CONTINUOUS FLOW HYPERSONIC TUNNEL

DESCRIPTION:

1. Two 31" square interchangeable test sections - one Mach 10 and the other Mach 12.
2. Single and double pass schlieren system.
3. 25,000 HP 700/1 compression ratio - 4400 psi compressor system.
4. Two electrical heaters capable of heating compressor discharge to 236°F.
5. Auxiliaries, including 4 vacuum pumps, 6 intercoolers, water pumps, 2400 psi air storage bottles, interconnecting piping, valves, controls.
6. 36,000 cu. ft. vacuum storage sphere.
7. Instrumentation.
8. Modifications to existing building to house items 1 through 5 and 7.

Use:

1. Heat transfer and aerodynamic tests at Mach 10 and Mach 12.
2. Variable angles of attack and yaw on models up to 13" span and 4' length containing all necessary instrumentation, controls and physical features.
3. Reynolds numbers per foot up to 2.6 x 10^6.
4. Continuous steady state conditions.

Cost:

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>C of F</th>
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<td>1957</td>
<td>$5,753,661</td>
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