# ABBREVIATED VITA JOEL N. MYERS

#### Education

The Pennsylvania State University, Ph.D., Meteorology, 1971 The Pennsylvania State University, M.S., Meteorology, 1963 The Pennsylvania State University, B.S., Meteorology, 1961

#### Selected Professional Experience

The Pennsylvania State University, Member, Board of Trustees, 1981 - present. (Elected in 1981, 1984, 1987, and 1990 in alumni elections.) Has served on the Executive Committee and is currently Vice-Chairman of the Education Policy Committee. Lecturer, Department of Meteorology, 1974 - 1981, Assistant Professor, 1971 - 1974

Founder, President and Chairman of the Board of Accu-Weather, Inc., the nation's leading commercial weather service. Accu-Weather provides forecasts and information to more than 400 major radio and television stations and newspapers, as well as many major clients such as the ABC Television Network, CBS, Dow Jones, IBM, CompuServe, Prodigy, the Associated Press, UPI and Reuters. Accu-Weather also provides special forecasts to ski areas, construction companies, fuel oil dealers, utilities, major corporations, and local, state and federal governmental agencies. Altogether more than 7000 clients are served. Accu-Weather also engages in special weather surveys and studies for insurance companies and attorneys.

Consulting work has covered a wide range of activities involving use of meteorological and climatological data in a variety of applied problems. Specialists in ski area site evaluations as well as field measurement programs and analysis of micro- and mesoclimates.

Expert witness in meteorological forensic cases.

Professional Member, American Meterological Society Professional Member, National Weather Association Professional Member, Commercial Weather Services Association

Quoted in Time, Newsweek, U.S. News and World Report, Forbes, National Geographic, Economist, USA Today, Readers Digest, and more than 100 newspapers and magazines across the country in the past ten years.

Has appeared on scores of TV shows: national, regional and local interviews. These include ABC Nightly News, To Tell the Truth, and Nightly Business Report.

## Speeches

More than 100 speeches given, including:

American Meteorology Society, "A Real-Time Weather Database", New Orleans, Louisiana, 1991.

American Meteorological Society Second International Conference on Interactive Information and Processing Systems for Meteorology, Oceanography and Hydrology, "An Integrated Meteorological Information System", January 13, 1986.

The New York Academy of Sciences, Hurricane Forecasting, September 1984.

14th American Meteorological Society Conference on Broadcast Meteorology, "Forecasting and Data Services Available to Radio and Television Stations", June 22, 1984.

Panel Discussion on "The Role of the Private Sector in the Dissemination of Hurricane Forecasts and Warnings" at the 15th Technical Conference on Hurricanes and Tropical Meteorology and the 3rd Technical Conference on Meteorology of the Coastal Zone.

# Research Grants

PemTAP, 1968 - 1969. Application of meteorological and climatological information to improve the efficiency of operation of fuel oil jobbers and construction contractors. Co-Director.

Pennsylvania Coal Research Board, 1964-1965. Investigation of fog dispersal methods. Co-Director.

# Selected Publications

Myers, Joel N., 1964. "Preliminary Radar climatology of Central Pennsylvania," Journal of Applies Meteorology, 3:421-429.
, 1966. "Application of Slice Theory to Account for the Horizontal Extent of Convectiv
Precipitation Radar Echoes," <u>Iournal of Applied Meteorology</u> , 5:832-838.
, and Cahir, J., 1968. "Improved Weather Forecasts: Is the Consumer Getting the Benefits?
Earth & Mineral Sciences, 38 (1):6-8.
, 1968. "Fog," Scientific American, 219 (6):74-82.
, and Myers, B. L., 1972. "How Private Meteorologists Help," The Pennsylvanian, October p. 25.
p. 25.
, and Cahir, J., et al. "A Laboratory Manual for Introductory Meteorology", The Pennsylvani
State University.
, 1974. "A New Look at Limitations of Precipitation Probability Forecasts," Fifth conference
on Weather Forecasting and Analysis, St. Louis, Missouri. Published by American Meteorological
Society, Boston, Massachusetts.
, and Myers, B. L., 1974. "How Users Benefit from Private Weather Forecasts," Rural an
Urhan Roads, Vol. 12, No. 6, June, p. 17.
, and Myers, B. L., 1985. "New Technology and the Presentation of Weather," RTND.
Communicator. December.
Joel N. Myers. 1963. "Radar Climatology of Central Pennsylvania Report #4, Grant No. NSF G-24850, Th
Pennsylvania State University.
, and Hosler, C. B., 1965. Preliminary Investigation of Fog Dispersal Methods Applicable t
Greater Pittsburgh Airport. Coal Research Board SR-51.
, Cahir, J. J., and Hosler, C. L., 1969. A Meteorological Information and Dissemination System
to Aid Fuel Oil Distributors and Construction Contractors. Research Report to The Pennsylvani
Technical Assistance Program, pp. 40, The Pennsylvania State University.
, Greinter, R., and Kelley, J. E., 1972. Pilot study of the Applications of a Cumulus Clou
Model to Areal Precipitation Prediction. Institute for Research on Land and Water Resources, the
Pennsylvania State University, Research Publication No. 62.

