Name / Model & date of manufacture
Boeing B-737-130
SN 19437 manufactured 1968 Total time: 2608 hr
Number 1 production 737

Date airplane came to Langley
May 17, 1974

Brief description of airplane
twin-jet, short-range transport

Key characteristics:
<table>
<thead>
<tr>
<th>Item</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engines (2)</td>
<td>Pratt &amp; Whitney JT8D-7, 14,000lb ST ea</td>
</tr>
<tr>
<td>Max weight</td>
<td>97,000 lb (44 000 kg)</td>
</tr>
<tr>
<td>Max payload</td>
<td>29,000 lb (13 182 kg)</td>
</tr>
<tr>
<td>Wing span</td>
<td>93.0 ft (28.4 m)</td>
</tr>
<tr>
<td>Min speed</td>
<td>97 kt</td>
</tr>
<tr>
<td>Max speed</td>
<td>522 kt @ 23,500 ft (7160 m)</td>
</tr>
<tr>
<td>Ceiling</td>
<td>30,000 ft (9150 m)</td>
</tr>
<tr>
<td>Max range</td>
<td>1950 nm (3605 km)</td>
</tr>
</tbody>
</table>

Previous research program uses
1975-1977 Microwave Landing System evaluation & demonstration
1975-1985 Velocity vector display development
1976-1980 CRT electronic cockpit displays & formats pioneered
1983 Profile descent control law development
1986 Total energy control law development
1989 Helmet mounted displays for precision manual landings

Current research use
Satellite-based Global Positioning System for autoland
Ground-air data-link in lieu of voice communication
Traffic flow management
ATC-compatible 4-D Flight Management System development

Contacts:
Project Engineer - James R. Hall 864-3851

Photo of Airplane & photo No.
L-89-13501 right, side view over Rte. 134
L-89-13503 right side view over LaRC

Revision date: 10/24/90