1976-1977:

Chairman: William Zoino
Vice Chairman: Peter Taylor
Clerk: David Thompson
Member: Alton Davis
Member: Joseph Guertin
Member: Tony Barila
Forum Committee Chairman: Asaf Qazilbash

The group held the following meetings during the past year:

June 3, 1976 — "The Design of Underground Openings in Rock" — A lecture by Professor Edward Cording of the University of Illinois, presented at Harvard University. Attendance 45.

Nov. 2, 1976—"Relationships of Soil Structure to the Engineering Properties of Soils"—A lecture by Professor D. H. Borawicka of the Technical University of Vienna, presented at Harvard University. This was also an official meeting of the BSCE Section. Attendance 40.

Dec. 8, 1976 — "Liquefaction of Soils" — A lecture presented in two parts by Professor Alfred Hendron of the University of Illinois and Dr. Gonzalo Castro of Geotechnical Engineers, Winchester, Mass. Mr. Taylor was Chairman. Attendance 58.

Jan. 13, 1977 — "Mediation Arbitration and its Application to Construction Contracts." — A presentation by Mr. John Gnaedinger of Soil Testing Services, Northbrook, Illinois, followed by prepared discussions presented by Mr. Gerald Olanoff, attorney at law, Ms. Nancy Ferguson, American Arbitration Association and Mr. Eric O'Neill, Franki Foundation Co. This was a joint meeting with the Construction Group and the Action Program Committee. The meeting was held at the Red Coach Grill, Boston. Attendance 70.

Feb. 22, 1977 — "The Use of Underground Space" — A lecture by Mr. David C. Willett of Acres American Inc. presented at Harvard University. Mr. Guertin was Program Chairman. Attendance 40.

Mar. 22, 1977 — "Design, Construction and Safety of Sewer Trenches — Differing Viewpoints" — A panel discussion among Mr. William Zoino of Goldberg, Zoino, Dunnicliff, Mr. Gilbert Leonard of Salah & Pecci and Mr. John Fiatrone of the U. S. Department of Labor. The moderator was Asaf Qazilbash. The meeting was held at Dukes in the Park. Attendance 53.

Officers and Executive Committee members for 1977-1978 are as follows:

Chairman: Peter K. Taylor
Vice Chairman: David E. Thompson
Clerk: Anthony C. Barila
Member: Joseph D. Guertin
Member: Asaf A. Qazilbash
Member: Lewis Edgers

During the past year, the Geotechnical Group sponsored a lecture series on the subject of lateral earth pressures. The lectures were as follows:

- Sept. 28, 1976 "Review of Earth Pressure Theory and Earth Behavior" by Dr. C. Peter Wroth, Cambridge University, Great Britain.
- Oct. 12, 1976 "Lateral Support Systems" by Mr. Donald T. Goldberg, Goldberg-Zoino & Associates
- Oct. 19, 1976 "The Construction Contract" by Dr. James P. Gould, Mueser, Rutledge, Wentworth & Johnston, New York.
- Oct. 28, 1976 "Performance of Lateral Support Systems" by Dr. Ralph B. Peck, Albuquerque, New Mexico.
- Nov. 4, 1976 A three-part presentation by three practicing engineers:
 - (1) "The Boston Federal Reserve Building" by Harold V. McKittrick, Perini Corp. and Dr. Walter E. Jaworski, Goldberg-Zoino & Assoc.
 - (2) "The Sixty State Street Building" by Mr. Edmund G. Johnson, Haley & Aldrich, Inc.
 - (3) "Nuclear Power Plant Design" by Dr. A. Stanley Lucks, Stone & Webster Engineering Corp.

The Geotechnical Group is currently planning a lecture series for the spring of 1978 on the subject of foundation design for dynamic loads. Dr. Steve Poulos will chair the Lecture Series Committee.

Respectfully submitted, David E. Thompson, Clerk

Annual Report of Hydraulics Group, 1976-1977

The Executive Committee for 1976-1977 consisted of the following members:

Chairman:

Edward P. Dunn

Clerk:

Thomas Doucette Richard DiBuono

Executive Committee Members:

Reynold Hokenson

Oscar Donati

Note: William Darby, who has been elected as Vice-Chairman, resigned because he moved from this area. He has been replaced on the committee by Russell L. Peterson.

