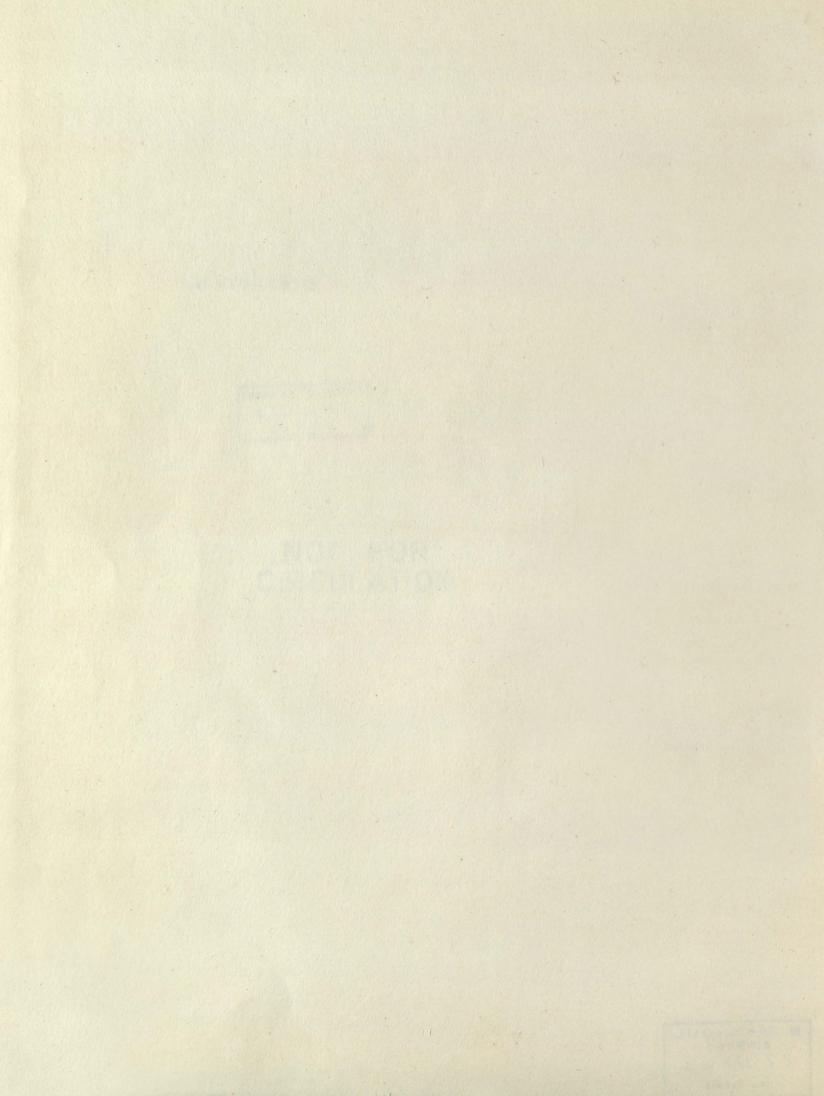


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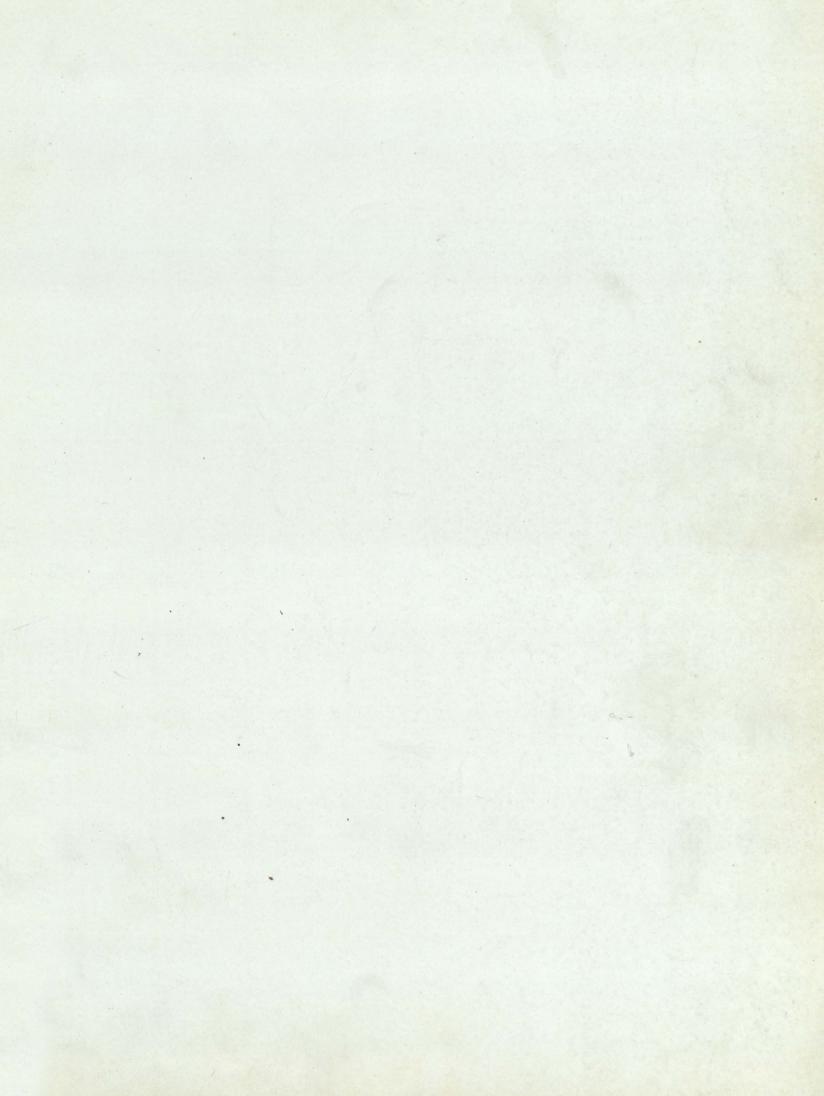


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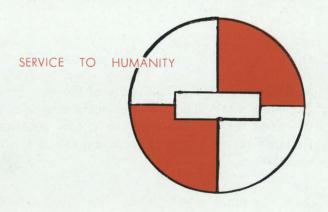
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# YEARBOOK









school of engineering

## the 1956 year book



At the end of the first five years of the new School of Engineering at A.U.B, it is with sincere appreciation that we dedicate this Yearbook to C. KEN WEIDNER, our Dean, in recognition of his untiring efforts towards its well being.

#### CONTENTS

- Faculty, and Industrial Training Teaching Staff
- The Students
- About the Graduates
- The School and Environment
- Directory of Students and Advertisements

A few years ago Engineering students' participation in the many A.U.B. activities was relatively unheard of. Parallel to the growth of the Engineering student body at A.U.B. a greater cooperation among the students has been developed. This has resulted in activities that have won us admiration and respect. West Hall Auditorium is sold out ahead of time for the Target Show; record attendance welcomed our traditional Xmas Target Ball; and no matter what the game or competition, be it of brain or brawn, the Engineering team is accorded its due. This year has seen the introduction of a piano in the Lecture Hall so that we get the right note for our songs. It has also seen the new organized sports started by a very active Students Corporation.

This Yearbook is but a little more evidence of the strong bond of comradeship and cooperation among engineering students. Some students made very valuable suggestions which helped the Yearbook committee plan a better book for this year. A new "graduates" sub-committee has been added to work for closer contact between graduates and students. Additions were included to make both students and faculty members look more human. The purpose of the Yearbook has, for the first time, been put down as a record of cherished memories of school life and a link between graduates and students.

Much of the success of the year's ventures is due to the interest taken in them and the help given to them by our faculty and Dean. To them we extend our warmest thanks.

#### Engineer's Dath

Using the heritage left by my professional forebears, I dedicate myself to the pursuit of knowledge and the search for truth in the extension of the benefits of my profession to humanity. I will strive always to disseminate what engineering knowledge I acquire. And I will fully accept my responsibility for the instruction of younger members of my profession.

Jealous of the high repute of my calling, I will strive to protect the interests and the good name of any engineer.

To all, I pledge integrity and fair dealing, tolerance and respect, and devotion to the standards and dignity of my profession. I gladly accept the obligation to use my special knowledge and experteness to serve humanity with complete sincerity.

I will strive faithfully to fulfill the solemn obligations of my profession and to govern my life and practice by its Canons of Ethics.

SCHOOL OF ENGINEERING, A. U. B.

### يمي المهندين

أَتَعَهَدُمُسُتَعَينًا بَآلارِثِ الذي تَرَكَهُ أَسَلافي في هٰذِهِ المِهنَة أَن أُكَرِّسَ نَفَيْحِيْ لِلسَّعِي وَرَاءَ المَعْرِفَة وَالْبَحْثُ عَن الْحَقِيقَة فِي المِدَادِ الْجِمَّعَ مِمَا في مِهْ سَيِّي مِن فَوَائِدَ وَسَالَبذَلُ جُهُدِي دَومًا في نَشِيْرِمَا اَكَ تَسِبُهُ مِن عِلْم هِندَسِيِّ وَآخُذُ عَلى نَفْيِي أَن اعْلِمَ الشَّبَابُ المُنْتَمِين الْيُ هُذِهِ الْمِهنَة.

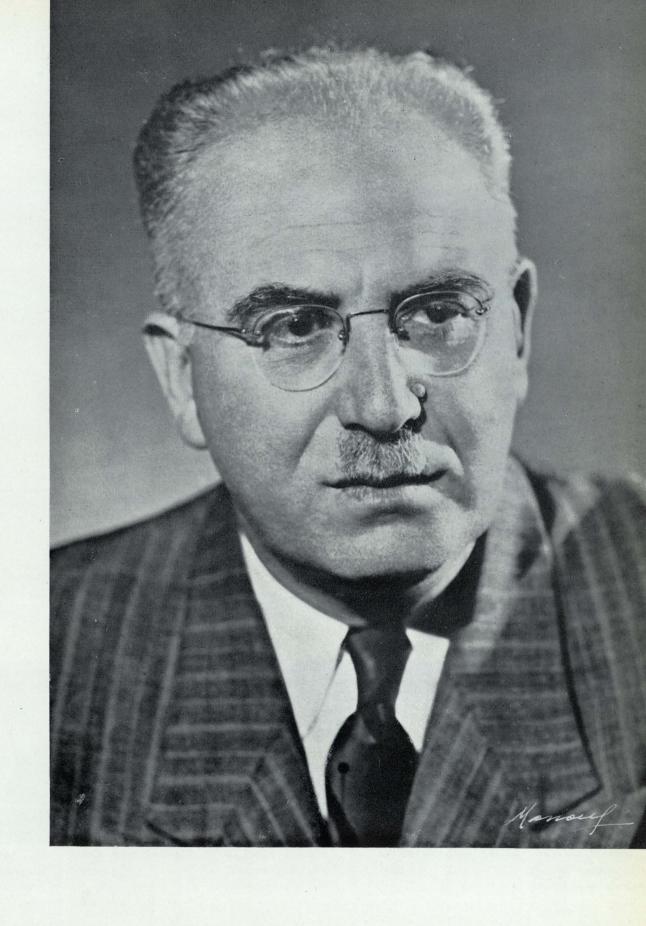
وَحِفَاظًا عَلَى مَا تَنَمْتَعُ بِهِ هُذِهِ الْهِنَة مِن رَفِيعُ الْمَقَامَ فَانِتْحِيْ سَأَبِذُلُ جُهُدِي فِي حِمَاية مِصَمْلَحَة كُلِّ فَهُ مِن زُمَلافِي المَهَندِسِٰين وَالْحُافَظُنَة عَلَى شُيمِعَت يُوالطّيبَ بَة.

وَأَنْعَهَّدُ لِلْجَمَيْعِ بِالْأَمْ اَنَةِ وَصِيْدُقِ الْمَامَةِ وَاللَّسَامُ وَالاَحْتَرَامَ وَالوَلاَءِ لِمَا أَتَطَلَبْهُ مُثُلُه لِهِ إِلهَانَة وَكَامَتُهَا. وَأَعِدُ بَأَن اَضَعَ عَليى وَخِبُرَقِي فِي خِنْد مَةِ المُجْنَتَمَعَ بَكِلَ مَا أُوتِيتُ مِنُ اِخُلاصُ.

وَاعِدُ بِأَنْ اَقُومَ بِكُلِّ اِمَانَةٍ بِمَا تَفْتَضِيْهِ وَاجِبَاتُ مِهنَتِي وَاَن اُسِيِّرُحَيَا تِي وَاعْتَمَا لِي بُوجِب قِانُونِهَا أَيْخِ لُقِيَّ.

مدرسہ الهندسہ ، الجامعہ الامیرکیہ فی بیروت

THE ACTING PRESIDENT, Dr. CONSTANTINE K. ZURAYK





ARCHIE S. CRAWFORD Vice President & Treasurer



FUAD SARRUF Vice President in charge of Relations



DIMITRI BARAMKI Curator, A.U.B. Museum



FARID A. FULAIHAN Registrar



GEORGE TOMEH
Director of Student
Activities



CHRISTOPHER A. LEGGE Librarian



AZIZ K. NAHAS Superintendent of Buildings & Grounds

"Raise a standard to which the wise and honest can repair.

The rest is in the hands of God." — George Washington.



#### C. KEN WEIDNER

Dean of the Faculty of Engineering. Registered Professional Engineer, (Civil, Mechanical & Electrical). Professional Education by tutoring. Entered the Profession in 1925 on general, heavy, and railroad structures as Construction Foreman, then as Estimator and Superintendent, then as Construction Engineer in charge. 1931 joined the Engineering Dept. of Boeing Aircraft Company as designer and liaison between design and manufacture. 1934 joined the Faculty of Whitman College as Instructor in Physics and Supcrintendent of Buildings and Grounds. 1936 joined the staff of the University of Washington as Ass't Superintendent of Buildings and Grounds in charge of a continuous design and construction program of buildings and utilities. Ordered to active duty as Lieutenant (Civil Engineers Corps) U. S. Navy in May 1941. Served in American Theater and Asiatic Pacific Theater, promoted through Lt. Commander and Commander to Captain, decorated twice with the Bronze Star. Released to inactive duty December 1946. Gold Medal for Distinguished Service, Society of American Military Engineers, 1946. Consulting Engineer and Professor, University of Oregon until November 1947 when appointed Chief Engineer in charge of design and construction of the Argonne National Nuclear Research Laboratory, University of Chicago. Upon completion of this assignment October 1951 appointed Dean, School of Engineering, A.U.B. Member: American Society of Civil Engineers, American Society of Mechanical Engineers, American Institute of Electrical Engineers, National Society of Professional Engineers, American Society of Heating and Air Conditioning Engineers, American Society for Engineering Education. Senior Member; American Society of Tool Engineers. Military Engineer Member and past Director: Society of American Military Engineers. Naval Member; American Society of Naval Engineers. Fellow: American Association for the Advancement of Science. Many other Professional and Scientific Societies.



WALTER BAGGALEY



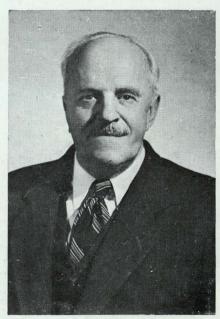
THOMAS G. BRIDGWOOD



EDWARD S. HOPE



IBRAHIM A. KHAIRALLAH IVAN A. RUBINSKY





ROBERT W. SLOANE

#### Instructing Staff

#### WALTER BAGGALEY

Professor of Mechanical Engineering. — Registered Professional Engineer. M.E. 1918 Stevens Institute of Technology. Tau Beta Pi and Sigma Nu. World War I in Chemical Warfare Service. Employed between college years on Construction of 60,000 KVA Steam Power plant at Muscle Schoals, Alabama. 1920-21 Assistant Master Mechanic on hydroelectric power plant construction in Canada. 1922-1926 Mechanical Designer and field construction supervisor with the Cleveland Electric Illuminating Co., Ohio, on construction of large steam electric generating plants. 1926 joined the Austin Co., Cleveland, Ohio, and was for twenty years Project Engineer supervising design and Construction of Industrial plants. Two years in Nizhni Novgorod: (U.S.S.R.) building Automobile plant; four years designing chemical plants for Carbide and Carbon Chemicals Corp. in West Virginia, Illinois, and Texas; five years building Atomic Energy Laboratories in Oak Ridge, Tennessee; Chicago, Illinois; Arco, Idaho and Denver, Colorado. Member: ASME, ASHAE, AlChE; Cleveland Museum of Natural History, Kirtland Geology Club, Cleveland Natural Science Club, and Earth Science Club of Northern Illinois.

#### THOMAS G. BRIDGWOOD

Professor of Electrical Engineering — B. Sc. in EE (with Honours) 1936, Ph.D., 1943, University of Leeds, 1928-1932 Staff Apprenticeship, English Electric Co. Ltd. Bradford. 1936-1938 Part time Lecturer in Mechanics and Theory of Machines, College of Technology, Leeds. 1939-1941 section leader Research Engineer in Charge of high voltage research and development, General Electric Co., Ltd. Witton, Birmingham, 1941-1955 Lecturer in Electrical Engineering, University of Leeds, and consultant to local firms. Also Evening Lecturer in Electrical Engineering Courses at Walsall Technical College, Staffordshire, 1939-1951, and at the College of Technology, Leeds, 1944-1947. Examiner for Associate Membership Examination, Institute of Civil Engineers, 1945-1949. Honorary Secretary, North Midland Centre, Institution of Electrical Engineers, 1950-1955. Did research into unstable behavior of electrical transformers associated with transmission lines. Published 'Instability in Iron-Cored Circuits' in Proc. Leeds Phil. Soc. Corporate Member of the Institution of Electrical Engineers.

#### EDWARD S. HOPE

Professor of Civil Engineering. Registered Professional Engineer, B.A. 1923, Morehouse College, B.S. in Civil Engineering 1926, M.I.T., M.S. in Civil Engineering 1927, M.I.T., Ed. D. 1942 Columbia University. Kappa Delta Pi and Alpha Phi Alpha. Summer 1926 Hydroelectric Investigation for the Granfell Mission, Newfoundland, 1927-1928 Junior Assistant highway engineer, New York State. 1928-1931 Hydraulic Engineer, Emprezas Electricas Brasileiras, Rio de Janeiro, Brazil. 1932-1944 Superintendent of Buildings and Grounds, Howard University. 1944-1946, U.S. Navy, Public Works Officer, Lieutenant, Civil Engineer Corps. Pearl Harbor, T.H. 1946, U.S. Navy, Lieutenant Commander, C.E.C. Director of Instruction, Navy Pacific University. 1947-1951, until joining A.U.B. faculty, Professor of Civil Engineering, Howard University. Wrote Technical papers on the "New Power Plant and Distribution Sytem of Howard University", "How Howard University is Training Power Plant Engineers", "Labor Policies of Colleges and Universities" and "Engineering Education at the American University of Beirut". Member: National Technical Association, American Society for Engineering Education. American Society of Civil Engineers.

#### IBRAHIM A. KHAIRALLAH

Lecturer in Engineering Law, with the rank of Professor — Counselor at law, M.A. 1910 A.U.B. Licentié des Droit 1916, Dijon University, France. L.L.B. 1927 Columbia University. Moslem Law at Al-Azhar in 1915 and 1916. Taught at A.U.B. 1904-1909. Admitted to the Bar in New York and Beirut, worked as Counselor at Law since 1915. Helped draft Domestic Relations and Personal Status Law for Protestant and other Christian communities in Lebanon. Started Lecturing at A.U.B. 1949. Former President, Alumni ASS, AUB; Former President, Road Federation. President, Lebanese Road Federation; Associated with International Road Federation. Awarded Order of Merit by Lebanese Government, awarded Order of the Cedar, Rank Officer, 1954.

#### IVAN A. RUBINSKY

Professor of Engineering Research — B.A., B.D., 1910 Kharkov Theological Seminary. Aeronautical Engineer 1915, Imperial Technical School of Moscow, Did design work at the "Dux" Aeroplane Plant. Technical Manager and Chief Engineer of the Moscow Aeroplane Workshops. 1915-1918, Consultant Engineer and Research Associate of the Aerodynamics Laboratory of the Imperial Technical School, Moscow. Member of the Board of Directors of the Central Aero-Hydrodynamics Institute, Moscow. One year (1921) with the R.A.F. in Egypt. 1924-1925, with the Damascus Cadastral Works. Joined A.U.B. Faculty in 1926. 1938-1939, guest Professor at MIT where he did research on Supersonic Wind Tunnels and for which he suggested the use of heavy gases instead of air. 1938-1939, Research Associate at Princeton University, doing work on the feasibility of the use of fiber glass in prestressed concrete. Had scientific publications in the "Magazine of Aeronautical Science" (1939) on his wind tunnel research; American (1951), British (1954), and Spanish (1955) magazines on prestressed concrete research; "Method of Deformating Vectors" in French magazines (1931, 1933); and on "Low Specific Speed Pumps" in "Civil Engineering and The Public Works Review" (1955).

#### ROBERT W. SLOANE

Director of the Experimental and Service Laboratories. — Chartered Electrical Engineer, B.Sc. in Natural Philosophy 1932, Glascow University, M.I.E.E. Towards his Ph.D. did experimental study of ignition of gaseous mixtures by the discharge of electricity between electrodes of low conductivity and experimental study of the discharge between points in hydrogen, 1932-1935. 1935-1944, Member of the Scientific staff of the Research Laboratories of the General Electric Company Ltd., Wembley, England. Patented an E type wavemeter for radar wavelengths. 1939-1944 Lecturer on the physics of radio to members of the Scientific Staff of G.E.C. 1944-1952 British Council Officer, seconded to A.U.B. as chairman of Physics Department. Published several technical articles on the theory of thermionic tubes and an industrial test apparatus for such tubes.



HAROLD W. BURKE



RAYMOND S. GHOSN



NICOLA E. MANASSAH



JACK G. NASSER



KHOSROV K. YERAMIAN

#### HAROLD W. BURKE

Associate Professor of Engineering Sciences — B.S. in Geology 1948, M.S. 1952, Ph.D. 1953, Stanford University, California. 1942-1947 field mapping of Pre-Cambrian schist of East Coast; Paleozoic sediments of Montana; Idaho Batholith; Ardmore Basin, Oklahoma; Kiti Peninsula, Japan; Mesozoic and Tertiary sediments and volcanics of Okinawa; and areal mapping of Western Montana; 1948-49 U.S. Geological Survey on Tertiary Limestone Stratigraphy of Saipan; 1949-53 Chief of Mariana Party U.S. Geological Survey; 1953-54 consultatn on soil mechanics, ground water, and engineering geology in California; March-August 1954, Geologist for Harza Engineering Company on dam site reconnaissance in Jordan. Has several publications

#### RAYMOND G. GHOSN

Associate Professor of Architecture and Structural Engineering — B.A. 1941, (A.U.B.), B.Sc. in C.E. with Distinction, 1945 (A.U.B.), S.M. in C.E. 1946, M.I.T., M. Arch. 1950, M.I.T., — Tau Beta Pi. 1941-1944 Designer, Assistant Field Engineer, Architectural Engineering Offices (Lebanon and Egypt). 1946-1947 Structural Engineer Designer with Architectural firm, Boston, U.S.A. 1947-1950 while preparing for degree in Architecture, part time teacher at M.I.T. (Graphics Department); also worked on visual design exhibits under Prof. Gyorgy Kepes (M.I.T.). 1950-1951, until joining A.U.B. Faculty, Architectural designer for Boston Firm, worked on the designing team of two buildings for Harvard University and Wellesley College; also Critic in charge of Fourth Year Architectural Design, Boston Architectural Center. At A.U.B. contributed the Architectural design of the Agriculture School Building, the Engineering Industrial Laboratories Buildings and the University Farm Buildings. Architect Consultant. Member ACI; Associate Member ASCE, Associate MSAA. Member Lebanese Order of Architects and Engineers.

#### NICOLAS E. MANASSAH

Associate Professor of Civil Engineering — B.A. 1927, (A.U.B.), B.S. in Civil Engineering 1931, University of Michigan. Licensed Surveyor, Government of Palestine. 1927-1932 Surveyor-Engineer with the University of Michigan and the University of Pensylvania on Archeological Expeditions in Iraq and Palestine. 1933-1942 Civil Engineer with the Iraq Petroleum Company in Palestine, Lebanon, Syria and Iraq. Since 1944 has been teaching Engineering at A.U.B. Consultant to a number of firms. During the last three years has worked as Structural Engineer on a number of A.U.B. buildings, including the Agriculture School and the University Farm Project. Participated in the restudy of The Lebanese City Planning and Building Code. Associate Member ASCE, Member Lebanese Order of Architects and Engineers, Member Lebanese National Committee of World Engineering Congress. On a year of furlough in the U.S.A. for studies on Highways.

