

# CONTENTS

Papers	Page
MAPPING STANDARDS FOR URBAN PLANNING by Rupert B. Southard Jr. . . . .	1
TEN-YEAR RESEARCH PROGRAM IN SURVEYING AND MAPPING by Morris M. Thompson . . . . .	9
PROFESSIONAL SURVEYING PRACTICE by California Council of Civil Engineers and Land Surveyors . . . . .	15
ELECTRONIC TRAVERSE VERSUS TRIANGULATION by John O. Phillips . . . . .	29
SURVEYING—THE PARADOX OF CIVIL ENGINEERING by Robert B. Read . . . . .	47
APOLLO LUNAR LANDING SITE SELECTION PROCESS by James H. Sasser . . . . .	55
SURVEY AND PROPERTY CORNER MONUMENTATION by Louis A. Woodward . . . . .	75
LIABILITY FOR LAND SURVEYORS by Edward B. Howell . . . . .	83
MAPPING FOR THE PENNSYLVANIA HIGHWAYS by Victor W. Anckaitis . . . . .	93
EVALUATION OF ACCURACY OF PRECISE LEVELING by Mordechai Geisler and Haim Papo . . . . .	103

(over)

---

This Journal is published by the American Society of Civil Engineers. Publications office is at 2500 South State Street, Ann Arbor, Michigan, 48104. Editorial and General Offices are at 345 East 47th Street, New York, N. Y. 10017. Subscription price is \$4.00 per year with discounts to members and libraries. AT, CO, UP, HW, PL, PO, PP, SU.

---

 DISCUSSION
 

---

Proc. Paper 5481

GEODETTIC PRECISION IN ONE PERSPECTIVE, by Theodore E. Wirtanen (Jan., 1966). errata . . . . .	117
COMPUTER PROGRAM FOR HORIZONTAL CIRCLE ASTRONOMY, by Lawrence A. White (June, 1966. Prior Discussion: Jan., 1967). closure . . . . .	117
PERPETUATION OF LAND SURVEY DATA <sup>a</sup> , by James A. Lindsey (June, 1966. Prior Discussion: Jan., 1967). by George P. Katibah . . . . . by Joseph C. Rodgers . . . . . by Robert W. Smith . . . . .	118 118 119 120
INADEQUATE SURVEYS: ECONOMIC AND LEGAL CONSEQUENCES <sup>a</sup> , by Joseph C. Whiteman, Jr. (Jan., 1967). by Gurdon H. Wattles . . . . .	121
DESCRIPTIONS—DEBATABLE OR DEFINITIVE? <sup>a</sup> , by Gurdon H. Wattles (Jan., 1967). by R. Robinson Rowe . . . . .	122
THE PHILOSOPHY OF GEOMETRONICS <sup>a</sup> , by Joe E. Colcord, Jr. (Jan., 1967). by Sybren H. de Jong . . . . . by Max O. Laird . . . . . by Gerard H. Pesman . . . . . by James A. Root . . . . .	125 126 127 129

## INFORMATION RETRIEVAL

The key words, abstract, and reference "cards" for each article in this Journal represent part of the ASCE participation in the EJC information retrieval plan. The retrieval data are placed herein so that each can be cut out, placed on a 3 x 5 card and given an accession number for the user's file. The accession number is then entered on key word cards so that the user can subsequently match key words to choose the articles he wishes. Details of this program were given in an August, 1962 article in CIVIL ENGINEERING, reprints of which are available on request to ASCE headquarters.

---

<sup>a</sup> Discussion period closed for this paper. Any other discussion received during this discussion period will be published in subsequent Journals.