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AUTHORITY
ONR ltr., 26 Oct 1977
MONTHLY STATUS REPORT - OCTOBER 1952

Contract N7-orr-295-Task 3
Project Number Nr 061-C03

Dear Sir:

Progress on the contract for the month of October has been as follows:

1. Traverses of a molecular beam reflected from a glass plate have begun. These initial measurements indicate that a satisfactory signal can be detected. Complete polar traverses of the reflected beam are now underway with a 1 per cent acceptance tube mounted on the detector gage.

2. During the month of October several test programs made use of the No. 3 Wind Tunnel. Impact and static probes were tested under a separate N.A.C.A. sponsored program. Lase pressure studies were continued in an effort to determine the cause of minor discontinuities in the test data.

3. The cone-drag single component balance has been completed and is now being bench tested prior to its use in wind tunnel tests.

4. The design of a new rotating cylinder drag balance has been completed. Shop work will be delayed due to the press of other test programs.

5. The following reports are in various phases of preparation:

a) A report describing the design analysis of a free molecule flow hot wire probe for wind tunnel use is being prepared, and will be issued shortly.

b) A report describing the design and operational tests of a rotating cylinder apparatus for use in low density gas dynamics research is being written.

c) A report describing the results of a subsonic heat transfer program using spherical models is being written.
6. Visitors: The following persons visited the project during the month:

William Lawrence Lewis  - Western Representative, Guggenheim Aeronautical Safety Center, Cornell University

Very truly yours,

S. A. Schaaf
Faculty Investigator

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