#### JACK G. NASSER

Lecturer. — Associate Professor in Civil Engineering — Diplome d'Ingénieur Civil, 1938, E.S.I.B. Ingénieur-Docteur, 1948, Sorbonne (Paris University). 1938-1940 Field Engineer and Designer, Société d'Etudes et Travaux (Lebanon) for various public and private buildings. 1941-1945 Municipal Engineer, Tripoli. 1946-1948 Engineer. "Société d'Etudes Considère", Paris, in charge of design of Bridges, Reservoirs, Generating Stations, Industrial Plants, Hangars, etc. Since 1949 Private Practice, Consulting Engineer, Expert at the Courts; Reinforced Concrete design for various Public and Private Bldgs such as the Electric Generating Plants (Joz; El-Bared), the Alliance School, the Bechtel Engineering Bldg, A.U.B., the Lazarieh Bldg, Reservoirs for Public Works Ministry. 1950-1953 Chief of Design and Planning Section, Municipality of Beirut. R.C. of Ministry bldg of Saudi Arabia; Expert of the State Bank of "Credit Agricole ,Industriel et Hotelier". Member Rotary Club, Beirut. Member Lebanese Order of Architects and Engineers and since 1950 member of its Scientific Commission.

#### KHOSROV K. YERAMIAN

Lecturer in Architectural Engineering, Associate Professor — B.A. 1927 (A.U.B.), B.Sc. in Civil Engineering 1930, Lafayette College, U.S.A., 1927-1928 taught Mathematics and Physics in Universal College, Aley. 1930-1931 Assistant Engineer on a reinforced concrete arch bridge and on a coaling station in Penna, U.S.A. Since then has been teaching in A.U.B. while carrying on his practice in Architecture, Engineering, and Contracting in Lebanon and Syria. Over 280 completed projects to his credit covering the diverse fields of residential, industrial, educational, religious, and public buildings, examples of which are the B.C.W., Gerard Institute of Sidon, School of Nabattieh, Cathedral and Seminaries at Antelias, AUB Library, Sanatorium in Azounieh. Worked as Engineer and contractor on bridges, tunnels, buildings, and roads with the Public Works of the Lebanese Government. Member, Aley Municipal Council, Cabinet Member Lebanese Order of Architects and Engineers, Beirut



FUAD L. ABBOUD



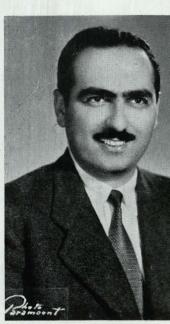
GEORGE ABI-RASHED



SULAYMAN D. DEEB



JACK I. HANANIA



RAJA A. ILIYA

#### FUAD L. ABBOUD

Assistant Professor in Electrical Engineering. — B.S.E.E. 1951 Michigan State University. Honors: P.M.E., E.K.N., Worked with Television Circuit Design, Sylvania Electric Products U.S.A. President, International Club, Michigan State University (1950-1951) — Research on magnetic amplifiers, Syracuse University, U.S. — Associate Member, Sigma Psi, I.R.E.

#### GEORGE ABI-RACHED

Assistant Professor in Mechanical Engineering — B.Sc. in Mechanical Engineering 1948 from ex-Fuad the First University, Egypt. 1948-1949 worked with the ESSO Company in Beirut as Mechanical Engineer for the design of service stations and the calibration of tanks. 1949-1954 in charge of the Mechanical Section at Tapline, Beirut, on projects including Heating, Ventilating, Air Conditioning, Hydraulics, Machine Design and selection, Member Lebanese Order of Architects and Engineers (Alternate member in its Disciplinary Committee for 1954). Worshipul Master of George Washington Lodge 1953-1954, Junior Member, ASHAE. Chess player, winner of the Syrian Bank Club Cup 1952.

#### SULAYMAN D. DEEB

Assistant Professor in Mechanical Engineering — B.A. in Engineering, 1932 (A.U.B.), B.Sc. in Mechanical Engineering 1949, Birmingham University England. 1949-1950 Trained in Refrigeration with J. & E. Hall, Dartford, and in Diesel Engines with Rustom and Hornsby, Lincoln, Lincolnshire. 1951-1954, Worked as Mechanical Engineer with Tapline in Beirut. Member Lebanese Order of Architects and Engineers.

#### JACK I. HANANIA

Assistant Professor in Electrical Engineering — D.L.C. (Hons) 1949, Loughborough College, B. Sc. (Hons.) 1950, London University, Ph.D. 1955, Leeds University. 1949, Vacation Apprenticeship with Ferguson Painin, Ltd., Manchester. 1950-1952 Graduate Apprenticeship with English Electric Co. Ltd., and training with the British Electricity Authority in power generation, transmission and distribution. 1953-1954 demonstrator in Electrical Engineering Laboratories, University of Leeds 1954-1955 Assistant Lecturer (University of Leeds) in Electrical Power, Electromagnetism, Transmission and Distribution; also in charge of laboratory courses in General Electrical Engineering Laboratory and Electrical Machines Laboratory. Graduate Membership, Institution of Electrical Engineers.

#### RAJA A. ILIYA

Assistant Professor in Civil Engineering — B.A. Engineering 1947, (A.U.B.); M.S.C.E. 1949 University of Texas, (Austin). 1949 joined Engineering Division of Tapline, Beirut, worked on various assignments including the survey of the pipeline right of way and its hydrostatic testing, soundings for submarine loading lines, Zahrani Terminal, and oil dispatching. 1952 until joining Faculty of Engineering at A.U.B. in charge of structural group of the Engineering and Construction Division at Tapline, Beirut. Member: A.C.I. and the Lebanese Order of Architects and Engineers.



HAROUTUNE Y. KALAYAN



FOUAD F. KHAZEN



KHALIL M. MALOUF





SHAHAN K. SOGHIKIAN



#### HAROUTUNE Y. KALAYAN

Lecturer in Engineering Sciences, Assistant Professor. — Engineer, Antiquity Dept., Republic of Lebanon B.A. 1931, (A.U.B.), B. Sc. in Civil Engineering 1946, (A.U.B.). With Antiquity Dept. since 1932 except 1938-1942 when he taught at Melconian Educational Institute, Nicosia, Cyprus, 1935-1937 consolidation works on "Crac des Chevaliers". 1937-1938 excavations at Byblos. 1937 delegated to survey and indentify on the map some old Roman villages west of Palmyra. Restoration and consolidation of monuments of Crusaders Age at Tartous, Sahqoun, Sea Castle of Sidon, Beaufort, Djbeil, Tripoli and monuments of Roman Age at Lattaquieh, Baalbeck, Beyrouth, Niha, Kala'at Fakra, Bziza, Mashnaqa.

#### FOUAD F. KHAZEN

Assistant Professor in Civil Engineering — B.A. Engineering 1932, (A.U.B.). A.M.I.C.E. London 1945; (Chartered Civil Engineer). 1933-1936 surveyor, draftsman and designer with the Public Works Dept., Palestine. 1936-1948 Foreman of works, designer, and Assistant Engineer with the Public Works Dept., Palestine. 1948-1953, with Syrian Ministry of Public Works, inspector engineer, Damascus, then district engineer, Hama, and later chief executive engineer, Aleppo. Treasurer, Society of Engineers, Jaffa, Palestine. Member of Society of Engineers, Damascus, Syria. Associate member, Institute of Civil Engineers, London. Member, Lebanese Order of Architects and Engineers.

#### KHALIL M. MALOUF

Assistant Professor of Civil Engineering — B.A. 1941, (A.U.B.), B.Sc. in C.E. 1945, (A.U.B.), D.I.C., Ph.D. (Hydraulics) 1950, City & Guilds, Imperial College of Science and Technology, London University. Prior to joining A.U.B. Faculty of Engineering, Instructor at A.U.B. and acting assistant Oil Movement Controller, I.P.C. Tripoli.

#### ASSEM A. SALAM

Assistant Professor of Architecture. — Baccalauréat 2ème Partie Mathématique 1943, (A.U.B.), Engineering course (1943-1945), Cairo University, B.A. Architecture 1950, Cambridge University. When at Cambridge, President for one year of the Arts and Architecture Society. Worked one year with Architect Lionel Brett in England on the Hatefield New Town. Has been in practice in Lebanon since 1951. Member, Lebanese Order of Architects and Engineers, Member, Moslem Welfare Committee. Member, Committee of the Beirut Museum (Fondation Sursock).

#### SHAHAN K. SOGHIKIAN

Assistant Professor in Civil Engineering — B.A., 1948, (A.U.B.); M.Sc. 1950 Columbia University. 1950 worked with Hirshathal and King, Consulting Engineers, New York, on reinforced concrete structures, apartment buildings, sewage treatment plants and bridge approaches. 1951-1952 worked with Custon Engineering, New York, and was assistant head of the Reinforced Concrete Section. Designed foundations and substructures of metallurgical plants at Marietta and Ashtabula, Ohio. 1952 Consultant Ain Zhalta irrigation project Lebanon. 1953 Consultant, Point IV, Litani River Project. Member, Kasmieh Rural Improvements Council. At present General Manager and Representative for the Middle East, Asia, and Africa for Malcolm Pirnie Engineers, Civil and Sanitary Engineers, N.Y., N.Y. Also Project Manager, Tripoli Sewerage Project. Junior Member A. S. C. E.

#### NAZIH J. TALEB

Assitant Professor in Engineering Sciences. — Sophomore Engineering Aleppo College 1947. B.S.C.E. 1950, (A.U.B.), Certificat d'Etudes Supérieures en Mathématiques Générales 1951, Centre d'Etudes Mathématiques, Beirut. M.Sc. in 1953 and Ph.D. in 1955 in Structural Engineering, Princeton University. Studied Mathematics at Northwestern University during the summers of 1953 and 1954. 1950-1952 Assistant in Physics, A.U.B., also Works Supervising Engineer of A.U.B. new Hospital bldg. Recipient of the Lebanese Engineering Society prize for the best Engineering Thesis of 1950. Former graduate of the Institution of Stuctural Engineers; Associate Member of the Sigma Xi Society.



YEGHISHE M. AVEDISSIAN



ANIS N. DAGHER



NAJ! DEEB



HANE C. FRIIS



NUR A. HAWA







BENJAMIN K. YOTNAKHPARIAN

#### YEGHISHE M. AVEDISSIAN

Instructor in Civil Engineering — B.Sc. in Petroleum Engineering 1951, University of Oklahoma. 1940-1944 taught English, Mathematics, and Sciences at American School for Boys, Baghdad. 1944-1947 Hoad Master of American School for Boys, Baghdad. 1951-1952 until joining A.U.B. Faculty of Engineering, worked as Laboratory Assistant, Junior Driller, Assistant Coments Engineer, and Drilling Statistician with Basrah Petroleum Co., Iraq. Has several publications including "License to Hell" (Poetry), "Petroleum in International Power Politics", and "Holiday for Tears", a novel published in New-York, 1950. Member of Pi Epsilon Tau, (Honorary Petroleum Engineers' Society).

#### ANIS N. DAGHER

Instructor in Mechanical Engineering — B.A., 1951 in Biology and Chemistry (A.U.B.); B.Sc. 1954 in Chemical Engineering, University of Texas (Austin). Associate member, American Institute of Chemical Engineers.

#### NAJI DEEB

Instructor in Engineering — B.A. 1940 (A.U.B.), B.Sc. in Electrical Engineering, 1948, University of Louisville, U.S.A., 1951-1952 took graduate courses St. Louis University. 1940-1943 Instructor Beer Zeit College, Palestine. 1943-1944 Instructor Friends' College, Ramallah, Palestine. 1944-1946 Director Aley National College. 1948-1950 private practice in Electricity, Beirut. 1950 worked for the Ministry of Economy of Lebanon as Electrical Engineer. 1951-1953, until joining the A.U.B. Faculty of Engineering, consultant engineer to various companies.

#### HANS C. FRIIS

Instructor of Civil Engineering; Master in the General Shops — 1949-1951 attended the School of Contractors, Sonderborg, Denmark, and graduated from the Engineering college at Horsens, Denmark, in 1953. During World War II joined the British Army's Security Section. 1943-1954 worked as a joiner at H. Sehestedt-Tonder, Denmark; later did the same job at Carl Trap, Sonderborg and at Sala, Sweden. 1947 worked at Carl Holtz Marstetten, Switzerland.

#### NUR A. HAWA

Instructor — Diploma (Hons.) 1949, College of Aeronautical Engineering, London. National Certificate in Mechanical Engineering and Higher National Certificate in Production Engineering, 1955. 1941-1946 Chargeman of Fitters, Royal Naval Armament Depot, Haifa, Palestine. 1949-1951 Worked with the De-Havilland Aircraft Co. Ltd. 1951-1953 Assistant Foreman, Middle East Airlines, Beirut. 1953-1955 Designer Draftsman with the De-Havilland Aircraft Company Ltd., London. During his studies in England attended several Aircraft and Engine manufacturer's courses; also a comprehensive course at the National Gas Turbine Research and Development on jet engines. Also has the British Ministry of Civil Aviation and the U.S. Civil Aeronautics Administration Ground Engineer's Licences on Aircraft Engines.

#### KANAAN KANO

Instructor in Engineering. — B.E.E. 1952, Rensselaer Polytechnic Institute M.Sc. 1953 University of Illinois. 1952-1953 half time teaching assistant at the Electrical Laboratories in the University of Illinois. Student member of the American Institute of Electrical Engineers. Is on miliraty leave with Syrian Army beginning January 1955.

#### KAMAL I. KHURI

Lecturer - Instructor of City Planning — B.S.C.E. 1953, (A.U.B.), Graduate work in Highway Traffic and Cert. in Highway Traffic 1954-1955, Yale University. 1953-1954 did individual research and study on transportation in the Republic of Lebanon. 1955 until now, Traffic Engineering consultant to the Lebanese Ministry of Public Works. 1955 wrote a research and professional paper on 'Intersection Signal Delay' at Yale University's Bureau of Highway Traffic.

#### BENJAMIN K. YOTNAKHPARIAN

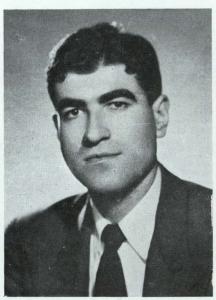
Instructor in Electrical Engineering. — D.L.C. (Hons.) 1950 Loughborough College. B.Sc. in Engineering 1951, London University. 1951-1952 until joining the Faculty of Engineering at A.U.B., worked in the Lancashire Dynamo and Crypto (Mfg.) Ltd. at Manchester, England, on the construction of many kinds of rotating machines ranging from 0.2 KVA to 3000 KVA and from 110 volts to 11,000 volts. Representative of the College Apprentices at the Lancashire Dynamo and Crypto. In Beirut designed the illumination system for the Industrial Institute buildings, and that of the American Community School, School building. At present acting as consultant Electrical Engineer on the electrical installations for the Industrial Institute.



PKEN V. DJANJIGIAN



ARMEN HAGOPIAN



FAIZ J. JIHA



RAMEZ A. SAAB

#### PAPKEN V. DJANJIGIAN

Teacher of Surveying and Allied Subjects. — B.S.C.E. 1952, (A.U.B.), M.Sc. 1955, Colorado Agricultural and Mechanical College. 1952-1953, worked on the Litani River Project with the Foreign Operations Administration in Lebanon. Junior Member A.S.C.E., Associate Member Sigma Xi.

#### ARMEN HAGOPIAN

Teacher of Surveying and Allied Subjects — B.A. in Engineering 1933, (A.U.B.); B.S.C.E. 1954, (A.U.B.) 1927-1929, worked with the Cadastre. 1932, taught at Brummana High School. 1933-1935 did private work. 1935-1938 worked on the Construction of Irrigation Canals at Homs, Syria. 1938-1940 taught at the Gerard Institute. 1940-1941 worked on the Construction of Irrigation Canals in Tyre, Lebanon. 1941-1947, with the British Army. 1947-1953, surveyed the runways of the Beirut International Airport. 1954, joined Faculty of Engineering, A.U.B. Member, Lebanese Order of Architects and Engineers.

#### FAIZ J. JIHA

Teacher of Surveying and Allied Subjects. — B.S.C.E. 1952, (A.U.B.) — M.Sc. 1954, University of California. 1952-1953 worked in the Litani River Project with Foreign Operations Administration as an Assistant Hydrologist. 1954-1955, with Foreign Operations Administration Agricultural Cooperation Service, as Irrigation Engineer. Summer 1951, worked in Building Construction and Bridge Construction with CAT Company in Banias, Syria. Junior member, A.S.C.E.. Member of Cultural Committee and of Cultural and Athletics Club, Bishmizzin, El-Kura, Lebanon.

#### RAMEZ A. SAAB

Acting Operations Chief Engineer — B.S. in Electrical Engineering 1942, Oklahoma University A. & M. 1942-1946 U.S. Army. 1946-1952 owned and operated an electrical engineering and contracting business in the U.S. Published an article on the Possibility of Use of Electrical Power in Early Historical Periods. Member AIEE, Engineers Society, HKN Electrical Engineers Honorary Fraternity, Mathematics Honorary Fraternity.

#### JOHN R. RYDER

Graduate Fellow — A.C.G.I. 1955, Imperial College, London. Student Member, Institute of Mechanical Engineers.



JOHN R. RYDER

#### HALIM D. KHAMMAR

Junior Master in the Mechanical Shop — 1928-1937 attended the Schneller High School, Jerusalem, Palestine. 1937-1953 worked on operations on all types of machines at the I.P.C. Central Workshop, Was in charge of a machine shop and other shops. Worked on metal spraying, pumps, and engines (Petrol and Diesel).

#### ADEEB F. MOUSSA

Junior Master in the Electrical Shops — Has Diplomas in Electrical Specialization from Ecole des Arts et Métiers, Beirut, and E.M.I. Institute, England. 1946-1948 worked as electrician at I.P.C., 1948-1953 became foreman of I.P.C. Electrical Shop in Jordan and Tripoli.

#### PIERRE N. MULLER

Junior Master of General Shops — 1939-1941 Apprentice in Carpentry at Hermann Dossecker, Zurich, and attended the Technical High School. 1941-1946 Journeyman Carpenter. 1946-1952 worked at the Schauspiel-Haus theater, Zurich, as Designer and stage Decorator. Attended Art School of Zurich. Exhibition Designer at Izmir International Fair, Turkey, 1953, and Damascus International Fair, Syria, 1954.



HALIM D. KHAMMAR



ADEEB F. MOUSSA



PIERRE N. MULLER

a charge to the class of 1956

"It is by noble deeds that a man shall prosper in any land".

As you go forth into the world as graduate engineers, I have no doubts as to your technical competence, professional and moral ethics, intellectual honesty or awareness of the evolutionary problems of human society. In these things you, like your predecessors, are solidly grounded.

But you are going forth into the world at one of the most crucial times in all history. Your own area is the center of a vast human drama which can at any moment become one of the greatest of all tragedies in history. It follows that the effect of your activities cannot help but influence rightly or wrongly the trend of events in your area and hence in the rest of the world.

In all things you must remain dynamically true to your professional heritage. Duty — Honor — Country has been the slogan of the professional engineer since the dawn of the profession's history. These words must be taken in their fullest sense and must be taken as one phrase. So taken, it sets a standard which demands the utmost of any professional man. In times like these, the greatest problem faced by every sound professional man is that of being productive and remaining true to his professional code and moral conscience in the face of organized and controlled public opinion.

Every upsurge of the people of any area toward improvement is always accompanied by strong forces which try to pervert, then control and direct this socio-volcanic force. This is why so many justified and well-intended social upheavals end as dictator-controlled police states.

Since engineering is the art of understanding and controlling the forces of nature for the benefit of humanity, and since man is that part of nature which, when acting collectively, is this socio-volcanic force, it is essential that you as engineers make a serious effort to comprehend the elements of man's collective behavior. But in doing so as professional engineers, you must remain objective and treat the matter as any other engineering problem. Only from such a position have you some chance of understanding it and influencing its activity for the long range public good.

You must remember that unfortunately, when dealing with man en masse, it is not so much the truth which is effective as what the mass is led to believe is the truth. There will always be those who for various reasons will try to substitute opinion or prejudice for the truth. Therefore, to Bossuet's statement "There is nothing so terrible as active ignorance", I would add "especially when it is led by perverted or selfish intelligence", because in this, you have the essence of the kind of controlled public opinion which destroys the very civilized soul of any people. Might does not make right, neither does a majority vote indicate anything except the momentary prejudice of the people en masse. It rarely has any connection with truth.

At the turn of the century, Clemenceau in writing about the famous Dreyfus case said, "Courageous men defying tyrants are never wanting in history, but it requires true heroism to defy the tyranny of public opinion".

As things stand today in the world, the shadow of this tyranny lies black across the whole international landscape. If enough of us who live in the world of "deeds" can muster the faith, courage and constancy to defy this monstrous thing, which is largely a creation of those of the world of "words", regardless of under what high sounding or emotional cloak it may masquerade, civilized man has some chance for survival.

As you all know, we here at the School have constantly stressed the need for using all the knowledge you can progressively acquire in some activity useful to your fellow man. We may at times have seemed to stress the importance of this productive use of knowledge beyond its acquisition. If so it is because, to us, while knowledge is power—only the wisdom which comes from the experience of using knowledge for some genuinely good and useful purpose, brings freedom. This is why in the world of "words" you will find men of great knowledge and therefore with great power to sway and lead or mislead the people. But only in the world of "deeds" are there men of sufficient wisdom to properly modulate the use of this power and properly determine and control the direction of its application.

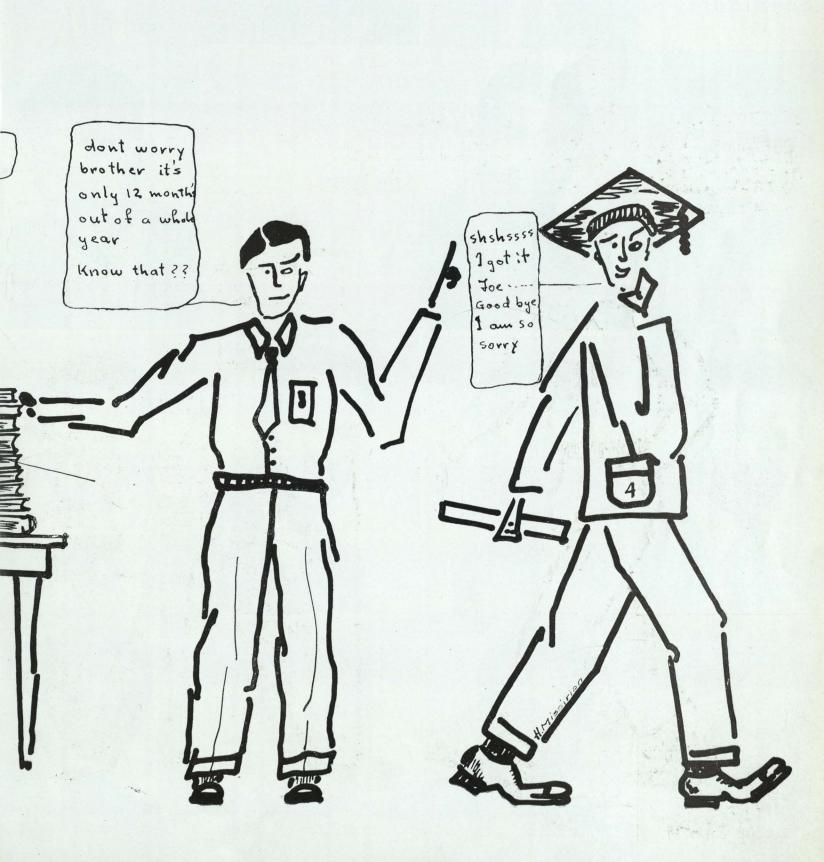
It is from you and your colleagues of the world of "deeds" that this wisdom, upon which the future of the Middle East and the World depends, must now come.

"God be with you and bring success to your worthy efforts".

