

SHUTTLE SERIES

ROMERE ALT WIND TUNNEL TEST DATA

This subseries of documents was received from Paul Romere who worked in the Engineering Directorate's Navigation, Control & Aeronautics Division. The run consists predominantly of raw ALT wind tunnel test data. Since this is a preliminary inventory, materials have not been culled and have been kept in their original folders. Related documents can be found in the Space Shuttle Aerothermodynamic Data subseries. Particularly helpful will be RP1125, "Space Shuttle Wind Tunnel Testing Program Summary" located in box 0026B. This document discusses Ferry / ALT Configurations, test designations and document titles from the Dataman database wind tunnel test reports. Documents run from 1964 through 1985. Early documents include Apollo and early Shuttle configuration data.

Inventory

SubHeading:	Box Number: 01	
	Low Speed Wind Tunnel Test of a .15 Scale Douglas F5D with NASA - OGEE Wing Planform	September 2, 1964
	Apollo Venting Problems	April 1965, May - Sept. 1
	SLA Panel Venting Anomaly on AS-503	August - November 1968
	Apollo SLA Panel Honeycomb Pressure Analysis	(1968)
	Orbiter 040 (Delta Wing) Hypersonic Arbitrary - Body Aerodynamic Program	September 1971
	MDAC Woodward Program & Datcom Program (Aerodynamic Data Programs)	March 1971- March 1972
	MSC Orbiter 040A (Notes 7 Data on Aerodynamic Characteristics)	Sept 1971- March 1972
SubHeading:	Box Number: 02	
	Double Delta Studies for Shuttle Wing	March - April 1972
	Shuttle 049 MDAC & TRW Aerodynamic Data	April - May 1972
	LTV Ground Effects Test (S-081)	October 1972
	NR ATP Baseline Ground Effects Study	Sept. - Nov. 1972
	Ground Effects on Shuttle	Sept. 1971 - Dec. 1972
	NR PRR Orbiter, NAAL Test 696, Ground Effects Data	December 22, 1972
SubHeading:	Box Number: 03	
	Control Reversal Study (inc. Delta Wing Separation Can Dominate Shuttle Dynamics - AIAA paper & Lockheed Review of Delta Wing Space Shuttle Vehicle Dynamics)	October 1971, September 1
	Ground Effects TN, Review Copy, Notes & Data: Empirical Methods of Predicting Longitudinal Aerodynamic Characteristics of Low - Aspect - Ration Wing Configurations in Ground Effect During Subsonic Flight	March 1973
	-89 Ground Effects, Lightweight Orbiter	January - April 1973
	OA-47 Trim and Stability & Control Boundaries	April 1973
	N - Surface Test Cases, Ground Effects Study Subsonic Flow Lifting Surface Analysis Program	September 1972 - May 1973
	Orbiter 139 Ground Effects (Tests & Theory)	May - June 1973
SubHeading:	Box Number: 04	

	Hypersonic Arbitrary Body Aerodynamic Program (HABP) Studies of Orbiter 039 & 147B	March - July 1973
	Ground Effects Predictions Capability Presentation	July 1973
	Ground Effects Correlation Data, 040A Orbiter	Oct 1972 - August 1973
	RI Integrated Pressures Comparison with Measured Data	September 1973
	Ground Effects, Orbiter Configuration 147B N - Surf Program Data	October 1973
	CSM / Docking Module Aerodynamics	February 1973, April 1974
	OA62B Ground Effects on 140A/B	January - July 1974
SubHeading:	Box Number: 05	
	ASTP Doppler Antenna on SM	July 1974 - January 1975
	OV-101 Drawings	February 1975
	Aerodynamic Considerations of Flying Orbiter with Tailcone for First ALT Flight	September 26, 1975
	747 / Orbiter ALT Tail Cone Presentation	September 26, 1975
	ALT Tail Cone on Requirements	July & September 1975
	Project Manager's Assessment	September 1975
	Orbiter Elevon; Speed Brake Effectiveness, Tailcone On - Off	September 1975
	Tailcone On Tailcone Off Orbiter Aerodynamic Data	September - October 1975
	OV101 ADS Boom and Probes	September - October 1975
	ALT CDR	October 13, 1975
	Wide Body Advisory Group (WBAG) Pre-101 CDR Review SAS/AERO/75- 697	October 1975
	Model Drawings, Model 76-0 36% Scale	1974 - October 1975
	OA164 (ARC 40'x80') Ames Wind Tunnel Test of Orbiter	October - December 1975
SubHeading:	Box Number: 06	
	ALT Tailcone Use in ALT Program	Oct 1975 - Feb 1976
	Orbiter Vehicle Lines for Wind Tunnel Models (OV101 & OV102)	February 1976
	OA172 Wind Tunnel Test Data	February 1976
	Shuttle Flight System Interface Working Group (FSIWG)	Sept 1974 - March 1976
	LA-81, LRC LTPT, Orbiter Tailcone Wind Tunnel Tests	Nov 1975 - March 1976
	Tailcone Pressures	March 1976
	OA-173 ARC 12", Orbiter with Tailcone Wind Tunnel Tests	October 1975 - April 1976
	ALT Tailcone Instrumentation Requirements	March - April 1976
	A-172 - NAAL, Shuttle Wind Tunnel Test	October 1975 - May 1976
	ALT Test Program, Tailcone on	December 1975 - May 1976
SubHeading:	Box Number: 07	
	OA-176 NAAL Low Speed Wind Tunnel Test	February - May 1976
	OA-175 Ames 11' Wind Tunnel Test	April 1975 - July 1976

