

DK

CALIFORNIA
INSTITUTE
OF
TECHNOLOGY

COMMENCEMENT
EXERCISES

OCTOBER 20, 1944

3:45 P.M.

PASADENA CIVIC AUDITORIUM

PROGRAM

CONCERT AND PROCESSIONAL MARCH

The Navy V-12 Band

INVOCATION AND CHAPLAIN'S ADDRESS

The Most Reverend Joseph T. McGucken, S.T.D.

COMMENCEMENT ADDRESS

"The Old Order Changeth . . ."

William Bennett Munro, Ph.D., LL.D., Litt.D.

*Edward S. Harkness Professor of History and Government,
California Institute of Technology.*

CONFERRING OF CERTIFICATES AND DEGREES

Candidates presented by

Winchester Jones, A.B., *Associate Dean of Upper Classmen.*

William R. Smythe, Ph.D., *Chairman of the Committee on the Course
in Science.*

Franklin Thomas, *Chairman of the Division of Engineering.*

William R. Smythe, Ph. D., *Acting Dean of the Graduate School.*

Degrees conferred on behalf of the Trustees and Faculty by

Robert Andrews Millikan, Ph.D., LL.D., Sc.,D., *Chairman of the Executive
Council.*

"THE INSTITUTE AND POST-WAR DEFENSE"

Dr. Millikan

HYMN: "FOR THOSE IN PERIL ON THE SEA"

(The words are printed on the last page. The first two verses will be sung.)

BENEDICTION

THE NATIONAL ANTHEM

CANDIDATES FOR CERTIFICATES AND DEGREES

SENIOR CERTIFICATES

NAVY V-12 STUDENTS

| | | |
|-------------------------|---------------------------|-------------------------|
| DUDLEY EARL BENNETT | CARL CHARLES COULSON, JR. | RETURN FRANCIS MOORE |
| ROBERT FRANCIS BLOCKER | GEORGE BAINBRIDGE KRAUSE | ROBERT BRUCE ROSECRANCE |
| WILLIAM GEORGE BONGARDT | JOHN ARTHUR LANGFORD | MARCELINO RUEDA |
| ANDREW BERRIEN CAMPBELL | LEVAL LUND, JR. | ROY WILLIAM WIRTA |
| ROBERT PAUL CAPPADONA | | |

BACHELOR OF SCIENCE IN SCIENCE

CIVILIAN STUDENTS

JOHN ROBERT NICHOLAS
PHILIP BARTLETT SMITH
ROBERT MCMASTER WEIDMAN

BACHELOR OF SCIENCE IN ENGINEERING

CIVILIAN STUDENTS

| | | |
|--------------------|-----------------------|----------------------|
| RASIT HILMI ALPAN | RICHARD HENRY LOCKETT | ASIM MUSTAFA UNAYRAL |
| LEONARD IVAN CHANG | JOSEPH KARL MANN | GEORGE KE-WU YIK |
| LEON KNOPOFF* | ALFRED D. ROBINSON | |

NAVY V-12 STUDENTS

| | | |
|-----------------------------|---------------------------|-----------------------------|
| PHILLIP L. ADAMS | LAWRENCE URQUHART HUDSON | THOMAS WILEY NORSWORTHY† |
| EDWARD MCKEAN ATCHISON† | RICHARD ALBERT HUDSON | GEORGE MIEROW OSGOOD |
| ROBERT PEARSON BRODIE | THOMAS ALLAN HUDSON | RAYMOND JEFFERSON PALMER |
| KENNETH GRANT BROWN, JR. | THOMAS ERNEST HUDSON | RALPH BABCOCK PASTORIZA |
| ROBERT BRYDOLF | JOHN CHARLES HUGGINS | DONALD WORTHEN PENDERY* |
| JOSEPH STANLEY BULLER | STEPHEN D. HURST | JOSEPH MANSFIELD PHELPS |
| THOMAS ARTHUR CARTER, JR.† | RONALD STAFFORD JOHNSON | EUGENE FISHER PISCHEL |
| JOSEPH HOWARD CHADWICK, JR. | HENRY CLAY JUDD | LEONARD ERNEST POPP |
| FRANK BYRON CLENDENEN | FERDINAND HERMAN KARSTEDT | LONGUEVILLE HOWE PRICE, JR. |
| LEO R. CODA | JAMES GILCHRIST KERR | ROBERT ORAM RANDALL |
| LOUIS GEORGE DAMESON, JR. | FRED WILLIAM KRUSE, JR. | RICHARD BRADSHAW RIDDELL |
| ILIF ROSS DANA, JR. | RICHARD ELI KUHN | WILLIAM FREDERICK ROBERTS |
| WILLIAM R. DAVIS | ROBERT FRANK LAABS | KIRK H. SADLER |
| DOUGLAS GEORGE DETHLEFSEN† | ROBERT ENOS LAUTERBACH | GEORGE REAMER SAUNDERS |
| WELDON ROGER DONSBACH | RAYMOND RALPH LOCHHEAD | HAROLD W. SCHAAR |
| JOSEPH BENJAMIN EARL, II | WILLIAM ELLISON | DAVID RICE SHEFCHIK |
| ALMERON J. FIELD | LOCKWOOD, JR. | PHILIP HERBERT SMITH |
| EARLE K. FISHER | NEVILLE STUART LONG† | JOHN "J" SOGORKA, JR. |
| MAURICE EARL FORD, JR. | FRANCIS EDWARD | WILBUR MILTON SWANSON* |
| JAMES ROBERT FREEMAN, JR. | MACDONALD, JR. | GARLAND STAVELEY TAYLOR |
| JOHN HOWARD GARDNER | ROBERT WALLACE MAPEL | WILLIAM ANDERSON TOOKEY |
| JOHN JEPSON GARLAND, JR. | ROBERT GUTHRIE MCANLIS | CLEMONS C. TURNER |
| DONALD THEODORE | GEORGE DEWALD | JOHN ROBERT UKROPINA |
| GREENWOOD*† | McDONALD, JR.* | DAVID FENTON WALKER |
| WILBUR LEE HALL | RICHARD VINCENT MCGARRITY | GEORGE MASON WOOD |
| WILLIAM ROBERT HAMILTON | RUBEN FRED METTLER* | WILLIAM BREWSTER YOUNG |
| HORACE M. HIGGINS | CHARLES BRADFORD MILLER | |
| WARREN DAVID HINTON, JR. | JOHN ALEXANDER MITCHELL | |