« اخذ الله بيدكم وكلل جهودكم بالنجاح »

### THE STUDENTS



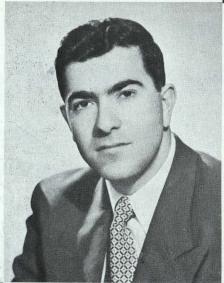


## fourth year engineering

candidates to the B.C.E.



fuad abu-nasr Beirut, Lebanon E.S.S. ( President ). E.S.S. Band.



vahé bakjejian Beirut, Lebanon





munir bulus Haifa, Palestine E.S.S. (Treasurer) Engg. Football Team



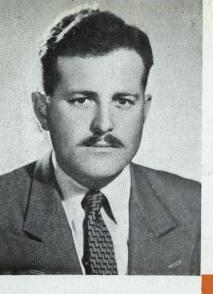
emile fares Mreijat, Lebanon



khayrallah lubbus Engg. Corporation Engg. Tug of War



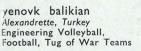
nazim hashwi Homs, Syria



haroutune markarian Aleppo, Syria Engineering and Varsity Football Teams Engineering Tug of War

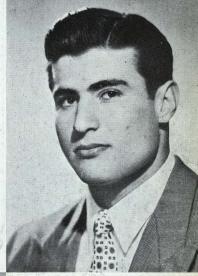


hrair mouradian Aleppo, Syria





george nasr Hamat, Lebanon Engineering and Varsity Volleyball Teams, Engg, Tug of War (Captain)





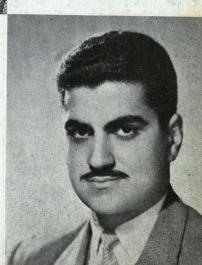
fuad nuwaysir Haifa, Palestine Yearbook Committee



vahan piranian Beirut, Lebanon Engineering Corporation Yearbook Committee Bowling Club (Treasurer)



jean zaydan Jedeidat el-Matin, Lebanon Engg Corporation (President) Engg Volleyball Team



ajaj abul-husn Biticney, Lebanon

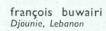
## candidates to the B.M.E.



ilyas abu-saba Miah-Miah, Lebanon



talal afifi Jaffa, Palestine Engineering Corporation





izzudin habib Tripoli, Lebanon Engg. Volleyball Team





salahuddin hashash Beirut, Lebanon

emile jiha Bishmizzine, Lebanon





hovhannes kulajian Aleppo, Syria

tarek kabbarah Tripoli, Lebanon



yusuf matta Burj-el-Barajneh, Lebanon

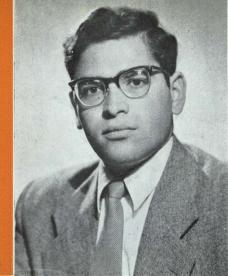




edward naman Haifa, Palestine



mikhael shahin Caftour-Kura, Lebanon



faysal kublawi Electrical Acre, Palestine

Candidates to the B. E. E.

sami kurban Electrical Dhour Shweir, Lebanon International Volleyball Player

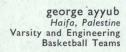


khalid al-musfi Electrical Baakline, Lebanon E.S.S. Secretary Yearbook Committee



Wafic adada Beirut, Leband

Candidates to the B. A. E.





ara bilezikjian Beirut, Lebanon A.U.B. Marksmanship Manager and champion





nadim bulus
Kura, Lebanon
Engineering Corporation
(personnel)
Show Committee



farouk ghorayyib Amman, Jordan Engineering Corporation (Finance)





charles haddad Jaffa, Palestine Engineering Corporation (Secretary)



hagop kitabjian Aleppo, Syria Yearbook Committee Engineering Volleyball Team



ibrahim resek Haifa, Palestine Ooutlook Editorial Board





victor shiber Jerusalem, Palestine Varsity and Engineering Football Teams Captain



# third year engineering





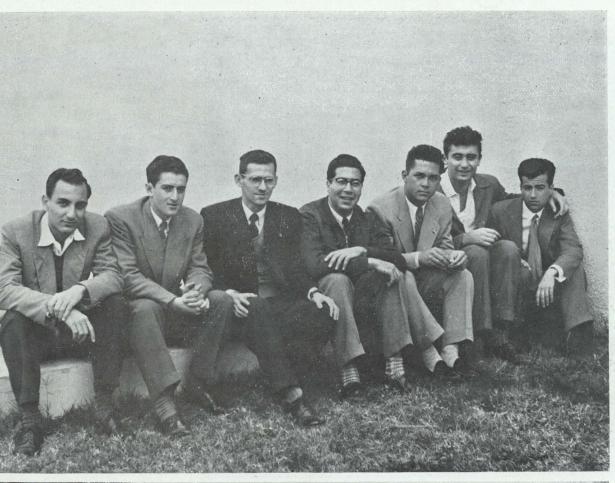
#### CIVIL

STANDING FROM LEFT TO RIGHT adil saad, Beirut, Lebanon Yearbook Committee ryiad salamun Beirut, Lebanou nabih jabbur Hamat, Lebanon ahmad kalash Sidon, Lebanon antun jurjus Duma, Lebanon albert sifri Jafa, Palestine zaki shammas, Jerusalem, Palestine Varsity Football Team, Engrr. Team khalid al-yashruti Acre, Palestine abdul-ghani abu-kurah Amman, Jordan nabih khuri Jerusalem, Palestine isam az-zayn Sidon, Lebanon SITTING FROM LET TO RIGHT theodosius trocholakis Jerusalem, Palestine fuad nasr Hamat, Lebanon mubadda suwaydan, Haifa, Palestine ESS (Vice President), Yearbook Committee charles sifri Jerusalem, Palestine karnik shahinian Beirut, Lebanon zahi rashid Marj-Oyoun, Lebanon onning sinanian Beirut, Lebanon michel awad, Agnascalientes, Mexico ESS (Associate Secretary), Yearbook Committee najm azar Kab-Elias, Lebanon parounag maljian Beirut, Lebanon fuad sallum, Homs, Syria Chess Club (Secretary)

MECHANICAL FRONT ROW LEFT TO RIGHT albert suruji Jaffa, Palestine kamil shabb Sidon, Lebanon berdi manoukian Beirut, Lebanon Samir abu-rahmah, Haifa, Palestine Engineering Football Team guy kilzi Beirut, Lebanon ghassan khabbaz Khartum, Sudan edward rabbat Damascus, Syria muhamed jardanah Amman, Jordan BACK ROW LEFT TO RIGHT mustapha abdur-rahim Jaffa, Palestine michel khudr, Beirut, Lebanon Yearbook Committee john fistere, New York, N.Y., U.S.A. Il Varsity Baseball Team, ESS Band mansur bardawil Acre, Palestine gabriel matta-okam Aleppo, Syria Yearbook Committee usama bayazid Damascus, Syria nader hakimi Kabur, Afghanistan adib talmasani Beirut, Lebanon henry juraydini Beirut, Lebanon ilyas mansur

Beirut, Lebanon ESS Band

varoujan mangassarian Beirut, Lebanon



#### ELECTRICAL

LEFT TO RIGHT

makram dumit Haifa, Palestine Yearbook Committee

edward buri Jaffa, Palestine

marwan atiyyah Bayno, Lebanon

george katul Jerusalem, Palestine ESS Band

basil hakki

Damascus, Syria farouk midani

Damascus, Syria International Basketball Player

raul mizrahi Damascus, Syria



#### ARCHITECTURAL

LEFT TO RIGHT

mikaiel youssoufian Beirut. Lebanon Yearbook Committee

hrair missirian Beirut, Lebanon

vartkess balian Beirut, Lebanon Engineering Basketball Team

bedros adjemian Aleppo, Syria ESS (Member)

fawzi jirmanus Jerusalem, Palestine

bernard hadidian Beirut, Lebanon ESS Band

john kittaneh Jaffa, Palestine

vahe derkhorenian Beirut, Lebanon

georgios mestanas Athienou Larnaca, Cyprus

usama barudi Hama, Syria

charles zakhariyya Jerusalem, Palestine

sakr fakhry Zrarieh, Lebanon

# second year engineering



#### SECTION I

STANDING. LEFT TO RIGHT

naim nasir Acre, Palestine rene taktak Beit Mallat, Lebanon edward kuran Beino, Akkar, Lebanon samir zaynun Zalka, El-Matn, Lebanon abdul masih batri Aleppo, Syria fawzi kawash Meirun, Palestine anis jidawn Bassa, Palestine maadh khayri Ramleh, Palestine yusuf hayik Jaffa, Palestine



BACK ROW. LEFT TO RIGHT

yusuf hybaykah Tripoli, Lebanon sami abbud-klink Bikfaya, Lebanon berj kalaidjian Beirut, Lebanon Engineering Football Team hrant khatchadourian Khartoum, Sudan carol khouri Beirut, Lebanon Yearbook Committee jurji jurayj Rahbeh, Lebanon abdul-razzak mansur Tartous, Syria muhamad khalid Jaffa, Palestine sarkis demirdjian Aleppo, Syria

matheos mahshikian Alexandrette, Turkey



#### SITTING. LEFT TO RIGHT

gilbert saykali
Beirut, Lebanon
ESS (Member)
ruhi sharif
Nablus, Palestine
albert hazbun
Amman, Jordan
Yearbook Committee,
Badminton Club (Secretary)
shamil ayntrazi
Ain-Anoub, Lebanon
suhayl bathish

Nazareth, Palestine Yearbook Committee tawfik khatib

Nablus, Palestine maurice salim Amioun, Lebanon

faik tutunji Amman, Jordan



#### MIDDLE ROW. LEFT TO RIGHT

bisharah murr
Haifa, Palestine
Yusuf kallabi
Baghdad, Iraq
Yearbook Committee
afif jiha
Bishmizzine, Lebanon
michael achdjian
Beirut, Lebanon
haig kasparian

haig kasparian Aley, Lebanon ilyas mazijy

ilyas mazijy Beirut, Lebanon shahe israbian

Beirut, Lebanon

Nazar karacashian Beirut, Lebanon Engineering Basketball Team

FRONT ROW. LEFT TO RIGHT

garbis svadjian Beirut, Lebanon Cnel touryan Beirut, Lebanon antoine aftimus Sidon, Lebanon

#### ARCHITECTURE

LEFT TO RIGHT

faddul shwayri
Beirut, Lebanon
kevork karajerjian
Aleppo, Syria
sabah abi-hanna
Hamat, Lebanon
kevork toroyan
Zahlé, Lebanon
Engineering Baseball Team

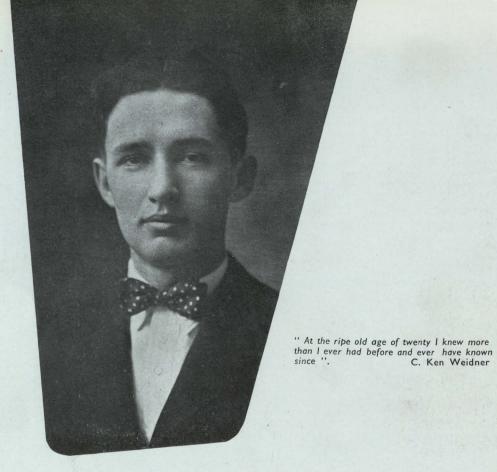
muhammad amin buhsali Beirut, Lebanon Yearbook Committee

diran srabian Beirut, Lebanon ESS Band

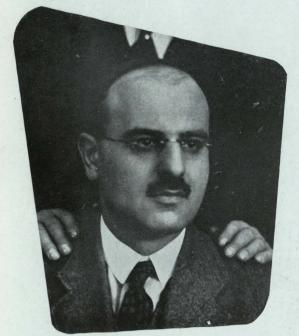
marwan malki
Damascus, Syrla
International Basketball Team



#### nassif robert hakim nimah tumah Moukhtara, Lebanon 4 george burtkush Jaffa, Palestine krikor baytarian El-Husn, Jordad Bassa, Palestine fuad rihani EI-Husn, Jordan Beirut, Lebanon michel jidawn ..adim sayigh Zahlé, Lebanon najib kawar Haifa, Palestine Beirut, Lebanon Amioun, Lebano salim maksud Jaffa, Palestine rizkallah jabr Sidon, Lebanon Bassa, Palestine henry shilazi ayez suayfan Aleppo, ôyria elie haddad engineering 104 97. 100 102. (7) 93. 94. 95. 96 98 66 101 183. krikor jirair yeretzian Beirut, Lebanon Bissan, Portuguese Guinea khalid abdun-nur Souk El-Gharb, Lebanon edward bakjejian emmanuel asmar (A) sami alam-ud-din khatchig piligian edward abadjian nabil abu-haydar (8) Baakline, Lebanon Shemlan, Lebanon antoine mamari bahig bawarshi Haifa, Palestine antoine haddad Damour, Lebanon Baakline, Lebanon Kameshly, Syria chalid al-awar Beirut, Lebanon Beirut, Lebanon Amman, Jordan awni as-sakit michel hilou Beirut, Lebanon atif himada Safita, Syria Mosul, Iraq 6 (2) 8 84. 89. 90. 77. 83. 86. 78. 79. 8 82. 85. 87. 88 80. (3) muhammad fathi kalaf Tulkerm, Jordan muhammad sad kudsi 3 (2) abdu homerus salid polyvios vintiades samit abu-hamzah ahmad abul-hawa Jerusalem, Palestine wa id abu-shakra giovanni vincenti haydar abu-jabir tawfik uwaydah edward akkawi (3) 61. suhayl shahfah Damascus, Syria lezzine, Lebanon ripoli, Lebanon shafik abi-said Amman, Jordan (88) Ismailia, Egypt Beirut, Lebanon Jaffa, Palestine Aley, Lebanon talal kawalit Aley, Lebanon farid rayyis Alebbo, Syria Kerak, Jordan 3 (2) 33 3 73. 74. 62. 63. 64. 65. .99 67. 68 .69 70. 7 72. (%) muhammad fawwaz hratch etyemezian george aghajanian Haifa, Palestine Marjayoun, Lebanon lerusalem, Palestine (3) vahe bilezikjian assadour hajjian Ramlieh, Lebanon Jerusalem, Jordan george nahhas Beirut, Lebanon elie uways Beirut, Lebanon Tripoli, Lebanon ghassan azuri Beirut, Lebanon Beirut, Lebanon Tibnin, Lebanon Amman, Jordan Zahlé, Lebanon Jaffa, Palestine (3) rusuf salman zuhayr bulus munir mur'i raja halazun (E) Aleppo, Syria samir shaul uad munla salim safadi 46. 20. 56. 58 59. 8 49. 5. 52. 53. 54. 55. 57. 60 34 (A) marwan ishak iskandar ibrahim hirru ghattas (38) 60 farid khuri makdisi Jubail, Saudi Arabia Jerusalem, Palestine Nazareth, Palestine yakub madallah (33) (57) lerusalem, Jordan muhamad agha Acre, Palestine Rachaya Lebanon Amioun, Lebanon nikula bikhazi Beirut, Lebanon azmi hajjaj Jaffa, Palestine Beirut, Lebanon fuad kyriakos Beirut, Lebanon Beirut, Lebanon adil abu-nasr Jaffa, Palestine jule iskandar Zahlé, Lebanon john dumyan hassa , ayyad Beirut, Lebanon munir khuri wahib salim saba abdu 32. 33. 34. 35. 36. 37. 38. 39. 40. 4 45. 43. 44. 45. 45 (26) 3 6 mardiros mardirossian Dammam, Saudi Arabia amin salim-hammud yervant nahabedian umar tahir ibrahim lerusalem, Palestine john warwar Ramallah, Palestine Ras Kifa, Lebanon Amioun, Lebanon (25) hanna makhluf faysal mutasim Bikfaya, Lebanon Nabatieh Lebanon alfred rizk Haifa, Palestine Beirut, Lebanon Beirut, Lebanon samir isa nasif Nablus, Jordan Acre, Palestine abdallah said Sidon, Lebanon Feheran, Iran loseph safar michel rizk 30 john ubayd samir alami awni masri Irbid, Jordan 9 22. 24. 25. 26. 27. 28. œ 6 20. 23. 89 44 ibrahim abu ayyash Hebron, Jordon Kumatiyyah, Lebanon Jerusalem, Palestine ghalib abu muslih hagop boyadjian Beirut, Lebanon haig kistosturian Dairen, China Zghorta, Lebanon hatim ghunaym Jaffa, Palestine Damascus, Syria william haddad El-Husn, Jordan Haifa, Palestine michel dahdah nabil al-khatib samir jahshan Jaffa, Palestine suhayi haddad Beirut, Lebanon sadik al-hanna Jaffa, Palestine munir hawwa mamun diyab Aley, Lebanon (7) nabil akrah ali jafar 4: 4. 5 9 œ 6 0 2 3 15



# WHEN



I. Khairallah



N. Manasseh

"I wish I could be twenty again so as to sustain a rightful ambition backed by hard work that is to contribute more fully and efficiently to fellow men's welfare in this part of the world". K. K. Yeramian



"Those years! — What ideals! Hopes! Ambitions! Illusions! When the powerful current of life brought each to his different shore and reserved destiny, the light of those years very often continued to guide and to illuminate the path through time". Ivan Rubinsky



" At twenty : a student.

To-day : still a student and how much more to learn ! ". Raymond Ghosn

### THEY WERE 20



" Training to handle students at AUB!". Walter Baggaley

AMERICAN UNIVERSITY OF BEIRUT

BE IT KNOWN THAT

BE IT KNOWN THAT

FACULTY OF THE

FACULTY OF

ENGINEERING HONORS

ENGINEERING HONORS

ENGINEERING THIS CERTIFICATE

THEREOF

AND IS AWARDED THE EVIDENCE THEREOF

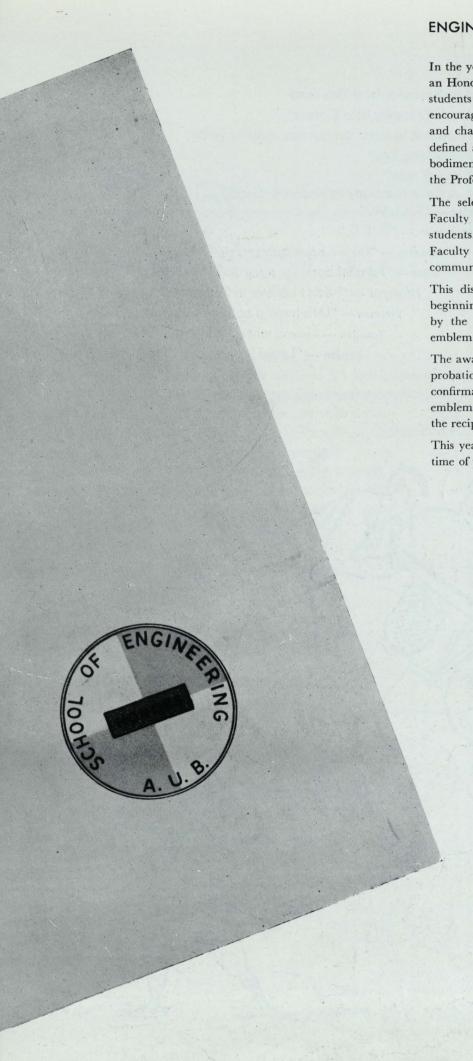
AND EMBLEM IN EVIDENCE THEREOF

GIVEN AT BEIRUT, LEBANON
DAY
THIS

Chairman of Honors Committee

Dean of School of Engineering

OF



#### ENGINEERING HONORS

In the year 1951-52 the Faculty of Engineering has established an Honors award to be conferred on Final Year Engineering students «in recognition of outstanding achievement and as an encouragement to sustained effort towards high scholarship and character development. In this instance, scholarship is defined as academic accomplishment and character as the ambodiment of those moral qualities which are true attributes of the Professional Engineer».

The selection of candidates for this honors is made by the Faculty of Engineering without solicitation on the part of the students. The selection is based entirely upon the collective Faculty observations of the curricular, extra-curricular, and community attitudes and activities of the candidates.

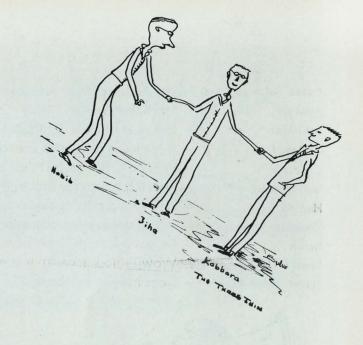
This distinction is conferred upon regular students at the beginning of the last term of their Final Year and is recognized by the award of an engraved certificate and a distinctive emblem for personal wear.

The awarding of the emblem, prior to the commencement, is probationary. The certificate awarded at Commencement is a confirmation of the successful termination of probation. The emblem then becomes the unqualified personal property of the recipient.

This year's honors award har not been decided upon at the time of printing of this issue.

### CURTAIN CALL

Abu-Nasr Fuad - Last ambassador from Zulu land Bakhjejian — Author of "Economy as a Career" Balikian — "Ce n'est pas la force qui compte, mais la vérité" Boulos — "Daddy long legs" Fares - "The tall man" Hashwi — "Love is a many splendored thing" Lubbus — "P. O. W." Markarian - "D. I. D." Mouradian — "Do we have quizzes, sir ?" "? مين بيشارط على Parallel bars "?" مين بيشارط على Nuwaysir — "I don't believe in free hours" Piranian — "Let's have a coffee at Sam's" Toutjian - Now... where! why! when! Zaydan — "I paid half a pound for "service", and the teacher didn't show up !". Kurban Matta Nasr





Abulhusn: «Nehi» kit is very keasy to be kunderstood..»

Abu Saba: «From Plato to electronic syphons, I know all the answers»

Afifi : Baghdad, city of a thousand delights and cadillacs..

Buweyri : Bless them all, and Mar Maroun above all.

Habib : Unstable equilibrium, body tips south-east when nose points north.

Hashshash: No comment! Isn't his name enough?

Jiha : Wanted by the Gandourma, dead or alive.

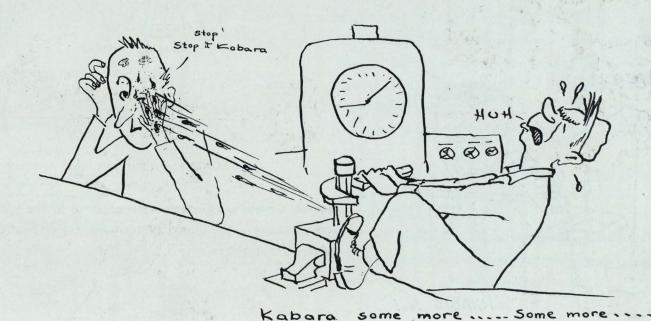
Kabbara : «I'm-so-handsome, you can't resist mi-look»!

Kulajian : «Hovhannes el-Halaby», yawns by the dozen — aren't classes a bore?

Matta : Tell us a story. Pleasel pleasel end it.

Naman : «Be careful with Water Power, I'm ticklish...»

Shahin : Industrial Institute's envoy extraordinary at the Engineering School.



Adada (with papilion) - The Architect from Ashrafiye.

Ayoub — Marhaba George ! Girls lock your doors !

Belizikjian — The most eminent contradictor of Soviet Russia. Heil Hitler! Shoot!

Boulos N. - If silence is silver then speech is gold

Ghorayib — I am an engineer. Isn't that a joke? Now, who is going to build my house?

Guiragossian — Boys! It is time for brake! He! He! He!

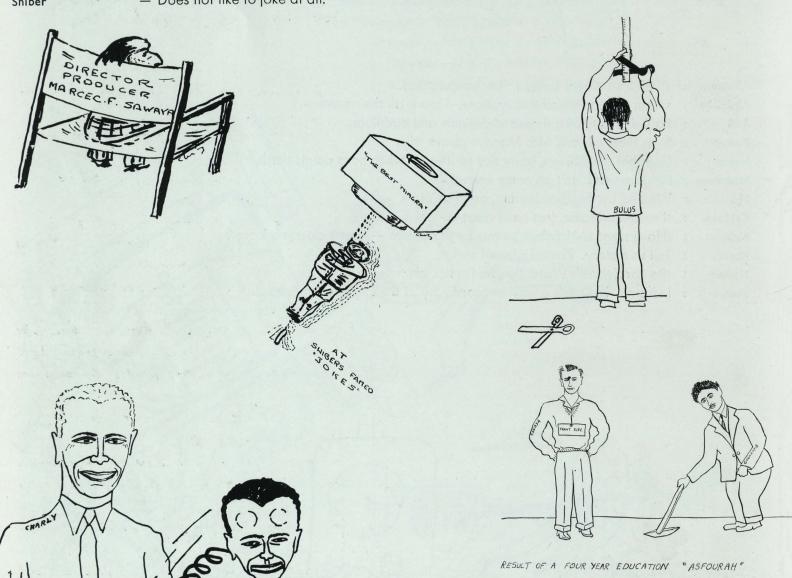
Haddad - PHD in Aircrafts operations. Army consultant for issuing military communiqués. Over!

Kitabjian — Why I always win discussion? Very simple. I never stop arguing.

Resek — I'm just a little gi'l from Dom'nica, Dom'nica. I live on the wrong side of the world.

Sawaya - Wow! Stop teasing me, wla tosht!

Shiber — Does not like to joke at all.