	Space Shuttle Orbiter Approach and Landing Test Evaluation Plan, JSC-09348	July 1976
	OA-175 ARC 11' Orbiter Assembly 175 Test in ARC 11 Foot Wind Tunnel	December 1975 - August 19
	LA-89 ARC 11'x11' Wind Tunnel Test Article Engineering Drawings	July 1974&Apr - Aug 1976
	Nose & Main Landing Gear and Wheel Well Doors Airloads Briefings	August 1975 - Oct 1976
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	LA 89 Tail Cone on Wind Tunnel Test	July - October 1976
	Tailcone - on Aero Data Book Inputs or Miles Whitnah	September - October 1976
	OV101 Aero Presentation to Astronauts	October 1976
	OA-174 ARC 40'x80' Tailcone on & Tailcone Off Wind Tunnel Tests	June 1975 - November 1976
	OA172 Ground Effects Data	October - November 1976
	OV101 October 1976 Data Book Changes Talk to STA Personnel	November 1976
	Aerodynamic Monitoring Handbook	November 1976
SubHeading:	Box Number: 09	
	Aerodynamic C. G. Requirements for Vehicle 101 with Tailcone	June 1975 - December 1976
	Orbiter Approach and Landing Test Flight Readiness Reviews	November - December 1976
	OV-101 Aero Inspection Meeting	January 1977
	OV-101 ALT Aerodynamics DCR	January - February 1977
	Calspan: Sting Tare Test LA-82	May 1976 - February 1977
	OV101 Venting of Tailcone	February 1977
	OV-101 ALT - DCR Design Certification Review	May 1976 - March 1977
	Miscellaneous ALT Information	July 1973 - March 1977
	Orbiter 101 Dimensional Certification	March 1976 - April 1977
SubHeading:	Box Number: 10	
	OA235 NAAL Low Speed Wind Tunnel Test	April - May 1977
	OA250 NAAL Low Speed Wind Tunnel Test	May - June 1977
	Man in Loop Simulation of ALT Free Flight Tests SAS/FSA/76-269	May 1976 - June 1977
	ALT-3 Flight Test Data	September 1977
	ALT Flight Data & Analysis	August - October 1977
	ALT-2 Flight Test Data	October 1977
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	Briefing: Aerodynamic Effects of Adding Tailcone to Orbiter	October - November 1977
	ALT-5 Flight Test Data	October - November 1977
	ALT Landing Gear Delta C sub D	November 1977 January 197
	ALT Data	October - November 1977,
	ALT Analysis (Performance)	May - September 1978
	ALT-1 Flight Test Data	August 1977, March 1978,
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ALT-4 Flight Test Data	September - December 1977
Tailcone Tufting	March - April 1979
ALT Flight Test Data Analysis - Ground Effects	September - October 1977
AEDC Tunnel Corrections	July - September 1979
OV-101 Ground Effects	1976-1979
200k to 300k High Altitude Analysis	July - September 1982
SILTS Pod Effect	August 1984
MA-37 Wind Tunnel Data	August 1985

Responsibilities

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