## CHARLES L. HOSLER

# Biographical Sketch

## Personal Items

Date and Place of Birth: 3 June 1924; Honey Brook, PA

Home Address: 1229 Smithfield Circle

State College, PA 16801

Home Phone: 814-237-7115

Office Address: 617 Walker Building

University Park, PA 16802

Office Phone: 814-863-8358

Married with four children

#### Education

Bucknell University

Massachusetts Institute of Technology

The Pennsylvania State University
The Pennsylvania State University
The Pennsylvania State University
The Pennsylvania State University
1947 B.S. Meteorology
1948 M.S. Meteorology
1951 Ph.D. Meteorology

# Military Sarvice

Lt. Commander, USNR, retired

Active Duty: 1 July 1943 to 21 July 1946 - Pacific Asiatic Theatre

Naval Reserve Unit 4-4, 1949-1966

# Professional Experience at The Pennsylvania State University

1947-1948	Graduate Assistant in Meteorology
1948-1951	Instructor in Meteorology
1949-1959	Hydrographer Federal State Flood Forecasting Service
1951-1954	Assistant Professor of Meteorology
1954-1960	Associate Professor of Meteorology
1960-present	Professor of Meteorology
1961-1965	Head of the Department of Meteorology
1965-1985	Dean of the College of Earth and Mineral Sciences
1985-1988	Vice President for Research and Dean of the Graduate School
1988-1992	Senior Vice President for Research and Dean of the Graduate School
1990-1991	Acting Executive Vice President and Provost of the University, and Senior Vice President for Research and Dean of the Graduate School
1992	Retired, 4 March 1992

## Honors and Memberships

- \* National Academy of Engineering (Elected 1978)
- \* American Meteorological Society (Elected Fellow)
- \* 1956 American Geophysical Union Award for outstanding contribution to the field of hydrology in 1955
- \* John E. Wilkinson Award for Administrative Excellence, 1981
- \* Charles Franklin Brooks Award for Outstanding Service to the American Meteorological Society, 1981
- \* Golden Key National Honor Society Outstanding Faculty Award, 1982
- \* Sigma Xi (Past President Penn State Chapter
- \* Tau Beta Pi
- \* Triangle Fraternity
- \* Sigma Gamma Epsilon
- \* Alpha Phi Omega (Advisor)
- \* American Association for Advancement of Science

#### Current Professional Activities Include

Planning Commission, American Meteorological Society, 1979 - present Executive Committee, Panel of Experts on Education and Training, World Meteorological Organization (U.S. Representative)

Environmental Effects, Transport and Fate Committee, Science Advisory Board, U.S. Environmental Protection Agency, 1982

Member, National Science Board, 1985-1994

Member, Ad Hoc Committee on Environmental Research, National Science Board Chairman, Committee on Nominees, National Science Board

Member, Committee on Programs and Plans, National Science Board

1989 Committee on Fellows, American Meteorological Society

STORM Steering Committee, American Meteorological Society

President, Pennsylvania Research Corporation

Advisory Board of the Pennsylvania Geographic Alliance, 1989-present

Chairman, National Weather Service Modernization Committee, National Research Council, 1989-present

Chairman, Advisory Committee, Pennsylvania Academy of Sciences

## Past Professional Activities

Weather Modification Panel of the National Science Foundation, 1968 Atmospheric Science Panel of the National Science Foundation, 1969-1970 National Lecturer XI, 1970-1972

National Lecturer American Chemical Society, 1972

National Academy of Sciences, National Academy of Engineering Commission Advisory Committee to Environmental Science Services Administration on Weather and River Services, 1970

Cloud Physics Committee of the American Geophysical Union, 1963-1967

Commissioner for Education and Mannayer - American Methodological Soci

Commissioner for Education and Manpower - American Meteorological Society, 1968-1970

Board on Radio & TV Weathercasting, 1967-1972

National Academy of Sciences - National Academy of Engineering Committee
Advisory to the National Oceanic and Atmospheric Administration and
Chairman of Panel on Weather Modification, 1972-1973

Meteorology & Atmospheric Environmental Quality Panel, National Aeronautics and Space Administration, 1972-1973

Stormfury Advisory Panel, National Oceanic and Atmospheric Administration-United States Navy, 1969-1975

(Past Professional Activities Cont'd.)

