

University of Alabama in Huntsville  
 saturn history  
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**SATURN HISTORY DOCUMENT**  
 University of Alabama Research Institute  
 History of Science & Technology Group

ROUGH  
 DRAFT  
 FINAL  
 REVISION

Date --- TITLE --- Doc. No

TOOL NUMBER	TITLE	ROUGH DRAFT	FINAL	REVISION
AAP				
Manufacturing Plan 10M14500	Apollo Telescope Mount (ATM) (Feb 1969)		x	
Manufacturing Plan 10M24001	Apollo Telescope Mount - Solar Array System (Feb 1969)		x	
Manufacturing Plan	S-IVB Orbital Workshop Solar Array System (Dec 1968)	x		
Manufacturing Plan	Neutral Buoyancy Cluster Mockup (Nov 1968)	x		
Manufacturing Plan	Attitude Propulsion System Module for Workshop Attitude Control System (Feb 1969)		x	
Manufacturing Plan	Multiple Docking Adapter (MDA) (Feb 1969)		x	x
Manufacturing Plan	Apollo Telescope Mount Cameras (Oct 1968)		x	
Operation & Service Manual	Air Bearing Capture and Transfer Simulator- Model #2 (Jan 1969)		x	
Manufacturing Process Data MPD-41002	Joining of Stainless Steel Tubing by Induction Brazing (Jan 1969)		x	
Training Manual	Space Welding - Electron Beam Weld Study (Dec 1968)	x		