The following meetings were held during the past year:

October 6, 1976 — William Brutsch, Senior Mechanical Engineer with the Metropolitan District Commission, led a tour of the Mystic River Pumping Station at the Amelia Earhart Dam. Edward Dunn, Assistant Vice-President, CE Maguire, Inc., assisted in the tour. Attendance 25.

January 5, 1977 — Nicholas P. Triano, Project Manager, Chas. T. Main, Inc., spoke on the Shiroro hydroelectric power, spillway and diversion facilities. The talk covered the criteria used for hydraulic and structural design. A general review of the project features for this 600 MV hydroelectric project located in northwestern Nigeria was also given. The meeting was held at the Ralph M. Parsons Water Resources Laboratory at M.I.T. Attendance 42.

February 2, 1977 — The guest speaker was Mark S. Dortch, Research Hydraulic Engineer, Waterways Experiment Station, U.S. Corps of Engineers, Vicksburg, Mississippi. He was assisted by Richard J. DiBuono, Chief, Hydraulics and Water Quality Section, New England Division, Corps of Engineers. The talk provided a brief background on the proposed Dickey-Lincoln School Lakes hydroelectric power project and the need to perform thermal simulation analysis of the two lake system. The talk also covered the physical and mathematical models developed to perform the thermal analysis. The meeting was held at the Ralph M. Parsons Water Resources Laboratory at M.I.T. This was also an official meeting of the BSCE Section. Attendance 22.

March 9, 1977 — The guest speaker was James T. Price of the Water Systems Development Branch, Tennessee Valley Authority. He spoke on the impact of dam failure on nuclear power

plants. The talk covered siting considerations and the evaluation of dam failures coupled with extreme rainfall events. Mr. Price described laboratory investigations, field measurements and computational procedures employed by the Tennessee Valley Authority in several of these studies. The meeting was held at the Ralph M. Parsons Water Resources Laboratory at M.I.T. Attendance 23.

April 19, 1977 — This meeting will be the official BSCES meeting for the month of April. Nominations for election of the Hydraulics Group officers and Executive Committee will be presented at the meeting, as follows:

Chairman: Thomas F. Doucette
Vice-Chairman: Richard D. Buono
Clerk: Reynold Hokenson
Executive Committee Members: Russell L. Peterson
Oscar Donati
Edward P. Dunn

This meeting will be the second lecture of the Freeman Lecture Series, and will be held at M.I.T.

Respectfully submitted, Thomas F. Doucette, Clerk

Annual Report of Structural Group, 1976-1977

The Executive Committee this year consisted of the following members:

Chairman: Kentaro Tsutsumi
Vice Chairman: Frank J. Heger
Clerk: Franklin B. Davis
Member, Executive Committee: James M. Becker
Member, Executive Committee: Richard A. Foley
Member, Executive Committee: Kenneth B. Wiesner

The scheduled meetings held by the Structural Group were as follows:

October 13, 1976 — Dr. Robert H. Scanlon, Professor Civil Engineering, Princeton University, presented AISC's T. R. Higgins Lectureship award-winning paper entitled "Modern Approaches to Solution of Wind Problems of Long Span Bridges". In this paper, Professor Scanlon discussed the problems of flutter, lateral buckling, torsional divergence, vortex-induced oscillations and buffeting, and showed how modern aerodynamic research can be used in the design of long-span bridges. The meeting was held at MIT. Attendance 45.

December 1, 1976 — Dr. E. V. Leyendecker, Research Structural Engineer, National Bureau of Standards, presented a talk on "Progressive Collapse". Progressive collapse is the phenomenon in which the resultant damage due to a failure is much larger than would have been expected from the magnitude of the original failure. Examples of this type of failure from around the world, and potential design changes to minimize the resulting damage were discussed. The meeting was held at the MIT Faculty Club. This was also an official meeting of the BSCE Section. Attendance 57.

February 9, 1977 — At a meeting held at MIT, Professor David P. Billington, Civil Engineering Department, Princeton University, discussed "The Role of Aesthetics in the Failure of Tacoma Narrows Bridge". With the use of exceptional slides, Professor Billington brought out the use of modern detection devices in the examination of old structures. In addition, comparisons of successful suspension bridge design were made with that of the bridge at Tacoma Narrows which failed. At this meeting, Chairman Tsutsumi received a special AISC award. Attendance 130.