Advisory Committee to the Pennsylvania Water Resources Center, 1970-1975 Meteorology Advisory Committee, Environmental Protection Agency, 1970-1975 Space Shuttle Scientific Committee, National Aeronautics and Space Administration, 1977

Council and Secretary of Executive Committee, American Meteorological Society, 1970-1974

American Meteorological Society Film Panel, 1969

Chairman, Board of Professional Ethics, American Meteorological Society, 1972-1976

American Society of Civil Engineers Task Committee on Weather Modification Planning and Policy, 1970-1975

National Advisory Committee on Oceans and Atmosphere, 1972-1975

President, American Meteorological Society, 1976

Cooling Tower Research Committee, American Society of Mechanical Engineers, 1973-1979

Atmospheric Cloud Physics Laboratory (ACPL) Subcommittee of the Applications Steering Committee, National Aeronautics and Space Administration

Committee on Atmospheric Sciences, National Academy of Sciences, National Academy of Engineering, 1975-1978

American Association of Universities Advisory Committee on Energy Research, 1979 Select Committee on National Weather Service of the National Academy of Sciences, 1979-1980

Chairman, Stormfury Advisory Panel, National Academy of Sciences, National Academy of Engineering, 1975-1982

Chairman, Weather Modification Advisory Panel of the Office of Science and Technology Policy, 1980-1982

Board on Atmospheric Science and Climate - National Research Council, 1982-1984 Chairman, White House Briefing Group on Atmospheric Sciences, 1983 National Research Council

Chairman of the Board of Trustees for University Corporation for Atmospheric Research (Acting President, 1983) 1982-1985

National Research Council, Commission on Physical Sciences, Mathematics, and Resources, 1984

Pennsylvania Weather Modification Board, 1967-1985

Mineral Resources Committee, National Association of State Universities and Land Grant Colleges, Executive Committee, 1978-1985

Treasurer, University Corporation for Atmospheric Research, 1985

Chairman, Board on Atmospheric Sciences and Climate, National Research Council, 1984-1986

Geophysics Research Forum (GRF), National Research Council, 1984-1986 Chairman, Nominating Committee, American Meteorological Society, 1986 Chairman, Education and Human Resources Committee, National Science Board Member, Nominating Committee, National Academy Engineering, 1987 Chairman of the Board, Advanced Technology Center of Central and Northern

Chairman of the Board, Advanced Technology Center of Central and Northern Pennsylvania, Inc., 1986-1988

Member, Audit and Oversight Committee, National Science Board

Member, Committee on Economic Competitiveness, National Science Board

Member, Committee on Openness of Scientific Communications, National Science Board

Chaired the Panel on Meteorological Support for Space Operations, National Research Council, 1987-1988

Director, Advanced Technology Center of Central and Northern Pennsylvania, Inc., 1988-1990

# University and Community Activities

University Senate University Senate Library Committee Faculty Advisory Council (Milton Eisenhower) Graduate School Lecture Committee 1980 Committee (in 1960 for Eric Walker) Tenure Review Faculty Rights and Responsibilities Admissions Committee Chairman, Council of Deans, 1977 Chairman of United Way, University Park, 1981 1st Vice President, Board of Directors, Centre County United Way, 1985 (County Chairman, 1983) Chairman of Central Pennsylvania Committee for Revising the Pennsylvania Constitution, 1968 Numerous search committees Perhaps 100 miscellaneous University committees

## Teaching and Lecturing

Undergraduate and graduate courses in meteorology, one undergraduate course in humanities; in excess of 1000 invited public lectures in U.S. and abroad; taught courses in six universities and on T.V.; extensive experience in T.V. video taping and motion picture production; 12 years T.V. weather program. National lecturer for: American Meteorological Society, Sigma Xi, American Chemical Society.

#### Research

Thirty years of experience in contract research for the U.S. Air Force, National Science Foundation, Department of Interior, U.S. Department of Agriculture Commission of Pennsylvania, National Aeronautics and Space Administration (NASA), McDonnell Douglas, Atomic Energy Commission, Hazelton Nuclear Science, etc.