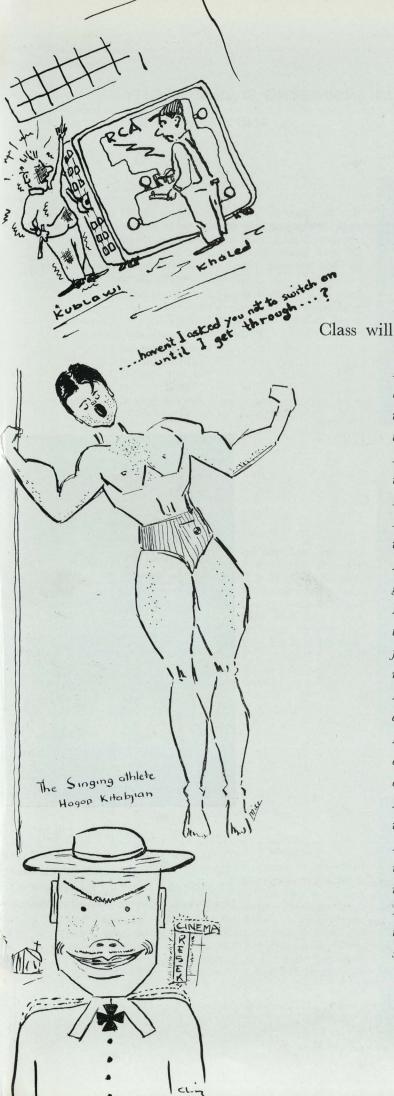


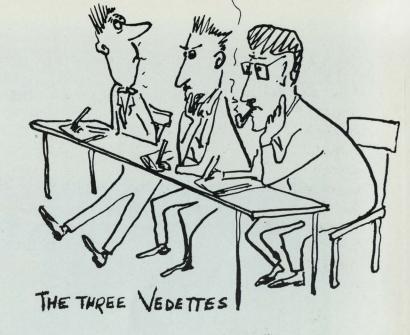
Al-Musfi, Kublawi and Kurban — three-phase in the classroom and a neutral on the board . Which one will the neutral bless.. «Mish akhouk ana?»

KHABIS No.1

presents

KHABIS No.2





We, the members of the 1956 Fourth Year Class of the School of Engineering, being mentally sound despite any sarcastic remarks made by our teachers, and as physically sound as can be expected after our vigorous work in athletic classes, do will and bequeath to our successors the following — our best loved possessions:

Item 1: we leave our well-rounded outlook on life and our almost worn-out motto, "Work and lots of Play".

Item 2: our stubborn tenacity in face of all arising crises.

Item 3: our appreciation of "moving architecture", be it skirts waving uphill or short-clad figures on the neighboring green field.

Item 4: we leave our nerves of steel sharpened by four years of diligent attendance to Saturday quizzes.

Item 5: we, the humble victims of the "autumn hair" disease offer to similar God-forsaken students the advice and perscriptions collected from various specialists and over a long period of experiment and research.

Item 6: we, the architectural class, bequeath our "mobile-hanging" craze initiated on poor unknowing slobs.

Item 7: we, the fourth year class, leave our patience and perseverance acquired through the years when not all our wants and desires were accomplished overnight.

Item 8: we leave our well-earned indifference to vacations and relaxive weekends.

Item 9: alas, we "funny-faces" leave — our drafting room with its flashy red walls and the clacking high heels of Miss Salman across miles of polished green tile.

Item 10: and lastly, we leave our devotion and votes of gratitude to this beloved school and its faculty and the hope that all the rest of its students share our appreciation and high esteem.

#### THE A.U.B. ENGINEERING STUDENT SOCIETY AND ITS ACTIVITIES



#### members of the cabinet

president : fuad abu nasr

vice-president: mubadda suwaydan

: khaled al musfi secretary

: munir bulos treasurer

associate secretary

michel awad members : bedros adjemian

gilbert saikali



This year's ESS Cabinet has acted much the same with Zulu land Abu Nasr as President, Fingernail Suwaydan for Vice-President, Akhouk Ana Musfi taking the minutes helped by Amigo Awad, his Associate Secretary. Munir Bulos counted the money. The cabinet is not complete without Monsieur Saikali and Poster Adjemian. The fruits of its labors are in the next few pages, both in words and in pictures.



THE HUNTING CLUB

To relieve the pent up energy of the Engineering faculty and students, the ESS has started a hunting club under the management of Gilbert Saikali. This year, hunting will be restricted to Lebanon though it is hoped to extend it to Syria during the coming year.

#### BALL COMMITTEE

«Yes, sir, I'll say it again and again. No ball will ever be a failure with those boys on the committee! How can you expect a failure when busy man Suwaydan, Maestro al-Musfi and french educated Saikali from the ESS with Outlook's Rezek, Junior Dumyan and me representing the different classes.

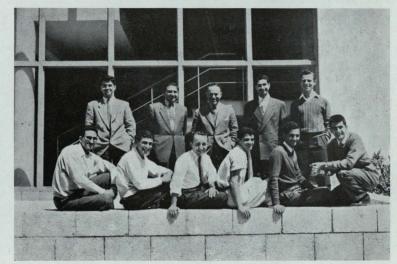
«Yes, wait and see, once the whole team starts to work with the cooperation of the students then all you have to do is hold your breath till you enter the Ball Room and you'll wow!!» — Shorty Sawaya.

John Dumyan Khaled Al Musfi Ibrahim Rezek Gilbert Saikali Marcel Sawaya Mubadda Suwaydan (Chairman)



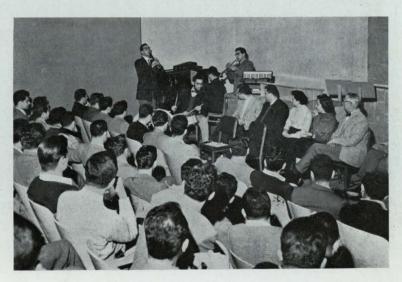
#### SHOW COMMITTEE

With M. Awad as Chairman those who have taken on the job of putting up a Target Show this year are S. Alami, M. Bardawil, M. Bulos, N. Bulos, J. Kallabi, C. Khuri, M. Khodr, I. Rezek, M. Sawaya and J. warwar. As a change from the usual variety show, a Parody of Shakespeare, both in Arabic and English, is to be attempted with the committee members forming into sub-committees to divide the work. J. Haik, S. Haddad, H. Ghunaym, S. Kudsi, A. Masri, J. Matta, S. Safadi and T. Kuwalit as members of the make-up committee have quie a huge task awaitting them.



#### ESS BAND

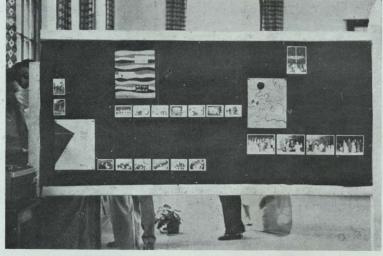
When you hear the ESS Band, you'll know it was meant for dancing. Fuad Abu Nasr is the clarinet man while George Katul blows the trumpet. While they are resting between sets, George Nahhas with his accordeon keeps them dancing. Diran Srabian warms the piano keys while John Fistere handles the drums. Ilyas Mansur, the original drummer, played with them until December, Fuad and John will be leaving at the end of this year but there will the be nucleus of a new ESS Band come next September.

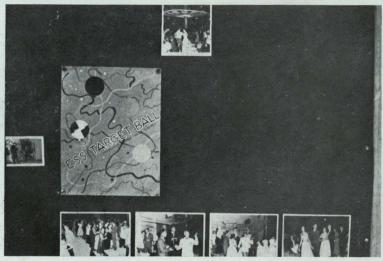




#### AUB New Students' Reception

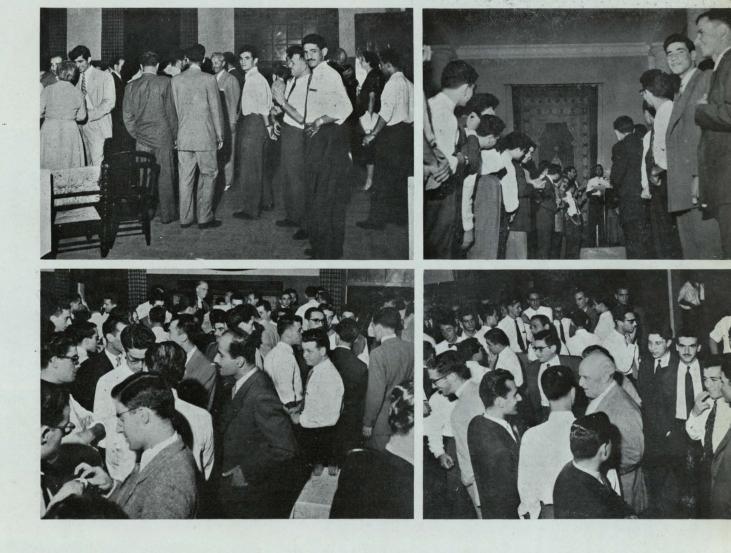
Like various student societies on the campus the ESS was asked, in October 1955, to help in putting forth an exhibition of student activities to which new AUB students could be lured by a cup of tea and cakes. The ESS was the only school student society represented and its display of photographs was well attended by a large audience which also listened to recorded music on the ESS recorder, part of which was supplied by the ESS band.





Engineering New Students Reception

The big day for the first year students this year was Tuesday, 25th October. They showed up at the West Hall Common Room all dressed up to be presented to the rest of the Engineering student body and to have some refreshments.







#### ESS PARTY IN SCHOOL

The ESS held its first evening party on Saturday 11 February 1956. The idea of the cabinet behind these small informal gatherings is the encouragement of the student's sociability and relaxation after a hard week of study. The ESS is trying its best to make these gatherings like home parties where all attendants sit in one group and dance with every one present from 20:00 to 24:00.

So far, the parties have enjoyed a great success.

#### ENGINEERING RECEPTION SUCCESSFUL

The ESS held an informal party on Saturday evening Nov. 21. in Wes Htall Common room. Girls from AUB and BCW and engineering boys were arranged in circular groups to give them a chance to get acquainted.

The first item on the program was a general knowledge contest conducted by Marcel Sawaya and Khaled Musfi. Then the Engineering Band took over for the rest of the evening. Tea and cakes were served, after which the enthusiastic dancing was resumed. Several dance features were enjoyed such as the balloon dance, the pacing game and the samba train. At 11 p.m. the party came to an end with a hearty rendition of Alma Mater. Escorts were at hand for the girls to return home.













#### ESS Skiing Trip

The E.S.S. sponsored a skiing trip to the Cedars on Sunday Jan. 22. Two busses left the Medical Gate at 6:30 and BCW at 7:00 a.m. loaded with Engineering students and friends

The Cedars was reached at 11:00 a.m. Everybody spread out: some on skiis, some on toboggans and some on their own feet. Snow balls, and snow men were soon all over the place. At 4:00 p.m. the bus leaders had to round up their passengers from a cosy restaurant and some cosy dancing. Beirut was reached ot 7:00 p.m.

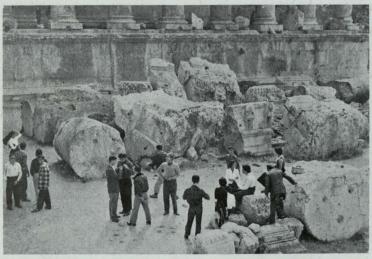
#### ESS TRIP TO BAALBEK

On Sunday, October 20th, the ESS sponsored a trip to Baalbek. AUB and BCW girls had been invited on the "first come, first serve" basis. But when alarm clocks rang early on Sunday morning everybody woke up to be confronted by pouring rain. Even with such a discouraging omen, at 7:30 five busses carrying AUB boys and girls were on their way to BCW where they picked forty additional College girls.

The climb by way of Dhour-el-Chweir was most gay and pleasant.

12 o'clock saw the whole group at Baalbek ruins. Then satisfied but hungry, everybody proceeded on to Ras-el-Ain where they had their lunches under the thicket shade by the waterside. After lunch, some set up targets and had rifle-shooting contests. Others took strolls in the quiet meadows adjoining the spring. At 3:00 the students were on their way to Zahle and the Bardawni where, to escape the riverside chill, they all lodged to a snug little café. There they had warm refreshments and danced to their hearts' content.

Around 5 o'clock, the ESS party started on the way home — warm, happy, and very, very tired.











#### ESS BALLS

On December 10th the ESS opened the season with its Target Christmas Ball. Right from the ball tickets, made up in the form of rocket flight tickets to the moon, one was given the feeling that he was being prepared for something special and out of the ordinary.

Done up to represent the moon, West Hall Common Room could hardly be recognized or disappoint anybody for that matter. The dance floor on the south end was bordered on one side by Mr. Muller's ceiling high flat depicting far-distant earth, planets and stars seen beyond a three dimensional moon landscape of craters and stark tree branches. Spotlighted weird faces all over the other walls looked down upon the dancing couples.

The adjoining volley ball room was done in black and white with abstract and semi-abstract drawings representing impressions of space travellers. Royal blue, red and orange nets, hung low, completed the effect giving an uncanny, exotic, and yet completely intimate atmosphere.

Cecil and the Boys, featuring «Andrus» of the Corsair, supplied the music and Mr. Mardell of the Boarding Department, the refreshments.

Another ball is being planned for May 12th to take place somewhere off-campus with all sorts of innovations to raise it to a still higher standard with many students helping, as usual.



















#### ESS GENERAL KNOWLEDGE CONTEST

The traditional school spirit of friendly competition was manifest in the three sessions of this year's ESS General Knowledge Contest. Aside from the usual fun and benefit of such contest, it served the purpose of helping the organizers choose the ESS team for the All University General Knowledge Contest.

Contrasting with the usual procedure followed in other general knowledge contests, Mr. Y. Avedissian, quiz-master, asked the questions on a team basis, each question getting four points if answered completely. The second year team made the winning score of 56 points, closely followed by the First Years with their 55 points. Engineering IV, after starting out well, ended np third place but still ahead of the lagging Third Year team. Z. Haddad, S. Tawil, D. Srabian, A. Hazbun and A. Mansour made up the second year team; F. Makdisi, R. Jabbur, S. Hanna, M. Gedeon and A. Hajian, the first year team; and F. Nuwaysir, S. Toutjian, N. Boulos and Ch. Haddad, the fourth year team. The third year team underwent two complete changes.

Challenged by WSO, ESS hoped to take a forward step in establishing male superiority at AUB in a General Knowledge Contest, held in the West Hall Auditorium.

It did not work out quite that way. The competition was very hot and ended in a tie. Under quiz-master Prof. Cecil Hourani, our brave team was made up of N. Bulus, Z. Haddad, F. Makdisi, and S. Toutjian.



#### AUB GENERAL KNOWLEDGE CONTEST

One of the teams to participate in the All University General Knowledge Contests was that of the ESS. The contests are arranged on the double elimination basis in which a team has to lose twice before being knocked out.

The first round against the Natural Sciences was held on the 27th of March with ESS coming out the victor. The second round against the Agriculture Students Society on April 13th was not so fortunate and ESS was soundly beaten but that still left it another chance at time of printing.

The ESS teams for the first round was D. Srabian, S. Tawil, Z. Haddad, S. Toutjian and F. Makdisi with Professor Melikian as quizmaster while the second round team had S. Tawil, N. Boulos, M. Awad, F. Makdisi and C. Haddad with Professor Scott for quiz-master.









THE TEAM THAT WAS PLACED SECOND

#### ESS AUTO RALLY

Edward Naman won first place in the first ESS sponsored Rally Paper. The record he set was 1 hour 34 minutes. Second and third places went to R. Salamoun and H. Juraydini. The fourteen cars that participated had their justifiable quota of thrills and excitement although speed was limited to 45 km per hour only. This experimental race organized by N. Boulos and M. Awwad started from the medical gate and covered only Beirut and its suburbs. Each car was required

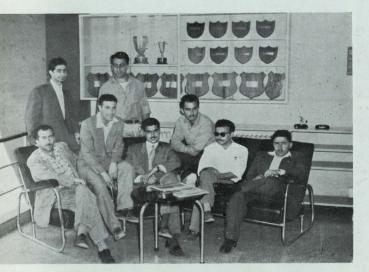
to contain two Engineering students, one of them driving. The participating cars were first asked to fetch two shaving kits in order to qualify for the opening word puzzle. Altogether there were fifteen other puzzles which ended at Uncle Sam's.

Another Rally which will include all A.U.B. is contemplated for May and will cover a larger portion of Lebanon.

THE WINNING CAR







#### THE AUB ENGINEERING STUDENT CORPORATION

#### EXECUTIVE COMMITTEE

Jean Zaydan Chairman Charles Haddad Secretary Vahan Piranian Security Nadim Boulos Faruk Ghorayyib Khayrallah Lubbus

Personnel Finance Research and

Sami Kurban Talal Afifi François Boueri

Development Production Promotion Control

«Hey . . there! . . . We have a Corporation meeting. Call the boys.»

The word is passed. A glance at the drafting room, a glimpse at the milk bar, and most of the boys are up in the Lounge. Meeting. Where? All rooms are occupied. Someone says Milk Bar. Another one Faculty Room. No. Suggestions rejected. Secretary Charles Hadda dcoming from a reconnaissance tour with good news: «Operation successful, Room 401 empty. Let's go!»

We're in. So what? President Jean Zaydan hasn't shown up yet. Most propably he overslept and could not catch the car from Jdaydeh on time. No there he is, walking

down the hill, in a slow, leisurely manner.

-«Good morning. I am sorry, gentlemen. You see, I was late so I took a taxicab to come on time, but, you see, unfortuately the taxi ran out of fuel so we were delayed you see. I hope you understand».

«Sure, sure, ma'lesh!»

«Meeting is called to order. Let the Secretary please read the minutes»

Marshall Haddad starts reading his usual military communiqué, stressing every word and putting the accent where it should not be: «The Engineering Student Corporation held its meeting on Wednesday at 8:30 sharp. Security officer, Vahan Piranian, raised the questions of students shouting in the corridors. Upon deep discussion and thorough arguing about the matter, it was decided by the executive members of the Board of Directors that Security Officer Piranian and Promotion Officer Afifi will take immediate action for preventing and stopping any further misbehaviour of the students in that line and in that direction, and will thereby be entitled to report any student seen or caught doing such a deleterious and abnoxious action. And it was hereby declared. . . . .»

Crash! Boueri is coming in, a sandwich in one hand, a cigarette in the other.

«. . . . and made known to all that the members of the executive committee will not accept nor tolorate that. . . . .»

Footsteps. Three knocks at the door. Sheikh Abdallah Al Sabbah Faruk Ghorayyib steps in furtively, wiping his lips with a handkerchief, his mouth still full with the fourth cake he had swallowed before leaving the milk bar.

Minutes are approved. We pass to the agenda: 1 — Sports Activities. 2 — Students' Lockers. 3 — Juke Box in Milk Bar. 4 — Atomic Exhibition.

Khayrallah Lubbus eports that Professor Sloane has not approved the idea of the Juke Box. Major reason: electric power is not sufficient in the Milk bar. Sami Kurban electrical advisor: «Sorry - no comment». Discussion is closed on the first point. Time is running short. Someone suggests to pass the remaining to the Personnel Mana-

ger to handle them. Suggestion approved by majority.

Nadim Boulos «Wait a minute! I protest. . . »

Meeting is adjourned.

Yes, meeting is adjourned. Yet, believe it or not, the class of 1956 has done quite a job this year. It has succeeded in making the students feel their responsibility in the school and to the school. It has tried to convey to all, the true professional attitude and practice of an engineer.







The Engineering Corporation organized the contribution of the Students in ushering for the Atomic for Peace exhibit at the Unesco.

#### yearbook coommittee editorial board of 1956

Khaled Al Musfi Michel Awad Suhayl Bathis Amin Bohsali Makram Dumit Albert Hazbun Avedis Guiragossian

Avedis Guiragossian

Joseph Kallabi

Hagop Kitabjian

Carol Khouri

Michel Khodr

Antoine Maamari

Gabriel Matta

Youssuf Matta

: Layout Manager

Apprentice Graduate section

: Associate Layout

: Apprentice Manager

: Assistant Editor

Apprentice Photgrapher

: Assistant Treasurer

: Treasurer

: Manager

: Assistant Photographer

: Assistant Gaduate section

: Apprentice Treasurer

: Apprentice Layout

: Apprentice Editor

: Assistant Layout

: Associate Manager

: Assistant Manager

: Manager Graduate section

Photography Manager

Hrair Missirian Edward Naman Fuad Nuwaysir Vahan Piranian Adel Saad Mubadda Suwaydan

Mubadda Suwaydan : Editor
Mikhaiel Youssoufian : Assistant Layout



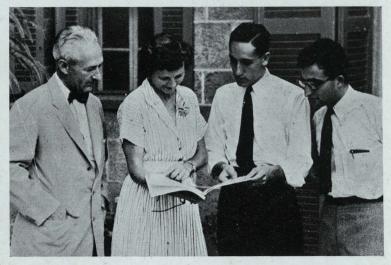
#### THE YEARBOOK COMMITTEE

Just like in previous years, the Yearbook has become larger and better and will continue to be more so, year in year out. Its growth has been matched by that of a more enthusiastic clientele, no longer made up of students and Faculty members only. An increased demand for Yearbooks has been coming in from graduates who want to know what is going on in their old school. They also want to know what is happening to their old classmates. Thus the Yearbook has added to its Managerial, Editorial, Layout, Photography and Treasury sections a new Graduates section, to cope with this increased demand.

The committee has never been prompt in meeting press dead lines. This year, the call to help the earthquake damage survey has made things still more difficult. Yet the press has brought this issue of the Yearbook out on time. The Committee wishes to thank the press for going out of its way to accommodate it.



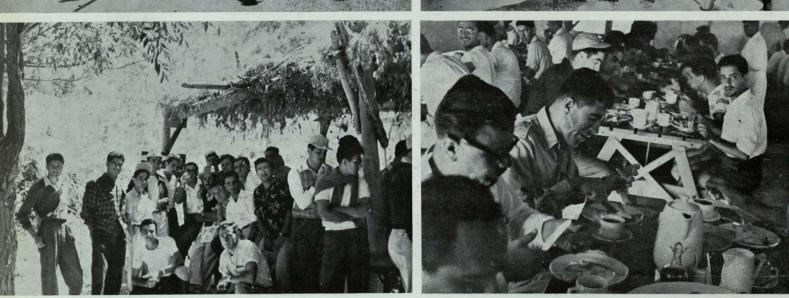
TO ACTING PRESIDENT ZURAYK



TO MRS. S.B.L. PENROSE — THE BOOK WAS DEDICATED TO THE MEMORY OF LATE PRESIDENT PENROSE

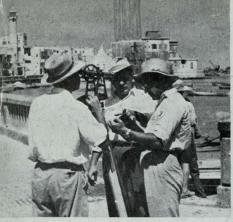
















#### SUMMER CAMP

The camp of 1955 showed a few more touches of civilization than it did in 1954 - gravelled pathways, an office, organized food, and hot water! In spite of all those improvements there was no integration of the 2nd year, the 3rd year, and the TVT students. They existed as three separate groups. This may have been caused by the fact that each of the three groups started and ended their summer work at different times.

Everybody remembers the grapes, figs, and the numerous other fruits that were all the more sweet because they were swiped. Tripoli, its movie houses and Arabic Sweet shops especially, remember the students who went there on Wednesday, Saturday and Sunday afternoons and evenings.

As far as sports were concerned the Camp team was beaten by its last years rivals, the C.J.L. in both Volleyball and Basketball.

The success of the 1955 camp is proved by the memories which will be cherished by those who attended it.

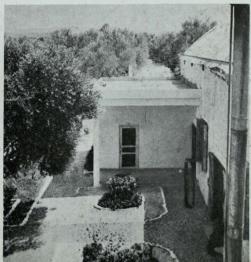














#### THIRD YEAR OUTSIDE WORK

The old B.S. curriculum calls for a summer of outside work for every student between his third and fourth years to try and get him to see the practical side of his profession. May 1955 saw the present fourth year students hammering away at the lobby typewriters, finishing their application letters to various companies asking for work during the summer. Six succeeded to land with jobs somewhere in Europe while the rest stayed in the Middle East, mostly with CAT. Be it in the sweltering heat of the desert or among fellow workers of the opposite sex in cool Belgian factories—it was called "experience". Some had a hard time trying to adapt themselves to life at 50° and going from their room to work and then back again after eating something that passed for food, while others had easy hours, union wages, and the conventional finishing tour of Europe to boot.

Kabbarah, Kublawi and Mush enjoyed themselves in Belgium, Kurban and Midani in Holland. Haddad, Kulajian, Markarian and Mouradian worked in Syria. Abu Nasr, Ayyoub, Azar, Bulus M., Buwayri, Jeha, Lubbus, and Zakhim, sweated it out in Qatar. Balikian, Bakjejian, Bilezikjian, Bulus N., Fares, Guiragossian, Hashshash, Kitabjian, Matta, Shahin, Shiber and Toutjian stayed in Beirut. Ghorayyib went to Jordan and Naaman to England. Iraq had its share in Abu Saba, Abulhusn, Afifi, Habib, Hashweh, Nuwaysir, and Piranian, while Adada, Nasr and Sawaya saw Kuwait.