O-NONE ISSUED                      S-SUPPLEMENT  
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ISSUE March 1969	PREPARED	APPROVED	OFFICE S&E-ME-TDP	DISTRIBUTION
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TOOL NUMBER		TITLE		ROUGH DRAFT	FINAL	REVISION
Manufacturing Plan		S-081 Experiment Payload (Oct 1968)			x	
Manufacturing Plan		Weld Process Verification Tank - S-II Test (Dec 1968 - for Info Only)			x	
Manufacturing Plan		Payload Simulator Exp. Shroud Test (SK30-3565) (Jul 1968)		x		
Tool Manual HF-15060		Serpentuator Envelope Neutral Buoyancy Handling Fixture (Nov 1968)			x	
Tool Manual HF-349-20500		Gyro Positioner "X, Y & Z" Position Holding Fixture (Feb 1969)			x	
Tool Instructions AF-343-20216		MDA Docking Ports Assembly Fixture (Feb 1969)				x
MIT-375-14529		Action-Reaction Free-Fall Simulator (Jun 1968)			x	
MIT-395-14811		Surface-Zero Gravity Simulation Calibrated Measuring Force Receiver (Dec 1967)			x	
Manufacturing Plan		Spent Stage Exp. Support Module (Jun 1966)			x	
Manufacturing Plan		Proposal for Electromagnetic Radiation Astronomy Package (Oct 1966)			x	
Manufacturing Plan 30M14501		Apollo Telescope Mount (ATM) Rack Assembly (Mar 1968)		x		
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Manufacturing Plan		Assembly and Re-Assembly Procedure on LEM Mockup (Jan 1967)			x	
Manufacturing Plan		Payload Module (PM) - "Structure Assy." 30M14650 (Sep 1967)		x		
Manufacturing Plan		Nuclear Ground Test (May 1966)			x	
Manufacturing Plan		Nuclear Ground Test - Abridged Version (Mar 1967)			x	
SPECIAL PROJECTS						
Instructions		Std. Instructions for Procuring, Receiving, Handling, and Storing Expanded and Unexpanded Honeycomb Cores and Face Sheet Materials (Jan 1968)		x		
AF-470-14533		17-Inch Valve Shaft and Bellows Assembly Preassembly and Test Fixture (Oct 1966)		x		
MiT-954-14546		Tube Chamfering and Facing Tool (15 Mar 1966)		x		
PTE-954-14561		Pressure Testing Equipment (15 Jul 1966)		x		
HT-496-14609		S-II Adapter Ring Hoisting Sling (22 Jun 1966)		x		
		Tool Design Manual, Mechanical Drawings (6 Apr 1962) (17 Aug 1962) (1 Oct 1962) (8 Mar 1963) (23 Aug 1963)		x	x	x
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TOOL NUMBER		TITLE		ROUGH DRAFT	FINAL	REVISION
		Preparation of Tool Instruction Manuals (15 Aug 1961) (20 Dec 1961) (23 Aug 1962)		x	x	x
HT-395-14676		S-V Damper System Components Hoisting Tool (Jan 1967)			x	
HT-395-14645		Damper System Assembly Hoisting Tool (Sep 1968)			x	
PTE-934-14561		Pressure Test Equipment (Jul 1966)		x		
		Precision Positioning Control for Welding of Saturn Space Vehicles			x	
		Arc Variation Study, Internal Note (13 Apr 1962)			x	
		Dynamic Braking Motor Governor, Invention Disclosure (20 Feb 1962)			x	
		Research Effort Pertaining to Aluminum Rib Detection, Internal Note (15 Jan 1962)		x		
		Metal-Inert-Gas (MIG) Spot Welder (Jan 1962)		x		
		Alignment Position Indicator for AF-1-302-02000 (16 Mar 1962)			x	
		Governor Servo Control Unit (21 Feb 1962)			x	
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TOOL NUMBER	TITLE	ROUGH DRAFT		FINAL	REVISION
	Controlled Arc Power Supply (24 Jul 1962)			x	
DFMT-IN-19-60	Manual Heliarc Spot Welding Equipment Development (6 Jun 1962)			x	
4-GM451230	Timer Programmed Consumable Electrode Fusion Spotwelding Process (Variac) (Jan 1961) (15 Nov 1961)	x		x	
	Specification, Bridge Type Cranes for use on North Gantry, Saturn Assembly Station No. 3 (30 Aug 1961) (18 Sep 1961)	x		x	
HT-395-14645	Damper System Assembly Hoisting Tool (Dec 1966)			x	
HONEYCOMB PROJECTS					
BF-395-5138	Honeycomb Panel Assembly Bond Form Fixture (27 Jul 1965) (1 Jun 1966)	x			x
TmF-395-5139	120-Inch Diameter Honeycomb Panel Trim Fixture (22 Jun 1965)	x			
ADJ-395-5140	Honeycomb Cylindrical Assembly 30-Inch, 60-Inch, and 120-Inch High 90-Degree Panels Assembly Drill Jig (15 Apr 1966)	x			
BF-395-5149	120-Inch Diameter Honeycomb Panel Assembly Bond Form Fixture (30 Jul 1965) (15 Jun 1966)	x			x
BF-318-6400	Cylindrical Shroud Panels Bond Form Fixture (15 Aug 1966)			x	
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MiT-318-6404		Bond Form Fixture Base Plate Mill Fixture (15 Oct 1965)		x		
MiT-318-6411		HOBE Expander Table (15 Oct 1965)		x		
MiT-318-6412		Honeycomb Before Expanding (HOBE) Saw Table (30 Jun 1966)		x		
MiT-318-6434		Honeycomb Panel Cleanup and Ultrasonic Test Miscellaneous Tool (31 Aug 1966)			x	
HT-318-6437		Honeycomb Panel Hoisting Tool (26 May 1966)		x		
HT-318-6753		60-Degree Cylindrical Shroud Panels Handling Tool (15 July 1966)			x	
HT-372-6759		Honeycomb Shroud Bond Form Fixture Handling Sling (3 Jan 1966)		x		
HT-318-6760		Honeycomb Shroud Storage Rack (StR-318-6407) Handling Sling (28 Feb 1966)		x		
PrD-318-6762		Flat Honeycomb Sheet Production Dolly (15 Dec 1965)		x		
PrD-318-6763		Honeycomb Shroud Curved Honeycomb Sheet Production Dolly (28 Feb 1966)		x		
HT-318-6764		HOBE Handling Tool (1 Nov 1965)		x		
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PrD-318-6765		HOBE Production Dolly (15 Dec 1965)		x		
PrD-318-6768		Honeycomb Shroud Face Sheet Holding Fixture Production Dolly (20 Jan 1966)		x		
DJ-318-6769		Honeycomb Shroud 60-Degree Shroud Panel Segment Forward Edge Drill Jig (28 Feb 1966)		x		
LH <sub>2</sub> EXPERIMENT						
Manufacturing Plan		LH <sub>2</sub> Forward Nose Cone Assembly			x	
AF-132-6300		LH <sub>2</sub> Experiment Lower Cone Assembly Fixture (1 Aug 1965)		x		
AF-132-6301		Saturn 1B LH <sub>2</sub> Experiment Upper Nose Cone Assembly Fixture (Change, Sep 30, 1966)		x		x
HT-132-6308		LH <sub>2</sub> Experiment Nose Cone and Lower Frustum Assembly Hoisting Tool (1 Jul 1965)		x		
HT-132-6314		LH <sub>2</sub> Experiment Lower Frustum Hoisting Tool (10 Aug 1965)		x		
TORUS						
Manufacturing Plan		200-Inch Diameter Toroidal Container (Oct 1965)			x	
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AF-953-6100 and AFA-953-6101	Torus Test Tank Assembly Fixture and Torus Test Tank Assembly Fixture Accessory (20 May 1964)		x		
CRYOGENIC TEST TANK					
AF-13559	105-Inch Cryogenic Test Tank Insulation Assembly Fixture (27 Apr 1964)				x
SK30-1834	Handling Procedure for 105-Inch Cryogenic Tank Assembly for Rocket Sled Test (Mar 1968)			x	
Manufacturing Plan 16-A-Y-250	Insulation of 20-Inch Diameter Bi-Metal Joint Cryogenic Test Tank for Purged SI-62 Insulation Test (Oct 1967)			x	
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