

# **FINDING AID FOR THE FRANK HUGHES COLLECTION, 1967-1999 (#2019-0011)**

## **Contact Information**

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## **Descriptive Summary**

**Repository (049):** University of Houston-Clear Lake Archives & Special Collections

**Collection # (099):** 2019-0011

**Title (245):** Francis E. Hughes Collection

**Creator (100/110):** Hughes, Francis E.

**Inclusive Dates:** 1967-1999

**Extent (300):** 20 linear feet (26 1/2 boxes; 6 boxes)

**Language (546):** English

## **Administrative Information**

**Restrictions on Access (506):** unrestricted

**Restrictions on Use (540):** unrestricted

**Acquisition Information (541):** Unavailable

**Processed by (583):** Nanes, Roberto August 11, 2021

**Preferred Citation (524):** The Francis E. Hughes Collection, 1967-1999 (#2019-0011),  
University of Houston-Clear Lake Archives & Special Collections.

## **Biographical/Historical Note (545)**

Francis E. Hughes (who goes by "Frank") earned his BS in physics at St. Mary's College, California; and a MS degree in environmental management at the University of Houston-Clear Lake. Hughes served as the chief of NASA's Johnson Space Center Spaceflight Training Division. He spent more than 30 years with NASA, working spaceflight training in Gemini, Apollo, Skylab, Space Shuttle, Space Station and future exploration programs, training the flight crews, the flight controllers, and the trainers. He was a computer and GNC expert during Apollo Training. He trained Shuttles crews in GC and computer systems; then he became manager with increasing responsibilities. He left Shuttle training to initiate Space Station training in 1982. Hughes pioneered the training cooperation with all of the ISS partners including Russia. He

retired from NASA and is currently heading up some new training efforts in the aerospace community.

--<https://airandspace.si.edu/support/wall-of-honor/frank-e-hughes>

### Scope and Content (520)

Collection contains the papers of Francis E. "Frank" Hughes and documents his career as a computer and GNC expert at NASA during Apollo.

### Arrangement

Collection is arranged into 34 boxes. There are 34 chronological series.

### Index Terms (6xx):

#### Corporate Names

United States. National Aeronautics and Space Administration (LCNAF)  
Space Shuttle Program (U.S.)(LCNAF)  
spacelab program (lcnaf)  
United States. National Aeronautics and Space Administration. Space Station Operations Task Force (lcnaf)  
United States. Presidential Commission on the Space Shuttle Challenger Accident (LCNAF)  
Challenger (Spacecraft) (lcnaf)  
Apollo 7 (Spacecraft) (lcnaf)  
Lyndon B. Johnson Space Center (lcnaf)  
Uchū Kaihatsu Jigyōdan (Japan) (lcnaf)  
European Space Agency (local)  
Tsentr podgotovki kosmonavtov imeni IŮ.A. Gagarina (lcnaf)  
Russian Space Agency (lcnaf)  
International Space Station (lcnaf)  
Project Apollo (U.S.) (lcnaf)  
Boeing Company (lcnaf)  
United States. Presidential Commission on the Space Shuttle Challenger Accident (LCNAF)  
United States. National Aeronautics and Space Administration. Space Station Operations Task Force (lcnaf)  
Goddard Space Flight Center (lcnaf)

#### Subjects

astronauts (lcsh)  
schedules (fast)  
Planning (lcsh)

#### Document Types

Memorandums (lcsh)  
Motion picture plays (lcsh)

### Inventory

#### Series I: 1967

<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
22	1	Apollo Program - Mission Test Document of AMS101 Guidance and Navigation System Mission Test Demonstrations of ISMC Control and Monitor of	1967

		the Simulated Apollo Spacecraft (101-MT-9) (101-MT-13) (101-MT-14)	
22	4	Apollo Program - AS - 503A Spacecraft Reference Trajectory	1967
22	5	Apollo Mission Simulator Command Module Computer Closed-Loop Verification (Conclusions Report)	1967
22	9	Visual Display System (VDS) for the Apollo Mission Simulator (AMS) and Lunar Module Simulator (LMS)	1967
22	10	AS-501 Spacecraft Operational Trajectory - Trajectory Description (REF DOC #05952-H067-RO-01)	1967
22	14	Lunar Module Simulator (LMS Visual Display System)	1967
22	15	Boeing Co. "Description of the Boeing Space Flight Simulator and Associated Simulation Facilities"	1967
22	16	system Assessment Readiness Review, Mission Effects Projection (MEP) System of the Visual Display Subsystem AMS #2	1967
23	1	Minutes of the ISAGC Coordination Meeting #1 through #12	1967

Series II: 1968

<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
22	11	Simulation of the Apollo Guidance Computer in the Apollo Mission Simulator (AMS) and Lunar Module Simulator (LMS)	1968
22	12	Apollo Program - Colossus Implementation on Apollo Mission Simulator	1968
22	13	NASA Manned Space Craft Center, Flight Crew Operations Branch Simulator Operations	1968
23	2	Mission "c" Rendezvous Mission Techniques Meeting (MTG #3,4,6,8,9)	1968
23	4	Minutes of the ISAGO Coordination Meetings #13 through #21	1968
23	6	Visual Display, High Resolution TV Display (Memos)	1968
23	7	Mission Effects projector (MEP)	1968
23	8	Colossus Program - Massachusetts Institute of Technology (MIT) Test Plan for Checkout of MIT Program Colossus	1968
23	9	Mission Control / Flight Crew Trainer - Integrated Simulation Operations Panel Minutes (#1 Through #8)	1968
23	10	Apollo Mission Simulator Mission Events Reset Points	1968
26	1	Apollo 7 ("C" Mission) Revision 1 to the Operational Consumable Analysis	1968

26	2	Colossus First Article Configuration Inspection FACI -Minutes	1968
26	3	Flight Software Readiness Review "C-Colossus	1968

Series III: 1969

<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
23	5	Minuted of the ISAGO Coordination Meeting #23 through #35	1969
26	5	Command Module Simulator (CMS) -2 Fuel Consumption Study	1969

Series IV: 1974

<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
29	133	Transcript Proceedings — NASA Space Transportation Briefing	1974
29	133	Transcript Proceedings -- NASA Space Transportation Briefing 6/5/1974	1974

Series V: 1977

<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
28	46	Informal Notes-- ISD Process	1977
28	47	Memorandum-- Assignment of Training Manager	1977
28	3	Generic Training Materials (DOD)	1977, 1979
32	5	JSC Internal Note No. 77-EW-1 Application of Skylab Workday, Analysis to future programs	1977, May

Series VI: 1979

<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
27	71	Management and Budget	1979-1989
28	1	NASA Organizational, Technology, Mission, History and NASA Factbook 1988	1979-1992

Series VII: 1980

<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
30	10	Negatives of STS026 Pictures	1980

Series VIII: 1981

<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
11	5	Flight Operation Directorate Master Training Plan	1981
30	37	STS-1 Technical Crew Debriefing (JSC-17306)	1981

Series IX: 1982

<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
28	45	STS Training Cartoon	1982

Series X: 1983

<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
8	18	Structured On-The-Job Training (OJT) Training Program For Control Instructions	1983
32	46	White paper and notes: A. comparative study of the evolution of command and control activities for manned and unmanned spaceflight operations	1983

Series XI: 1984

<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
10	12	Shuttle SMS Upgrade Requirements	1984
25	2	Training Using Training Manuals Versus SFOM	1984
30	147	NASA's Management Principles to Achieve Excellences	1984
32	38	Magazine Article- Datamation The Art of Space Software	1984
32	39	Presentations on STS software products	1984
8	19	Training Division Long Range Goal and Man Power Stratus	1984-1984

Series XII: 1985

<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
1	15	#51-L-13: STS-51-L Crew Activity Schedule	1985
8	20	Training Scripting Philosophy	1985
10	1	Shuttle Mission Training Facility Operations Concept (Singer-Link) Working Draft	1985
10	13	Shuttle Generic Training Loads	1985
10	14	Shuttle Simulator Long-Range Efforts	1985
27	14	Informal Science Study: Toys in Space	1985
31	40	Mitre Onboard Training Task	1985
1	33	#51-L-37 & #51-L-40: STS-51-L Crew Training Guide	1985-1986

Series XIII: 1986

<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
1	1	STS-51-L Data and Design Analysts Task Force	1986
1	2	STS-51-L MPOT Information on Crew Training, Training Records, and Certification Statistics of Training Personnel	1986
1	3	STS-51-L — Mission Planning and Operations Team (MPOT)— Training	1986

1	5	#51-L-2: STS Training Operation, Operation, Methodology	1986
1	6	#51-L-3: Memo— Mission Planning and Operations Team (MPOT) Action 1 Training Requirements Calculations	1986
1	7	#51-L-4: Memo— Mission Planning and Operations Team (MPOT) Action 2 Training Program Changes	1986
1	8	#51-L-5: Memo— Mission Planning and Operations Team (MPOT) Action 3 Certification of Controllers in MCC	1986
1	9	#51-L-6: Informal Note— NASA Mission Planning and Operations Team Working Group Activity Summary	1986
1	10	#51-L-7: Informal Note— Support Data for DA5 Presentation to 51-L Accident Commission	1986
1	11	#51-L-8: Memo— Crew Training Requirements Evolution to Support the STS 51-L Investigation	1986
1	12	#51-L-9: Memo— Evolution of Flight Controller Training Objectives	1986
1	13	#51-L-16 & 51-L-19 & 51-L-32: Memo— Kudos For Work on the STS-51-L Investigation; Certificate of Appreciation	1986
1	14	#51-L-12: STS-51-L DDATF Mission Planning and Operation Team Action Item	1986
1	16	#51-L-14: Avoid Verbal Orders— Response to 51-L Certification Action	1986
1	17	#51-L-15: STS — 51-L Crew Training Hours Summary	1986
1	18	#51-L-10 & 51-L-11 & 51-L-17: Memo — Transmittal of Official STS-51-L Training Preservation	1986
1	19	#51-L-18: Memo— STS— 51-L Data Transmittal	1986
1	20	#51-L-20: Memo— STS— 51-L Post—Flight Training Report	1986
1	21	#51-L-21: Memo Preliminary Mission Planning and Operations Team Report	1986
1	22	#51-L-22: Cre SMS Training Summary Data (Preliminary)	1986
1	23	#51-L-23: Memo- training Activities to Support Casa Blanca Landing Site	1986
1	24	#51-L-24: Informal Note: Headcount	1986
1	25	#51-L-25: Memo STS- 51-L: Data and Records Impounded at Johnson Space Center Building 30	1986
1	26	#51-L-26 & 51-L-27: Informal Note: STS-51-L Accident Investigation Certificate of Appreciation List	1986
1	27	#51-L-28 & 51-L-29: STS-51-L Recommendations	1986
1	28	#51-L-30: Report at a Glance- Presidential Commission on the Space Shuttle Challenger Accident	1986