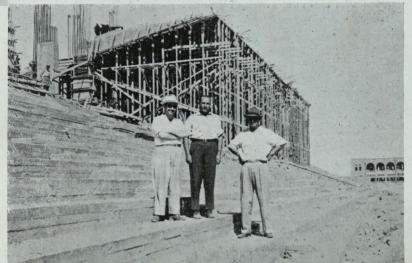












#### QUALIFYING MONTH

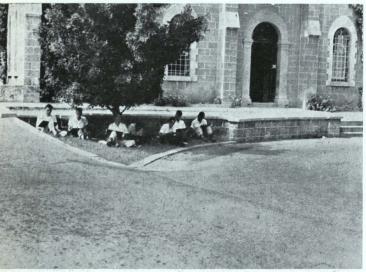
"Good Morning, Gentlemen! As future Engineers, you should be prompt ... 7:30 ... not 7:29 ... not 7:31 ... "Well, what does he think we are! human beings or watches! Any way, this was our first contact with our future Dean; and surprisingly enough during the thirty days that followed, not one of the 120 students came late to class. We were immediately dog tagged; and just think of the poor fellows who forgot to take off their numbers when classes were over, and simply went home tagged. I, personally, have never been in a concentration camp before, but I can tellone when I see it; well, this ... wasn't one ... because in such a camp, first, you don't pay

and secondly, they feed you. Everybody knew that the best policy was to do his best and forget about the rest in theory, shops, or athletics, but we could not help but tremble under the firm and dictatorial orders of Mr. Khammar; his 16 points one hour speeches we had to take every week, standing after a swallowed lunch, hearing about files, saws and oh!... "the combination set" were simply ... thrilling ... we were moved to tears. I never knew that such instruments could be talked about for hours and hours ...

Once a week, we had 3 hours athletics, given by Professor Tarabulsi in person. He had to fill a sheet on which, from direct observation, he had to deduce from our sportsmanship on the field and from our way of shooting a basketball or dribbling down the court, the following things: honesty, cooperation, integrity, morals cleanliness, courage, self respect, imagination, creativeness, artistic feeling, etc... Briefly, we never had a more exciting time, in a more frightening way...

farid makdis







#### LECTURES AND FILMS

Thanks to Professor Baggaley's efforts and the IPC's cooperation. Engineering students were given the opportunity to attend three lectures this year. The attendance was sparse but the lectures were good. These were:

«Tank Loading and Tank Farm» on December 2, 1955, by Mr. J. Daher.

«Petroleum Refinery» on April 12, 1956 by Mr. G. Khalife, «Transport by Pipe Line» on April 19th, 1956, by Mr. A. Burley. A most interesting lecture on T.V. was held on Saturday afternoon (Jan 14) at the Bechtel Bldg. Lecture Hall. Through the courtesy of Bulus Bros. and the PYE Co., a whole system of cameras and receivers was installed and operated to illustrate the lecture. Engineering students and a large audience of guests had the pleasure of appearing on a TV screen for the first time in their life.

Films were also offered as suppliments to the courses of Sanitation, Water Supply, Metallurgy, Concrete, Transportation, and Descriptive Geometry among others. Most of them were of an obligatory nature, so attendance was a little less sparse.

#### MUSIC DEPARTMENT

The Engineering School Band, and with it a more organized musical activity at the school, was born exactly three weeks before the 1954 Target Show. It started by some inquisitive person wanting to know why there was no band to accompany the show numbers. Nobody seemed to know the answer to that, and before anyone seemed to realize what was happening, practice had started. Doctor K. Malouf stepped into the role of pianist with a band consisting of a clarinet (F. Abu Nasr) a trumpet (G. Katul), two violins (Hadidian and Takhtajian) and a drum (N. Nassar). The show was a great hit and the Band got special praise.

From that moment onwards musical activity has gained momentum. A second hand piano was bought this year and inaugurated during a Wednesday meeting in which the Band presented a musical session. Several other Wednesday meetings this year have been dedicated to music. To top it all the ESS Eand has become in great demand for private dances.

#### CHESS

If one missed his stool in the draughting room, which was often, all he has to do would be to take it from a group watching a chess game in progress somewhere. It would invariably be found there. This chess craze among engineering students is in evidence in the lounge where chess boards clutter up the tables. To organize the rivalry between the different students and classes Professor Abi Rached and Mr. Abadjian have announa tournament between the four classes to take place during the month of May.





#### MONDAY AND WEDNESDAY ASSEMBLY MEETINGS

Wednesday meetings this year began and ended with the usual noise. This sometimes resembled some tune or other, and was occasionally accompanied by Srabian on the piano.

The talks were mostly the same old story of either the project or of the students' summer experiences with the interesting parts cut out. The group that was most interesting were the Architects or, at least, some of them. Marcel Sawaya dissected a fellow architect; Ibrahim Resek gave a Glenn Miller audition. The "Horrors of Communism" were dwelt upon by Ara Bilezikjian. Of the others, Haroutune Markarian railed at the Dean's List people for not joining the football team and Vahan Piranian spoke of his adventures while surveying the earthquake damages. Not to be outdone, the ESS Band inaugurated the piano in a "mixed" session.

A very well-received talk on "Scientific Curiosity" was given by Mr. Bunting, (industrialist, engineer, past President of ihe U.S. National Association of Manufacturers and presently Chairman of the Executive Committee of the President's Commission on the Employment of the Handicaped) passing through Beirut.

Here are a few exerpts from the various talks:

"Why? Why is this man talking? It took me sometime to discover the true answer to this. Why is it that IV year students have to talk in Wednesday meetings? Well - as silly as it might sound - they have to talk in order to show that they can talk, to show that they can stand up and talk in front of a difficult audience, an audience of students it does not take much to distract. It is not easy to talk in public for someone who is not used to it. From the minute you stand up to the minute you sit down, you feel as if you were in a bad dream, a parched throat, weakness in the knees, sometimes a slight fever and always, yes always, a sudden loss of memory. However; it isn't enough to stand up and talk. There is something far more important than saying words, and that is to convey the words you are saying to your audience. To have them feel what you want them to feel; to have them think the way you want them to think; in other words to make your speech become a part of them. This is what makes the difference between a good speaker and a bad one ..... If you want to be a good leader, you ought to be a good speaker. Leadership is the art of making your aims become the ideals of other People. This you cannot acquire with money or with guns. This can only be achieved by your speaking abilities. The best way to learn to speak is by speaking, and that's why IV year students have to take the floor every Wednesday morning..... nadim boulos

"Engineering students work among the hardest in the University but as one sees, they also are the ones that produce amongst the most, whether in extra-curricular activities or work assigned to them..... Gentlemen, Engineering students can do all these activities because they use every single free hour they have ..... Time is valuable, more than you can realize at present, but I am telling you this out of experience. The best solution is to work out a schedule for your studies and your activities..... We don't want you to stay all the time in your room not knowing what is going on around you.... We want you to know how to stand on your feet and reply to any question whenever and wherever you are asked. We want you to know how to behave in society and not stumble when you speak. We want you to know how to speak and befriend the opposite sex and not get all the blood pounding in your face by the first glance at a girl. We want you to be an athlete because there is nothing better than an able body .... You can't learn how to do all these things except if you mix and join in all activities that are within your reach without endangering your studies..... Memorizing is not good because, once you start it, you stop thinking, you start doing all the silly mistakes that you would not do otherwise. Engineering needs understanding and not memorizing. That is why most of your quizzes are open books. Understand the theory and do not try to memorize the solution of specific problems because in understanding the theory, with a little thinking you can solve any problem..... munir bulus

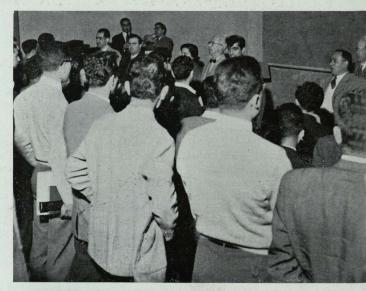
"I have often wondered what we will find if we dissect a 4th year architectural student. Maybe then we will be able to define him: Just behind the eyes, an autographed picture of Professor Ghosn; close to the heart a bundle containing a T-Square, a drawing set of pencils and a set of triangles. Near the ears a tape on which is recorded an uninterrupted four hours lecture. Then in the front part of the head a petition signed by the students asking earnestly to adjourn the date for giving in the due problem. In the rear-rear part of the

head an illegible statement by Professor Ghosn saying that from now on all problems will have to be given on time; and right at the bottom of his sub-conscious a piece of balsa wood, an exacto knife, colored canson paper and a pair of scissors. The accepted definition of the 4th year Architecture student as one who works with colored papers, cuts balsa wood and makes only two quizzes on Saturdays is not so inaccurate but it does not go far enough. How would you define a student, who spends his Sundays proclaiming his career is the best in the world and spends the rest of the week complaining about it! Who proclaims that he and only he is the one to have a sense of beauty and yet changes whatever he has done because a passer-by said that it is not so inspirational; who loves to hear that he has contributed most in the decorations for the ball or the show, but is reluctant to be in charge to do it again. Who complains about the courses he studies and whom every teacher complains about, who keeps on adjourning problems but who in the end does more work than was scheduled.....

" Professions like nations can only flourish thru an individual sense of cooperative responsibility "... I may say that your grades at school do not count more than 10% of the engineering career you are dreaming of .... It is your performance and work with people later on that are important. People will judge you and grade you according to that. They make out of you the failure or the good engineer.... It is not a rule that those who are good at school will be good in their profession, many instances show the contrary .... To make good engineers you ought to be brave, morally brave. You should have the courage to stand up and say what is right and what is wrong... As all of you know the definition of work is Force times the Distance moved. You may have a great force, the knowledge and ideas, the qualifications you have a gathered in these preparatory years. But if you lack the motive power, the courage that makes your force move to others, to produce useful work for you and for our country, then these qualifications are wasted .....

nazim hashwih

marcel sawaya





Gentlemen, I will talk to you this morning about my experience last summer when I went to work with the Bell Telephone Manufacturing Co., in Antwerp. Belgium, with two of my friends: Mr. Khalid Musfi and Mr. Tarek Kabbara.

In the first place we were doubtful whether we would be able to do any job that would be assigned to us as efficiently and as quickly as a trained worker would. This problem, in general, faces every third year student when he goes out to work with some firm in the summer between his third and fourth year.....

We spent the first day of our work making a tour around the different departments, shops, and laboratories. But the more we saw the more we got upset about the kind of work we were to do and whether we would be able to get along with it or not.

Actually, this problem ceased to exist after we began the work; in the meantime we realized that there is essentially nothing to worry about. Once a young engineer is in the heart of the problem trying to solve it or following instructions intelligently with the help of the supervising engineer, and with all the background he had at school, he will be able to tackle the problem very successfully. He needs very little time to master a job which takes an ordinary worker several months of training...



It is rather a wonderful experience to get to know the workers, live with them, share their problems and understand them, see how they try to solve them, the way they look to their superiors and how they try to show that they know better than any body else in the company about the kind of work they are handling! sometimes they even boast that they know better than the engineer. Many times we had to watch a dispute between a worker and his superior about a certain type of job and many times the superior was wrong, but he was using his position and rank to supress the inferior worker. It is also quite an experience to try to talk to somebody who does not understand your language, i. e. you do not have any language in common. Sometimes you would find it necessary to use your engineering drawing skill to express yourselves; if this fails to make somebody understand you, you will find yourself resorting to your hand and making gestures with them which may be misunderstood. faysal kublawi

The successful school plan is one which achieves a sort of a tri-lateral balance among the forces of three great factors so inextricably fused that they form a kind of trinity, a three-inone consideration dedicated to make the school the most effective possible for the schoolchild in the teacher-pupil relationship of the school life. The three are : education, environment,

and economy. The structure must (1) facillitate to the greatest possible degree the educational methods and the curricula by which that process is controlled; (2) provide an environment of maximum desirability for pupils and teachers engaged in the learning process; and (3) achieve both these ends, harmoniously within the limitations of the community budget. First, let us take education. In one sense, space is the common denominator between architecture and education. Education requires certain kinds of spaces and equipment to carry out its function; architecture involves the ways and effects of arranging and inclosing these spaces. Therefore, if the aims of education are to be facilitated by the school plant, planners must know these aims and have some idea as to the kind of spaces and equipment needed to carry them out.

The next consideration of this approach to planning schools, is the physical enclosure of the pupils and the process. One of the most important jobs that the architect has, is the design of this enclosure - or envelope - a building cover which will provide physiological comfort to the pupil as well as afford educational efficiency.....

The last leg of the tripod is economy and the length of the leg depends on how much money is available for the building program. Invariably, after programming is complete, school planners find that this third leg is very much shorter than the other two. This leaves two alternatives: (1) to get more money, or (2) to make certain compromises in educational and environmental requirements..... hagop kitabjian

God, give us men! A time like this demands
Strong minds, great hearts, true faith and ready hands;
Men whom the spoil of office does not kill;
Men whom the spoil of office cannot buy;
Men who possess opinions and will
Men who have honor, men who will not lie.
Men who can stand before a demagogue
And damn his teacherous flatteries without winking!
Tall men, suncrowned, who live above the fog
In public duty and private thinking!
For while the rabble with their thumbworn creeds
Their large professions and little deeds,
Mingle in selfish strife, lo! Freedom weeps,
Wrong rules the land, and justice sleeps.

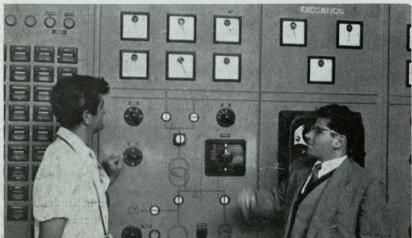
os quoted from josiah gilbert holland by elias abu saba

















#### TECHNICAL TRIPS

The Engineering School Faculty does not believe that an education consists of reading textbooks or of laboratory work only, but of travelling throughout the country and seeing how the principles studied in class are applied. It chooses to call these excursions 'technical trips'. Many industries have sprung up, but relatively few students know of them, let alone visit them — these trips try to remedy this defect, too. Trying to find a way of giving the above mentioned trips an official standing, the faculty has hit on the idea of tagging them onto the various courses as supplementary laboratory sessions, and, in keeping with that status, the Mechanicals and Electricals of the Fourth Year, the Mechanicals and Civils of the Third Year, and the Second Year students have ventured out on a number of technical trips.

With Professor Baggaley as chaperone to see that his boys did not get into any mischief, the Fourth years visited the Nahr El Bared, Chamoun, and C.E.B. power stations, the Tapline at Saida, Medico, Kassardjian Foundry, and some Gold Storage Plants — Kassardjian's Foundry was also visited by the Third Year Mechanicals where they studied the production of "The Best Niagara" with Mr.Dagher. Two Transportation field trips and one Sanitation field trip were what the Civils of the Third Year went on this year.

The first Transportation trip was to the Araman Factory of reinforced concrete pipes, the only incident worthy of note here was Professor Khazen's traffic violation which resulted in his receiving a ticket. The second was to the Autostrade construction site and its excavations. Dbayyeh and its water works were the aim of the Sanitation trip arranged by Professor Hope. This included a side visit to the Beirut City Dump. The Chekka Cement Factory, the Dbayyeh works, soap factories, hydrogeneted cottonseed plants, the Polycarpos workshops, a flour mill and a number of power generation stations were subjected to the Second Year students' scrutiny. Some of those trips were made during their summer camp period while the others were accomplished during the year with some of the professors.

Mr. Hawwa took his first year students to the Beirut International Airport workshops to see rivet making and testing. On the whole, these technical trips serve their purpose and are throughly enjoyed by students going on them —















football team (above) and basket ball team

#### SPORTS

That Engineering students have rendered a very good account of themselves this year both in intermural and outside sports is proof of Mr. Friis' excellent coaching and the Corporation Athletics Program.

In the major league the Basketball shield is ours and the Engineering team is having it out with the Arts and Sciences team over the Football shield. Two games have ended in a tie inspite of a referee playing against the Engineering team in the second game. A third game is pending. Baseball gave our team an opportunity to show up well while our boys got to the finals in Tug of War. The finals Volleyball game is to be played against the Aggies and we have a very good chance of winning it. The tennis courts might as well be called the Engineering Tennis Courts as you hardly see anybody other than Engineering students playing on them— In the air pistol shooting George Katul beat Professor Tarabulsi's record and another Engineering student came within five Points of it. Thefourth years are not having the same luck as they have had in the past years in the Minor League but are being hard pressed by the first years who have run away with the football championship and by the third years whose share of the loot has been the basketball championship. The fourth years have retained the tug of war championship and have to play one more game with the first years to determine who is best in volleyball.

Saturday sports include twenty minutes of swedish exercises and then two periods of swimming, football, fencing, rifle shooting, tennis, baseball, or basketball. Much of the credit of the Engineering winning streak this year goes to this sports program. May 5th will see the Engineering field day which will

be a kind of proving ground for the AUB field day where we hope to wiu.

Not to be belittled are our staff's efforts against other staff and outside teams.

In spite of our victories, one of the salient features of any game we participate in is sportsmanship and fair play even though we might be playing the referee or umpire as well as the opposing team.

tug of war team

volleyball team

rifle shooting team

tennis team















#### THE EARTHQUAKE

Around the end of March, the 3rd and 4th year civil and 3rd and 2nd year architectural students volunteered to work at the request of the Ministry of Public Works in surveying the damages caused by the earthquake on March 16.

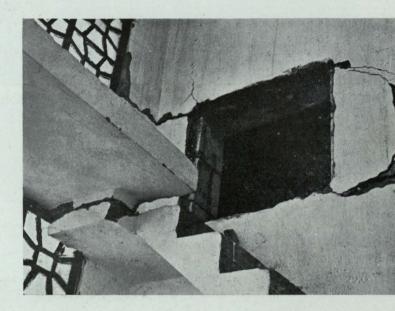
Two engineering students and one guide from the ministry formed a team. At 8 every morning, the teams reported to the ministry, received their assignments, and left Beirut in cars provided by the government, to the ruined villages. There, the different mayors showed them the damaged houses and they made a report on each.

In nine days, 50 engineering students inspected the damages in more than 10,000 houses in Metn, Shouf, Beka' and the South. Meanwhile other students on the waiting list joined the Red Cross in its task of distributing food, shelter and clothing to the victims.

Following the earthquake Professor HaroldW. Burke made the following statment: "After studying the earthquake area with the valuable assistance of Mr. Harutoune Minassian it was apparent that the movement causing the earthquake occurred on the Roum fault approximately at Kaitouleh. This fault runs approximately North-South along the western edge of the Lebanon Mountains. Most of the damage was due to poor construction. Dry masonry structures are the worst type for earthquake areas.

Landslides set off by the quake caused much of the damage, even far from the center where no buildings were damaged directly by the quake. Some of the villages, Chehim for example, should be moved since they are located on permanent slides.

Other structures were badly hurt because they were built on deep soil rather than rock foundations. A portion of Joun was destroyed because of this. Joun is also an example of a village hurt because it was built on a fault along which earthquake waves were reflected and intensified ".





#### TRANSLATION OF A LETTER ADRESSED TO DEAN C. KEN WEIDNER

In appreciation of the great efforts made by the engineers and the students of Engeneering III and Engineering IV at the American University of Beirut and Ecole Superieure d'Ingenieurs, the Minister of Public Works expresses to them all his sincere thanks and deep appreciation for their good services in surveying the buildings damaged by the earthquake of 16 March 1956 and hopes that this letter will be considered as a personal expression of thanks to each one of them individually.

Minister of Public Works
Signed: EMILE BOUSTANI

Beirut, 16 April 1956





## الى مرتفع ا...

فهو للاحباب اضحى مرنعا وبروحي افتدي ما جمعــا ترك الجسم وخلى الاضلما كم عب فيه صب الادمما وتذكر قلبي المنصدعا قد كفاه في الدوى ما لوعا بعد طيب الحقل الا بلقما قرب ذاك النور قف مختشما ولها نور بقلبي سطعا

حى عنى ذلك المرتفعا جمع الحسن على الوانـــه كم فؤاد فيه هيان وقد كم محب فيه القي روحه قف به ان زرنه یا صاحی قل له يا ذاك كم لوعته هجرسلمي لم يدع من نفسه واذا شاهدت نورًا ساطعا ذاك نور من سليمي اول

تلك اشعاري فاقرأ مقطعا من سليمي حسنها فاندفعا اغا في خلق سلمي ابدعا في حسابي صار وقتاً ممتما ذاك يوم من حياتي ضيعا و اجملن من قبلها لي مصرعا احذت للحب منى مرجعا فجنيت المر لما اينما لقى الجنة والنار معا. .

ايها القائل اني مدع انا ان غنيت شعرًا هزني خلق الله الورى مثل الالى ان يوماً قد اراها دونه واذا م وما شاهد تصا رب لا تجمل عاتي بعدها کی اذا مت وعاشت ظبیتی قد زرءت الحب في قلبي فتي واذا الصب نفاني في هوى ً

اسامہ بارودی 57' class ( حزيران ١٩٥٢)



STUDEMTS' MUSINGS

### Tragedy

The most noble thing that can befall any man is Tragedy. It sharpens the mind, quickens understanding, refines the senses, enlivens the soul, purifies the emotions, deepens the thought, creates meaning for what seems to be meaningless, replaces dullness by wisdom, generates a sense of responsibility towards one's self and consequently towards the outer world, in short, it transforms pigmy into giants.

Tragedy offers two and only two alternatives: the way of death, annihilation, extinction and corruption and the way of life, true, magnificent, pure,

clean, powerful, creative, refined, humble, a life that shines into the other darker, sadder lives.

Tragedy gives confidence, grafts strength onto weak souls, burns away the spoiled, childish manners of boyhood, instills a deep sense of helping others who have been inflicted by a calamity. It is only tragedy that creates men of flowing creative power and strong leadership.

Tragedy has innumerable forms and unlimited ways of knocking at peoples doors.

In the physical realm, it was the tragedy of deafness that transformed Beethoven into the giant of music. It confronted him with its challenge of life or death. For a while he seemed to have chosen the way of death, defeat, submission - as the Heiligenstadt Testament proves; but later he changed his mind, and as his Fifth Symphony very eloquently reveales, he chose the way of victory, eternal life, and greatness. It is outstanding that a man who could not hear one singe musical note could have put down for posterity a lot of the most beautiful passages there are to listen to. In the spiritual form, the most refined and divine example we know of is that of GOD atoning for the weakness of man. It was motivated by a deep

sense of tragedy for the decline of mankind morally and spiritually.

Joseph Kallaby class '58

# طلائع الربيع

اذا ما نبسم الحفل ازهارًا ' وتنفست الازهار عبيرًا ' وسرى العبير طبيًا يدغدغ العذاري ويسكرهن ' فخرجن يجرحرن الحفر ويتمثرن بالحياء يحدوهن امل بلقاء الحبيب . . . وأذا ما اخضل النرجس وأغرورقت عيونه فبكي فرحًا بانتصار الحماة . . . واذا ما شاركته الاشجار فرحته فاتشحت باجي ثوب' وازدانت باحلي الازاهير' وتعطرب باطير الشذى . . .

واذا ماشعرت بالدف. يدري في جنبانك وبشعلة الحياة تستعر في قلبك ' وبفيض من البشر يغمر كيانك ، وبالسعادة تلف ما حولك. . . عد الرزاق منصور 58' class فاعلم انه الربيع!!

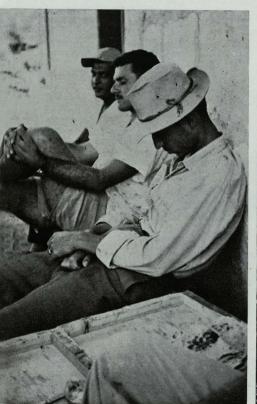


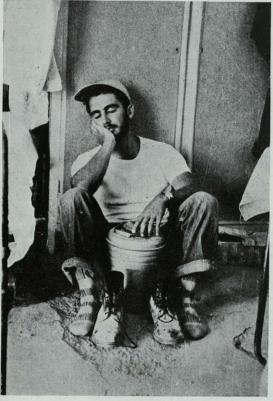
# شراء الهاور! ...

للحب عندي في القلوب الزاويه اقسمت حبك لا يزور قوافيه اعشقت ?! حبي جارف لكنه يسمو بنفسى عن نفوس باليه نسج العناكب للخيوط الواهيه تنساب ولهى في الغرام كانصا عن بـــذل نفسى في بيوت الغانيه الحب عندي قيمة اسمو جا نفسي مجنحة الغرام ' من الاثير دماؤها ' ومن النجوم ترابيــه

في العز بعض من نداء الهاويه ومشيت في درب الشموخ فهالني وضحيج عربدة الرياح العانيه ورأيت في نفسي انحدارًا صاخبًا وصراخ وحش في الوحوش الضاريه ولحيب غانيـة تحن الى اللظى من خمر حبك في الكؤوس العاريه فرميت نفسى في اللذاذة راشفاً الى الشفاه الثاثرات الصاديه هاتي الرحيق من الشفاه المترعات · من احتراقي واشتهاء العاصيه! هاتي الرحيق الي من زبد الطيوب

وركضت اعلق في شفير الهاويه! وتركت عزي والسمو على الثرى فيصل قبلاوي 56' class





و بغير تلك النار قلبك يظلم آلحب نار في فؤادك تضرم واذا خلوت فانت ميت معدم فاذا عشقت فانت حي مسعد كذابة من خلق من لاينهم» قيل الهوى عار فقلت «عبارة والخيرمنه حللوا ام حرموا فالحب دين والسعادة دونه يا عاشقاً اني عليك اسلم

class '57 اسامه بارودی

ذكرى وامل

يامن احبو عاش في دنيا الحوى

عاد اثر يوم مثقل بالهموم والتعب ليسجل ومضة لاحت في ساء حيانه ثم ما لبنت ان للاشت فكأضا لم تكن. امسك بقلمه وفي عينيه بريق امل باسم وفي نظرانه شرود ، ثم انطلق القلم يُعذي جَذُه العبارات المحمومة :

« هل تذكرين ? لا اخال ذلك ' فما خلقت الا للنسيان ' اما انا فذكرياتي تمر نباعًا حتى ليختلط حلوها بمرها ' وهي في نظري سواء لانها قطعة مني. . . انه اصيل يوم من ايام الربيع وقد رأت الشمس ان تأوى الى مخدعها ٬ فاودعت في وجهك احمرارًا انقدت له وجنتاك .