**Graduated with honor in accordance with a vote of the Faculty.*

†*Awarded the Honor Key by the Associated Student Body for participation in student activities.*

MASTER OF SCIENCE IN SCIENCE

Geology

FERNANDO NIERI-CASTAGNINO, Civil Engineer, Catholic University of Peru, 1943.

Physics

SAMUEL POPE MORGAN, JR., B.S., California Institute, 1943.

MASTER OF SCIENCE IN ENGINEERING

Aeronautics

RALPH L. GEISBERG, B.M.E., The Clemson Agricultural College, 1937.

Civil Engineering

ROBERT LEE JANES, B.S., California Institute, 1936.

CARL BURDETT JOHNSON, B.S., California Institute, 1938.

JOHN KACHIG MINASIAN, B.S., California Institute, 1938.

Mechanical Engineering

MEHMET NURI BERKANT, B.S., Robert College, 1943.

ERTUGRUL BIRLIK, B.S., California Institute, 1944.

ETHEM OZKARAGOZ, B.S., Robert College, 1943.

SUREYYA RAFET TANYILDIZ, B.S., California Institute, 1944.

PROFESSIONAL DEGREES

Aeronautical Engineer

HARRY JAMES HEIMER, S.B., Massachusetts Institute of Technology, 1941.

RUDOLPH WILLIAM HENSEL, S.B. and S.M., Massachusetts Institute of Technology, 1942.

JOHN LAUFER, B.A., Louisiana State University, 1942; M.S., California Institute, 1943.

JOHN WILDER MILES, B.S., California Institute, 1942; M.S., 1943.

Civil Engineer

JOSEPH BERNARD FRANZINI, JR., B.S., California Institute, 1942; M.S., 1943.

DOCTOR OF PHILOSOPHY

STEPHEN WINCHESTER DANA (*Geophysics*), A.B., Oberlin College, 1940; M.S., University of Southern California, 1942.

JACOB WILLIAM DUBNOFF (*Biology*), A.B., University of California at Los Angeles, 1931; M.A., University of California, 1933.

CH'ENG-YI FU (*Geophysics*), B.S., National Tsing Hua University, 1933; M.S., McGill University, 1941.

CHAO-WANG HSUEH (*Physics*), B.S., National University of Peking, 1931; M.S., California Institute, 1939.

JOSEPH FRANK MANILDI (*Electrical Engineering*), B.S., California Institute, 1940; M.S., 1942.

JOHN WILDER MILES (*Electrical Engineering*), B.S., California Institute, 1942; M.S., 1943.

KNOX MILLSAPS (*Mathematics*), B.S., Alabama Polytechnic Institute, 1940.

TE-HSIEN PI (*Physics*), B.S., Yenching University, 1932; M.S., 1934.

EDWARD ROSENTHALL (*Mathematics*), B.S., McGill University, 1937; M.S., 1938.

JURG WASER (*Chemistry*), Certificate of Maturity, University of Zurich, 1935.

FOR THOSE IN PERIL ON THE SEA

ETERNAL FATHER, strong to save,
Whose arm hath bound the restless wave,
Who bids't the mighty ocean deep
Its own appointed limits keep;
Oh, hear us when we cry to Thee,
For those in peril on the sea.

O Christ Whose voice the waters heard
And hushed their raging at Thy word,
Who walked'st on the foaming deep,
And calm amidst its rage did'st sleep;
Oh, heard us when we cry to Thee
For those in peril on the sea!

Most Holy Spirit! Who did'st brood
Upon the chaos dark and rude,
And bid its angry tumult cease,
And give, for wild confusion, peace;
Oh, hear us when we cry to Thee
For those in peril on the sea!

O Trinity of love and power!
Our brethren shield in danger's hour;
From rock and tempest, fire and foe,
Protect them wheresoe'er they go;
Thus evermore shall rise to Thee
Glad hymns of praise from land and sea.

THIS IS A SONG BENEDICTION which has particular application to sea-faring men. It was written in 1860 by the Reverend William Whiting, clergyman of the Church of England, after he had come through a terrible storm in the Mediterranean Sea. At the United States Naval Academy, this hymn is sung at the conclusion of every service.