1	29	#51-L-31: Actions to Implement the Training Recommendations	1986
1	32	#51-I-38 & 51-I-39: 51-L SMS Activity Schedule	1986
1	39	SSOTF-38: Space Station Overview Presentation to Space Station Operations Task Force	1986
2	1	SSOTF: Space Station Operations Task Force Log	1986
2	2	SSOTF-1: MSFC/POCC Interface to Users	1986
2	3	SSOTF-2: HOSC/POCC Overview	1986
2	4	SSOTF-3: SSOTF Panel 1: SMICA Study and Results	1986
2	5	SSOTF-4: Payload Resources Management	1986
2	6	SSOTF-5: D-1 Operations Experience	1986
2	7	SSOTF-6: Spacelab/Space Station Science Operations	1986
2	8	SSOTF-7: Payload Selection/ Elevation Process	1986
2	9	SSOTF-8: Spacelab Payloads Management Concepts	1986
2	10	SSOTF-9: Space Station Program Training Concepts	1986
2	11	SSOTF-10: Office of Space Science and Applications (OSSA) Science Needs For Space Station	1986
2	12	SSOTF-11: MSS Operations Concept	1986
2	13	SSOTF-12: Spacelab Payload Training	1986
2	14	SSOTF-13: Spacelab Payloads Operations Forcing Functions	1986
2	15	SSOTF-14: A Plan for the OSSA Testbed Program	1986
2	16	SSOTF-15: Integrated Payload Training at MSFC	1986
2	17	SSOTF-16: Space Station Basic Operations Function	1986
2	18	SSOTF-17: Spacelabs Payloads Flight Operations Lessons Learned	1986
2	19	SSOTF-18: Space Station User Operations Support Concept	1986
2	20	SSOTF-19: Payloads Operations Control Center (POCC) Cadre Training Program (Example)	1986
2	21	SSOTF-20: PCTC Status (FY86/87)	1986
2	23	SSOTF-22: Provide Feedback on Japanese's Negotiations	1986
2	24	SSOTF-23: Space Station Verification and Integrated Assembly and Checkout (IACO)	1986
2	25	SSOTF-24: Space Station Flight Operations Support Architecture	1986
2	26	SSOTF-25: ESA Astronauts for Columbus	1986
2	27	SSOTF-26: Operations Task Force (OTF) Product Outline Thoughts	1986

2	28	SSOTF-27: Operations Task Force- Columbus Elements	1986
2	29	SSOTF-28: Memo: Space Station Crew and Flight Control	1986
2	30	SSOTF-29: Guidelines and Assumptions for Space Station Task Force	1986
2	31	SSOTF-30: Space Station Budget Presentation to Space Station OPS Task Force	1986
2	32	SSOTF-31: Space Station Verification and Integrated Assembly and Checkout	1986
2	33	SSOTF-32: Memo: Personnel Nominations to SSOTF	1986
2	34	SSOTF-33: Instructions for Preparing the Integrated Training Plan	1986
2	35	SSOTF-34: Frank Hughes Notes From SSOTF Training Sub Panel Meeting	1986
2	36	SSOTF-35: Instructions for Preparing an Experiment Simulator Requirements Document	1986
2	37	SSOTF-36: Space Station Platform Project Status Report to SSOTF	1986
2	38	SSOTF-37: Space Station Program Overall Baseline Configuration —SRR Results and Summary	1986
2	40	SSOTF-39: SSOTF Panel I Members - Activity Until Next Week's Meeting	1986
2	41	SSOTF-40: Space Station Integrated Assembly and Checkout(IACO)	1986
2	42	Space Station Work Package and Systems Integration	1986
3	1	SSOTF-41: Log For Space Station Operations Task Force (SSOTF)	1986
3	4	SSOTF-45: Space Station Overall Management Agreement Approach for Operations	1986
3	5	SSOTF-46: SSOTF Space Station Training Facility Requirements	1986
3	6	SSOTF-47: Space Station Polar Platform Payload Servicing Requirements	1986
3	7	SSOTF-48: Space and Earth Science Advisory Committee (SESAC) Task Force Scientific Uses of Space Station - Space Station Summer Study Report	1986
3	8	SSOTF-49: Findings of the Critical Evaluations Task Force (CETF)	1986
3	9	SSOTF-50: Space Station Program Office Distribution List	1986
3	13	SSOTF-54: Space Station Tactical Planning	1986
3	16	SSOTF-58: Training Concept - Canadian Approach	1986
3	17	SSOTF-59: Payload Operations Control Center (POCC) Cadre Training Program Development	1986
3	18	SSOTF-60: Space Station Budget Pitch - Training	1986

4	1	SSOTF-61: Space Station On-Orbit Maintenance Training	1986
4	2	SSOTF-62: Concept and Expected Use of the Software Support Environment	1986
4	3	SSOTF-63: JSC Weightless Environment Training Facility (WETF) Adequacy For Space Station	1986
4	4	SSOTF-64: Crew Role in Integrated Assembly and Check-Out (IACO) - Identify Skills Required	1986
4	5	SSOTF-65;66: Avionics Systems Division - DMS, C & T and SSIS Support to the Tele-Science User	1986
4	7	SSOTF-68: Space Station Mission Dependent Training - Productive Activities	1986
4	8	SSOTF-69: SSOTF - Crew Issues / Effective Utilization of the Station	1986
4	9	SSOTF-70: SpaceLab 2 Payload Specialist (PS) Selection	1986
4	10	SSOTF-71: Space Shuttle Program- Space Transportation System Payload Integration	1986
4	11	SSOTF-72: space Station Operations Comments	1986
4	12	SSOTF-73: A Station Manning Plan	1986
4	13	SSOTF-74: History of the Space Station Operations Concept Development	1986
4	14	SSOTF-75: Utilization of the Station (Crew Considerations)	1986
4	15	SSOTF-76: FlightCrewRecommendation Space Station Operations	1986
4	16	SSOTF-77: Safe Space Station Operations - A Commanders View Point	1986
4	17	SSOTF-78: SSOTF Panel 1 - Space Station Medical Considerations	1986
4	18	SSOTF-79: Space Station Crew	1986
4	19	SSOTF-80: Tele-Science - Code E	1986
4	20	SSOTF-81: Science and Applications Information System Tele-Operations panel Report	1986
4	21	SSOTF-82: Space Station Information System (SSIS) Support of Telescience - Presentation to the Space Operations Panel	1986
4	22	SSOTF-83: Mission Integration Office - The Manifest Progress	1986
4	23	SSOTF-84: Mission Operation Directorate Operation Programming	1986
4	24	SSOTF-85: MOD - Space Station Operations	1986
4	25	SSOTF-86: Goddard Space Flight Center (GSFC) Training Concepts	1986
4	26	SSOTF-87: Voyager Sustaining Engineering	1986
4	27	SSOTF-88: OSSA Payload Operations Concepts	1986
4	28	SSOTF-89: KSC Study Report on Space Station Proprietary Operations	1986

4	29	SSOTF-90: Briefing to SSOTF Training Sub-Panel	1986
4	30	SSOTF-91: Memo-Proprietary Information: Payload Training Facilities	1986
4	31	SSOTF-92: Space Station Training Facility Loading Study	1986
4	32	SSOTF-93: Japan/NASA Comments on Operational Principles	1986
4	33	SSOTF-94: Memorandum: Considerations For Reducing Ground Space Operations Cost With Knowledge- Based System	1986
4	34	SSOTF-95: Customer Integration and Development Briefing (Multi-Contractor)	1986
4	35	SSOTF-96: SSOTF Training Sub-Panel Agenda	1986
4	36	SSOTF-97: Briefing #2 to SSOTF Oversight Committee on Selected Issues	1986
4	37	SSOTF-98: Results of the Space Station Operations Task Force Review of Program Phase C/D RFP's	1986
4	38	SSOTF-99 Space Station Trainer	1986
5	6	SSOTF-106: Space Station Operations- Presentation to NASA Space Station Operations Task Force	1986
5	7	SSOTF-107: Hubble Space Telescope - Sustaining Engineering for Two Decades?	1986
5	8	SSOTF-108: Resource Envelope Parameters	1986
5	9	SSOTF-109: Platform Servicing	1986
5	11	SSOTF-UARs Data Processing System	1986
5	13	SSOTF-113: Space Telescope (ST) Basic Operations System	1986
5	16	SSOTF-116: Astrophysics Data Operations	1986
5	17	SSOTF-117: Operations Task Force- Commonality for Operations	1986
5	18	SSOTF-118: International Partner Functional Responsibilities and Financial Accountabilities for Space Station Operations	1986
5	23	SSOTF-124: SSOTF Meeting Request - Consideration for Space Station Policy	1986
5	24	SSOTF-125: Civil Needs Data Base (CNDB) Updates- Status Report	1986
5	25	SSOTF-126: SSOTF Report	1986
5	27	SSOTF-128: Tactical Drivers	1986
5	28	SSOTF-129: Character- Space Operations and Support Systems	1986
5	29	SSOTF-130;131: Operations Task Force Tracking - Log	1986
6	12	SSOTF-143: Minutes if the SSOTF Training Meeting on December 10,	1986
8	21	SIM Sup Philosophy and Procedures SIM SUP Corporate Knowledge	1986
10	10	National Space Transportation System Manifest	1986

