PHOTOGRAMMETRIC ENGINEERING and REMOTE SENSING

February 1982

Volume XLVIII

Number 2

COVER PHOTO — This photograph was taken for the Wrather Corporation to show the Long Beach Redevelopment Program. The Wrather Corporation leases the Queen Mary from the City of Long Beach and the Spruce Goose from a flying club. Located by the arrows, the Spruce Goose is the largest aircraft ever built, and the Queen Mary was, at one time, the largest ocean liner ever built. Submitted by Jerry A. Wagner of Ertec Airborne Systems, Inc., Long Beach, California. TECHNICAL ARTICLES Accuracy of the Normal Case of Close-Range Photogrammetry Youssef I. Abdel-Aziz......207 Calibration and Model Reconstruction in Analytical Close-Range Stereophotogrammetry. Part II: Special Evaluation Procedures for Rasterstereography and Moiré Topography An Airphoto Key for Major Tropical Crops Warren R. Philipson and Ta Liang......223 A Comparison between Aerial Photography and Landsat for Computer Land-Cover Mapping B. K. Quirk and F. L. Scarpace......235 Multispectral Photographic Remote Sensing of Green Vegetation Biomass and Productivity Paul J. Curran.......243 Use of GOES and TIROS/NOAA Satellite Data for Snow-Cover Mapping Thomas M. Lillesand, Douglas E. Meisner, Anne LaMois Downs, and Richard L. Deuell251 Registration of Heat Capacity Mapping Mission Day and Night Images Kenneth Watson, Susanne Hummer-Miller, and Don L. Sawatzky263 Landsat Thermal Imaging of Alpine Regions Satellite Photos Can Aid Navigation on Aerial Photo Missions Richard J. Myhre275 (Continued on page 165)

Second-class postage paid at Falls Church, Virginia and at additional mailing offices.

Photogrammetric Engineering and Remote Sensing (ISSN 0099-1112) is published monthly by the American Society of Photogrammetry, 105 N. Virginia Ave., Falls Church, Virginia 22046. Publication Office—Everybodys Press, Hanover, Pa. 17331. (Also see Notice on second following page.)

Copyright 1982 by the American Society of Photogrammetry. Reproduction of this issue or any part thereof (except short quotations for use in the preparation of technical and scientific papers) may be made only after obtaining the specific approval of the Editor.

The Society is not responsible for any statements made or opinions expressed in the technical papers, advertisements, or other portions of this Publication.

MEMBERSHIP RATES: Membership in the American Society of Photogrammetry is open to any person actively engaged in the practice of Photogrammetry, Photo-interpretation and Remote Sensing, or who by means of education or profession is interested in the application or development of these arts and sciences. The annual dues for Regular members are \$30.00 which includes a \$15.00 member subscription to the Society's official journal, "Photogrammetric Engineering and Remote Sensing." The annual dues for accredited student members are \$12.50 which includes an \$8.00 student subscription to the official journal. (All memberships are on a calendar year basis.) Add \$5 for all international memberships to cover cost of postage. Postmaster: send address changes to the American Society of Photogrammetry, 105 North Virginia Avenue, Falls Church, Virginia 22046.

SUBSCRIPTION RATES: Persons or organizations that are not affiliated with the Society may obtain non-member subscriptions to Photogrammetric Engineering and Remote Sensing in accordance with the following schedule:

Non-member subscription . . . \$35.00 per year (calendar) Add \$5 for international subscriptions.

(Continued from page 163)

| An Intelligent Earth Sensing Information System Temple H. Fay, John Nazemetz, David M. Sandford, Vidya Taneja, and Peter Walsh |
|---|
| Trends and Issues in Remote Sensing Education Thomas M. Lillesand |
| NEWSLETTER |
| Call for Papers, 1982 ACSM-ASP Fall Technical Meeting. 234 Forum, An Analytic Correction Method for Satellite MSS Geometric Corrections. 241 Call for Papers, AUTO-CARTO V—Commission IV ISPRS. 242 Canadian Institute of Surveying Centennial Meeting. 260 1983 ASP-ACSM Annual Convention. 274 Short Course, Optical Science and Engineering. 279 Landsat Lifeline. 280 |
| Annual Seminar and Workshop in Biomedical Photography |
| Officers of the Society |
| Journal Affairs |
| Permission to Photocopy |

Permission to Photocopy

The appearance of the code at the bottom of the first page of an article in this journal indicates the copyright owner's consent that copies of the article may be made for personal or internal use or for the personal or internal use of specific clients. This consent is given on the condition, however, that the copier pay the stated per copy fee of \$2.25 through the Copyright Clearance Center, Inc., 21 Congress Street, Salem, MA 01970, for copying beyond that permitted by Sections 107 or 108 of the U.S. Copyright Law. This consent does not extend to other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works, or for resale.

NOTICE: Correspondence relating to all business and editorial matters pertaining to this and other Society publications should be directed to the American Society of Photogrammetry, 105 Virginia Ave., Falls Church, VA 22046, including inquiries, memberships, subscriptions, changes in address, manuscripts for publication, advertising, back issues, and the Manuals of Photogrammetry, Remote Sensing, and Color Aerial Photography. The telephone number of the Society Headquarters is (703) 534-6617.