## **FOREWORD**

This Interim Engineering Progress Report covers the work performed under Contract No. F 33615-68-C-1197 from 1 November 1967 through 31 January 1968. It is published for technical information only and does not necessarily represent the recommendations, conclusions, or approval of the Air Force.

This contract with Battelle Memorial Institute of Columbus, Ohio, was initiated under Project No. 140-8, "Prototype Production Process for Fabrication of Wire and Tubing by Hydrostatic Extrusion-Drawing". It is being administered under the direction of Mr. Gerald A. Gegel of the Metallurgical Processing Branch (MATB), Manufacturing Technology Division, Air Force Materials Laboratory, Wright-Patterson Air Force Base, Ohio.

The program is being conducted at Battelle by the Metalworking Division with Mr. R. J. Fiorentino, Associate Chief, as Program Manager. Mr. B. D. Richardson, Research Metallurgical Engineer, is Project Engineer of the studies on beryllium wire and rounds and Mr. G. E. Meyer, Research Metallurgical Engineer, is Project Engineer of the titanium tubing portion of the program. Others contributing to the program are Mr. J. R. Douglas, Research Metallurgist, and Mr. A. M. Sabroff, Chief of the Metalworking Division, and Mr. F. W. Boulger, Senior Technical Advisor of the Department of Process and Physical Metallurgy. Dr. J. C. Gerdeen, Senior Research Mechanical Engineer, Advanced Solid Mechanics Division, is contributing to the high-pressure-container design study. Data from which this report has been prepared and recorded are in Battelle Laboratory Record Book No. 24446.