-Contents—



SESSION I - INTENSIFIER TUBES	
IMAGE INTENSIFIER TUBES Charles F. Freeman	3
THE IMAGE TUBE IN ULTRA-HIGH-SPEED FRAME AND STREAK PHOTOGRAPHY R. W. Engstrom and R. W. Fitts	15
MAGNETIC FOCUS IMAGE INTENSIFIERS FOR PHOTOGRAPHIC APPLICATIONS Donald H. Ceckowski	25
IMAGE CONVERTER WITH III-V COMPOUND REFLECTIVE MODE PHOTOCATHODE H. L. Palmer, N.J. Koda and John H. Dinan	31
A TECHNIQUE FOR EFFECTIVELY MEASURING MTF OF IMAGE INTENSIFIERS AT LOW OUTPUT LEVELS W. Travis Walton and Sidney Weiser	35
SESSION II - COMPONENTS	
OPTICAL SYSTEMS FOR DIRECT VIEW NIGHT VISION DEVICES Martin Shenker	45
CONSIDERATIONS FOR THE DESIGN AND EVALUATION OF OBJECTIVE LENSES FOR LOW LIGHT LEVEL APPLICATIONS M. W. McDowell, E. van Rooyen, L. Dicks and	
A. J. Boettcher	59
C-LA The are	71

|--|

PHOSPHORS Nicholas A. Diakides	83
FIBER OPTIC IMAGE COUPLERS Walter P. Siegmund	93
CHANNEL IMAGE INTENSIFIER TUBES Albert E. Jennings and M. J. Needham	95
SESSION III - LAW ENFORCEMENT (Part I)	
LAW ENFORCEMENT APPLICATION OF IMAGE INTENSIFIERS	
William J. Ward	103
A STANDARD FOR NIGHT VISION DEVICES FOR LAW ENFORCEMENT Joseph C. Richmond	109
A USER'S GUIDE TO COMMERCIAL LOW LIGHT LEVEL TELEVISION CAMERAS	
George G. Elsaesser	117
MILITARY APPLICATIONS (Part II)	
LOW LIGHT LEVEL SURVEILLANCE Edward J. Sheehan	121
LOW LIGHT LEVEL PHOTOGRAPHY Charles W. Haney	125
AIR-TO-GROUND TARGET ACQUISITION WITH NIGHT VISION DEVICES	
Shelton MacLeod and R. L. Hilgendorf	133

SESSION IV -ASTRONOMICAL APPLICATIONS APPLICATION OF IMAGE INTENSIFIERS IN ASTRONOMICAL OBSERVATIONS ELECTROGRAPHIC OBSERVATIONS AND FUTURE **EQUIPMENT REQUIREMENTS** RESOLVING POWER, SIGNAL-INDUCED BACKGROUND, NOISE, AND DETECTIVE QUANTUM EFFICIENCY OF IMAGE INTENSIFIER PHOTOGRAPHS Richard H. Cromwell and Gregory H. Smith 155 PICOSECOND IMAGE CONVERTER STREAK CAMERAS FOR LASER DIAGNOSTICS AIR FORCE APPROACHES TO NIGHT GATED **PHOTOGRAPHY** Ronald N. Hubbard and James C. Rachal, Jr. 181 SESSION V BIO-MEDICAL APPLICATIONS X-RAY IMAGE INTENSIFIERS SOME ZOOLOGICAL STUDIES WITH IMAGE INTENSIFIERS