LETTERS
Limitations of Technology: M. Engelson; G. Moeller; Fixed Combination Drugs: C. J. Stetler; C. M. Kunin; H. J. Tumen; L. Lasagna

EDITORIAL
Crises and Knowledge: J. Schmandt

ARTICLES
A Unified Procedure for the Detection of Life on Mars: R. Radmer and B. Kok
Electronic Optical Astronomy: Philosophy and Practice: E. W. Dennison
Modifying the Ionosphere with Intense Radio Waves: W. F. Utlaut and R. Cohen
WWNNS: Seismology's Global Network of Observing Stations: J. Oliver and L. Murphy
Deep-Water Archeology: W. Bascom

NEWS AND COMMENT
Inside HEW: Women Protest Sex Discrimination
Molecular Biology: Corporate Citizenship and Potential Profit
ABM Debate: Learned Society Split by Old Grievance

RESEARCH TOPICS
Global Meteorology (I): Experiments in the Tropics

BOOK REVIEWS
The Revolt of the Engineers, reviewed by C. Rosenberg; The Pivot of the Four Quarters, reviewed by D. Pong; New Journals Received; Books Received

REPORTS
Evaporation Retardation by Monolayers: Another Mechanism: J. Wu
Methyl Mercury and Inorganic Mercury Collection by a Selective Chelating Resin: S. L. Law
Olivines: Revelation of Tracks of Charged Particles: S. Krishnaswami et al. .......................... 287

Duricrusts and Deep-Weathering Profiles in Southwestern Wisconsin:
G. H. Dury and J. C. Knox ......................................................... 291

Norepinephrine Stimulated Increase of Cyclic AMP Levels in Developing Mouse Brain
Cell Cultures: N. W. Seeds and A. G. Gilman ........................................ 292

Chemoreception in Nassarius obsoletus: The Role of Specific Stimulatory Proteins:
S. Gurin and W. E. Carr ............................................................... 293

Cyclic Adenosine Monophosphate: Function in Photoreceptors: W. H. Miller,
R. E. Gorman, M. W. Bitensky ....................................................... 295

Sex Attractant of the Codling Moth: Characterization with Electroantennogram
Technique: W. Roelofs et al. ........................................................... 297

Circadian Rhythm: Population of Interacting Neurons: J. W. Jacklet and J. Gerónimo .. 299

Anomalous Retinal Pathways in the Siamese Cat: An Inadequate Substrate for Normal
Binocular Vision: R. E. Kaifl, S. R. Jhaveri, W. Richards ............................ 302

Intercocular Apparent Movement in Depth: A Motion Preference Effect:
S. H. Ferris and N. Pastore ............................................................ 305

Extremely Rapid Visual Search: The Maximum Rate of Scanning Letters for the
Presence of a Numeral: G. Sperling et al. ........................................... 307

Pineal Function in Sparrows: Circadian Rhythms and Body Temperature:
S. Binkley, E. Klith, M. Menaker .................................................... 311

Color- and Edge-Sensitive Channels in the Human Visual System: Tuning for
Orientation: R. Held and S. R. Shattuck ........................................... 314

Technical Comments: Carbon and Atmospheric Oxygen: B. Gregory; L. Van Valen;
Reversal Potential for an Electrophysiological Event Generated by Conductance
Changes: Mathematical Analysis: J. E. Brown, K. J. Muller, G. Murray ............. 316

ASSOCIATION AFFAIRS

Preliminary Program, AAAS Annual Meeting, Philadelphia; Energy Production from
Nuclear Fusion: R. W. Gould; Astronomy from a Space Platform:
G. W. Morgenthalcr; 400th Anniversary of Johannes Kepler's Birth:
R. J. Seeger ............................................................... 319

COVER

One of ten elements of the ring-array antenna used for ionospheric modification experiments near Boulder, Colorado. The entire antenna occupies a circular area 110 meters in diameter. The antenna elements are crossed, conical dipoles. See page 245. [Friedrich Hoezl, National Oceanic and Atmospheric Administration, Boulder, Colorado]