NACA - LEWIS FLIGHT PROPULSION LABORATORY

INSPECTION - OCTOBER 8-10, 1947



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NACA - LEWIS FLIGHT PROPULSION LABORATORY INSPECTION October 8-10, 1947

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NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS

FIRST ANNUAL INSPECTION

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FLIGHT PROPULSION RESEARCH LABORATORY

CLEVELAND, OHIO

October 8, 9 and 10, 1947

As the guests arrived at the Administration Building they were registered in the main lobby and then directed to the auditorium. At 9:30 a.m. the guests were welcomed by Dr. Jerome C. Hunsaker, NACA Chairman, (October 8) or by Mr. John F. Victory, Executive Secretary, (October 9 and 10). See text of speech enclosed.

Dr. H. L. Dryden, Director of Aeronautical Research, then outlined the methods used by the NACA to carry out its duty to "supervise and direct the scientific study of the problems of flight with a view to their practical solution". See text enclosed.

Mr. E. H. Sharp, Director of the Flight Propulsion Research Laboratory, then introduced Mr. A. H. Mothrook, Assistant Director of Aeronautical Research, who stated that time would not permit an inspection of the entire laboratory but that a number of essential projects had been selected to illustrate the research work being conducted. He then gave a brief description of the fields of work covered by the laboratory in order that the visitors might better correlate the different demonstrations they were about to see. Mr. Rothrock had prepared no written text but followed the following outline and illustrated his remarks by referring to the parts of a cut-away I-40 turbojet engine which was mounted at the front of the auditorium.

1. Compressors - Axial-flow, centrifugal and mixed-flow

- 2. Combustion Design problems and fuel problems
- 3. Turbines Materials. Cooling, sir and water.
- h. Tailpipe Burning To use excess air for thrust augmentation.
- 5. Bearing Research
- 6. Controls
- 7. Rockets
- 8. Ram Jots
- 9. Complete Engines. In A.W.T. and in new tanks.
- 10. Icing Mesearch. Icing Tunnel and in flight.

Mr. Sharp then introduced Mr. Carlton Kemper, Flight Propulsion Research Laboratory Executive Engineer, who described some of the outstanding research facilities of the laboratory. See speech enclosed.

Mr. Sharp then called for a photograph to be taken of the visitors, read an announcement for press representatives (see text enclosed), warned against use of cameras by the visitors, and started the tour of the exhibits at 10:00 a.m.

275 visitors were present on October 8. They were mostly representatives from the aeronautical industry. Photograph 0-19727 shows them seated in the auditorium at the morning session.

341 visitors were present on October 9. They were mostly Army and Mavy personnel. Photograph C-19728 shows them seated in the auditorium.

167 visitors were present on October 10. They were mostly representatives of Cleveland industrial firms. Photograph C-19729 shows them seated in the auditorium.

Time schedules for each day are enclosed, as is also a photograph of the luncheon set-up in the auditorium.

NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS 1724 F Street, N. W. Washington 25, D. C.

FIRST ANNUAL INSPECTION NACA FLIGHT PROPULSION RESEARCH LABORATORY CLEVELAND, OHIO

October 8, 1947 - For Aeronautical Industries.

October 9, 1947 - For Military Services.

October 10, 1947 - For Cleveland, and Supporting Industries.

The National Advisory Committee for Aeronautics will hold its First Annual Inspection of its Flight Propulsion Research Laboratory, on the <u>West Side</u> of the Cleveland Municipal Airport, Cleveland, Ohio, in three identical sessions, as shown above.

PURPOSE. The purpose is chiefly to afford the key executive and engineering personnel of the aeronautical and related industries and activities, and of the military services, an opportunity to receive first-hand reports of recent progress in scientific research in the field of aircraft propulsion at the NACA's Cleveland Laboratory, and to witness demonstrations of the special facilities and methods used.

ARRANGEMENTS. Special buses will meet guests in front of the Cleveland Hotel, adjoining the Cleveland Terminal Station on the Public Square, at 8:30 a.m., Eastern Standard Time, October 8, 9, and 10, and will transport guests to and around the Laboratory and return them to the Cleveland Hotel at 5:00 p.m.

REGISTRATION. Attendance is limited to American citizens who are registered in advance for this Inspection. Registration will be made only upon acceptance in writing, addressed to:

John F. Victory Executive Secretary, NACA 1724 F Street, N. W. Washington 25, D. C. NOTE: Select nearest Deputy Passenger Agent from list on reverse hereof, and fill in and mail one copy of this form.

Pennsylvania Railroad Travel Service

to

NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS FLIGHT PROPULSION RESEARCH LABORATORY CLEVELAND, OHIO

| | | Date | |
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| | s, D.P.A. | | |
| Dear Sir: | | | |
| Research Laboratory, please firm by telephone or return management | make the follow | Mr. C. R. James | |
| Lower Berth | | Compartment | |
| Upper Berth | | Single Bedroom | |
| Roomette | | Double Bedroom | |
| miles and | _ Drawing Room | | |
| PRR train #39, The Clevel | | ad helow on (date) | 0 |
| arriving at the PRR Station | | | , |
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| Lv. New York | | Lv. Washington | 8:50 p.m. |
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| PRR train #38, The Clevels | ander | on (date) | , |
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| the following morning at ti | me checked belo | | |
| Ar. Harrisburg | 4:04 a.m. | Ar. No. Philadelphia | 5:55 a.m. |
| Ar. Baltimore | 6:40 a.m. | The state of the s | 7:08 a.m. |
| Ar. Washington | 7:35 a.m. | Ar. New York | 7:25 a.m. |
| Upon confirmation of spary rail and Pullman tickets. | ace reservations | s by you, I shall purchase t | he neces- |
| only rate distributions. | | Very truly yours, | |
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| The fact that we have | Name (prin | nt) | |
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Tel. No.