11	6	Audit of Strategic Planning at JSC	1986
15	3	Space Station Freedom Program Training Concepts	1986
15	4	Space Station Training Facility Loading Projection	1986
19	7	MOD Phase 1 Training Program	1986
25	3	Improve Productivity and Utilization of SMS Propriety Requirements list	1986
25	4	Centaur Lessons Learned	1986
25	5	Trip Report and Abstracts from AIAA National Flight Simulation Technical Committee and Training Subcommittee of the Inter-service/Industry Training systems Conference; AIAA American Institute of Aeronautics and Astronautics	1986
27	5	Space Station Operation Task Force Training Sub-Panel Agenda	1986
1	4	STS-51-L Accident Investigation Log (51-L-1)	1986-1987
32	1	Flight Controller Training Objectives Evolution	1986, April 1

Series XIV: 1987

<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
1	30	#51-L-33: Memo- Post STS-51-L Training Program Revisions	1987
1	31	#51-L-34 & 51-L-36: Memo- STS-51-L Crew Schedules, Crew Schedules	1987
3	2	SSOTF-42 & SSOTF-43: Training Concepts for Mature Operations (Original and Changes)	1987
3	3	SSOTF-44: Training Division Issues - Final SSOTF Wrap-Up	1987
3	10	SSOTF-51: Space Station Operations Task Force Recommendations	1987
3	11	SSOTF-52: SSOTF Training Subpanel Report to MOD	1987
3	12	SSOTF-53: SSOTF Recommendations for Strategic and Tactical Planning	1987
3	14	SSOTF-55: SSOTF Panel 1 Report - Space Operations	1987
3	15	SSOTF-57: SSOTF Memo— Final Draft Review of Summary Report of the SSOTF	1987
5	1	SSOTF-101: Locations / Types / Numbers of Training Facilities Required	1987
5	2	SSOTF-102: Orbital Mechanics Problems	1987
5	3	SSOTF-103: Major Area and Alternatives	1987
5	4	SSOTF-104: McDonnell Douglas Astronautics Company - Discussion With NASA SSOTF	1987
5	5	SSOTF-105: Briefing Lockheed to SSOTF : The Next Logical Step	1987
6	1	SSOTF-132: Ground Operations Concept Proposal (Entire Pitch)	1987

6	2	SSOTF-133: SSOTF Panel 1 - -Platform Operations and Support Concept	1987
6	3	SSOTF-134: Letter - Proposed structure for space Station User Documentation	1987
6	4	SSOTF-135: SSOTF Panel 1 - System Operations	1987
6	5	SSOTF-136: User Operations Planning and Execution	1987
6	6	SSOTF-137: Space Station Training Concept for Mature Operations	1987
6	7	SSOTF-138: Rockwell International Space Station Systems Division	1987
6	8	SSOTF-139: Space Station Operation Cost Model	1987
6	9	SSOTF-140: Space Station Proprietary Operations Study Summary	1987
6	10	SSOTF-141: United Airlines Services Corporation - Commercial Airlines Lesson Learned	1987
6	11	SSOTF-142: Space Station Considerations for the SSOTF	1987
6	13	SSOTF-144: SSOTF. Panel / orbital Mechanics Problems	1987
6	14	SSOTF-145: OTF Outline Update	1987
6	15	SSOTF-146: NASA Headquarters - State of NASA	1987
6	16	SSOTF-147: Antarctic Research	1987
6	17	SSOTF-148: Pricing Policy Sub-Panel Report - User Integration and Development Panel	1987
6	18	SSOTF-149: SSOTF - Marketing Sub-Panel	1987
6	19	SSOTF-150: Payload Selection / Resource Allocation Goals	1987
6	20	SSOTF-151: SSOTF Panel 3 Manifest Sub-Panel Report	1987
6	21	SSOTF-152: IBM - Data Management System Hardware	1987
6	22	SSOTF-153: Space Shuttle Software Development	1987
6	23	SSOTF-154: Space Station Crew Requirements	1987
6	24	SSOTF-155: SSOTF Panel / Report - Tactical Planning and Manifest Assessment	1987
6	25	SSOTF-156: SSOTF Panel /. Report Review	1987
8	17	Training Study Update	1987
8	22	Payload Specialist Training Proposal / Program	1987
8	23	Training Division / Simulator Problems	1987
8	24	Training Division Systems Survey	1987
10	2	The Reliability of Shuttle Mission Simulators: FY83 Thru FY85 (MTR-10017, JSC 22371	1987
11	18	JSC Strategic Planning - Technology Development Ideas, Training Division	1987
12	2	NASA Vision and Goal Statement 1987 and NASA HQ Strategic Planning	1987

12	3	1987 JSC and MOD Goals and Objectives	1987
21	4	Crew Training Objectives Update	1987
21	5	Inertia Upper Stage (IUS) Task Analysis and Training Assessment Seminar (TATAS)	1987
24	1	Phase I Training - Comments and Suggestions	1987
25	6	Training Reading Articles From Industry	1987
25	7	Southwest Research Institute (SRI) Concept Papers for NASA Training	1987
25	8	Lesson Development Process Personnel Roles Instructional Techniques to Utilize	1987
25	9	Instructor's Training Program for SME/Instructors At NASA JSC	1987
25	10	Simulator Needs Determination Presentation to AIAA/ASTD Fall Training Seminar	1987
25	11	Southwest Research Institute (SRI) White Paper on "An Intelligent Front-end to the Malfunction pages for the Shuttle Mission Simulator: An Instructor's Simulator AID (ISA):	1987
27	72	Management and budget (Artificial Gravity-- a countermeasure for zero gravity)	1987
27	73	Management and Budget: Progress Towards Autonomous intelligent system	1987
27	74	Management and Budget: Space Transportation Architecture study overview	1987
27	75	Management and budget: Flight telerobotic service (FTS): A Focus for automation and robotics on the space station	1987
27	76	Management and budget: NASA's telerobotic R and D Program: Status and Future Directions	1987
27	77	Management and budget: Study of the conceptual and functional model of a space robot (SPIDI) with the development of a reactive task planner.	1987
27	78	Management and budget: Applicability of A.L. Techniques of the space station, a study case: Development of an Expert System for Onboard fault Management	1987
27	79	Management and budget: Space communication services define a DRS- Based space communication system	1987
27	80	Management and Budget: Space station program implication from the viewpoint of the space station operation task force	1987
27	82	Management and budget: Space Station Information: Concepts and International Challenges	1987
27	83	Management and budget: New Properties of the rotation matrix	1987
27	85	Management and budget: The Hermes Utilization Program me (In-orbit servicing by HMS) (Presentation)	1987

27	86	Management and budget: AI Applications to the Command and control of future aerospace plane vehicles	1987
27	87	Management and budget: Launch Processing System Operations with a future look to operations analyst (Opera)	1987
27	88	Management and budget: A simulations analysis of space operation	1987
27	89	Management and budget: Application and Antimatter Electric Power to interstellar propulsion, by Gerald D Nordly	1987
27	90	Management and Budget: Importance of Human Factors in the conception of Hermes Spacecraft	1987
27	91	Management and budget: Investigation of Antimatter airbreathing propulsion for single stage-to-orbit ship	1987
27	92	Management and budget: Development Experience of the Attitude control system using single-axis control moment gyros for long-term orbiting space station	1987
27	93	Management and budget: Space transportation system- beyond 2000	1987
27	95	Management and budget: Technology Challenge for the national Aero-Space Plane	1987
27	97	Management and budget: An advanced Launcher System for Europe	1987
27	98	Management and budget: JEM Present Project Status	1987
27	99	Management and budget: Potential of robotic Operation onboard the man-tended free-flyer	1987
27	100	Management and budget: Autonomous relative navigation using multiple imagery information for space robotics applications	1987
27	104	Management and budget: Trade and problem in the definition of Columbus operation concept	1987
29	3	Presentation--SSOTF Training Sub-Panel Report to Mission Operation Directorate, by Frank Hughes June 11,	1987
30	30	Southwest Research Institute (SWI): white Paper Discussion of Training Evaluation	1987
31	26	SMS Priority Requirements List (SPRL) -- SPRL From STF 264A	1987
32	15	International Astronautical Federation (I.A.F.) XXXVIIth Congress	1987
11	19	Mission Operations Directorate (MOD) 10 -Year Strategic Plan	1987-1988
27	108	Space Station Mission Operation Office (SSMOO) Administrative Materials and History	1987-1988
27	107	Challenger Center Materials	1987-1989
32	49	Training Concepts for mature operations	1987, March 5

