

CONTENTS

Contributors	v
Preface	vii
GUIDANCE AND NAVIGATION	
A Comparison of Fixed and Variable Time of Arrival Navigation for Interplanetary Flight Richard H. Battin	3
Advanced Radar Information Evaluation System - ARIES David L. Lovenvirth and William F. Holst	33
Interplanetary Injection Guidance C. G. Sauer, Jr.	55
The Problem of Satellite Navigation by Use of a Doppler Receiver Otto Spies	73
The Effect of Outage on Missile Performance D. G. Stechert	103
TRACKING	
Radar Velocity Tracking Systems Analysis Gregory O. Young	127
Analog Simulation of Radio Guidance and Space Communication Systems J. P. Frazier and J. M. Lambert	169
SPACE TRAJECTORIES	
Analytical Perturbation Expressions for the Restricted Three-Body Problem Paul A. Penzo	203
Gravitational Librations of a Satellite and the Influence on Control System Design Robert R. Wolfe and Bernard Arrow	231
The Motion of an Equatorial Satellite of an Oblate Planet J. L. Brenner	259
Interplanetary Trajectory Simulation D. S. Merrilees and J. C. Walker	291

FIFTH SYMPOSIUM ON BALLISTIC MISSILE AND SPACE TECHNOLOGY

Regions Accessible to a Ballistic Weapon	317
F. L. Beckner	
SPACE PHYSICS	
Plasma Probes for Space Exploration	367
Bernard Raab	
Radio Propagation Experiments for Investigating the Solar Wind	393
S. Rubin and S. D. Softky	
Scientific Results of the Satellite, Explorer VI . . .	405
E. J. Smith and Alan Rosen	
The Dynamic Stability of the Upper Atmosphere of Venus	445
Jean I. F. King	

