

---

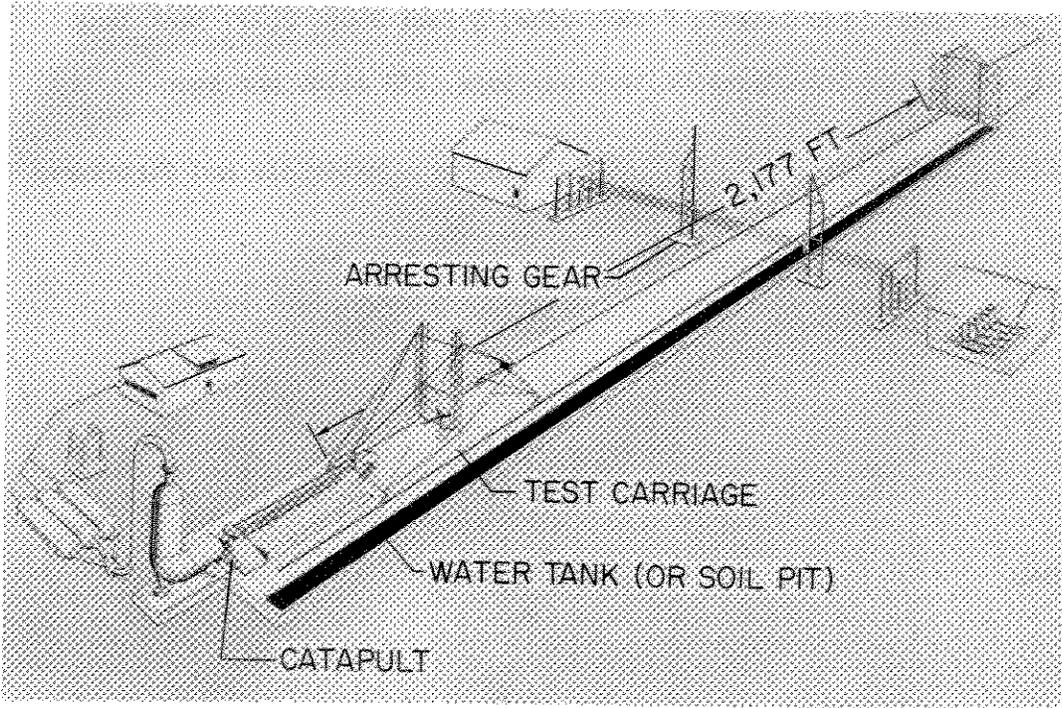
**TECHNICAL FACILITIES RESUME**

DATE OF RESUME: July 1, 1966

FACILITY NO: 04-00-22-00

---

1. REPORTING INSTALLATION: Langley Research Center  
Hampton, Virginia
2. FACILITY NAME: Landing Loads Track
3. LOCATION (if other than in 1. above): Same as 1.



4. FUNCTIONAL NAME: Landing Loads Track Facility
5. TECHNOLOGICAL AREAS SUPPORTED: Loads and motions are measured during impact and braking tests on hard surfaces and soils.
6. NARRATIVE DESCRIPTION OF FACILITY CAPABILITIES & FUNCTIONS:  
The test carriage travels on steel rails, straddles and concrete track 2,177 feet long, and contains a drop frame to which a landing gear specimen is attached. The test carriage is catapulted to the desired speed, the drop frame is released from a predetermined height, and a landing is simulated.

---

6. NARRATIVE DESCRIPTION

During the landing, research is carried out on landing impact and stopping capability for a variety of landing surface conditions (dry, wet, slush, soils, etc.).

Forward speed, 150 miles per hour  
Vertical impact velocity 18 f.p.s.  
Drop weight 6,500 to 20,000 pounds.

A tank that parallels the Landing Loads Track is used for hydrodynamic landing gear tests. The tank is 8 feet wide, 5 feet deep, 2,177 feet long.

Forward speed of the hydrodynamics test carriage, 150 miles per hour.

Application - Aeronautics

Category - Materials and Structures

7. POTENTIAL:

8. PLANS:

9. BLDG. NO. 1257-62 10. YR. BUILT: 1957 11. FAC. CAT. CODE: 320-40  
12. INITIAL COST: \$ 4,351 K 13. NASA B.O.D. 1957\*\* 14. STATUS CODE: Active  
15. ACCUM. COST: \$ 4,360 K 16. LIFE EXPECT. Indef. 17. OWNER CODE: NASA  
18. OPER. CODE: NASA 19. CONTRACTOR NAME (if contr. oper.):

\*\* Completion of last major modification

20. OTHER SOURCES OF INFO: "Investigations on the Ground Performance of Aircraft Relating to Wet Runway Braking and Slush Drag, N64-13883, Jan. 1963"

21. COGNIZANT ORGANIZATIONAL COMPONENT: Dynamic Loads Division

22. LOCAL OFFICE TO CONTACT FOR FURTHER INFO:

Chief, Research Models and Facilities Division (56.000)  
Phone: (Area Code 703) 722-7961, extension 4745