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Box	Folder	Title	Date
9	25	Space Station Training Concept	1988
13	1	Preliminary Working Draft of the Space Station Training Facility, Level A, Training Requirements (JSC32068)	1988
13	2	Space Station Training	1988
14	1	MSFC/JSC Payload Training Technical Interchange Meeting	1988
15	5	Space Station Training Mini-Retreat — Interfaces and Training Concept	1988
16	2	Space Station Freedom Program Assembly Sequence and Schedule	1988
16	3	Space Station Freedom Program Work Package-1 and Work Package -2 (WP-2) Overlap Resolution	1988
16	4	Space Station Freedom Systems Support Software Requirements Specification (SRS)	1988
21	6	Space Station Mission Operations Office Transition Workshop	1988
21	7	Recommendations for Identifying and Writing Training Objects.	1988
21	8	Training Division Comments on the Space Station Training Plan: Assembly Phase (JSC032056 Preliminary)	1988
21	9	Training Information Management System (TIMS) Requirement Status Report	1988
21	10	Space Station Onboard Training	1988
25	12	Intelligent Tutoring System (ITS)	1988
27	1	Space Station Training Working Group (SSTWG) Materials Minutes for Meeting #3 at Marshall Space Flight Center July 13-15 1988	1988
27	2	Space Station Training Working Group (SSTWG) - Attendees list: Training Program (TPP) Schedule; Training International Integration; Space Station operations cost model; SSTWG Action Item; Space Station Program Definition and Requirements	1988
27	3	Memo (for Distribution)-- Space Station Training Work Group Meeting Minutes	1988
27	4	SSTWG Attendees list	1988
27	6	SSTWG Meeting Minutes	1988
27	7	Charter for Space Station Intercenter training working group	1988
27	8	Memo for Distribution-Space Station Training Work Group (SSTWG) update	1988
27	10	Space Station Training Working Group Materials	1988
27	15	"Challenger" screen and Citation and Authority, by George England	1988

27	17	Building 5 Payload training and project request	1988
31	79	Contract Task Order -- Flight System Operation Preparation Support	1988
32	31	Training White Paper	1988
32	28	PAYLOAD TRNG	1988, 1989, 1990, 1991, 1992
32	34	Branch ops; Table of Org; Training division organization documents	1988, 1989, 1990, 1991
11	3	Training Concepts	1988, 1990
32	41	Training costs	1988, 1990
24	3	Space Station Training Concepts White Paper for SSF (Freesom)	1988, 1992
24	14	General Memos/Messages Between F. Hughes and Outside Personnel	1988, 1993, 1995, 1996
32	47	Actions of SFTD	1988, April 27
32	15	Mission operations directorate space station mission operations office	1988, August 8
32	6	Collected Drafted for the PS Policy Meetup	1988, May 9
32	16	Memorandum: Mini-retreat on space station	1988, May 27
32	13	Preliminary Working Draft of Space Station Facility, Level A Training requirements	1988, November 10

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<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
9	5	Instructors Skills Training course and Related/Applicable Reading Articles	1989
10	9	Recommendations for the Space Station Proximity Operations Trainer Visual System - McDonnell Douglas Space System	1989
15	6	Space Station Freedom Training Facility External Products/ Deliverables Requirements	1989
15	7	MSD/MOD Space Station Training Facility Action Plan - Action 1 Report	1989
16	5	Space Station Freedom - DS2 Front -End Analysis	1989
16	6	Space Station Freedom (SSFP) Ground System Program (Directive #23) (SSP 30000, SOC 2)	1989
21	11	SSTF Facility Loading Status (Space Station Training Facility)	1989
28	2	Unsolicited Proposal: -Space Station Cross Cultural Issues (JSC-6-89-8970) -Researching into Training Technology for Extended Duration Manual Mission (JSC-4-89-8951)	1989
31	69	Contract Task Order Continuation Sheet	1989

31	70	Tasking/Needs Statement for MDSSC DMS Support to DG52-DATA/Control Section	1989
31	71	Correspondence- Requirement for 1 EP from Work Package? (B. Pearson to Frank Hughes)	1989
31	72	Memo- Task Orders for Space Station Training	1989
32	36	UT Space Design Newsletter. - Vol. 1 No. 1, November 1, 1989 - Vol. 1 No. 2 March 7, 1990	1989, 1990
32	37	Class Syllabi for: - ASE 387p Mission Analysis and Design (11385) - ASE 387 Space system design	1989, 1990
32	29	TRNG Costs— - Astronaut Training costs for simple and complex flights 1991 - Cost of crew training 1989	1989, 1991
32	44	White Paper: The Life of a procedure and its role in the operations data file	1989, August 14
32	45	Memorandum: Shuttle Mission Training facility/space station training facility interface level a requirements documents concerns	1989, August 17
32	43	Space Station Freedom Operation Planning Resources Scheduling	1989, August 18
32	14	Space Station Operations issued summary	1989, February 6
32	42	Space Station Management Level I, II, III	1989, July 7
32	33	Space station freedom flight crew operation	1989, June 1
32	8	Training Audit Response of IG Office	1989, September 9
32	9	Recommendations for the space station proximity operations trainer visual system	1989, September 22

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<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
9	6	Space Station Advanced Training Evolution	1990
11	7	Training Operations Sub-Panel	1990
11	8	Intelligent Tutoring System (ITS) For Space Station Control Center Needs by South Research Institute	1990
11	9	Global Information System Technology INC Prototype Part -Task Trainer Intelligent Tutoring System(P2T2/ITS)	1990
11	10	Mission Operations Integration Panel (MOIP)	1990
13	3	Strategic Planning and Total Quality Management (TQM) For Space Station Freedom Training	1990
13	4	Space Station Mock-Up and Trainer Facility Requirements	1990

13	5	Privacy Act Operating Plan For the Mission Operations Directorate (MOD) Training Record System	1990
14	3	Mod Space Station Strategic Plan	1990
15	8	Space Station Freedom Training Functional Control Document	1990
15	9	SSFT Budget Re-Plan - 90 Day Scrub Re-Plan	1990
19	8	Cosmonaut Selection and Training Protocol for Long- Duration Space Missions	1990
21	12	Space Station Flight Crew Wellness Plan	1990
25	13	Immersion Management Training : Management of Change	1990
27	59	International Cooperative Policy (Draft Version) February 8, 1990	1990
28	43	Audit Report Flight Crew Training Johnson Space Center August 30, 1990, Nasa Office inspector General A-JS-89-004	1990
28	89	Follows--On Action Required before OIG Closure of Recommendation1	1990
30	54	The European Astronauts Centre Its Role and Build-up	1990
30	148	Malfunction Philosophy	1990
31	47	Simulator Time Utilization -1978-1981 (Semi-Annual Hours) Total Both Bases	1990
32	24	SWRI- Virtuality Reality	1990
32	35	Extra Vehicular Activities Training	1990
32	27	ASCAN TRNG	1990, 1991
32	10	Columbus (Attached Laboratory) overall crew training executive summary	1990, July

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<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
9	7	Space Station Instructor Simulation Display	1991
10	8	JSC Mission Operations - Shuttle Operations Flight Rate Capability Study ZBB Resource Summary	1991
15	10	Operational Training Lessons Learned	1991
18	3	NASA/European Space Agency (ESA) Mission Specialist Training Agreement	1991
21	13	Instructor / Operator Station(IOS) Concepts Review	1991
24	2	Joint Integrated Simulation (JIS) Documentation	1991
24	4	Distribution of DT Structures and Mechanical Responsibilities	1991
28	31	Paper on the subject of AIDS in the United States	1991
29	132	DT Training Guide (JSC - 36001)	1991
30	77	Mission Operations Directorate Space Station Program	1991

27	62	Payload Concepts Materials	1991-1993
32	58	DT/FE Hughes: EVA/Robotics/ Assembly problems	1991, March 20

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<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
7	1	DT Intelligent Computer Aided Trainer (ICAT)	1992
7	2	MOD DA4 Teamwork Corrective Action Team (CAT) Final Report	1992
9	8	Space Station Operations and Utilization in the International Memoranda of Understanding (MOUS)	1992
9	9	Space Station Freedom (SSF) Astronaut Certification Standards and Requirements	1992
11	11	Pre-SMS SPACEHAB Sub-System Training Agreement	1992
11	12	Virtual Reality Training and Capability	1992
13	6	Training Operations Concepts - SSJTF Operations Phase Assessment	1992
13	7	Integrated Training Facilities Strategic Plan	1992
14	4	Space Station Verifications and Training Facility (SSVTF) - Response to DT Requirements Briefing	1992
14	5	SSF Training Operations Issues	1992
15	11	DT FY93 Goal and Action Plan, Goal and Metrics	1992
17	2	NASDA Intern Agreement	1992
21	14	Establishment of Lead for Training Managers	1992
24	5	Training FCD Issues	1992
24	6	Supporting Rationale for Space Station Debate	1992
27	13	Space Station Training Manager Plan (Draft)	1992
27	48	Space Station Freedom Payload Training and Operation Concepts: Science Customer Perspectives	1992
27	49	Microgravity Science an Application Division Payload Plans and Operations presented to Space Station Science and Application Advisory Subcommittee (SSSAAS)	1992
27	51	Microgravity Science and Application Division Training Concept for Space Station Freedom Payload	1992
27	52	Summary Minutes Space Station Science on Applications Advisory Subcommittee fall Meeting Huntsville , AL October 1992	1992
28	97	Correspondence-- Arrival training in NASA of Cosmonaut and astronaut of the crews "MIR-18" and "MIR-19" and specialists of Gagarin CTC-- Instructions of scientific experiments program	1992
30	9	Supervisor's Performance Checklist	1992

30	14	NASA Administrator (Daniel S Golden) Speech on "The Light of a New Age"	1992
30	18	Mission Operations Directorate (MOD) Feedback Presentation on "Fifteen For The Future	1992
30	22	Extravehicular Activity Self-Rescue Using Hand - Held Thruster	1992
30	23	Functional Control Document (FCD)- Training	1992
30	25	MOD Space Station Training Concept	1992
30	31	Space Station COPOLA Simulator	1992
30	42	Training Russian Cosmonaut as Mission Specialists STS-60 Lessons Learned	1992
30	79	DT Man Power Package	1992
30	87	SSVTF Early Development	1992
30	89	MOD October Retreat Topics - Tactical Planning	1992
30	114	Handwritten note: "P/C Trng"	1992
30	119	Management and Supervisory Performance Appraisal Key Specific Objectives	1992
30	149	Memo-HCC Program Advisory Committees	1992
30	167	Advanced Technologies for Training	1992
31	15	"Potential" Facility Simplification SMTF Savings, by Cassi Moore DG66/3-2468	1992
32	50	Training function control document: Space Station Freedom Program Office	1992
28	38	U.S. -- Russian integrated Training "Top Problems"	1992, 1994
32	59	SSF Training CBT Architecture Summary, by T. Smith	1992, January 16
32	60	Orbiter Function Requirements for Space Station and operations from Steven A Hawley	1992, October 13

