

FILE #	DRAWER #	ITEM	UFI #	SOURCE	REF #	REV.	DATE	KEY	SUBJECT	FROM	TO
PIONEER PROJECT											
21	1								PN F/G - PROJECT MGMT RPTS & POP 79-2 COST ANALYSIS		
21	1			NASA/ARC	POP79-2			PN COST ANALYSIS	PIONEER COST ANALYSIS PROGRAM - PRINTOUTS		
21	1			OSS/ARC			1969-1974	MGMT RPTS	PIONEER F/G (10/11) PROJECT MANAGEMENT REPORTS		
21	2								1975 HAC CORRESPONDENCE, CHANGE TO DOCUMENTS, ETC.		
21	2						1975	CORRESPONDENCE	1975 HAC CORRESPONDENCE, CHANGE TO DOCS, ETC.		
21	3								PIONEER -MIXED		
21	3			NASA/ARC				PN OUTER PLANETS ORB	PIONEER OUTER PLANETS ORB APPENDICES		
21	3			NASA				PN OUTER PLANETS ORB	PIONEER OUTER PLANETS ORB		
21	3				PSD17			MARS ATMOSPHERE	NASA CR-5300 AVCO FEASIBILITY STUDY: PROPERTIES OF MARS ATMOSPHERE		
21	3				PSD04			LUNAR PLANETARY PROGRAM	DOLLAR/MANPOWER SURVEY OF LUNAR PLANETARY PROG...		
21	3			MCDD			2-Aug-73	ATMOSPHERE PROBE	SATURN/URANUS ATMOSPHERE PROBE-ASSEMBLY & FABRICATION OF ENGINEERING MODEL		
21	3			SAI			20-Sep-73	AUTOMATED PROJECTS	MANPOWER ESTIMATION MODEL/COST ESTIMATION MODEL FOR AUTOMATED PLANETARY PROJECTS		
21	3			HAC				PIONEER-VENUS CLOSEOUT	PIONEER-VENUS CLOSEOUT		
21	3						JUL '73	PAE	PAE OUTGOING CHRONICLES		
21	3				MCR73-291		7-Nov-73	HARDWARE DESIGNS	STUDY OF ADAPTABILITY OF EXISTING HARDWARE DESIGNS TO PIONEER SATURN/URANUS PRB - FINAL RPT		
21	3						1973	CHISEL/RASMUSSEN	CHISEL/RASMUSSEN COST ANALYSIS OF LOW COST PIONEER AND PIONEER MISSIONS		
21	3						1973	CHISEL/RASMUSSEN	CHISEL/RASMUSSEN COST MODELS		
21	3						8-May-74	OUTER PLANETS PROBE	OUTER PLANET PROBE TECHNOLOGY WORKSHOP		
21	3			NASA			Jul-75	PROBE IN OUTER SOLAR SYS	ENTRY PROBE IN OUTER SOLAR SYSTEM		
21	3						1974	OUTER PLANET EXPLORATION	ROUND TABLE - OUTER PLANET EXPLORATION		
21	3				SPJ:244-14/5-293		30-Jun-80	AGARD LECTURE	TCM - TRIP ATMOSPHERIC ELECTRICITY AIRCRAFT INTERACTION (AGARD LECTURE SERIES 110)		
21	4								PIONEER MIXED		
21	4			LMSC			14-Dec-76	PV DWGS	PIONEER VENUS DRAWINGS		
21	4			LMSC			14-Dec-76	PV DWGS	PIONEER VENUS DRAWINGS		
21	4			LMSC			14-Dec-76	PV DWGS	PIONEER VENUS DRAWINGS		
21	4			LMSC			15-Oct-76	RPA	PIONEER VENUS RETARDING POTENTIAL ANALYSER (RPA) & DRAWINGS		
21	4			LMSC			28-May-09	RPA	PIONEER VENUS RPA - STATEMENT OF WORK - PV 3871		
21	4			LMSC			12-Feb-74	RPA	PIONEER VENUS RPA - PRD		
21	4			LMSC			3-Nov-75	RPA EGSE	PIONEER VENUS RPA EGSE COMPUTER PROGRAMMING		
21	4			LMSC			20-Jun-77	RPA	PIONEER VENUS RPA SPECIFICATIONS		
21	4			LMSC			5-Feb-74	RPA	PIONEER VENUS RPA CONCEPTUAL DESIGN		
21	4			GMBH			22-Feb-74	RPA	PIONEER VENUS RPA SENSOR DESIGN REVIEW		
21	4			LMSC			5-Apr-74	RPA	PIONEER VENUS RPA EXPERIMENT DESCRIPTION		
21	4			LMSC			22-Apr-74	RPA	PIONEER VENUS RPA IMPLEMENTATION PLAN		