Pennsylvania Railroad Travel Service

Deputy Passenger Agents

Mr. I. W. MacMullin, D.P.A.
Pennsylvania R.R. - Pennsylvania Station
New York, N. Y.

Mr. L. F. Jacobs, D.P.A. Pennsylvania R.R. - 744 Broad Street Newark 2, New Jersey

Mr. C. R. James, D.P.A. Pennsylvania R.R. - 30 St. Station Philadelphia, Pennsylvania

Mr. R. B. Stoll, D.P.A. Pennsylvania R.R. - 1615 O'Sullivan Bldg. Baltimore 2, Maryland

Mr. H. A. Karr, D.P.A.
Pennsylvania R.R. - 626 - 14th St., N.W.
Washington, D. C.

Mr. A. C. Sigelin, D.P.A.
Pennsylvania R.R. - Pennsylvania Station
Harrisburg, Pennsylvania

New York Central System Travel Service

to

NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS FLIGHT PROPULSION RESEARCH LABORATORY CLEVELAND, OHIO

| | City | | |
|--|-------------------|--|--|
| | Date | | |
| Mr. T. R. Ruth Asst. General Passenger Agent New York Central System 466 Lexington Avenue New York 17, N. Y. | | | |
| Dear Sir: | | | |
| In connection with the First Annual Inspection of the Flight Propulsion Research Laboratory of the National Advisory Committee for Aeronautics, please reserve the following space in my name: | | | |
| Drawing Room | Roomette | | |
| | Lower Berth | | |
| Bedroom | Upper Berth | | |
| On Cleveland Limited, NYC Train #57, leaving Grand Central Terminal, New York City at 8:00 p.m., on (date); arriving at Cleveland Union Terminal at 7:40 a.m. the following morning. | | | |
| On Cleveland Limited, NYC Train #58, leaving Cleveland Union Terminal at 8:30 p.m., on (date); arriving at New York at 8:00 a.m. the following morning. | | | |
| Upon confirmation of space reservation by you, I shall purchase the necessary rail and Pullman tickets. | | | |
| | Very truly yours, | | |
| Name | (print) | | |
| Addres | ss | | |
| City _ | | | |
| Tel. N | To. | | |

New York Central System Travel Service

to

NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS FLIGHT PROPULSION RESEARCH LABORATORY CLEVELAND, OHIO

| City | | | |
|--|--|--|--|
| Mr. T. E. Nerland Asst. General Passenger Agent New York Central System La Salle Street Station Chicago, Illinois | | | |
| Dear Sir: | | | |
| In connection with the First Annual Inspection of the Flight Propulsion Research Laboratory of the National Advisory Committee for Aeronautics, please reserve the following space in my name: | | | |
| Drawing Room Roomette Compartment Lower Berth Bedroom Upper Berth | | | |
| On the Forest City, NYC Train #290, leaving La Salle Street Station, Chicago, at 11:15 p.m., on (date); arriving at Cleveland Union Terminal at 7:00 a.m. the following morning. | | | |
| On the Forest City, NYC Train #89, leaving Cleveland Union Terminal at 11:59 p.m., on (date) ; arriving at Chicago at 6:50 a.m. the following morning. | | | |
| Upon confirmation of space reservation by you, I shall purchase the necessary rail and Pullman tickets. | | | |
| Very truly yours, | | | |
| Name (print) | | | |
| Address | | | |
| City | | | |
| Tel. No. | | | |

Baltimore and Ohio Railroad Travel Service

to

NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS FLIGHT PROPULSION RESEARCH LABORATORY CLEVELAND, OHIO

| | City |
|--|---|
| Mr. D. L. Moorman General Passenger Agent Baltimore and Ohio Railroad 1508 H Street, N. W. Washington 5, D. C. | Date |
| Dear Sir: | |
| | al Inspection of the NACA Flight Promake the following reservations in my urn mail: |
| Lower Berth Upper Berth Roomette Drawing Room | Compartment Single Bedroom Double Bedroom m |
| | shington, D. C., at 8:30 p.m., on ; arriving at Cleveland Terminal xt morning. |
| | land Terminal Station at 8:15 p.m., on ; arriving at Washington, 7:30 |
| Upon confirmation of space resonecessary rail and Pullman tickets. | ervation by you, I shall purchase the |
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| Tel | . No. |

NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS 1724 F Street, N. W. Washington 25, D. C.

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John F. Victory Executive Secretary, NACA 1724 F Street, N. W. Washington 25, D. C.

CONGRESSIONAL COMMITTEE STAFF

PERSONNEL ATTENDING CLEVELAND LABORATORY INSPECTION OCTOBER 9 and 10, 1947

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Halford Davis - Staff Member on Aviation

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William Duvall - Assistant Clerk Kenneth Sprankle - Assistant Clerk

Armed Services

Robert W. Smart - Staff Member, Subcommittee on Research and Development

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