

Photogrammetric Engineering

Volume XXX

MARCH 1964

Number 2

Contents

COVER PAGE—Queen Maud Range, Shackleton Glacier Antarctica, looking toward the plateau in the background. Photography by the U. S. Navy for the U. S. Geological Survey. Flying height 20,000 ft., 6 inch focal length.

SOCIETY AFFAIRS

List of Sustaining Members	173
Application for Corporate Membership	320
MANUAL OF PHOTOGRAPHIC INTERPRETATION—Information and Order Form	191

TECHNICAL PAPERS

Aerial Triangulation in the Antarctic <i>Arthur J. Brandenberger</i>	197
Highway Engineering Influence on Aerial Surveys <i>William T. Pryor</i>	202
The Use of Aerial Photographs for Engineering Soil Reconnaissance in Arctic Canada <i>Roy Jackson Fletcher</i>	210
The Role of Testing and Evaluation in the Development of Photogrammetric Equipment <i>Sidney Presser</i>	220
A Method for Correcting the Effect of Gravity Anomalies on Precision Inertial Navigation Mapping Systems <i>B. R. Rubenstein and H. Winter</i>	225
Investigation of the Camera Rotation System of Aerial Triangulation <i>Michael G. Misulia</i>	230

(Continued on page 169)

Second-class postage paid at Menasha, Wisconsin and at additional mailing offices.

Published six times a year, during the months of January, March, May, July, September and November, by the American Society of Photogrammetry Publication Office, Curtis Reed Plaza, Menasha, Wis., and at Society's Address—44 Leesburg Pike, Falls Church, Va. The Editor's address is 3523 Raymond St., Chevy Chase 15, Md.

Copyright 1964 by the American Society of Photogrammetry. Reproduction of this issue or any part thereof (except for short quotes in the preparation of technical and scientific papers) may be made only after obtaining the specific approval of the Society's Chairman of the Publications Committee.

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

Subscription Rates—No charge to Society members in good standing; \$9 annually for subscribers in the United States and its possessions; and \$9.50 annually, elsewhere. Society pays the postage. Price of individual back numbers—in U. S. and its possessions, \$1.75 per copy for single purchase of 3 or less and \$1.65 per copy for 4 or more; elsewhere \$1.85 per copy for single purchase of 3 or less and \$1.75 per copy for 4 or more. Orders for subscriptions or for individual copies should be sent to the Society's address.

Changes in address should be sent to the Secretary at the Society's address in Falls Church, Va.

Printed in the United States of America

(Continued from page 167)

Automatic Mapping System Design <i>H. F. Dodge</i>	238
A Test of Stand Age Estimation from Aerial Photos in Even-Age Douglas-Fir <i>David A. Bernstein</i>	242
A Report on the Camera Calibration Phase of the C&GS Satellite Geodesy Program <i>Eugene A. Taylor and B. Frank Lampton</i>	245
Roadway Plans from a Total Airphoto Technique without Ground Control <i>Nicholas W. E. Lee</i>	251
The Historical Development of Analytical Photogrammetry <i>Frederick J. Doyle</i>	259
Pictures Don't Lie—But the Bigots Can't Be Bothered <i>Robert N. Colwell</i>	266
Adjustment of Elevations Derived from Instrumentally Bridged Aerial Photographs <i>Morris L. McKenzie</i>	272
Philippine—Numerical Photogrammetric Cadastre <i>G. T. Marzan, G. Umadhay and T. C. Jimenez</i>	278
Development of Programs for Strip and Block Adjustment at The National Research Council of Canada <i>G. H. Schut</i>	283
Atmospheric Refraction and Its Distortion of Aerial Photographs <i>Arthur H. Faulds and Robert H. Brock, Jr.</i>	292
Model Flatness—A Guide for Stereo-Operators <i>G. P. Katibah</i>	299
Panel—The Ballistic Camera Accuracy Review Project <i>G. H. Rosenfield, A. E. Glei, R. A. Gugel, F. Collen and R. A. Brown</i>	307
An Index to Publications in the English Language Pertaining to Aerotriangulation in Space <i>Gordon Gracie</i>	312
JOURNAL ADMINISTRATION	
Announcement of International Congress	319
Index to Advertisers	171

FMA—MAKER OF PRECISION ELECTRO-OPTICAL EQUIPMENT

Film Data Recording and Reading Systems Film Transports
High Acuity Viewers Information Storage and Retrieval Systems
Image Enhancement Devices

HAS TECHNICALLY CHALLENGING WORK FOR
Senior Physicists, Optical and Electronic Engineers

Write in Confidence to
Mr. Clifford Blades, 142 Nevada Street, El Segundo, California