21	4			LMSC			28-Nov-73	RPA	PIONEER VENUS RPA PROPOSAL		
21	4						5-Jun-84	SPACE STATION	SPACE STATION OVERVIEW	NASA	
21	4							SPACE STATION	SPACE STATION POP 84-1 SUBMISSION	ARC	
21	4						1976	ARCFLOW/AEROTHERM	ARCFLOW - AEROTHERM, VERSION 2 PLUS SAMPLE CALCS		
21	4						27-Jun-79	AEROTHERM	AEROTHERM CHEMICAL EQUILIBRIUM JOB-PRINTOUT OF 1OCT80		
21	4						28-Feb-79	COMPUTER PROGRAM	MAIN PROGRAM FOR COMPUTING JOVIAN'S ATMOSPHERIC PROPERTIES		
21	4							RADIATING SHOCK LAYER	OUTPUT FOR THE RADIATING SHOCK LAYER ENVIRONMENT		
21	4						8-Feb-82	AEROTHERM	AEROTHERM CHARRING MATERIAL THERMAL RESPONSE & ABLATION PROGRAM		
21	5								PIONEER MIXED		
21	5				HS507-7179		5-Jan-78	OPTICAL CONTAMINATION	OPTICAL CONTAMINATION TEST RESULTS - PIONEER VENUS		
21	5						22-Aug-77	SAPPHIRE WINDOW	SAPPHIRE WINDOW STATUS - PIONEER VENUS		
21	5						OCT '67	ORB BLANKETS	CONDUCTIVE SURFACE CONTAMINATION / ORBITER BLANKETS		
21	5				HS507-5480		18-Aug-76	RF CORONA	RF CORONA TEST REQUIREMENTS - PIONEER VENUS		
21	5						23-May-78	PRE-SHIP REVIEW	LA GOW - RESPONSE TO PRE-SHIP REVIEW		
21	5							LIFESTAT	REUSABLE REENTRY SATELLITE - LIFESTAT		

21	5				15-May-78	INTERNAL HEATING	INTERNAL HEATING TEST		
21	5				15-Jun-77	DIAMOND WINDOW	DIAMOND WINDOW - PIONEER VENUS		
21	5					MLTPRB PRE-SHIP REVIEW	MULTIPROBE PRE-SHIP REVIEW PIONEER-VENUS		
21	5		HAC		13-Mar-78	BATTERY REVIEW	BATTERY REVIEW - PIONEER/VENUS		
21	5					LARGE PROBE	LARGE PROBE PRESENTATION - PIONEER/VENUS		
21	5				21-Jul-78	SSG	SCIENCE STEERING GROUP PIONEER/VENUS		
21	5		HAC		29-Sep-78	PROBE LEAK RATE	PROBE LEAK RATE INFORMATION PIONEER/VENUS		
21	5				12-Jan-76	ORB APERATURE	ORBITER APERATURE HEAT LOAD-PIONEER/VENUS		
21	5				2-Aug-78	SMALL PROBE	SMALL PROBE 2 SYS DESCENT SIMULATION-PIONEER/VENUS		
21	5				20-Dec-71	STAR SENSOR	STAR SENSOR THERMAL PROBLEM - PIONEER/VENUS		
21	5		HAC	HS507-7855	15-Apr-78	PROBE WINDOW	PROBE WINDOW EXTERNAL CONTAMINATION-PIONEER/VENUS		
21	5				1973-1974	J GIVEN'S LOG	J GIVEN'S LOG - PIONEER PROJECT		
21	5			HS507-4134-H	27-Apr-76	PBOBES	LARGE & SMALL PROBE TEST ACCESS CONNECTOR CONFIGURATION		
21	5			HS507-7058	30-Aug-77	SMALL PROBE	SMALL PROBE #1 DESCENT TEMP. - POST TEST CRITIQUE		
21	5		HAC	HS507-7485	30-Jan-78	STM BUS	VACUUM BAKEOUT OF STM BUS SOLAR PANEL		
21	5				JUL '68	LIFE SUPPORT	LIFE SUPPORT & PROTECTIVE EQUIPMENT WORKBOOK		
21	5				5/73-8/75	J GIVEN'S LEDGER	J GIVEN'S LEDGER		
21	5		NASA		16-Mar-77	FLOW FIELD	FLOW FIELD - MASLEN TECHNIQUE		
21	5		HARVARD		1962	HELIUM	THERMODYNAMIC PROPERTIES OF HELIUM TO 50,000 DEGREES		
21	5				14-Dec-76	PV DWGS	PIONEER VENUS DRAWINGS		
21	5		LMSC		14-Dec-76	PV DWGS	PIONEER VENUS DRAWINGS		
21	5		LMSC		14-Dec-76	PV DWGS	PIONEER VENUS DRAWINGS		