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<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
7	3	Public Support for the US Space Program	1993
7	4	Spaceflight Training Division Station Work Plan Process	1993
7	5	Shuttle Mission Training Facility (SMTF) Rehost	1993
7	6	NASA Strategic Planning - A Status Report	1993
7	7	MOD Space Shuttle Program April Inchstone Report	1993
7	8	Space Station Redesign - Radical Operations	1993
7	9	Basis of Estimate for Recent JSC Space Station Operations Cost Estimates	1993
7	10	Space Station Training Impacts of POP-93-1 Costing Guidelines	1993
7	11	Training Technology Challenges for the Next Decade and Beyond	1993
7	12	Ascent / Entry FDO/GPO Instructor	1993

7	13	Computer Based Training (CBT) Prototype Project Final Report	1993
7	14	MOD - Display Development and Synergy	1993
7	15	Audit Activities Involving Training Division	1993
7	16	Report of NASA Circadian Workshop Consultants Meeting (SLSD)	1993
7	17	"Do It Now" List From UHCL	1993
8	1	DT PTC to JSC Personnel Team Cost and functions	1993
8	16	Training Operations Assessment Team (TOAT) Vol 2-Division Operations, Final Report	1993
9	10	MOD - Space Station Redesign - Option A	1993
9	11	Strategy for SSF Operations Capability	1993
9	12	Shuttle Training Operations Assessment Final Report	1993
9	16	Space Flight Training Division Final Cost	1993
10	4	Landing and Rollout Simulation in the Shuttle Mission Simulator	1993
10	5	Simulation Supervisor's Post Flight Report for STS-58, STS-61, STS-55	1993
10	7	Space Shuttle Program Vision 2000	1993
10	11	Shuttle Crew Stations Display Panel Changes MEDS Display	1993
11	13	NASA Multimedia Training capacity	1993
11	14	NASA's Space Human Factors and Engineering Program Plan	1993
11	15	Space Flight Training Division Organization Charts and Strength Summaries for September	1993
12	4	Task Analysis of Shuttle Entry and Landing Activities (NASA Technical Memorandum 10476)	1993
12	5	Shuttle and MIR Program Acronyms and Abbreviations	1993
12	14	Space Station Mission Operations - Training Administration System Requirements Definition Document (JSC-36/51)	1993
13	8	Space Station Freedom Training Operation Concept	1993
13	9	Payload Training Thoughts	1993
13	10	US/International Partner/Russia Space Station Operations Concept	1993
13	11	Station Alpha - Joint Program Directive - Alpha Station Program and System Definition (SSP-JPD-002)	1993
13	12	Training Implementation Plan	1993
13	13	DT Guidelines, Assumptions and Questions, Space Station	1993
13	14	Space Station Basic Training Requirements	1993
13	15	Training "Product Description, Schedule and Budget Rationale	1993

14	6	Space Station Teamwork Final Report	1993
15	12	Spacecraft Station Mock-up Trainer Facility	1993
15	13	SES Offload Study	1993
15	14	Contractor "Best Practices" - An Opportunity to Build on Strengths	1993
15	15	Space Station training Concepts and Requirements; Team Goals, Philosophy, Training Conduct Vision	1993
17	2	Space Station Freedom Consolidation Payload Training - Coordination with NASDA	1993
17	3	Multicultural Working Group/Training Program	1993
17	4	Draft- Overall Concept of the NASDA Basic Training Program (Proposal 2) 31 August	1993
17	7	Working with Japanese - Training Program	1993
19	1	Documentation of Russian Training questions and Comments	1993
19	9	RSA Negotiation on: —English H Language Integrated Logistics Operations Planning and Cargo Integration, Command and Control, ISSA Crew Composition	1993
19	10	Lessons Learned from Training the Russians for STS-60	1993
21	15	Contractor Training Division Level-of-Effort Staffing Status	1993
21	16	Consortium for Aerospace Technical Education (CATE) Status of Aerospace Technology Degree Program	1993
21	17	Space Station Operations Functional Synergy	1993
24	7	2 vs. Training Bases - Assessment of SMS Third Base Requirements	1993
24	8	Cost of Crew Training	1993
24	15	Station Costing for Alpha Configurations with Russians	1993
24	21	Dept. of the Air Force - Cost Effective Space Mission Operations Book Project	1993
25	14	Integrated Product Teams (IPT) Concept	1993
25	15	Abstract - A Team USA Approach to Global Space Commerce NASA Strategic Avionics Technology WG.	1993
27	11	Johnson Space Center/ Nation Space Development Agency (JSC/NASDA) Internship Program Information and materials	1993
27	18	General Comments in Preparation for February 23-24; bi-lateral Teleconference Convening SSF payload training	1993
27	20	Consolidated Training Load Comparison	1993
27	22	ICAT Project Reports Space Station Training Computer-Aided Trainer	1993

27	23	Comments to TOS Consolidated Payload Training Discussion Summary	1993
27	24	Marshall Space Flight Center Payload Resource Management	1993
27	25	NASA Proposed Whole P/L Training Objections (Draft)	1993
27	26	Chart- DT Training Integration and Facility Schedule	1993
27	27	Training Operations Concepts Draft Training Operation Sub-Panel February, 1993	1993
27	28	Oversized Chart-- DT Training Integration and Schedule	1993
27	29	FAX--ESA Input for 3/3 Telcon-- APM Crew Training	1993
27	31	Consolidated Training Land Comparison to SSVTF Excess ability	1993
27	32	General comments in preparation for February 23-24 Teleconference Concerning SSF Payload Training	1993
27	33	SSVTF Training Loading (OPS Phase Assessment)	1993
27	36	ESA Training Concept	1993
27	37	International Crew Office	1993
27	39	Training Operations Sub-panel February	1993
27	40	Fax--'Subject' TOS Executive Session -- Tokyo Meeting	1993
27	43	NASA FAX-- 2/10/93 TRNG Charts	1993
27	44	Training Operation Concepts Subpanel February	1993
27	45	Training Operations Sub-Panel Frank E Hughes February 1993	1993
27	46	JSC/FE Hughes MIR-M 7: Training Operation Concepts	1993
27	57	Training Operations Concepts (Draft)-- Training Operation: Sub-panel March 18, 1993 (2-Copies)	1993
27	58	Training Issue Resolution Status-- Columbus Operation Board 18 February 1993	1993
27	61	Consolidation of Space Station Utilization and Operations set JSC Space station utilization Assessment Team action JSC response September 30, to October 1, 1993	1993
27	66	Training Division Concerns and Changes List	1993
28	94	Material Concerning-- training Operations Assessment Team (TOAT)	1993
28	96	Group Brainwriting Results	1993
28	104	White Paper-- Space Station Freedom Training Operations Concepts, by F. E. Hughes NASA/ Johnson Space Center July 31, 1993	1993
29	4	Operation Phase Assessment Team II Space Station Redesign Support Basic Report CNP-1 May 6	1993
29	5	Operation Phase Assessment Team II Space Station Redesign Support Basic Report April 23,	1993

29	136	Payload specialist Flight Preparation Plan (JSC-23194)	1993
30	8	Mission Operations Directorate- Effective Meeting Training (Participant Workbook)	1993
30	11	MOD/DA4 Operation Budget (Cost Review)	1993
30	12	Training Budget Review	1993
30	21	Mod Human Resources Guidelines: —Excellence in Training Award —Fy1194 Performance Appraisal Closeout —Overtime and Premium Pay —Number of Hours to train Mission Controllers —MOD Work Guidelines	1993
30	24	Paper— Space Technology Requirements and Interdependency for National Competitiveness	1993
30	26	Multicultural Language Task — Language Assistance Packages	1993
30	105	Teamwork Job elements to be Including in Performance Plan	1993
30	128	Audit Activities Involving Training Division	1993
30	131	Training Course Change Summary	1993
30	151	Survey Comments	1993
30	152	Memo- Projections for Future Use of Video in D.T. Training	1993
30	154	Space Flight Training Division Standards Integration, and Quality (SI&Q) Panel Minutes, June	1993
30	156	Memo- Crew Coordination Training	1993
30	157	Step 2/3 Upgrade Status	1993
30	158	Memo- Issues for Station Management and redesign	1993
30	160	Space Station Operations Phase Assessment April 1993 Space Station Reconfiguration Effort Summary: Option C-12/96 FEL \$ In Millions	1993
31	14	Vision Statement for Onboard Training Development	1993
31	21	Update Mission Operation Directorate Training Division Volume, No. 1 May	1993
31	34	Dan Odom Staff Senior Manager Training and Development McDonnell Douglas Aerospace	1993
31	48	FCT Monthly Report April and March	1993
31	50	Required Start of SMS Standalone TRNG	1993
31	55	Advances Instructor Training (AIT-1) Course-End Report	1993
31	62	Mission Operation Directorate (MOD) Space Flight Training Division- Plan to Obtain Significant Operational Experience (Cross-Training)	1993
31	63	Space Flight Training Division Major activities	1993
31	77	Memo to EP Chief, Propulsion and Power Division -- Stirring the Pot	1993

