Design Reference Manual

EXTERNAL PRESSURIZATION SYSTEMS FOR CRYOGENIC STORAGE SYSTEMS

71-7535

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PREPARED FOR

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FOREWORD

In a study conducted under Contract NAS 9-10453, initiated in December, 1969, the AiResearch Manufacturing Division of The Garrett Corporation has investigated the design of external pressurization systems for cryogenic storage systems. The external pressurization concept allows pressure control of cryogenic storage systems to be accomplished without installation of dynamic components in the storage vessel.

The primary objective of the study was the establishment of a handbook-type approach to design of external pressurization systems. The results of the program are presented in three reports, as follows:

External Pressurization Systems for Cryogenic Storage Systems - Design Reference Manual, Report 71-7535, September 10, 1971

Study of External Pressurization Systems for Cryogenic Storage Systems - Contract Summary Report, Report 71-7536, September 10, 1971

Study of External Pressurization Systems for Cryogenic Systems - Final Report, Report 71-7537, September 10, 1971

The handbook design information mentioned above is contained in this volume, the first listed above. Effort has been directed to making the Design Reference Manual a self-sufficient document, readily usable by workers in the field. For background information on the characterizations contained in this volume, reference should be made to the Final Report.

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