#### Consultant Services

Numerous private corporations and government agencies, weather modification, weather and other environmental effects of cooling towers, Zero-G cloud physics in space, U.S. Senate and House Committees (testimony 20 occasions). An advisor on meteorological matters to President Dwight Eisenhower.

#### **Publications**

90 Refereed Publications.

#### Travel

In connection with research and as a lecturer, travelled extensively in Europe, Britain, Soviet Union, People's Republic of China, Japan, Central and South America, Caribbean, India, Australia, Africa and numerous Pacific Islands.

#### Affirmative Action

From 1956 to 1968, spent six weeks each year working with science teachers in black institutions of higher learning in the southern United States. The only earth science graduate program at a black institution in the United States was started at Virginia State University, Petersburg, Virginia as a result of this work. Through a continuing relationship with former students and faculty at these institutions, maintained up to the present; has been instrumental in helping hundreds of black students acquire degrees; found financial resources for, and sponsored, a number of graduate students at Penn State, three of whom obtained doctorates and three obtained master's degrees.

## Recreation

Ran half-mile in high school, Bucknell, and M.I.T.; was on soccer team at Bucknell; played baseball and boxed. Enjoy fishing, hunting canoeing, hiking, and other outdoor activities. An avid follower of the national and international political and economic scene.



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JOEL N. MYERS, President BARRY LEE MYERS, Exec. Vice President MICHAEL A. STEINBERG, Vice President ELLIOT ABRAMS, Sr. Vice President EVAN A. MYERS, Sr. Vice President JOSEPH P. SOBEL, Sr. Vice President



NORMAN J. MACDONALD Meteorologist 226 Route 103 York, ME 03909 (207) 363-1877

BORN: August 15, 1924

EDUCATION:

High School:

Bethesda-Chevy Chase, Suburban Washington, D.C. 1939-42

College Preparatory:

Devitt Prep., Washington, D.C. 1943

College Degrees:

California Institute of Technology 1946 - B.S. in Science

California Institute of Technology 1948 - M.S. in Meteorology

Graduate work at Massachusetts Institute of Technology - Graduate work 1960-61 and 1964-65.

# **EXPERIENCE:**

November 1991-Present

Consulting meteorologist specializing in Forensic and Media Services.

1981-1991

Senior Meteorologist, Accu-Weather, Inc., State College, PA: Prepared hundreds of forensic weather report and made dozens of court appearances as an expert witness; prepared and presented lectures on voice dynamics and live radio weather broadcasts for 16 to 20 radio stations, mostly in New England.

1976-1981

Director and founder of MWX Services, Bedford, MA; a Meteorological consulting firm specializing in media and forensic meteorology.

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WITH ACCURATE WEATHER FORECASTS AND DATA SERVICES FOR THREE DECADES

1974-1976

Part time teaching of undergraduate meteorology at Boston College and Northeastern university in Boston, MA, area.

1967-1976

Member research staff, Planetary Circulations Project, Department of Earth Sciences, Massachusetts Institute of Technology, Cambridge, MA; Designed, conducted and evaluated experiments using observational data to determine the dynamics and physical characteristics of planetary atmospheres.

1961-1967

Atmospheric physicist, Air Force Cambridge Research Laboratory, Hanscom Field, Bedford, MA. Designing experiments to determine relationship of geophysical phenomena to their environment and their response to extra-terrestrial influences.

1961-1977

Television and Radio Weather Broadcaster on WBZ-TV and WBZ-Radio, Boston, MA. Science News Reporter 1974-1977.

1960-1961

Senior Scientist, Advanced Research and Development Division of the AVCO Corporation, Wilmington, MA.; Investigating the dynamics of Ionosphere disturbances and their effect on radio communication.

1957-1960

Research scientist on the staff of High Altitude Observatory University of Colorado, Boulder, CO; Conducting basic research into the effects of variable solar activity on the terrestrial atmosphere.

1953-1957

Director of Weather Forecasting Services and Applied Research Division of Irving P. Krick Associates, Denver, Colorado.

1951-1953

Naval Officer, assigned to Project AROWA Norfolk, VA. with special assignment to Operation IVY (detonation of first thermonuclear device) received Letter of Commendation for performance.

1948-1952

Weather forecaster, Irving P. Krick Associates, Pasadena, CA and Houston, TX.