ولكن ما بال الوجه البرئ وقد بدا لغزًا مستعصيًا ?

او لماذا ابدو عاجزًا عن حل طلاسمه ? عهدي بالسهام تطلقها العيون ' فما بال ثفرك وقد هم باطلاق سهم لست ادري مكنون طياته . . اخشى ان يحمل السم القائل وقد ذكروا بانه كلمة ( لا ) . أن كانت هذه الكلمة اليتيمة القائلة هي ما اردت قوله ' فليس لي الا إن إحاول تخفيف وطأتها، حتى لتبدو وكأخا بلسم شاف لأثَّفن الجرام . . .

اني كالظمآن تلهب قليه سياط الظمأ وهو في طريقه الى النهر ' ومع ذلك فانا اخشى بلوغ النهر لاني ان بلغته ارتويت وعندها تصبح حرقة الظمأ وقسوة السياط ذكرى ' وثني باني لا اقبل لحبنا ابدًا ان يمسي ذكرى » .

وهنا افاق على نفسه فقام وقد ارتسمت على وجهه ابتسامة يعرفها من عانى كابوسًا مزعجًا في احلامه ' عــاد وكلمة ( نعم ) تتراقص في مخيلته ' للك الكلمة الهادئة التي ظن النحا ستحيل حياتها الى نعيم مقيم . معاذ الخيري 58' class

# EARTHOUAKE DELIEF



OUR THIEFS OF BAGHDAD

# APRIL 7?

WHY OF COURSE!

EVERY ONE KNOWS IT'S THE ...

W.S.O. BALL

Come and enjoy the dancing.

Come and see the decorations, created uniquely by engineering boys.

will It Be: King? Queen? Couple? Smartest Dancers? Sports Personalities?

### **PLUS LOTTERIES:**

MAJOR PRIZE: ROUND TRIP TO CAIRO PLUS 34 OTHER AWARDS

### CAPITOLE HOTEL

TICKETS L.L. 5 PER COUPLE
Tickets at West hall and at Capitole Ballroom door



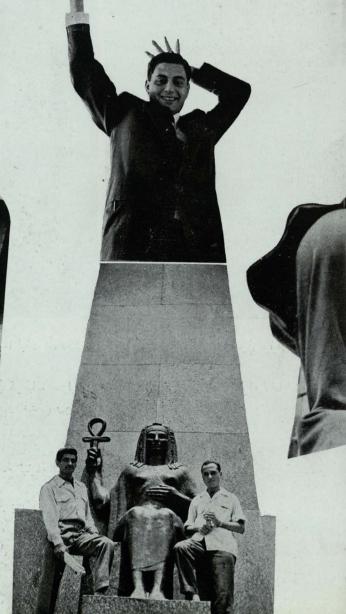
IT MUST BE SOMETHING CAPTIVATING !



GOD! THIS ENGINEERING !!!



CAPTAIN VIC

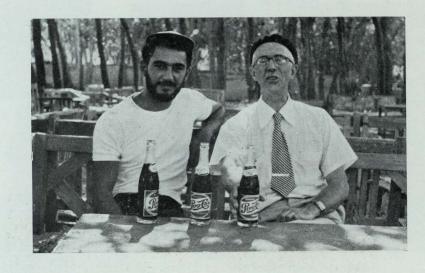


FROM PHARAOHS TO LIBERTY



#### I HEARD THAT:

- 1. Professor Sloane is going to offer his oldfashioned Prefect car to the ESS and buy a 1956 convertible Cadillac.
- 2. Professor Yeramian was going to publish his memoirs; however, all editors contacted have refused, because they could not decide in what language it is to be written.
- 3. Professor Abi-Rached has been able, at last, to get hold of a servant-maid for the family. Thanks to Khayrallah Lubbus.

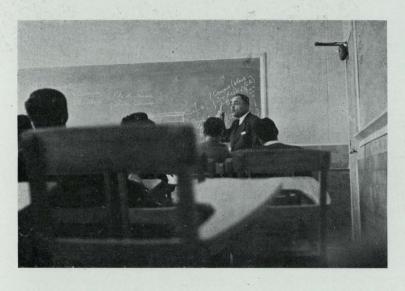


- 4. Professor Ghosn has cut down his daily working hours to 17-1/2. After all one has to enjoy living.
  - 5. Professor Burke has ordered a new pair of shoes from the States. No local shoe-maker had enough engineering knowledge to design the cantilevered part to resist bending.

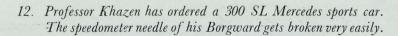
- Faculty members are going to elect Mr. Mustaches 1956. Professor Baggaley - Mustaches à la Douglas - has got much chance. Professor Ilya and Mr. Musa withdrew when outsider Mr. Saab declared himself candidate. Professor Bridgwood was appointed by his colleagues of the Electrical Department to represent them in the contest but he immediately stressed on his best Oxford accent and said: "Jee! Wizz! Darn it, chaps! I won' be part of it. Ma wife won' let me. Ya better pick another chap!".
- to Cambridge. He will prepare a thesis on «English as spoken à la Française». Meanwhile Professor Rubinsky will be preparing another paper on «Russian as spoken à l'Anglaise».
- 8. Mr. Avedissian is going to rewrite the Sanitation course. Everything concerned with the under-waist will be omitted.

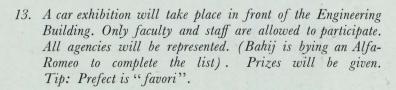




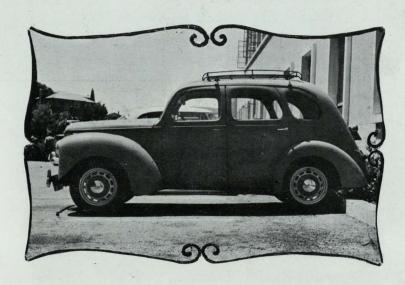


- 9. Professor Ma'louf has a set of nice stories about Scottsmen. Yet, his friendship with Professor Sloane prevents him from making them public.
- 10. Professor Hope is going to publish his souvenirs about the experiences he got in Rio-de-Janeiro, and distribute them to the students.
- 11. Mr. Khammar was finally able to discover a device that would read to less than one thou







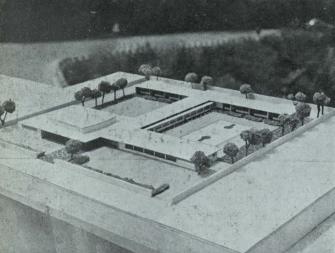


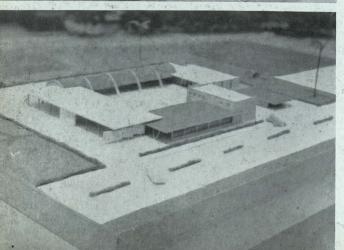
The projects submitted by the senior class this year covered a wide variety of subjects. In each case a considerable amount of personal interviewing was required to obtain statistical and engineering data, which served to illustrate the importance of the human factor in any kind of project. The correlation of collecting, compiling, and analysing data and the exercise of judgement is well exemplified in the results of these projects.

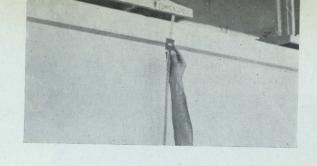
These projects serve a purpose quite distinct from the students' regular courses in that they are executed with the minimum assistance from the faculty and require him to use his own initiative and judgement, simulating at nearly as possible, practical experience. All the fourth year presented and defended their projects in April while the electricals, following their special curriculum, will do so







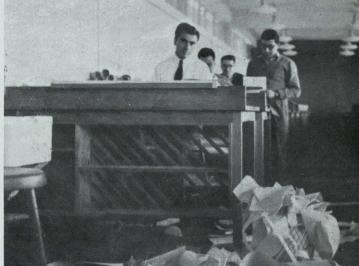


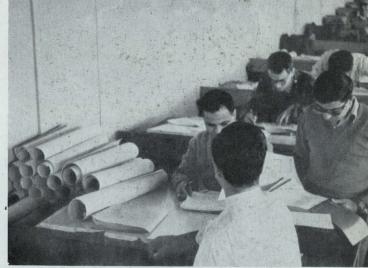


1956 PROJECTS











#### LIST OF PROJECTS:

CIVILS

abu-nasr

bakjejian

balikian

bulus, M.

faris

hashwih

a reinforced concrete highway bridge on the beirut river. comparative study of an appartment with beam and girder floor and with rubbel floor construction. water distribution system of the american university of beirut design of a beirut bypass turnpikewater supply systems for mreijatt and bnuareje, lebanon. reastane dam, syria.

lubbus markarian mouradian

nasr

nuwaysir

piranian

toutjian

zaydan

a sewerage system far safita, syria a grandstand for A.U.B.
a sewarage system for the village of boshrieh, lebanon.
a bridge over nahr abu-ali on the main boulevard, tripolireinforced concrete highway bridge on the dog river.
study of tunneling on beiruldamascus turnpike.
water distribution system and tanks for A.U.Ba sewerage system for the village

of jdeideh, lebanon.

#### MECHANICALS

abulhusn

abu saba afifi buwayri habib

hashash

jiha jumayil kabbarah

kulajian matta

naman

shahin

the feasibility of policelain enameling plant in lebanon. a design of a hand mower, water supply system for A.U.B. cold storage plant for meats, the design of an apple packing

house. heating and air conditioning of an appartement.

fruits dehydration plant, a cold storage plant for apples, milk pasteurization plant, feasibility of refrigerated cars and trucks in the arab middle east-

design of a water pumping station. design of a modern automobile service station

apple juice plant in lebanon.

#### ELECTRICALS

kublawi kurban al-musfi artificial transmission line.
linear pulse generator.
demonstration cathode ray oscilloscope and control circuits.

#### ARCHITECTS

adada ayoub bilezikjian boulos n.

ghorayyib

a stadium.

oub juvenile delinquents institution. ezikjian a publishing firm.

a beach club.
a recreation building and cafe-

guiragossian a car haddad a dev

a car agency.

a development for beduin settlements.

kitabjian rezek sawaya shiber

a catholic church.
a departments store.
a nursery school.

an elementary school.

# ARCHITECTURAL GRAPHICS STUDENTS' WORK



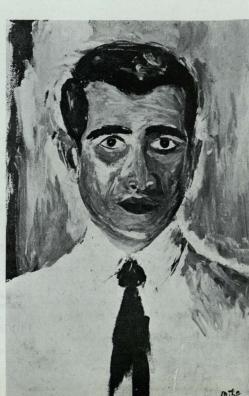


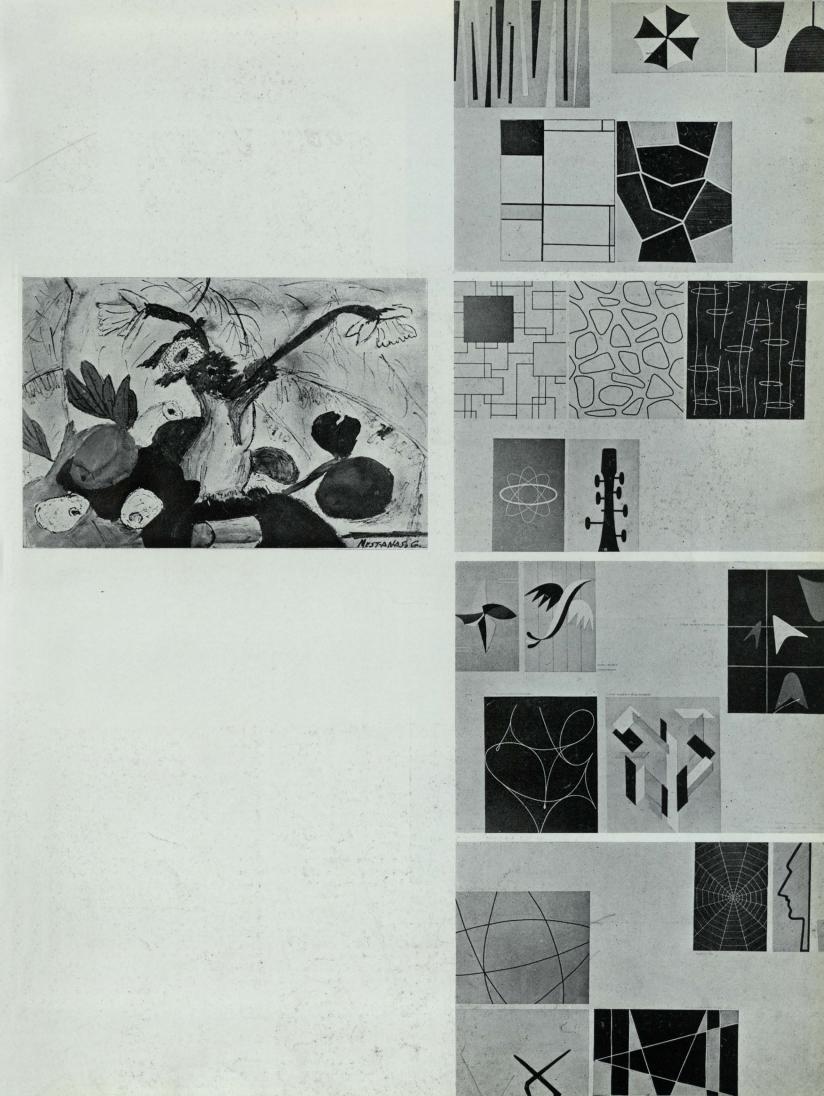


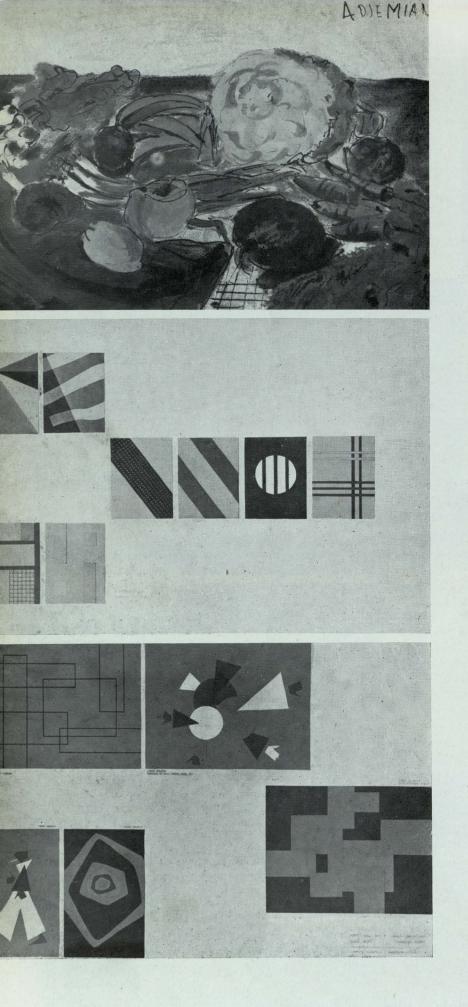


SELF-PORTRAITS









# THE GRADUATES

The yearbook committee, feeling that general information about Engineering graduates is of utmost importance to the school (students and faculty) as well as to fellow graduates, has enlarged the Yearbook's graduate section and added a sub-committee dedicated to contact them and get information about them. Since it is difficult to include all graduates at the same time it has chosen to write about graduates of the past three years to each issue, and those that graduated ten years hence, i. e. 1953, 1954, 1955 and 1946 this year. It intends to continue this system in the future, thus covering all graduates since 1946.

The information gathered by the kind cooperating graduates is presented in a condensed manner below. Judging from their comments, the product is selling very well and it is hoped that the production rate will be increased to meet the rising demand.

#### CLASS OF '55

michel abu-jawdeh. Born in Jourat - cl - Ballut, Lebanon; single; hobbies: woodwork; likes hiking; working with Tapline in Turaif, Saudi Arabia, as a construction engineer; hopes to specialize in sanitary engineering in the U.S.; believes that one should ask about what he is going into and not take a job that has nothing to do with engineering if that is what he wants to practice; other graduates working with him are Mike Jeha and Raja Bitar.

ali alamuddin. Born in Baakline, Lebanon; single; his main hobby is reading engineering articles in magazines; and practices tennis, fencing, indoor swimming, ballroom dancing, mus.c, and rifle shcoting; he is at present a Graduate Apprentice at the General Electric Company, England, and says that the training he's having is interesting and beneficial and that the life he's leading is preparing him for marital life from the point of view of comfort and privileges; cooking his food, darning his socks, ironing his shirts and training in electrical engineering «all adds up to an enjoyable experience»; hopes to return to Lebanon in 1957 and find a job; as to his remembrences from school, says he is proud of having been a member of the Engineering School.

varouj azadian. Born in Aley, Lebanon; single; international basket-ball player and likes to participate in track and field meets; at present doing architectural design, supervision, and private contracting work in Beirut and in the mountains; thinks that physical endurance is a great help in work and that students should have more magazines and new books brought to their attention to help them in their courses; one of the graduates, Nabih Majdalani, is working with him on a hospital design in Merjeyoun, Lebanon.

shawki freiha. Born in Brummana, Lebanon; single; writes English poetry and plays tennis; works as a mechanical engineer with Tapline, Beirut and thinks that mechanical engineers learn much from already experienced American engineers; projects he is working on are the test of an aftercooler for raising the hp of the engines driving the pumps that pump the oil across the desert by raising the intake air temperature, and the utilization of the waste water jacket heat of the engines for heating the dwellings of the Pumping Stations (after-cooler seen in photo); he always drops by the Engineering School to see old friends; has many fond rememberances. . .

laurent khayat. Born in Aleppo, Syria; single; his hobbies are reading novels and collecting stamps; is working at Aleppo with Civil Engineer Razek Accad, and states that work slowed down in the Northern part of Syria last year because the crops were bad.

riad malki. Born in Damascus, Syria; got engaged recently to Miss Hadiyya Jazzar, an A.U.B. graduate; reads books, swims and likes dancing; at present works with the Damascus Municipality (Bureau Technique); claims it is good practice to work with the municipality because it will help any Engineer in digesting the municipal rules and building codes, and in getting him acquainted with many engineers working in Damascus; moreover, he thinks it is a good experience; he is to join the army for his military service, and hopes to work on his own afterwards; other graduates working with him are Mukhtar Malas and Elias Dunia.

mukhtar malas. Born in Beirut, Lebanon; single; likes photography and eating, enjoys swimming and skiing; works at the Technical Bureau of the Damascus Municipality; plans to get married; Riad Malki and Elie Dunia are the other graduates working with him.

vasken najarian. Born in Beirut, Lebanon; single; sports he practices are tennis and swimming; presently doing graduate studies at the Engineering School of the University of California at Los Angeles (UCLA), and intends to receive an M.S. in «Hydraulic Machinary and Power»; says "Engineering graduates are chased by aircraft factories, manufacturers and industrialists so that a senior engineering student gets three to four offers before graduation"; he particularly remembers Professer Baggaley's «assumption».

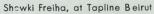
hratch papazian. Born in Baghdad, Iraq; single; hobbies: work! plays chess and bridge; works in a local company in charge of road construction ust outside Baghdad; (photos of him supervising asphalting operations); he

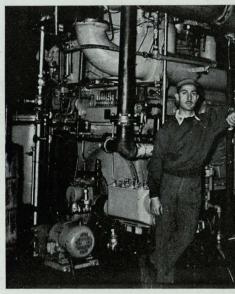




Commence of the second

Ali Alamuddin at G. E. England





says, "With the tremendous amount of constructional work going on at an increasing rate everywhere in Iraq, there is no reason why any junior engineer should not be able to secure a good position in a short time. Religion, race and nationality may still act as deterrents, but their effects are waning rapidly"; future plans? "Find time to get married"; he misses the technical environment— and the bowling alleys . . .

rafic samaha. Born in El-Jouar, Lebanon; single; reads, hikes and likes photography; presently working at Kuwait, supervising the construction of three buildings: a club house, a stadium and a residence house in University Town in Kuwait; he says, "Kuwait is the ideal place for a graduate and a fortune for a practicing engineer"; hopes to start a well organized contracting company in the future; his special memories from school days are Saturday quizzes and Professor Baggaley's statement "Nine times out of ten"; graduate Sarkissian works with him.

albert sarrafian. Born in Beirut, Lebanen; married; his hobby is photography; sports he practices are swimming and hiking; works at present with the Lebanese government and had previously worked with the CAT Company; is enjoying his work, is well paid and appreciated; he obtained his Lebanese Engineering licence and became a member of the Lebanese Syndicate of Engineers; hopes to be going to the U.S. to settle there; says there is a future in Electrical Engineering and particularly remembers the kindness and eager cooperation of his teachers.

#### CLASS OF '54

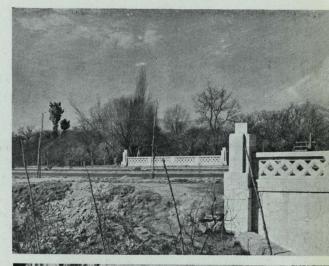
salim azzam. Born in Haifa, Palestine; single; hobby: listening to music; is a fielde ngineer with the Amarah Co., Riyadh, Saudi Arabia; plans to continue his education after working for a few more years; of the chances of engineers in his area, he says, "Good experience, good pay, hard work, quite a few chances"; was in Beirut in January 1956, and hopes to spend Christmas here this year; he particularly remembers working on the Yearbook; working with him are Nabil Nassar, Zain Mayyasi, and Rabah Husseini.

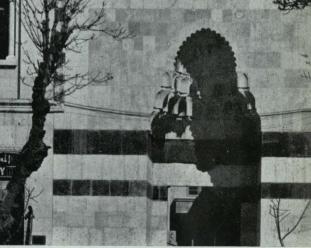
mohammad fayyad. Born in Gaza, Palestine; single; plays tennis and chess; at present doing post-graduate work at the Imperial College of Science and Technology, London, and hopes to participate in building up the economic and social structure of Jordan and the Arab World from what he is learning in Europe; he thinks that the role of professional intellectuals is essential in the development of the Arab World; special expressions he remembers are Professor Yeramian's «funny face» and the «shut up» of Professor Manassah. He also remembers the constantly worn smile on Professor Rubinsky's face and the Dean's military speeches.

sarkis garabedian. Born in Ras-el-Ain, Syria; single; collects stamps and smokes a pipe; practices swimming and hunting; has previously worked fourteen months as Execution Engineer at the Irrigation Department, Public Works, Syria, and is presently working as a contractor's engineer for roads and irrigation canals' execution; while with the Public Works he helped install two turbines (550 HP each) for a hydroelectric station near Lattaquieh; thinks that chances for engineers in Syria are many, because it is in its preliminary stages of growth and there are a lot of projects being planned; he specially remembers work on the ESS Target Shows.

nabil nassar. Born in Cairo, Egypt; single; working at Riyadh, Saudi Arabia, as a Field Engineer for Al-Amara Co. and has previously worked for Rabya Coop. Co.; he particularly mentions the construction of Al-Nasrieh Palaces as being an interesting experience; other graduates working with him are Salim Azzam, Zein Mayassi and Afif Hibri; hopes to continue his education in the United States and particularly remembers working on the Yearbook and ESS shows.

khaled shehadeh. Born in Tripoli, Lebanon; single; reads magazines as a hobby, and practices swimming and skiing; is working at Qatar as an engineer and has previously worked as engineer and Instructor of Surveying at AUB; says that his area is saturated with engineers and that the kind of work he has come across is diversified, including prefabricated houses, ordinary





by Muhammad Malas: At top

First project a skew bridge for Damascus Municipality

Above

Tenkez gate, renewed and raised from its original position for Damascus Awkaf Directory

Below

First private proiect, Damascus



masonary buildings, concrete and steel structures, and deep-water structures of concrete using piles; plans to start a business on his own and get married; other graduates working with him are Albert Mirshak and Jawad Jawad.

hampartzoum yenikomshian. Born in Beylan; single; his hobby is reading and studying about the World Wars, especially World War II; he also practices photography; he is working in Baghdad as Site Engineer for the «INTRA» bank building with Sinmar Company; has previously worked on his own, designing and supervising work in Beirut; he says that in Iraq there is plenty of work and experience and it is exellent training for a newgraduate; graduates working with him are Ramez Rizk and Anwar Rizk; particular memories are milk-bar meetings with his classmates and Wednesday morning meetings; future plan: «Travel around the world».