31	78	Informal Note -- Workforce Morale to Dennis Web; Earl Thompson; Franks Hughes	1993
31	82	Memo- Frank Hughes: On-Board VR Proposal	1993
31	87	Mission Operation Directorate (MOD)-Space Flight Training Division Space Station Program Transition Support Plan - Ronnie R Lanier	1993
31	89	Role of the Instruction Critical Action Team Interim Report Agenda	1993
31	91	Memo Space Shuttle / Space Station Integration Efforts	1993
31	92	Mission Operations Directorate (MOD) Training Center Usage for August	1993
31	96	Vision Statement for Onboard Training Development	1993
31	98	DT Requirements for EDD OPS Concept	1993
31	99	Search for "New/Innovative" Ways of Doing Business to Reduce Space Station Assembly Flight Preparation Time	1993
33	29	A Proposal for an Aerospace Education institute	1993
24	23	Space Training Division STSOC Performance	1993, 1994, 1996
32	61	Paper the use of space exploration research to increase our knowledge of small group behavior, by Brian Kunz	1993, February
32	30	Gapping impacts/cuts	1993, February 4

Series XX: 1994

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0	21	Restructuring the MOD Program Training Program	1994
7	18	STS-59 Simulation Supervisor's Post Flight Report	1994
7	19	Metrics on DT Personnel Attending BIT by Section	1994
7	20	STS-66 Training Status Report #2	1994
7	21	MOD - Non-Prime Cost Review	1994
8	2	Payload Section Training Philosophy	1994
8	4	Payload Training Operations Concept	1994
8	7	Status of Shuttle Level-of-effort (LOE) Fact Finding	1994
8	8	SSP 30561 B Appendix A Acronyms and Abbreviations	1994
8	10	Shuttle Mission Training Facility Visual System Operation and Maintenance Analysis Potential Reductions	1994
8	13	MNSOLICITED Proposal - An Advanced Cardiac Life Support Training Performance Control System for Crew Medical Officers in Prolonged Manned Space Flight Missions	1994
9	13	Multilateral Training TIM	1994

9	14	Station Phase 1 / Early Phase 2 Training Options	1994
9	15	ISSA Crew Rotation Assessment	1994
9	17	ISS Alpha Program Payload Training Complex (PTC) Functional Responsibilities	1994
9	18	Memorandum of Agreement (MOA) Between the Integrated Planning System Office (DC), The Operations Division (DO), and the Space Flight Training Division (DT)	1994
9	19	ISSA Operations Training Overviews White Paper	1994
10	1	EVA Terminology Addendum to Russian Document	1994
10	3	Space Flight Training Division RTOP/Proposal Status	1994
10	6	MOD 94-1 Program Operating Plan (POP) Bottoms-Up, Summary and DA Offices	1994
10	18	Training Division Statement of Work	1994
10	20	Space Flight Training Division Overview	1994
10	21	Space Flight Training Division's Prototype World-Wide Web Server for the International Training Forum	1994
10	22	Space Flight Generic Instructor Certification Process - Final Report	1994
11	16	Computer Based Training Status	1994
12	6	Critical Shuttle Terminology (WG-5/NASA/CTC/NPO E/002/5007	1994
12	7	Shuttle Systems and Operation Overview (WG-5/NASA/CTC/NPO E/5033)	1994
13	16	Payload Training at JSC	1994
13	17	Frank's DT Station Road Show Briefing	1994
13	18	Space Station "Assembly Training Plan" (ATP) JSC 36068 Rev. A (September 1994	1994
13	20	Boeing "Assembly Implementation Requirements Document (AIRD)	1994
14	7	Whole Station Training	1994
14	8	Space Station "Bottoms Up" Manpower Analysis	1994
15	16	International Training Forum Charter	1994
15	17	Team Lead Crew Training Catalog Effort	1994
15	18	Payload Portion of SSVTF Loading -POP 94-1	1994
15	19	PBT and FCT Training in CC Environment	1994
15	20	Multilateral Training TIM - Agreements and Issues	1994
15	21	ASCAN (Astronaut Candidate) Training Review	1994
15	22	Space Training Division Shuttle Progress Improvements /Candidates for Reductions in FY96 and FY97	1994
15	23	Integrated Training Facility (ITF) Requirements Management	1994

16	1	MOD Flight Operations and Integration Review m(FOIG) Process Integrity Review Results	1994
17	5	NASA/NASDA Training TIM	1994
19	11	Operations Concept w/the RSA — Conversation with Gen. Glaskoc	1994
19	12	Russian Training System for SSVTF	1994
19	13	ISSA Operations Concept Discussions with Russians	1994
20	6	CSA/NASA Robotics Operations	1994
21	18	FY94 "Bottoms -Up" Manpower Budget Requirements -Space Shuttle Program	1994
24	20	Automated Training Development System (ATDS)	1994
25	16	JSC National Management Association (NMA)	1994
27	16	FOIG Workplan Presentation	1994
27	64	#VALUE!	1994
27	65	Space Station Payload Training Materials	1994
27	68	Presentation-- Mission Operations Directorate Space flight training division Payload Training at JSC 3/15/94 DT/Frank E. Hughes 224-7518	1994
28	9	"12 Ways to Get Lucky"	1994
28	10	"Part 4 Comparative Chronology of U.S. and Soviet/Russian Manned Spaceflight (MIR Hand and War Heritage, D.S.F Portree 163-186)	1994
28	11	NASA Position Paper -- Whole Station Training	1994
28	21	Shuttle /Station internal baseline Manifest- December 28, 1994	1994
28	37	U.S. Russia Cooperation Training Process Meeting Materials	1994
28	80	Booklet-- A Microgravity Investigator's Guide, prepared by the Microgravity Science and Application Division of NASA, February 1994	1994
28	98	Summer Hire Program	1994
28	101	Ground System Development-- Advanced Training Technologies-- Innovative-- Solutions for complex problem	1994
28	102	Presentation- Payload Training Complex Roles and Responsibilities	1994
28	107	Presentation-- SSVTF (Training) International Partner March 21, 1994	1994
28	108	Principles and Objectives of Science Training for Space Station Utilization	1994
28	109	MSFC Trip Debrief April 18, 1994	1994
28	110	White Paper-- Space Station Operations Planning Branch: Crew Workday Definition for International Space Station April 7, 1994	1994
28	111	FCT Scheduling	1994
28	112	Diversity Counsel Norms February 28, 1994	1994

28	113	Mission Operations Ground Facilities IPT (Draft) March 24, 1994	1994
28	114	1993 Low Z Approach Study Crew Consensus Report March 28, 1994	1994
28	115	Technical Note: 94-005-Simulator and Training Division-- Space hub Training in Building 5 March 30, 1994	1994
28	116	Concepts of Operations and Utilization Volume 1 Training impacts	1994
28	117	Flyer-- Asian Pacific American Heritage Month-- May Johnson Space Center Asian Pacific American Program	1994
28	118	Informal Note-- Russian Travel Requirements May 3, 1994	1994
28	119	Station Mission Operations (SMO) AIT Final May 5, 1994	1994
28	120	SOC POP94-1 SSP GME Guidelines Adjusted for\$3M Reduction May 2, 1994	1994
29	115	Training Concept for Cosmonaut (Astronaut) and Ground Control Personnel in the ISSA "ALFA" Program (Draft) October	1994
30	1	DT/Space Flights Training Division Files (Station) (Organization and General Administration)	1994
30	19	Training Philosophy and Curriculum Development	1994
30	20	Russian Segment Training	1994
30	41	Internal Memo- Lessons Learned From the NASA/RSA Operations and Training TIM	1994
30	65	Training Response to 6-21-94 Shepherd	1994
30	68	STATS/DT Tag-up Meeting Minutes	1994
30	70	Comments Position on Payload Support Activities in the SSMTF	1994
30	71	SFTD Station Details (Merged) Schedule Includes OV Detailed, and ITF	1994
30	76	Summary of Boeing/Huntsville PG-3 Fact finding	1994
30	78	ITF System Splinter Group, by James Ortiz	1994
30	80	Item of Concern to the Team Lead Office	1994
30	81	Shuttle Landing Facility (SLF) Upgrades	1994
30	88	Freedom Operation Phase Assessment Team	1994
30	90	Doris Wood Proposal - Fax	1994
30	91	Definition of Duties and Request for Candidates: Russians Interface Operator	1994
30	97	Draft- SVM- Fortran Feasibility Study	1994
30	102	Mission Control Training Template	1994
30	122	New Article: Coming to America, by Homer H. Hickman	1994
30	132	Chief/System Training Branch	1994

30	133	Memo-Space Shuttle Program Catastrophe Prevention Practice	1994
30	135	Memo- Training Aids	1994
30	136	TD. Shuttle Document Editing Status Report	1994
30	139	Space Station Training Strategy Team Product	1994
30	140	Space Shuttle Training Division D.T. Stratton Overview	1994
30	141	Motion Base Activity Sched	1994
30	155	Memo- Status report on the FLTL Exit (Khorosho) Program	1994
31	5	Informal Memo- DT Management	1994
31	6	Space Flight Training Division Training OPS Assessment Actions and Disposition	1994
31	13	Five Year Integrated Schedule	1994
31	25	CATE Executive Committee Meeting Minutes	1994
31	30	Memo- Human Resource Guidelines for Implementing the Reorganization	1994
31	31	Memo- International Holidays	1994
31	32	Recruitment to fill the Senior Executive Service Position of Director, Payload and Aeronautics Division, Office of Safety and Mission Assurance	1994
31	33	7-12 Manifest Baseline	1994
31	35	Station Fact Find Tentative	1994
31	36	DK/DT Tag-up Meeting Minutes for April 1,	1994
31	38	SSVTF Mtg	1994
31	41	Request for a Flight to serve NASA/MIR While in Russia to the Russian Program	1994
31	43	Presentation--"An SMS that is Good Enough is Perfect"	1994
31	51	Training Feedback Form	1994
31	52	Electronic Performance Support System (EPSS) Project Proposal, by Jody Graumann	1994
31	61	Memo- Should the Shuttle SCA Be Moved to Building 5	1994
31	84	SMTFER Replan	1994
31	85	ITF Operations Center FY95 Goal and Objectives	1994
31	88	SSVTF Questions and Proposals Addressing Various Issues	1994
31	93	Memo-Career Development Review Initiative	1994
32	40	Collaboration Between Gagarin Cosmonaut Training Center and Johnson Space Center	1994
8	12	Virtual Environment / Reality Strategy and Training Environment	1994-1995
30	117	Correspondence from John Scharf; Dianna Johnson to F. Hughes; Chris Blair to F. Hughes	1994-1995
30	129	Russian Preparation for ISS [Russian Translation]	1994-1995

