NASA TECHNICAL MEMORANDUM

NASA TM X-53227

APRIL 15, 1965

N65-24564
(ACCESSION NUMBER)
26
(PAGES)
(NASA CR OR TMX OR AD NUMBER)
(THRU)
1
(CODE)
33
(CATEGORY)
FACILITY FORM 602

NASA TM X-53227

BIBLIOGRAPHY ON THERMAL METALLIC CONTACT CONDUCTANCE

by HARRY ATKINS
Research Projects Laboratory

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Hard copy (HC) 2.00

Microfiche (MF) .50

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SPACE THERMODYNAMICS BRANCH

RESEARCH PROJECTS LABORATORY

ABSTRACT

This report is a revision of MSFC document R-RP-INT-64-8, dated February 14, 1964. It contains references in the area of contact heat transfer measurements and theories and contact surface parameter studies.

SUMMARY

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In the area of heat transfer in structures, the problems of heat transfer between the connected members is complicated by many complex parameters.

Since, especially in the exploration of space, a satellite's or spacecraft's survival is sometimes dependent on temperature control, it is not surprising that interest in thermal contact conductance has risen significantly in recent years. Presently, NASA funds five programs in this area, directly or indirectly. In all there are approximately twenty programs in this country and abroad. Because a thorough knowledge of past research is essential, an attempt has been mad to collect all known references on this subject.

This report, a revision of MSFC document R-RP-INT-64-8, dated February 14, 1964, contains references in the area of contact heat transfer measurements and theories and contact surface parameter studies.

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TMX-53227

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