#### CLASS OF '53

paschal habash. Born in Jaffa, Palestine; single; interested in photography and plays bridge; with the Lebanese Field Office of UNRWA; previously worked with the Fluor Corp. Ltd., Dhahran, Saudi Arabia, the contractors of the Dhahran Airfield; hopes to go into the contracting business; says that with the present construction schedule for the Housing of Refugees, there are lots of possibilities for engineers, sanitary and construction engineers in particular; another graduate, V. Zaven, works with him.

muhammad malas. Born in Damascus, Syria; single; has no time for hobbies; previously employed with the technical department of the Damascus Municipality and then with Awkaf-Al-Sham; has a private office at present (some of his projects seen in photos); frequently visits Beirut; Shakib Omari, a graduate, works with him.

albert ouzounian. Born in Beirut, Lebanon; single; enjoys listening to hi-fi music recordings, golfs and swims; is a structural engineer, designer, and estimator with Ragnar Benson, Inc., Engineers and Builders; eventually plans to make a career of the administrative and business phases of engineering and construction; says that with a very high standard of living in the U.S. there are unlimited chances for engineers due to the acute shortage of members of their profession to cope with the rapid technological advance of that country; attended 1954 Homecoming and sincerely hopes to visit his Alma Mater one day; has "thousands and thousands" of memories, from "Chief Funny Face" to Professor Baggaley's all-time high record of repeating 53 time during the course of one lecture his famous "back in the U.S.A." phrase...

pierre sioufi. Born in Aleppo, Syria; single; hunts, swims, plays tennis, and is interested in photography; present occupation is the design and field supervision of buildings and contractor with the Public Works; hopes to train in the U.S.; he notes that in his work an engineer should have all rounded knowledge and not be specialized in only one branch; he last visited the Engineering School a year ago and is sure to drop in sometime in the near future; he particularly remembers classes in the Bliss Hall drafting room as compared to the ones in new building, and, of course, "funny face".

garbis tabourian. Born in Beirut, Lebanon; about his marital status he states: "Not caught yet"; his hobby is photography and he practices swimming as a sport; is working at Beirut as part time engineer; wants to know what happened to a suggestion he once made to the ESS for making Engineering School emblems in the form of rings.

#### CLASS OF 46

mohammed jundi. Born in Damascus, Syria; married; has three daughters; hunts, swims, reads, and listens to music; has been a Damascus Municipality Field Engineer, Chief Engineer of the F.T. & Co. of Damascus, and an engineer on Training in U.S.A.; at present, a Consultant Engineer and Contractor in Damascus; believes that members of our prefession are badly needed in Syria; convinced that contracting is very exhausting due to the lot of details and supervision entailed and sometimes wonders if any results justify such a sacrifice; was present at 1955 Homecoming.



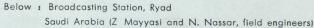
Left to right, Salim Azzam, '54 Nabil Nassar '54 and Zein Mayyasi '54



Afif Hibri '51 and Nobil Nassar '54



Above: Queen mother's palace, Ryad
Saudi Arabia, (Nabil Nassar, field engineer)





souren kasparian. Born in Aleppo, Syria; married; one child; collects stamps and hunts; presently works at Civil Engineering Projects in Beirut, mainly buildings, after having worked with Professor Yeramian as an assistant engineer; says that although Beirut is saturated with engineers, there are many places in the Middle East which are in need of engineers; attended the 1955 Homecoming and hopes to visit the school soon.

walid kayyali. Born in Aleppo, Syria; married; two children; enjoys reading, and classical music, plays bridge and tennis, swims and likes horse riding; used to be an army engineer, then worked on his own, and at present time, Chief Engineer of Construction and Maintenance with the Syrian State Railways; firmly believes that a diploma is not an end in itself but a means to help an engineer on his way—it is a symbol of good will; says that many Syrian projects are in need of engineers; is of the opinion that his school years were the best years of his life.

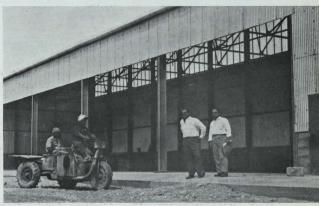
girayr khatchadourian. Born in Alexandretta, Sanjak; single; hobby: bridge; works in Beirut as Engineer and contractor and hopes to expand by getting new machinery as «contracting is becoming a more mechanized industry»; he specially remembers Professor Yeramian's «funny faces».

munther el khatib. Born in Nablus, Jordan; one daughter; hobbies: model buildings; has Cement Factory foundation, Mosul, and other concrete industrial buildings like Tapline Station 5, Turaif, to his credit; at present construction engineer for concrete works in the Sulaimania—Darbandikhan Road and hopes to continue as a contracting construction engineer; wishes that they will include more management, economics and phsycology courses in the curriculum; thinks that there are many opportunities for engineers with companies and the government in Iraq; other graduates working with him are Bahij Makdisi, Jubran Jubran, and Adeeb Khoury.

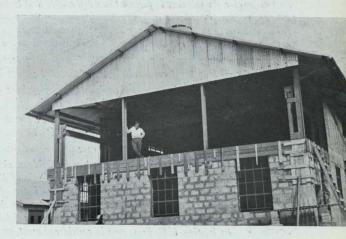
michel malik. Born in Bterran; single; his major hobby is photography including developing and printing; he presently works at Chemchemal, Kirkuk, Iraq, as Project Manager on the construction of the 90 km road between Kirkuk and Sulaymanyyeh; has worked previously as Civil Engineer with CAT Co., as Public Works Department Contractor in Lebanon, and on other jobs; states that his work is very interesting from the point of view of experience, both technical and social; also says that there are a lot of chances for engineers and calls Iraq a «Boom Country» and cites as an example his need for three engineers to work on the project he is executing now; other graduates working with him are Issam Minkarah and Ibrahim Ubayed.

fawzi shehadi. Born in Zahleh, Lebanon; married; one son; previously instructor, Civil Engineering Department, AUB, and now Technical Advisor, Ministry of Health and Assistant Professor at the school of Public Health, AUB; believes that there is a great demand for engineers; hopes that more engineers will be interested in the Sanitary Engineering field; thinks he will attend the Home coming this year; has fond memories of those «monkey faces» and «funny faces» of Professor Yeramian.





From top to Bottom, Khaled Shehadi in the field at Qatar



#### HOMECOMING

1954 saw the Engineering Graduates' Homecoming programs started with the intention of their being annual affairs where graduates and guests come to the School, hobnob with one another and their old teachers and attend a few lectures by fellow engineers. After being shown about the school by undergraduates and faculty members, they usualy end their so-journe in a big dinner and ball where they are happy to find out that they can still dance and spark the girls.

Industrial firms are expected to exhibit their latest products with prizes going to the most deserving stands and experiments will be performed in the different laboratories of the School.

Mr. A. Tabet, President of the Lebanese Order of Architects and Engineers is expected to address the alumni, guests, and

Mr. A. Tabet, President of the Lebanese Order of Architects and Engineers is expected to address the alumni, guests, and faculty members. A demonstrated talk on "The Future of Development in Prestressing Concrete in Lebanon and the Near East" will be given by Professor Rubinsky and his research group. Mr. G. Riachi, Chief Engineer of the Beirut Municipality, will talk on "The Technical Activities of the Beirut Municipality; Past, Present, and Planning for the Future". It will be followed by Mr. M. Saad's "Pressure Grouting of Hydro-Electric Projects in Lebanon". The Industry Institute is to present a report on Industrial Research and Standardization in the Arab countries.

Those present at the Homecoming will attend a luncheon at the Alumni Club and, on the night of the 10th June, end it all this year with dinner and some entertainment at the Bristol Hotel.

"To be content, but not satisfied—to be for a few moments yet forever where the common-place is fantastic and the fantastic is commonplace—to emerge from the cocoon of one's own civilisation into an awareness of the world's accumulated culture".

Dean C. Ken Weidner

#### RESEARCH IN PRESTRESSING CONCRETE

Chairman of Research — Professor Ivan Rubinsky

W. Bardawil '48

Research fellows - H. D. Kazandjian '29

A. A. Kinge '33

The snags and shortcomings of Reinforced Concrete long since felt in more advanced countries are slowly being here. It is part of the encountered engineer's mission to foresee these difficulties and to forewarn and forearm against them.

Due to the limited time and means at our disposal we decided to profit from research previously done by others, and study, and try out the various methods in use abroad before making any pretence at having accomplished anything on our own. In this respect, the inspiring leadership of our chairman, Professor Rubinsky, has been invaluable. He sacrificed practically the whole of last summer to tour Europe at his own expense, establishing and renewing contacts with firms, laboratories, and institutes in Austria, Belgium, England, France, Germany, Italy, and Switzerland. These, plus his former colleagues in the U.S., were instrumental in producing a vast store of informative data and literature.

An intensive study of materials led to ordering bare essentials from Switzerland and England and the making in the Engineering Shops of other epuipment, mostly designed by Professor Rubinsky.

In our projects, we have endeavored to concentrate on those of immediate practical value to the local building profession. Very attractive schemes had to be temporarily shelved, ceding priority to transitional practices within our everyday scope.

The different projects underway are:

- 1. 60 ft testing and prestressing bay for bridges, shed beams and railway sleepers, constructed according to our design by Professor K. Yeramian.
- 2. 20 ft testing and prestressing bay in a pair of 12 inch I beams, made by the Engineering Workshops.
- 3. 14 ft forms for a typical prertressed I beam of the Weinberg design, made by Mr. Friis.
- 4. Timber forms with copper electrode plates for the manufacture and curing by electric current of concrete blocks for testing.
- 5. Tum-table model for the poststressing of prefabricated block beams, previously designed and patented by Professor Rubinsky. It is now used by leading U.S. firms and is considered most practical and economical for the production of small beams and railway sleepers.

We must acknowledge a deep debt of gratitude to Dean Weidner and professor Sloane, who were very helpful and understanding; also Messers Sabah, Malik, Friis and Muller of the Workshops who have been most cooperative.

#### A DIRECT-READING PRONY BRAKE by T.G. Bridgwood, Ph. D. Professor of Electrical Engineering

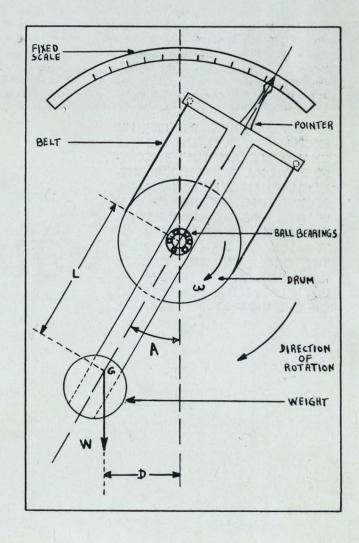
Among the methods devised by engineers for measuring the output of prime movers or electric motors, the prony brake is probably the oldest and most widely used. Unfortunately most of those seen in laboratories are poorly designed and are of doubtful accuracy. Faced with the prospect of providing upwards of twelve brakes for our electrical machines laboratory, it seemed worth while to investigate an original idea of the author' to see if its theoretical promise could be realized in a practical device.

The principle involved is very simple and is illustrated in the accompanying line diagram. The brahe drum shown is driven by the motor or prime mover whose output is to be determined. A retarding torque is applied to it by means of the belt, the tension of which can be varied in such a way that the retarding torque can be varied from zero up to the maximum output of the motor. The system to which the belt is attached is mounted on bearings on the same shaft as the drum, and would be free to rotate with the drum if it were not for the weight connected to this system below the drum, as shown; for as soon as the centre of gravity of the system G moves from its position of equilibrium through an angle A, a retarding torque equal to W D which in turn is equal to W L sin A will be set up. Thus if the weight is big enough the angle A will not grow indefinitely but only until the belt slips and the angle through which it moves will be such that the torque output of the motor is exactly counterbalanced by the torque produced by the weight. This is so because "to every torque there is an equal and opposite torque". It follows from this that the pointer and scale reads torque directly and is calculable in absolute teams if the centre of gravity and the mass of the weight and belt system is known. It is also easy to calibrate even when the machine is running by adding known additional weights in known positions.

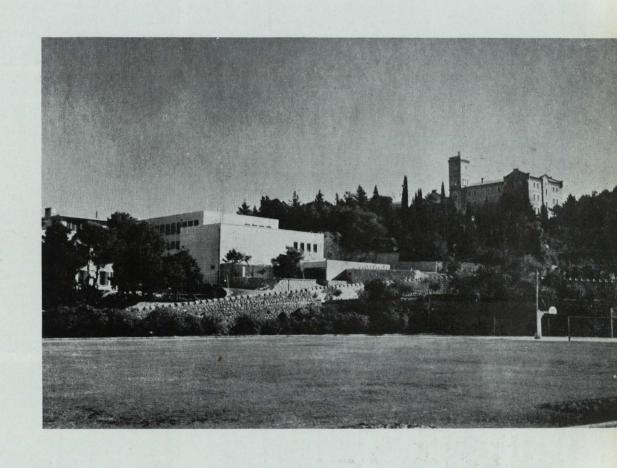
As a practical point it should be noted that even the friction of the bearings on which the weight and belt system is mounted tends to rotate the weight and therefore does not give rise to error. Another point is that the inertia of the system is so great that troublesome vibration is entirely avoided. There are other practical advantages which could be discussed in a longer article but it may be sufficient to say here that a development model has been built and tested very carefully by absolute methods and it has been shown that the error in reading torque is less than one four hundredth of the full scale reading at any part of the scale, and most of this prabably arises as a result of errors in drawing the scale, the only part drawn by the author. There are several other methods by which the power output of the motor can be absorbed whilst still employing the same principle and at present the most attractive is that in which the energy is dissipated in the form of eddy currents induced in a copper sheet. In addition, there are ways in which the brake could be adapted to read power directly but whether the complication involed is worth while remains to be seen.

Considerable credit for the success of this device belongs to Mr. Victor Bankoul, a graduate of this school. He carried out the whole of the detailed design and supervised the construction. Thanks should also be accorded to Mr. E. Sabbagh and to Mr. H. Khammar and his staff for their patient and accurate work.

26 April 1956



ON SUNDAY, APRIL 8th, 1956, HIS EXCELLENCY, PRESIDENT CAMILLE CHAMOUN GRACIOUSLY BESTOW-ED UPON MR. STEPHEN D. BECHT-EL, CHAIRMAN OF INTERNATIONAL BECHTEL INC., DONOR OF OUR BECHTEL ENGINEERING BUILDING, AND C. KEN WEIDNER, DEAN OF THE SCHOOL OF ENGINEERING, THE ORDER OF THE CEDAR, RANK OFFICER, FOR THEIR MARK-ED HELP IN THE DEVELOPMENT OF ENGINEERING IN LEBANON.

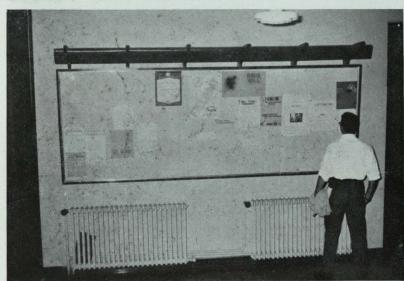


# THE ENVIRONMENT

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IN THE SHOPS
ON THE CAMPUS









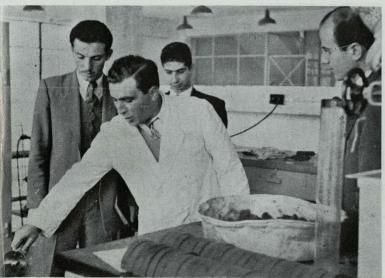










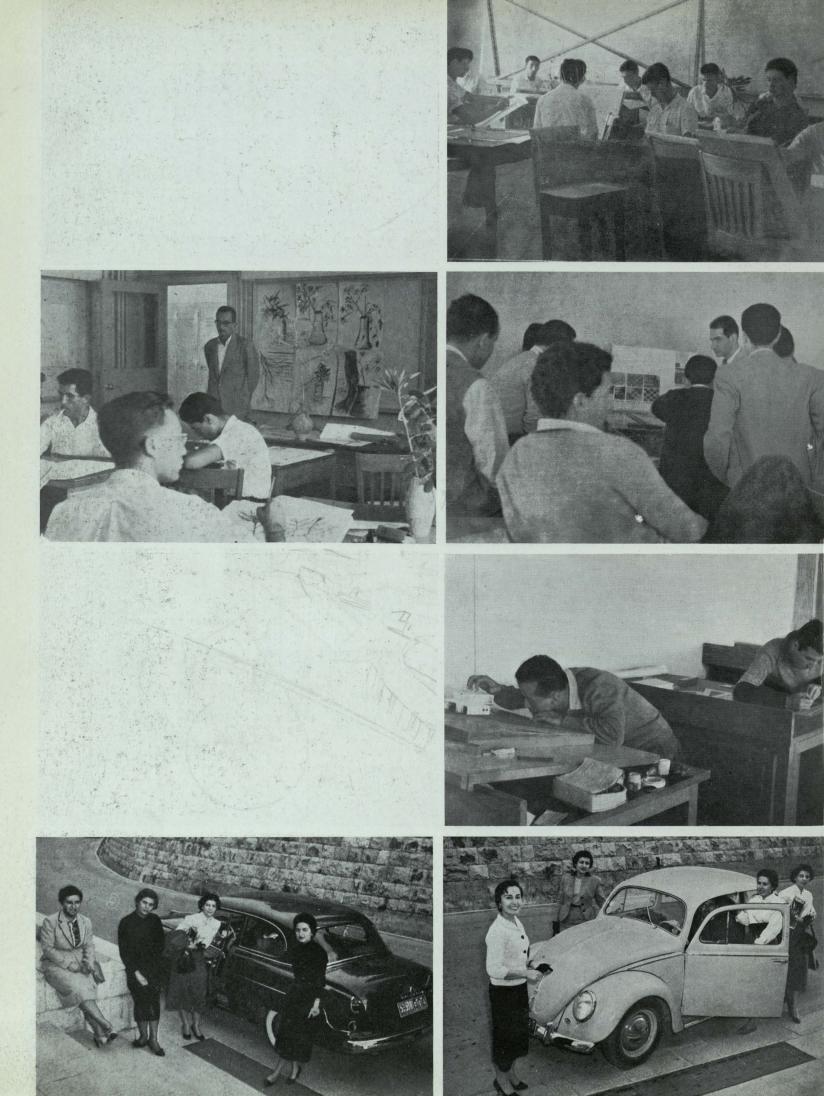




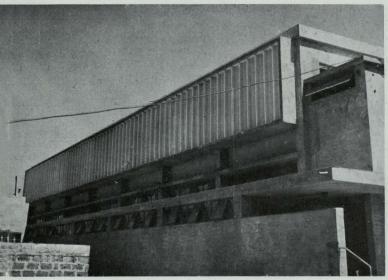






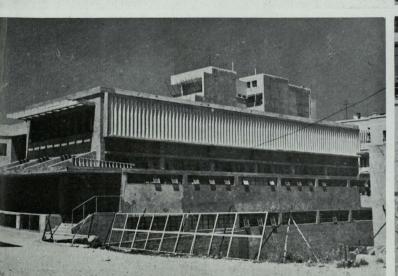








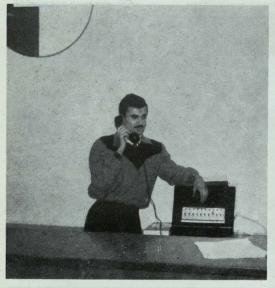




















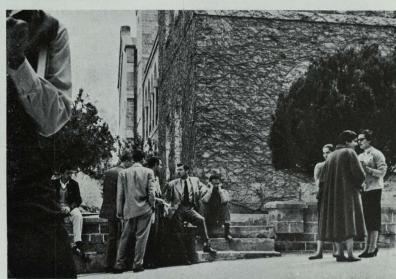












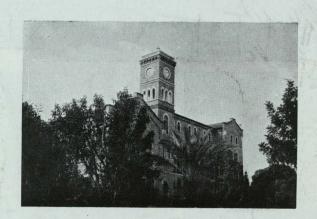
THE EARTHQUAKE ON THE CAMPUS

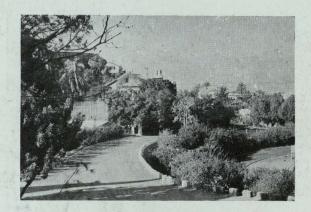


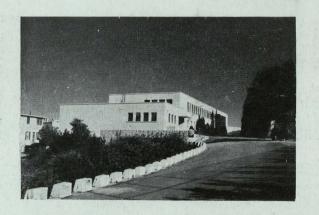




THE CAMPUS



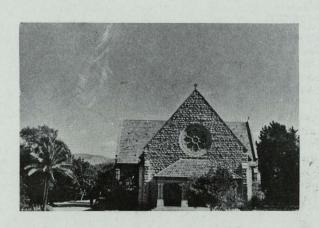


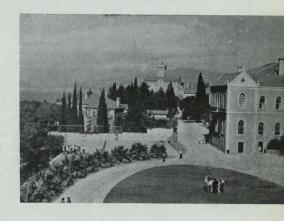




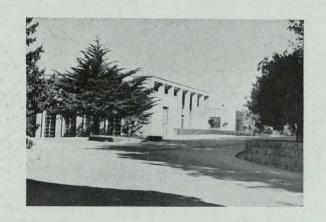








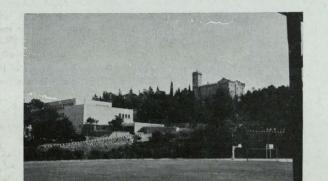












### CANONS OF ETHICS FOR ENGINEERS

### foreword

Honesty, justice, and courtesy form a moral philosophy which, associated with mutual interest among men, constitutes the foundation of ethics. The engineer should recognize such a standard, not in passive observance, but as a set of dynamic principles guiding his conduct and way of life. It is his duty to practise his profession according to these, Canons of Ethics.

As the keystone of professional conduct is integrity, the engineer will discharge his duties with fidelity to the public, his employers, and clients, and with fairness and impartiality to all. It is his duty to interest himself in public welfare, and to be ready to apply his special knowledge for the benefit of mankind. He should uphold the honor and dignity of his profession and also avoid association with any enterprise of questionable character. In his dealings with fellow engineers he should be fair and tolerant.

### professional life

Sec. 1. The engineer will co-operate in extending the effectiveness of the engineering profession by interchanging information and experience with other engineers and students and by contributing to the work of engineering societies, schools, and the scientific and engineering press.

Sec. 2. He will not advertise his work or merit in a self-laudatory manner, and he will avoid all conduct or practice likely to discredit or do injury to the dignity and honor of his profession.

### relations with the public

Sec. 3. The engineer will endeavor to extend public knowledge of engineering, and will discourage the spreading of untrue, unfair, and exaggerated statements regarding engineering.

Sec. 4. He will have due regard for the safety of life and health of the public and employees who may be affected by the work for which he is responsible.

Sec. 5. He will express an opinion only when it is founded on adequate knowledge and honest conviction while he is serving as a witness before a court, commission or other tribunal.

Sec. 6. He will not issue ex parte statements, criticisms, or arguments on matters connected with public policy which are inspired or paid for by private interests, unless he indicates on whose behalf he is making the statement.

Sec. 7. He will refrain from expressing publicly an opinion on an engineering subject unless he is informed as to the facts relating thereto.

### relations with clients and employers

Sec. 8. The engineer will act in professional matters for each client or employer as a faithful agent or trustee,

Sec. 9. He will act with fairness and justice between his client or employer and the contractor when dealing with contracts.

Sec. 10. He will make his status clear to his client or employer before undertaking an engagement if he may be called upon to decide on the use of inventions, apparatus, or any other thing in which he may have a financial interest.

- Sec. 11. He will guard against conditions that are dangerous or threatening to his life, limb, or property on work for which he is responsible, or if he is not responsible, will promptly call such conditions to the attention of those who are responsible.
- Sec. 12. He will present clearly the consequences to be expected from deviations proposed if his engineering judgement is overruled by non-technical authority in cases where he is responsible for the technical adequacy of engineering work.
- Sec. 13. He will engage, or advice his client or employer to engage, and he will co-operate with, other experts and specialists whenever the client's or employer's interests are best served by such service.
- Sec. 14. He will disclose no information concerning the business affairs or technical processes of clients or employers without their consent.
- Sec. 15. He will not accept compensation, financial, or otherwise from more than one interested party for the same service, or for services, pertaining to the same work, without the consent of all interested parties.
- Sec. 16. He will not accept commissions or allowances, directly or indirectly, from contractors or other parties dealing with his client or employer in connection with work for which he is responsible.
- Sec. 17. He will not be financially interested in the bids as or of a contractor on competitive work for which he is employed as an engineer unless he has the consent of his client or employer.
- Sec. 18. He will promptly disclose to his client or employer any interest in a business which may compete with or affect the business of his client or employer. He will not allow an interest in any business to affect his decision regarding engineering work for which he is employed, or which he may be called upon to perform.