32	62	VR Helmet product overview	1994, July 6
29	43	Deliverables Presentations- -Training Operations and Capability Development -Mission Operation Directorate (MOD)Space Flight Training Division Payload Training Operation Concept by, DT/F.E.Hughes	N.D., 1998, 1994

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8	3	Part Task Trainor (PTT) Status Review	1995	1995
9	20	Integrated Payload Training Scenarios for UF-1 and UF-2	1995	1995
10	15	EVA Preparedness Review	1995	1995
10	17	Executive Summary for MOD Director POP 95-2 Submittal	1995	1995
10	19	Training Philosophy	1995	1995
10	23	NASA HQ Office of Space Flight Realignment	1995	1995
10	24	Space Flight Personnel Certification Plan Sections of the Training Management Plan	1995	1995
10	25	Space Flight On-Orbit Training Plans	1995	1995
10	26	Operations Concept Study Training Focus Group Final Report	1995	1995
10	27	Space Training Systems Concept	1995	1995
12	8	Space Flight Technical Language Handbook (JSC-36207)	1995	1995
13	21	Space Station Training Facility (SSTF) Strategy, Remints, Fidelity, what is the SSTF	1995	1995
14	9	ISSA Training Operations	1995	1995
14	10	Space Station Training Architecture	1995	1995
14	11	Station Training	1995	1995
14	12	ISSA Training Overview	1995	1995
14	13	Space Station Flight Crew Operations (FCOC) Document	1995	1995
14	14	ISS Program Execution Plan-Rev B	1995	1995
14	15	ISSA Payload Training Integration	1995	1995
17	8	NASDA Jen Simulator at JSC	1995	1995
19	6	Russian Travel Schedules/Itinerary and Point of Contact	1995	1995
19	14	Phase 1/Phase 2 Science Training Integration	1995	1995
19	15	NASA/RSA # 14 Protocol on Training Agreements	1995	1995
19	17	Phase 1 Program Lesson Learned	1995	1995
19	18	Plan For the ISSA Russian Segment Training	1995	1995

19	19	Requirements for ISSA US Segment I (interface Simulator for Training Facilities of the Gagarin Center	1995	1995
19	20	Concept of Training of Russians Cosmonauts Astronauts and Ground Control Personnel in the International Space Station Alpha Program	1995	1995
19	21	MIR Interior Photo Documentation	1995	1995
19	22	Russian Tutor 1 Russian for Beginners	1995	1995
19	23	RSA/NASA Operations and Utilization Technical Interchange Meeting #3	1995	1995
19	24	Ryan International - Native Technologies Global Communications and Translation Support Program	1995	1995
19	25	Procedures for Travel to Russia	1995	1995
21	19	SES?SMS edge Working Group Update Presentation	1995	1995
24	9	Training Deliverables Proposal	1995	1995
24	10	Space Station Utilization, Operations and Training Assessment Team (UOTAT)	1995	1995
28	7	Summary of Phase 1 Program Problems with SLSD Procedure and Training, by Dennis Wed	1995	1995
28	8	Email Chain-- -Training Information MIR 18 and MIR -Star City Update -Star City Status	1995	1995
28	13	Johnson Space Center Announcement -- Medical Care While in Moscow, Russia	1995	1995
28	16	Onboard Training Exercise	1995	1995
28	18	U and O Station Assessment Team (UOSAT) Meeting Agenda	1995	1995
28	19	Agreement on the Principles Governing the assignment of responsibility amongst integrated crew members and the general requirement imposed on the extent of integrated crew member training (Draft)	1995	1995
28	22	Restructuring the MOD Training Program	1995	1995
28	23	MOD Civil service restructure plan	1995	1995
28	24	Spreadsheet-- Space Flight Training Division FY95 CS/LOE Requirements	1995	1995
28	25	Chart- MOD Mission Overview	1995	1995
28	26	Spreadsheet -- MOD Civil Service Restructure Plan	1995	1995
28	27	FAX: Statement of Dr. Maxime a Faget Founder, Space Industries, inc Before the Subcommittee on Space and Aeronautics Committee on Science U.S. House of Representatives	1995	1995
28	28	Informal Technical Memorandum -trip Report Vertical Motion Simulator (VMS) AMES Research Center.	1995	1995
28	29	presentation outline--Intro to ISSA	1995	1995

28	30	NASA/RSA Technical Interchange Meeting #14 Protocol on training Agreements Houston Texas	1995	1995
28	42	Presentation -ISSA Mission Operations Directorate Introduction to international Space Station by, DT/ Frank Hughes April 26, 1995	1995	1995
28	53	Presentation-- Excerpt from 1994 pre-proposal Distributed interaction Technology for Training and Operations by Universities' Space automation and robotics consortium (USARC) Engineering research center.	1995	1995
28	54	Articles and U.S. Economics prosperity relies on school-to- working training Focus. National center for manuscript sciences, September 1995	1995	1995
28	55	Agenda--Workshop Agenda Hughes Training Center November 30, 1995	1995	1995
28	56	Proposal for-- center for distributed interactive technology for training and operation by Rice University, Texas, A and M, the University of Texas at Austin, Arlington, and El Paso.	1995	1995
28	57	Technical white paper-- Interagent toolkit, by Modulus Technology	1995	1995
28	58	Presentation-- Excerpts from NSF ERC Program Announcement-- National Science Foundation, by Universities Space Automation and Robotics Consortium. (USARC)	1995	1995
28	62	Presentation-- "Director of Flight Operations, Space Preparation Department International Staff Training Management, Frank Hughes/DT [translated From Russian]	1995	1995
28	63	Presentation-- Ideas on how changes should be implemented in MOD DF/Dan Sedej; DT Tommy Capps April 4, 1995	1995	1995
28	91	Presentation-- Mission Operations Directorate Simulator Operations and Technology Division	1995	1995
28	93	Space Station Training Facility Level A Requirements	1995	1995
29	2	International Space Station Alpha Program Science and Utilization (D683-43033-1) All Flights Payload Integrated Training Plan (DR OD10), November 30,	1995	1995
29	31	Email--Star City Connections. . . March 25 (Travis Brice to Frank Hughes)	1995	1995
29	102	Automated Control Center Demonstration Project October 21	1995	1995
29	112	Management and Supervisory Performance Appraisal - Frank Hughes	1995	1995
29	136	Russian Manned Space Complex "MIR" (Modules and Systems) Training AID (9 of 9 Documents) (NAS15-10110)	1995	1995
30	3	Crew Rotation Issues	1995	1995

30	4	MEMO: Astronaut Corps Size and Training (CA-95-63)	1995	1995
30	5	Memo: Astronaut AIT Policy on Test Support (CBI-95-045)	1995	1995
30	7	Standard Facilities Practices and Technologies Handbook (JSC-27201)	1995	1995
30	17	Additional Materials to the GCTC Report on the Work Performed in Compliance to Contract NAS 15-10110	1995	1995
30	27	Cross Cultural Communication	1995	1995
30	28	Cross-Culture Communication Lesson (C3)	1995	1995
30	34	STS-71 Space Shuttle Mission Report (NSTS-08298)	1995	1995
30	35	Strategic Thinking for Space-an Unfolding Story	1995	1995
30	36	Memo: Science Institute Initiative- Issues And Considerations on establishing science Institutes	1995	1995
30	38	Training System Hardware /Software Transfer Agreement for International Space Station Alpha Multi-Segment Training TIM 14 (Team11B) Feb 14	1995	1995
30	39	Memo about Informatization of Aerospace Operators Training and Professional Activity	1995	1995
30	50	NASA/RSA Technical Interchange Meeting Protocol on Training Facilities Houston, Texas	1995	1995
30	51	Email Chain— Training TIM Trip Report	1995	1995
30	52	NASA/RSA Technical Interchange Meeting #14 Protocol on Training Agreement Houston, Texas	1995	1995
30	57	Backups Crews, T. Bowers, DT22,x47349	1995	1995
30	58	Soyuz 800K options DT/ Bill Schaefer	1995	1995
30	74	TSS Training Template Runs per Activity and Facility	1995	1995
30	84	Technical Directives 95-013 Clarification of Contract NAS 15-10110 Section J-4	1995	1995
30	85	System Training Inputs	1995	1995
30	99	Mission Operation Directorate Space Flight Training Division	1995	1995
30	100	Tag-Up Document	1995	1995
30	101	Training Requirements Reduction	1995	1995
30	103	General Objectives of the Main Mission Crew onboard the ISSA	1995	1995
30	104	Correspondence: Doug Basset to F. Hughes	1995	1995
30	106	Email Chain: NASA Work force Lament	1995	1995
30	107	Correspondence-- Gerald Burson to Frank Hughes	1995	1995
30	110	A Way for DA2 NASA to Assess the SOC Completion Form Transition	1995	1995
30	111	Mod Management Assignment	1995	1995
30	113	Correspondence: Richard Volz to F. Hughes	1995	1995
30	113	Correspondence: Gerald Brunson to F. Hughes	1995	1995