#### **PUBLICATIONS**

"A Guide to Arctic Forecasting" Nav. Aer. Publ., U.S. Navy 1955

"A Possible Relationship of Geomagnetic Disturbances to 300mb Trough Development" with D.D. Woodbridge and T.W. Phorte, Jrnl. of Mets. 64, 247 - 248, 1958.

"An Apparent Relationship Between Geomagnetic Disturbances and Changes in Atmospheric Circulations at 300mb" with D. D. Woodbridge and T. W. Phorte, Jrnl. of Geophys. Res. 64, 331 - 341, 1959.

"The Relation of Geomagnetic Disturbances to Change in Circulation at the 30,000 Foot Level" with D. D. Woodbridge, Science, 638 - 639, 1959.

"Further Evidence of a Solar Influence on Large Scale Circulation at 300mb" with W. O. roberts, Jrnl. Geophys. Res. 65, 529 - 539, 1960.

"Some Observations of the Mountain Wave" with H. T. Harrison, Bull. AMS 41, 627 - 632, November 1960.

"The Effect of Solar Corpuscular Emission on the Development of Large Troughs in the Troposphere" with W. O. Roberts, Jrnl. of Met. 18, 116 - 118, February 1961.

"The Predicted Performance of a High Frequency Polar Communication Network During an Ionosphere Storm" with R. Penndorph and G. E. Hill, AVCO Tech. Rpt. TR 61 - 71, page 36, April 1961.

"A Statistical Study of Lower Atmospheric - Ionospheric Coupling" with R. Knecht, Jrnl. Geophys. Res. 66, 3187 - 3190, October 1961.

"A Test of the Reality of Rainfall Singularities" with R. Shapiro, Jrnl. Met. 18. 704 - 707, October 1961.

"The Prediction of Geomagnetic Disturbances Indices" "Part I, the Elimination of Internally Predictable Variations" with F. Ward, Jrnl. Geophys. Res. 68, 3351 - 3373, June 1963.

"A Search for Rainfall Calendaricities" with G. W. Brier and R. Shapiro, Jrnl. Atmos. Sci. 20, 529 - 532, November 1963.

"A Test for a Period of 18 Cycles per Year in Rainfall Data" with G. W. Brier and R. Shapiro, Jrnl. Appl. Meteor. 3, 53 - 57, February 1964.

"The Persistence and Variability of Anomalous E-Region Penetrating Frequencies" Jrnl. Atmos. & Terres. Phys. 27, 1009 - 1018, 1965.

"Comments on a paper by V. R. Noonkester, "Non-Diurnal Variations of the E. Layer at Washington, D.C", Jrnl. Atmos. & Terres. Phys., 28, 13 - 17, 1966.

"Methods of Measuring Solar and Terrestrial Atmospheric Circulations", Tellus, 18, 13 - 17, 1966.

"The Dependence of the Motion of Cyclonic and anticyclonic Vortices on Their Sizes", Jrnl. Atmos. Sci. 24, 449 - 452, 1967.

"The Evidence For the Existence of Rossby-Like Waves in the Hurricane Vortex", Tellus 20, 138 - 150, 1968.

"Estimates of the Seasonal Variations of the General Circulation From Easily Identifiable Features", Tellus 20, 300 - 304, 1968.

"Estimating the Motion and the Mechanics of a Planetary Atmosphere", Planet & Space Phys. 17, 1149 - 1160, 1969.

"A Note on the Contribution of the Standing Eddies to the Meridional Flux of Angular Momentum", Tellus, 21, 1969.

"Further Comments on Estimating the Motion of a Planetary Wind Field", Planet Space Sci. 19, 907 - 913, 1971.

"The Relation Between the Average Motion of Cyclones and Anticyclones and Their Shape", with H. T. Storari, Jrnl. Geophys. Res. 78, 2685 - 2690, 1973.

"A Possible Association Between Convection and 'Tilting' Troughs", with F. Ward, RIVISTA Italiana DiGeofesca 23, 79 - 81, 1974.

"On the Apparent Relationship Between Convective Activity and the Shape of 500mb Troughs", Mon. Wx. Rev., 12, 1618 - 1622, 1976.

"New Findings on the Apparent Relationship Between Convective Activity and the Shape of 500mb Troughs", with T. S. Glickman and F. Sanders, Mon. Wx. Rev. 105, 1977.

Numerous popular articles in trade journals and the "Bulletin of the American Meteor. Society" and the "Natural History Magazine". Numerous letters to the various journals concerning other writing in the area of interest of the above listed publications.