April 6, 1977 — Richard L. Tomasetti of Lev Zetlin Associates gave a presentation on "Space Frames". Through a series of slides he showed standardized and specialized spaces frames used for roofs, towers, and unique applications. Attendance 32.

Elections were held for officers and members of the Executive Committee for 1977-1978, with results as follows:

Chairman:

Vice Chairman:

Clerk:

Member At Large:

Member At Large: Member (Past President): Frank J. Heger Franklin B. Davis

Richard A. Foley

James M. Becker Kenneth B. Wiesner

Kentaro Tsutsumi

During the year, plans were started for a lecture series to be held during the fall of 1977 entitled "Welding For Engineers".

> Respectfully submitted, Franklin B. Davis, Clerk

Annual Report of Transportation Group, 1976-1977

The Executive Committee this year consisted of the following members:

Chairman:

Vice Chairman:

Clerk:

Member: Member:

Past Chairman:

Marvin W. Miller Robert J. McDonagh

A. Russell Barnes, Jr.

Leo F. DeMarsh

Donald M. Graham

Maurice Freedman

The following meetings were held during the past year:

May 20, 1976 — Reconstructing the Southeast Expressway. Speakers, Deputy Chief Engineer for Highway Engineering, Robert J. McDonagh, and Deputy Chief Engineer for Traffic Operations, Kay K. Krekorian, of the Massachusetts Department of Public Works. It was made clear by both speakers that as expensive and disturbing as the proposed work would be, it would not materially increase the traffic capacity. This luncheon meeting was held at Polcari's Restaurant. It was a joint meeting with the Boston Transportation Group. Attendance 106.

September 16, 1976 — Transportation Futures. Representative Louis R. Nickinello, Co-Chairman Joint Committee on Transportation, Massachusetts Legislature, spoke before a luncheon meeting at Dukes in the Park Restaurant. He described the current and future trends in proposed legislation emphasizing the need for coherent, long range, State-wide planning. Attendance 40.

November 4, 1976 - Seminar on Public Transportation. A joint meeting with the Boston Transportation Group was held at Anthony's Pier 4 Restaurant, 9:00 a.m. to 2:00 p.m. Presiding were Chairman Marvin W. Miller, along with Alfred R. Howard, Chairman of BTG. A panel of speakers from the Massachusetts Bay Transportation Authority presented a discussion on delivering transit service. The panel included Ronald J. Tober, Susan S. Richardson, Richard L. Barber, Joseph F. McDonald, and Edward P. Collins.

Other subjects and speakers were Carla Johnston, Director of Budget Analysis, MBTA Advisory Board, and Louis Mraz, Jr., of the Urban Mass Transit Administration. The luncheon speaker was Robert R. Kiley, Chairman, MBTA. Attendance 160.

January 19, 1977 — The Future of the Highway; Commissioner John J. Carroll of Mass. DPW addressed an evening meeting on this subject. He described in detail the organizational structure of the Mass. DPW and how it functions with regard to revenue and expenditures. He stressed the DPW policy of hiring minority workers.

This was the annual meeting of the Transportation Group; an election was held and the following were elected as officers and Executive Committee members for 1977-1978:

Chairman:

Vice Chairman:

Clerk:

Member:

Member: Member:

Past Chairman:

Robert J. McDonagh A. Russell Barnes, Jr.

Leo F. DeMarsh

Rocco A. Mancini Edmund J. Condon

Robert A. Snober

Marvin W. Miller

The meeting was held at Nick's Restaurant. This was also an official meeting of the BSCE Section. Attendance 80.

March 23, 1977 — Mini Seminar on Transit; a joint meeting was held with the Northeastern University Student Chapter at the University. Three panelists from the staff of the Massachusetts Bay Transportation Authority made the following presentations:

Andrew C. Hyde, Assistant to the Director of Construction: "Project Management and Control"

Alfred J. Pacelli, Senior Project Manager, South Shore: "Transit System Design"

John I. Williams, Project Manager — Design/Development: "Station Planning and Design"

The speakers described experiences in the growing construction program of the MBTA and commented on its relationship to engineering students and professionals. Attendance 50.

Meetings of the Executive Committee were held on December 6, 1976, February 3, 1977 and February 17, 1977.

Respectfully submitted, A. Russell Barnes, Jr., Clerk