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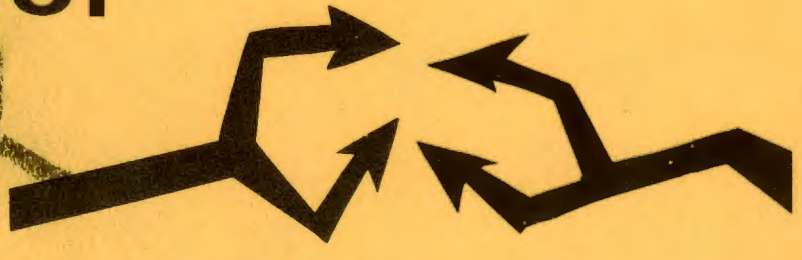

remote handling in advanced systems

18-19 April 1961

symposium

BEHAVIORAL SCIENCES LABORATORY
AEROSPACE MEDICAL LABORATORY
AERONAUTICAL SYSTEMS DIVISION
AIR FORCE SYSTEMS COMMAND
UNITED STATES AIR FORCE
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

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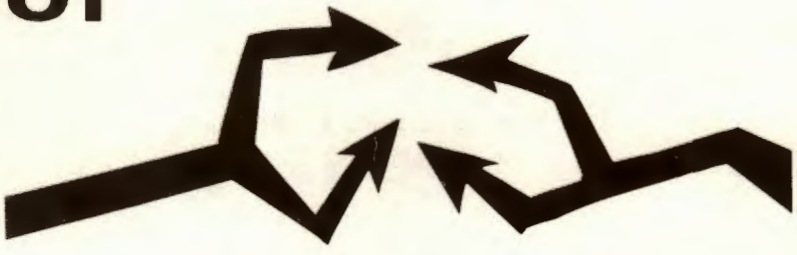

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Project No. 7184
Task No. 71586

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FOREWORD

The Human Factors of Remote Handling in Advanced Systems Symposium, held at Wright-Patterson Air Force Base, Ohio, on 18 and 19 April 1961, was sponsored by the Aerospace Medical Laboratory, Aeronautical Systems Division. Major L.D. Pigg, Chief, Maintenance Design Section, Human Engineering Branch, Behavioral Sciences Laboratory, of the Aerospace Medical Laboratory, served as Symposium Chairman. This report was prepared under Project No. 7184, "Human Factors in Advanced Systems," Task No. 71586, "Design Criteria for Ease of Maintenance." Lt. D. Frederick Baker served as project engineer.

Acknowledgment is made, on behalf of the Aerospace Medical Laboratory, to the speakers for their response, their presentations, and their contributions to this report. Thanks are extended to the members of the Technical and Arrangements Committees, listed below, for their efforts toward presenting and publishing this Symposium.

ABSTRACT

This report compiles the papers presented at the Human Factors of Remote Handling in Advanced Systems Symposium, sponsored by the Aerospace Medical Laboratory in April 1961. Human factors in remote handling as viewed by the psychologist and the engineer are discussed. Problems of operator selection and training are presented and manned and unmanned ground support equipment for nuclear-powered aircraft are reviewed. Space environmental constraints on extra-vehicular space operations are assessed. A representative remote-handling system for space operations is described and a 3-dimensional color television system for remote handling is analyzed and evaluated. Human factors in design of remote-handling equipment are discussed.

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SYMPOSIUM SPEAKERS

Colonel H. L. Parris
Behavioral Sciences Laboratory
Wright-Patterson Air Force Base, Ohio

Major L. D. Pigg
Behavioral Sciences Laboratory
Wright-Patterson Air Force Base, Ohio

Mr. V. L. J. DiRito
Aeronautical Systems Division
Wright-Patterson Air Force Base, Ohio

Mr. J. Davis
Atomics International
Canoga Park, California

Major J. F. Dinwiddie
Aeronautical Systems Division
Wright-Patterson Air Force Base, Ohio

Mr. P. L. Marjon
American Machine & Foundry Atomics
Greenwich, Connecticut

Mr. S. A. Huffman
General Electric Company
Cincinnati 15, Ohio

Dr. J. W. Clark
Hughes Aircraft Company
Los Angeles 45, California

Mr. S. J. Gerathewohl
National Aeronautics and Space Administration
Washington 25, D. C.

Mr. O. E. Martin, Jr.
Lockheed Aircraft Corporation
Marietta, Georgia

Captain J. C. Simons
Behavioral Sciences Laboratory
Wright-Patterson Air Force Base, Ohio

Mr. J. A. Mauro
General Electric Company
Pittsfield, Massachusetts

Mr. R. C. Goertz
Argonne National Laboratory
Argonne, Illinois

Mr. R. S. Mosher
General Electric Company
Schenectady 5, New York