# Accu-Weather, Inc.

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JOEL N. MYERS, President BARRY LEE MYERS, Exec. Vice President MICHAEL A. STEINBERG, Vice President ELLIOT ABRAMS, Sr. Vice President EVAN A. MYERS, Sr. Vice President JOSEPH P. SOBEL, Sr. Vice President



JOSEPH P. SOBEL 458 East Fairmount Avenue State College, PA 16801

## Education

G.W. Hewlett High School - Graduated 1963 University of Michigan - B.S., 1967 (Meteorology) Pennsylvania State University - M.S., 1970 (Meteorology) Pennsylvania State University - Ph.D., 1976 (Meteorology)

#### Professional and Academic Positions

Member of University of Michigan Field Project - Severe Storm Research, Chickashea, Oklahoma. Summer, 1967.

Meteorologist - ESSA, Weather Bureau Regional Headquarters, Garden City, New York. Summers of 1968 and 1969.

Pennsylvania Air National Guard - Weather observer and forecaster. 1969 through 1976. Highest rank obtained - Captain.

The Pennsylvania State University - One of a team of meteorologists presenting an 8-minute television program on Pennsylvania Public TV Network. Since 1970.

The Pennsylvania State University - Teaching and Research Assistant 1969 through 1976.

ACCU-WEATHER - part-time, 1971-1974; full-time, November 1974 to date. Appointed Associate Vice-President, September 1977. Appointed to Board of Directors, December, 1980. Appointed Vice-President, December, 1981. Appointed Senior Vice-President, December 1983.

The Pennsylvania State University - Visiting Lecturer - 1976 through 1986.

Joseph P. Sobel Page -2-

## Honors and Accomplishments

National Science Foundation Fellowship, 1969-1970

Granted American Meteorological Society Television Seal of Approved, October 1973.

Listed Who's Who in the East, 1992.

Admitted as Expert Forensic Meteorologist Witness at dozens of trials in Pennsylvania, New Jersey and other states, 1976 through present.

Completed Forensic Meteorology Workshop - American Meteorological Society, January 1992.

Author of hundreds of reports documenting findings of research projects to determine weather conditions at particular times and places in the past.

## Professional Affiliations

American Meteorological Society Sigma Xi Chi Epsilon Pi

## Publications

"The Relationship Between the Sales of Cutter Insect Repellent and the Weather in the Southcentral and Northeast Sales Region: , Report to Miles Laboratories. (Joint Author). Sobel, Clark, Adams and Antle. Accu-Weather, Inc. State College, Pennsylvania, January 1994.

"Forensic Meteorology: How and Why", The Legal Investigator, Vol. XXII, No. 2., November, pp. 10-12, 1992.

Ph.D. Thesis - Nested Grids in Numerical Weather Prediction and an Application to a Mesoscale Jet Streak. The Pennsylvania State University, University Park, Pennsylvania, 1976.

Master's Thesis - Objective Mesoscale Temperature Forecasts. The Pennsylvania State University, University Park, Pennsylvania, 1970.

ESSA Technical Memorandum Eastern Region #37. Garden City, New York, September, 1970.

Progress Report to the Environmental Protection Agency from Pennsylvania State's Select Research Group (Joint Author). Sobel, Anthes, Warner and Seaman. The Pennsylvania State University, University Park, Pennsylvania.

Joseph P. Sobel Page -3-

# Speeches

Numerous appearances before Rotary and other civic groups.

"The Weather Made Me Do It!", Northeast Pennsylvania Claims Association, Quarterly Meeting, November 11, 1993.

"Climatic Changes and their Impact on Severe Weather Patterns", Independent Reinsurance Underwriters Association Convention, October, 1993.

"Weather Data and It's Use in Insurance Claims", Lancaster and Harrisburg Claims Association Dual Meeting, July 9, 1992.

"When We Mean What We Say, Do They Know What We Mean?", American Meteorological Society 10th Conference on Broadcast Meteorology, June 15, 1990.

"Weather Broadcasting in the Soviet Union", AMS 19th Conference on Broadcast Meteorology, June 1, 1989.

"How Weather Data Are Used In Forensic Meteorology", 5th Annual Meeting, The Association of American Weather Observers, Inc., October 21, 1988.

"Private Weather Services", American Public Works, 23rd North American Snow Conference, April, 1983.

"Forensic Meteorology and Your Claim", Society of Chartered Property and Casualty Underwriters, Central Pennsylvania Chapter, December 1980.

"Commercial Weather Services", Pennsylvania State University Faculty and Staff Retirees Club, March 1994.