### relation with enginners

- Sec. 19. The engineer will endeavor to protect the engineering profession collectively and individually from misrepresentation and misunderstanding.
- Sec. 20. He will take care that credit for engineering work is given ta those to whom credit is properly due.
- Sec. 21. He will uphold the principle of appropriate and adequate compensation for those engaged in engineering work, including those in subordinate capacities, as being in the public interest and maintaining the standards of the profession.
- Sec. 22. He will endeavor to provide opportunity for the professional development and advancement of engineers in his employ.
- Sec. 23. He will not directly or indirectly injure the professional reputation, prospects, or practice of another engineer. However, if he considers that an engineer is guilty of unethical, illegal or unfair practice he will present the information to the proper authority for action.
- Sec. 24. He will exercise due restraint in criticizing another engineers work in public, recognizing the fact that the engineering societies and the engineering press provide the proper forum for technical discussions and criticism.
- Sec. 25. He will not try to supplant another engineer in a particular employment after becoming aware that definite steps have been taken toward the other's employment.
- Sec. 26. He will not compete with another engineer on the basis of charges for work by underbidding, through reducining his normal fees after having been informed of the charges named by the other.
- Sec. 27. He will not use the advantages of a salaried position to compete unfairly with another engineer.
- Sec. 28. He will not become associated in responsibility for work with engineers who do not conform to ethical practices.
- (Adopted by Engineer's Council for Professional Development October 25, 1947.)

The Yearbook Committee wishes to acknowledge its debt to the students who contributed the following articles:

M. Bardawil

IV Year Will I. Resek Show Committee J. Warwar Hunting Club G. Saikali ESS Band J. Fistere Corporation N. Bulos Summer Shops B. Hakki IV Year Outside Work M. Boulos Qualifying Month F. Makdisi Prof. Malouf Music Technical Tripls Carol Khoury, F. Buwayri,

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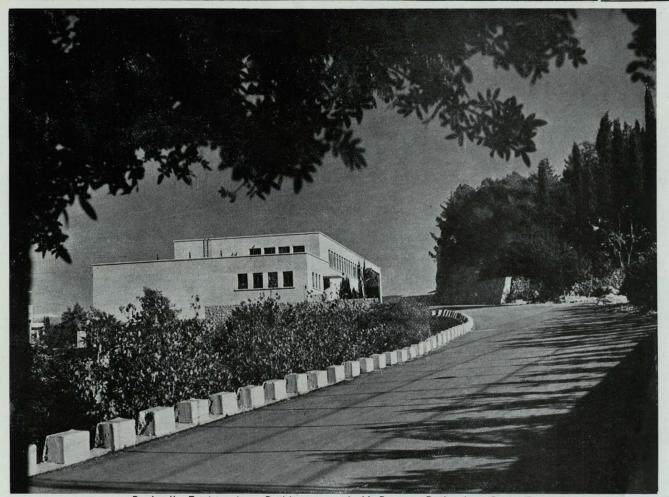
The Committee also wishes to thank Ibrahim Resek for a considerable amount of rewriting, Usama Baroudy for his great help in the Arabic part, Miss Sania Salman who wholeheartedly did all our typing and all those who, in one way or another, made this book a possibility.

# STUDENTS' DIRECTORY AND ADVERTISEMENTS

At the time of the printing of these pages the selection for ENGINEERING HONORS has just been made (see page 45). This year Mr. Munir Bulus, candidate to the B.C.E., Mr. Nadim Bulus, candidate to the B.A.E., and Mr. Fuad Nuwaysir, candidate to the B.C.E. have been selected to receive the award at graduation time.

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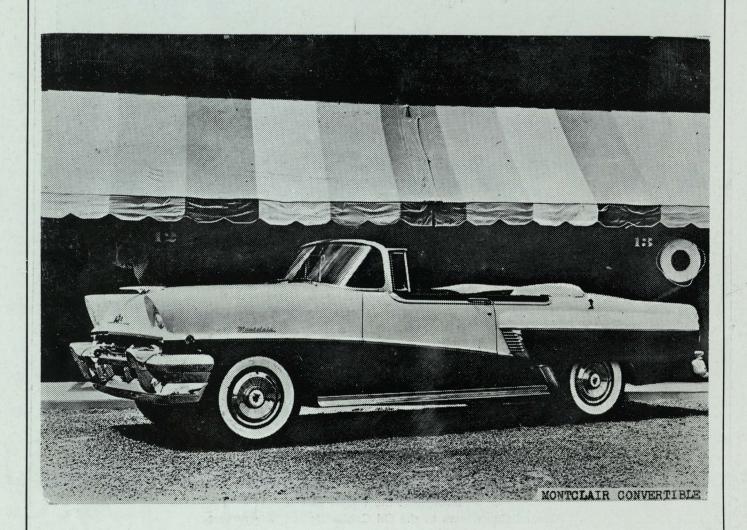
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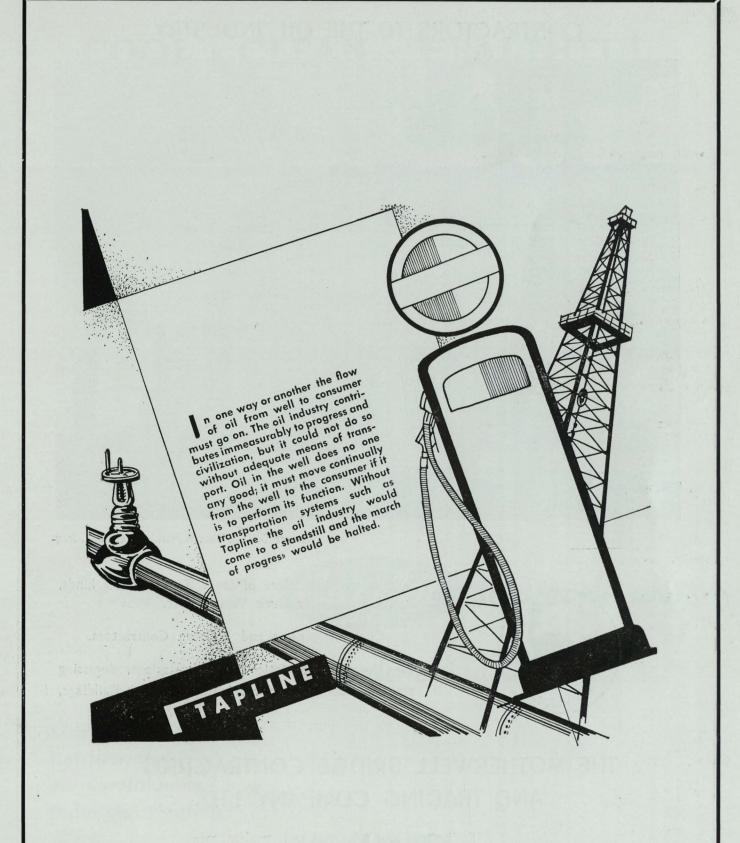
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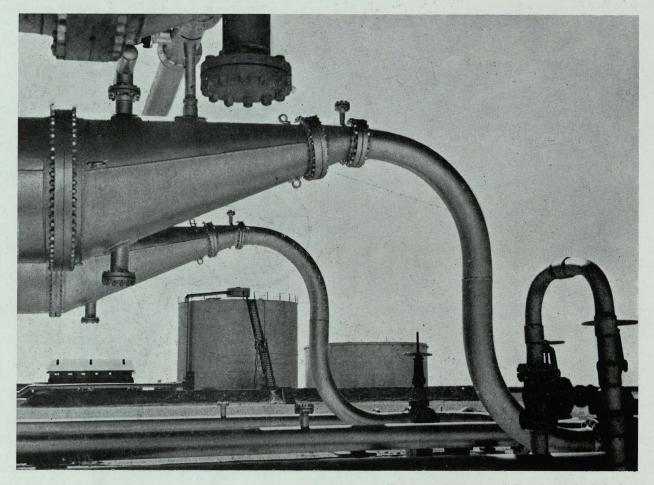
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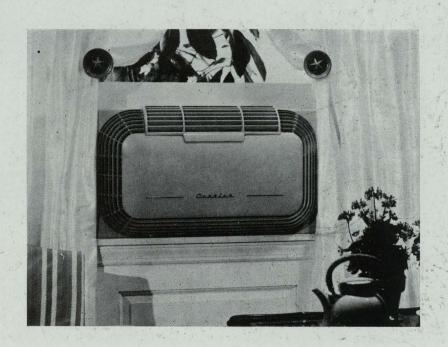
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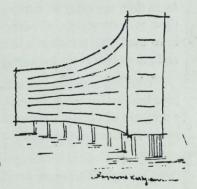
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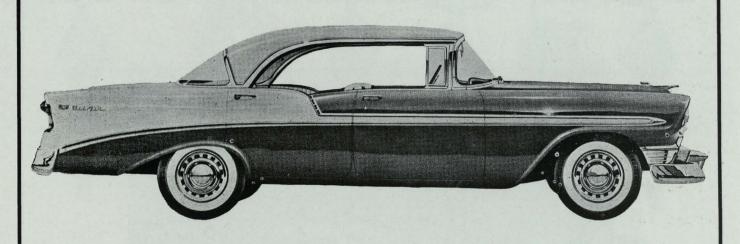
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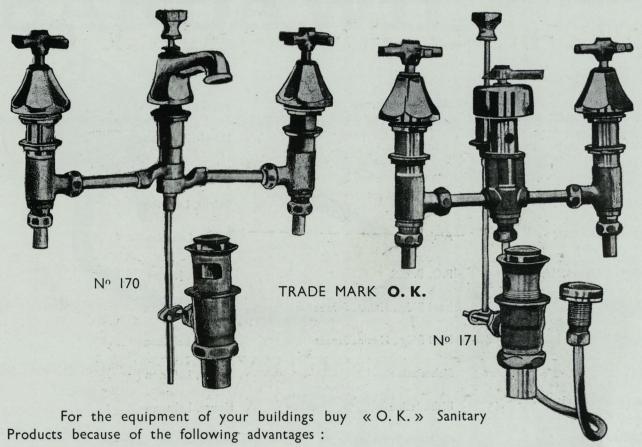
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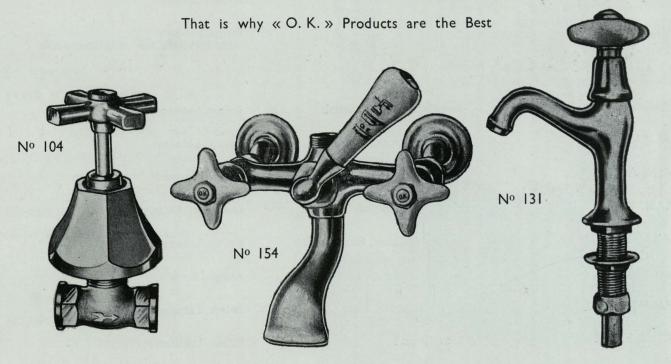
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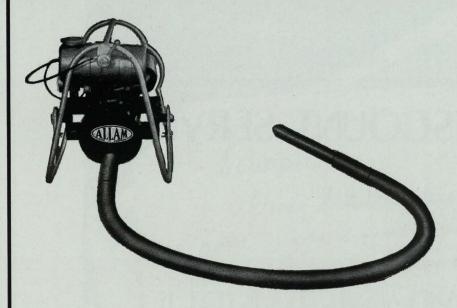
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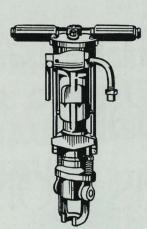
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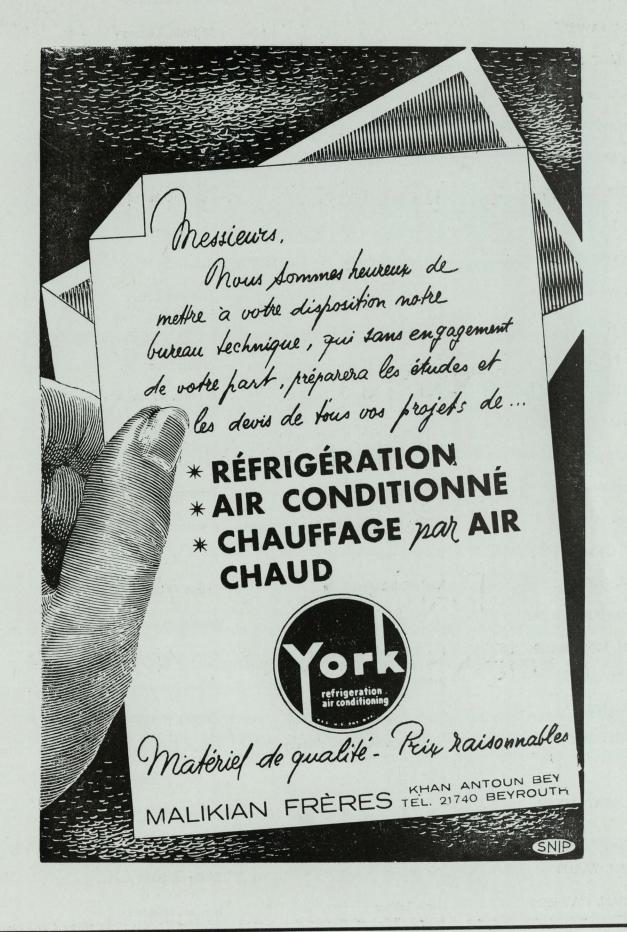
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KHABBAZ, GHASSAN	P.O.B. 2241	Beirut, Lebanon
KHALAF, MUHAMMAD FATHI	Attil	Tulkerm, Jordan
KHALID, MUHAMMAD	clo Kamal Naimi	Tyre, Lebanon
AL-KHATIB, NABIL	St. Justinian, Sanayeh	Beirut, Lebanon
KHATIB, TAWFIK	Deirsharaf	Nablus, Jordan
KHATCHADOURIAN, HRANT	10, Jesostris Street	Heliopolis, Egypt
KHAYRI, MAADH		Tulkarm, Jordan
KHOURI, CAROL	Station Massad, Rue Nahr	Beirut, Lebanon
KHUDR, MICHEL	Mousseitbé	Beirut, Lebanon
KHURI, MUNIR	c/o P.O. B. 606	Amman, Jordan
KHURI, NABIH	Jeanne d'Arc Street	Beirut, Lebanon
KILZI, GUY	Rue Clémenceau	Beirut, Lebanon
KISTOSTURIAN, HAIG	Si-Metry avenue	Teheran, Iran
KITABJIAN, HAGOP	clo Souren Minassian, Rue Altounian	Aleppo, Syria
KITTANAH, JOHN	Sidani Street	Beirut, Lebanon
KUBLAWI, FAYSAL	Khairallah Street	Beirut, Lebanon
KUDSI, MUHAMMAD SAD	65, Ousama Street, Jamilié	Aleppo, Syria
KULAJIAN, HOVHANNES	No. 273, Khandak Street	Aleppo, Syria
KURAN, EDWARD	Beino	Akkar, Lebanon
KURBAN, SAMI		Shweir, Lebanon
KYRIAKOS, FUAD	clo Dr. Kyriakos, Hotel Savoy	Beirut, Lebanon
LUBBUS, KHAYRALLAH		Safita, Syria

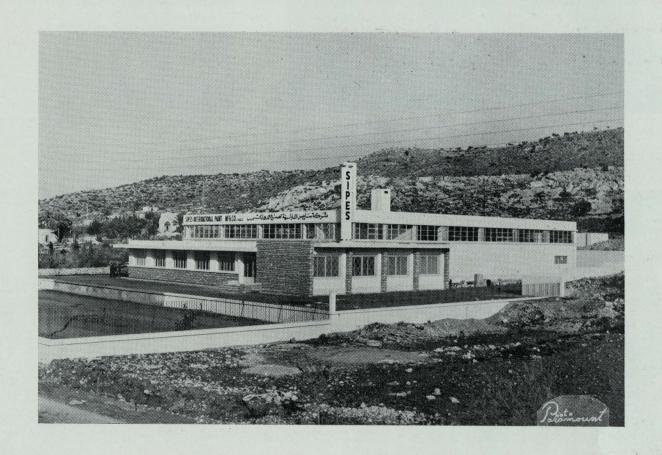
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Dhahran, Saudi Arabia

Haret Sakher Jounieh, Lebanon

MADALLAH, YAKUB

MAHSHIKIAN, MATHEOS



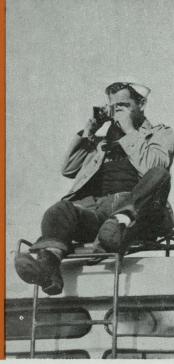
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MATTA, YUSUF		Bourj-Brajneh, Lebanon
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MIDANI, FARUK		Damascus, Syria
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(Contd. on page 138)

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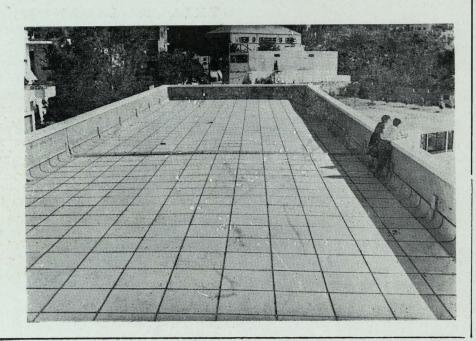
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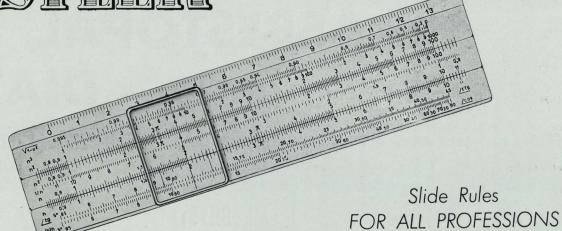
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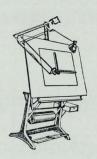


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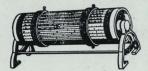


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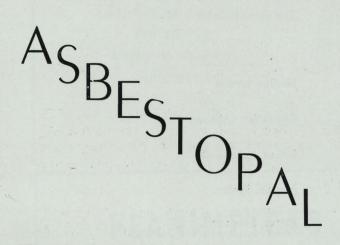
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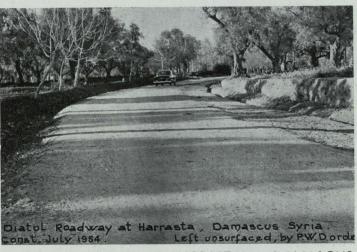
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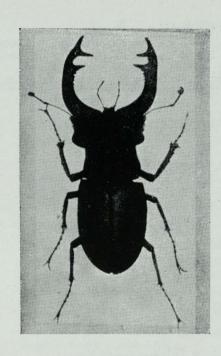
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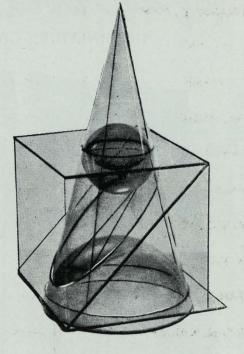
SALIM-HAMMUD, AMIN	Survey of Waster Barrier and whom your tree	Sidon, Lebanon
SALIM-HAMMUD, ISAM		Sidon, Lebanon
SALIM, MAURICE	Amioun	El-Koura, Lebanon
SALIM, WAHIB	clo George Salim — Amioun	El-Koura, Lebanon
SALMAN, YUSUF	Ramlieh	Lebanon (via Rashmaya)
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SHABB, KAMIL		Sidon, Lebanon
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SHAHINIAN, KARNIK	clo Michel Oknaya, Marad Street	Beirut, Lebanon
SHAHIN, MICHAIL	Kaftoun	El-Koura, Lebanon
SHAMMAS, ZAKI		
SHARIF, RUHI	Shwaitreh Street	Nablus, Jordan
SHAUL, SAMIR		Choueifat, Lebanon
SHIBR, VICTOR	78 Street, Ras Beirut	Beirut, Lebanon
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SIFRI, ALBERT	Ain-El-Muraysi	Beirut, Lebanon
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SINANIAN, ANTRANIG	clo Hagop Sinanian, Maidan	Aleppo, Syria
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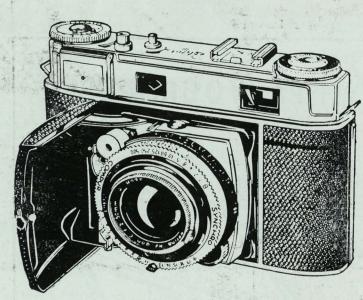
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TOROYAN, KEVORK	Jummeizeh	Beirut, Lebanon
TOURYAN, CNEL	Rue Hopital Orthodoxe, Achrafieh	Beirut, Lebanon
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TUMAH, NIMAH		Moukhtara, Lebanon
TUTUNJI, FAIK	P.O. B. 643	Amman, Jordan
UBAYD, JOHN	Amioun	El-Koura, Lebanon
UWAYDAH. TAWFIK	Zahrieh Street	Tripoli, Lebanon
UWAYS, ELIE		Beirut, Lebanon
VINCENTI, GIOVANI	Rue Verdun	Beirut, Lebanon
VINTIADES, POLYNIOS NICOLAS	2, Cawalla	Port-Said, Egypt
WARWAR, JOHN	clo Abdallah Jarjoura, UNESCO	Beirut, Lebanon
AL-YASHRUTI, KHALID	Sadat Street, Ras Beirut	Beirut, Lebanon
YERETZIAN, KRIKOR JIRAIR	Nahr Street	Beirut, Lebanon
YOUSSOUFIAN, MICHAIEL	P.O. B. 818	Beirut, Lebanon
ZAKHARIYYA, CHARLES	No. 71, Rue Sadat	Beirut, Lebanon
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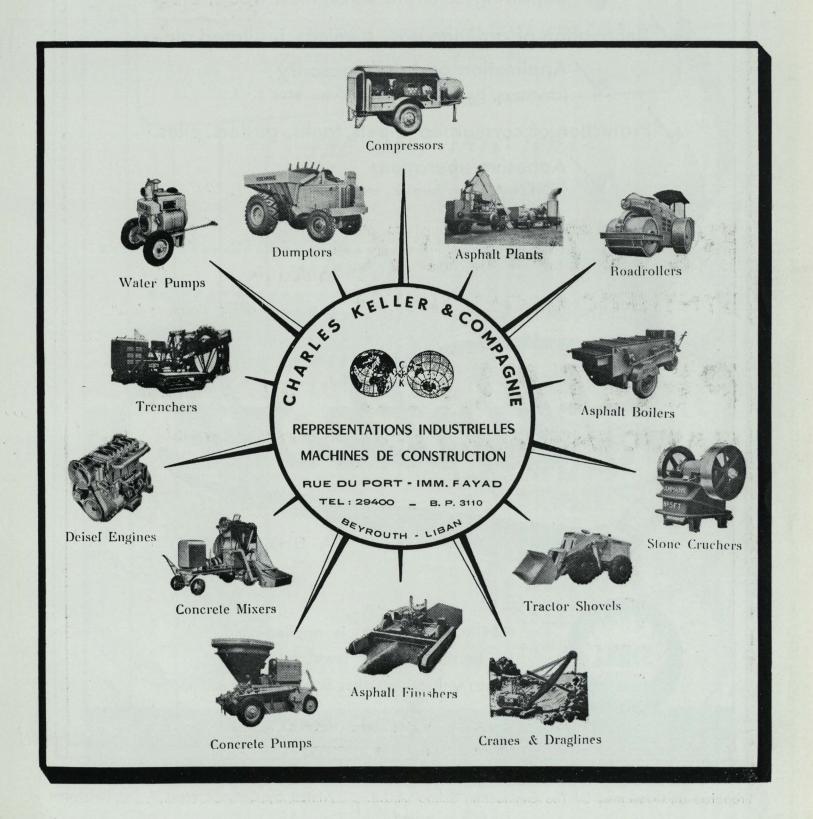
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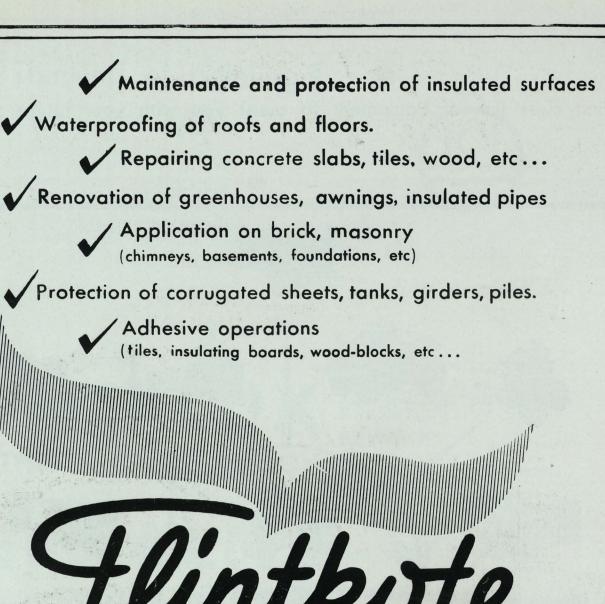
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