21	5		LMSC		15-Oct-76	RPA	PIONEER VENUS RETARDING POTENTIAL ANALYSER (RPA) & DRAWINGS		
21	5		LMSC		28-May-09	RPA	PIONEER VENUS RPA - STATEMENT OF WORK - PV 3871		
21	5		LMSC		12-Feb-74	RPA	PIONEER VENUS RPA - PRD		
21	5		LMSC		3-Nov-75	RPA EGSE	PIONEER VENUS RPA EGSE COMPUTER PROGRAMMING		
21	5		LMSC		20-Jun-77	RPA	PIONEER VENUS RPA SPECIFICATIONS		
21	5		LMSC		5-Feb-74	RPA	PIONEER VENUS RPA CONCEPTUAL DESIGN		
21	5		LMSC		22-Feb-74	RPA	PIONEER VENUS RPA SENSOR DESIGN REVIEW		
21	5		GMBH		5-Apr-74	RPA	PIONEER VENUS RPA EXPERIMENT DESCRIPTION		
21	5		LMSC		22-Apr-74	RPA	PIONEER VENUS RPA IMPLEMENTATION PLAN		
21	5		LMSC		28-Nov-73	RPA	PIONEER VENUS RPA PROPOSAL		
21	5		LMS			TITAN	STUDY OF ENTRY & LANDING PROBES FOR EXPLORATION OF TITAN		
21	5		MM			TITAN	STUDY OF ENTRY & LANDING PROBES FOR EXPLORATION OF TITAN - ADDENDUM		
21	5		MM			PROBE TECHNOLOGY	STUDY OF ALTERNATE PROBE TECHNOLOGIES - FINAL REPORT		
21	5		MM			TITAN	ENTRY & LANDING PROBES FOR EXPLORATION OF TITAN VOL II - A) CONTRACT MGMT		
21	5		MM			TITAN	ENTRY & LANDING PROBES FOR EXPLORATION OF TITAN VOL II - B) PRICING PROPOSAL		
21	5		MM			ORB/PROBE MISC	OUTER PLANET ORB/PRB - MISC.		
21	5					TITAN	TITAN ATMOSPHERE & TEMPERATURE - MISC.		
21	5				27-Apr-83	TITAN	TITAN EXPLORATION BY PROBES TO JWG STUDY TEAM ON OUTER PLANETS	BL SWENSON	
21	5			SSS:244-8/39	27-Feb-84	TITAN	JOINT ESA/NASA SATURN/TITAN MISSION STUDY	BL SWENSON	DISTRIBUTION
21	5					TITAN	NEW CONCEPT FOR A TITAN ATMOSPHERIC PROBE	SWENSON/MASCY	
21	5				27-Jun-83	TITAN	NEW TITAN PROBE CONCEPTS TO JWG TEAM ON OUTER PLANETS	BL SWENSON	
21	5			SSS:244-8	7-Sep-83	CODE EL	CODE EL QUARTERLY REVIEW & FY '84 STUDY PLAN	BL SWENSON	DISTRIBUTION
21	5				8-Jul-83	OUTER PLANETS STUDY	2ND MTG OF OUTER PLANETS STUDY TEAM OF JOINT U.S./EUROPEAN WORK GROUP ON	A SEIFF	GUSTAFERRO
21	5					MARK II COMET	FY '84 PRELIM COST ESTIMATES-MARINER MARK II COMET RENDEZVOUS MISSION/COMET NUCLEUS GSPS	NASA	
21	5			S:200-4	26-Mar-84	SPACE STUDIES	ADVANCED SPACE STUDIES/FUTURE PROJECTS	DE WILCOX	SS DIVISION
21	5		HAC	HS507-7665	24-29APR78	MLTPRB S/C PRE-SHIP	PIONEER-VENUS MULTIPLE PROBE S/C PRE-SHIP REVIEW MTG, VOL I - PROBES & AGENDA		
21	5		GE			DECEL MODULE	PIONEER-VENUS CONCEPTUAL DESIGN REVIEW - DECELERATION MODULE		
21	5					COMET NUCLEUS	COMET NUCLEUS PENETRATOR	NASA	
21	5				14-Jun-84	FUTURE/AMES	A PERSPECTIVE ON FUTURE SPACE PROJECT OPPORTUNITIES FOR AMES	BL SWENSON	
21	5				Apr-81	AFTER GALILEO	OUTER PLANET MISSIONS AFTER GALILEO	DG REA	
21	5			UPN:889-50 & 51	Apr-86	RESOURCE REPORT	PIONEER MONTHLY RESOURCE REPORT		
21	5				28-Apr-86	CODE S	CODE S SMALL PROJECT REVIEW CRAF / CNP		
21	5				3-Oct-86	CODE S	CODE S SMALL PROJECT REVIEW CRAF / CNP		