30	116	Correspondence: S. Garmen to J. Scharf	1995	1995
30	162	Mission Operations Directorate International Space Station Alpha Contractor Man Power in EP's	1995	1995
30	163	Past Three Years' Cost Reduction Exercises	1995	1995
31	2	Space Flight Training Division Staffing Plans	1995	1995
31	8	International Space Station Training Management Plan (Draft)	1995	1995
31	9	JSC-FY95 Code M. Project Quad Charts	1995	1995
31	10	Mission Operations Directorate (MOD) Space Flight Training Division Space Flight Training Division Staffing Plans	1995	1995
31	11	Proposed International Space Station Alpha (ISSA) Crew Payloads Jobs	1995	1995
31	12	Draft Crew Rotation Plan	1995	1995
31	16	Space Shuttle Program Launch Schedule	1995	1995
31	17	Memo- Mission Operation Directorate (MOD) Plan for Station Training	1995	1995
31	18	AP101s Emulator Loral Space Information Systems July 7, 1995, by K.M.Hill 282-7710	1995	1995
31	22	Faxed Memo-- "EDP Updates for all of you"	1995	1995
31	90	International Space Station Alpha Technical Task Agreement	1995	1995
32	12	Ephemera: European Space Agency information packet	1995	1995
32	56	Presentation: UOTAT Training team briefing to the association administrations	1995, April 4	1995
33	30	Message— Payload Operation on the international space station	1995, April 28	1995
32	53	Mission operations Directorate Virtual Environment Strategy	1995, February	1995
32	51	Presentation: Virtual Environments Strategy	1995, July 7	1995
33	28	Message - Visit of producer Andrew Liebman	1995, June 9	1995
32	55	Presentation: April training TIM Results, by Frank Hughes	1995, May 3	1995
32	57	Presentation: Mission operation directorate space flight training division structure post Re-Engineering, by Frank Hughes	1995, May 8	1995
33	31	Crew Operations Training system overview National space Development agency of Japan (NASDA) Jem Ops	1995, November	1995
33	22	Publication— European Space Agency - Crew Training Implementation Plan	1995, October 20	1995

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7	23	Son of Apollo 13 (Movie)	1996

12	9	Station Program Implementation Plan (SPIP), Volume VII: Training (SSP-502000-07	1996
12	10	Emergency Operation Center (EOC) Operator/Supervisor Certification Guide (JSC-36268)	1996
12	11	Mission Control Center International System Design User Review	1996
13	22	ISS Crew Training	1996
13	23	ISS Training Overview	1996
17	6	NASA/NASDA Training Splinter Meeting Minutes	1996
17	9	NASA/NASDA Technical Interchange Meeting On Jen Simulator, Robotics	1996
17	10	NASA/NASDA Training TIM on Whole Station Training, Era Responsibilities and Jen Module	1996
17	11	NASA/ASDA Training Splinter Meeting	1996
17	12	NASA/NASDA Technical Interchange Meeting on Jen Module Activation, Rack Transfer. . .	1996
17	13	NASA/NASDA Training Tim Minutes	1996
17	14	NASA/NSDA Technical Interchange Meeting On Jen Module OPS	1996
17	15	NASA/NASDA Multi-Segment Trainer (MST) TIM Minutes	1996
19	16	MOU Between NASA and Russia Space Agency on Cooperation in the Detailed Design Development, Operation and Utilization's of the ISS	1996
19	26	NASA-MIR Astronaut Training Proposal	1996
19	27	NASA/RSA Protocol including Terms, Condition and Assumptions Summary Balance of Contribution and Obligations to ISS.	1996
19	28	Protocol for Crew Rotation on 7A	1996
21	2	Computer Based Training - Field Deployable Trainer and Shared Virtual Reality	1996
21	3	Carroll College Visiting Professorship	1996
24	11	Payload Operations Training Concept	1996
24	12	Space Station Utilization Planning Response	1996
24	25	Technical Proposal for the Orbiter Advanced Flight Deck Visual Display System	1996
24	26	JSC Support for Science Proposal	1996
24	29	Crew Rotation and Split Crews Summary	1996
28	66	Information and materials concerning space transportation system-83 (STS-83): Training; Biographies, and experiments	1996
28	90	Presentation-- Training Technology Roadmap Evolution DK/R. Burke	1996
28	92	Coverage-- Training Development Support Plan	1996
28	212	Contract NAS9-2000: Space Flight Operations Management and integration plan October 1, 1996	1996

29	6	Crew Integration Test Guidelines (JSC-27575) October 11,	1996
29	18	Action Item Report Training Readiness Review- Crew and Flight Controller Training February 1,	1996
29	20	Note-- Phase 2 Training Comments November 8	1996
29	21	Lexicon/ Translations-- Russian Concepts November 7	1996
29	22	Note-- ISP in the Space Station Training Facility (SSTF) Meeting November 15	1996
29	23	Note-- Lexicon/ Translations-- Russians Consp. November 15	1996
29	24	Note- Konspekts	1996
29	25	Frank Hughes Schedule-- November 18- December 1,	1996
29	25	Interpreter/Translator Certification Process March 26	1996
29	26	Notes-- Konspekts November 19,	1996
29	28	Frank Hughes Schedule November 18 - December 1,	1996
29	33	2A/STS-88 Orbit Simulations	1996
29	34	Mission Report by NASA Astronaut Shannon Lucid 2nd Flight Engineer concerning her Training and Flight Board the MIR Orbital Science Research Station	1996
29	40	Training Implementation Forum Meeting	1996
29	104	Work Assignments for Diane Grizoffi	1996
29	116	Presentation -- Draft Concept for an ISS Payload Utilization Simulations September 4	1996
29	117	Meeting Protocol-- NASA?GCTC Training Specialists November 11-22, 1996 Star City, Russia	1996
29	118	International Space Station Flight Crew Operations and Experiment Training September 17	1996
29	119	Training Response to Shuttle Upgrade September 26	1996
29	121	Presentation --Russian Cross-Cultural Training, by Svelana Slubowski, Boeing August 8	1996
29	122	Overtime Leave Report October 12	1996
29	123	Credit Hours Report October 12	1996
29	124	Report-- Labor Distribution Variance, by Organization October 12	1996
29	125	Report-- NASA Personnel Payroll System October 12	1996
29	126	Message-- "Overtime" October 8	1996
29	127	Message-- "Overtime" October 31	1996
29	128	Report- Projected Year End Leave Loss as of 10/12/96 **Annual Leave**	1996
29	129	Informal Note-- CS Baseline --POP97 November 4,	1996

29	131	Proposal and Solicitation of Virtual Reality Training Facility at Iowa State University October 24	1996
30	13	Mod Innovation Workshop: How to Establish Effective Organizational Communication	1996
30	55	Memo- Flight Crew Created Gravity in Zero Gravity	1996
30	108	Email- Words to Live By	1996
30	120	Nonsupervisory Performance Appraisal	1996
30	165	John Young Memo on Experiment Training	1996
31	46	Chart- DT6/R. Reynolds /x47471 4/1/96	1996
31	54	Frank Hughes Agenda- February 1st -14th	1996
31	59	Fax-- Kansas Cosmosphere and Space Center Consultation of Frank Hughes	1996
33	24	ABC Training Deliverables template	1996
33	32	DT Planning Issue / Assignment Chart	1996
33	23	Increment 2, Multi-lateral increment training plan	1996 September 13
33	13	1996 Astronaut candidate training program	1996, August
33	27	Message- Operation Enhancements	1996, August
33	1	Memorandum- Joint NASA/RSA Meeting Requirements	1996, December
32	18	Nasa Summer Faculty fellowship academic year grant interim report grant number NGT 9-14	1996, December 20
32	22	Publication- NASA Strategic plan	1996, February
32	23	Publication- Nasa's Enterprise for the human exploration and development for space - the strategic plan	1996, January
33	33	Mission Operation Directorate Space Flight Training Division Space flight training system concepts DT/ Frank Hughes	1996, January 1
33	25	Agency wide Employee and Customer Satisfaction survey results	1996, March 3
33	26	Message- NASA- Mir Astronaut Training Proposal	1996, May
33	14	Soyuz Notes Fourth Draft	1996, October

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7	24	SMS Facility Requirements	1997
7	25	DT Lessons Learned from SFOC Transition	1997
9	21	ISS Training Issues	1997
9	22	Flight Crew Operations Concept (FCOC) Document	1997
9	23	Space Station Operational Readiness Review (ORR) (NASA/RSA)	1997
9	24	Systems Flight Controller Training	1997
9	26	ISS Operations review	1997

11	1	Remote Training for Expedition 1 Crew - Study/Analysis Report for the Space Station Training Facility (SST - 627,DRLI-24)	1997
11	2	Expedition 2-4 Preliminary Multilateral Advance Training Plan	1997
11	17	Space Flight Training Division - Strategic Planning	1997
12	12	ISS Program, Multilateral Training Management Plan, Volume 1	1997
12	13	ISS Program, Station Program Implementation Plan Volume 7: Training	1997
12	15	ISS Program Payload Training Implementation Plan	1997
13	24	basic Training Prerequisites for Space Station Detailed Requirements	1997
14	16	ISS Program - Guidelines for Dual Language Training Manual Development	1997
17	16	NASA/NSDA Training Simulator Working Group	1997
17	17	NASA/NSDA JST ICD Working Group #2	1997
17	18	NASA/NSDA JST ICD Working Group Splinter Meeting	1997
19	29	NASA Organization at GCTC (Gagarin Cosmonaut Training Center)	1997
19	30	Shuttle MIR Lesson for ISS Operations	1997
21	22	Headquarters Code M Advances Operation Program (POP 97)	1997
24	28	International Space Station Astronaut Basic Training Program Requirements	1997
27	69	Transparencies-- International Space Station Rev. B Assembly Sequence	1997
28	4	Generic Training Materials (NASA)	1997
28	40	Presentation --DT/Space Flight Training Division	1997
28	41	Email- "Needed Help" -- Issues of Concern due to US-Russian Cooperation Training	1997
28	49	NASA Training Implementation Plan (TIP) International Spaces Station Program Mission Operation Directorate Spaces Light Training Division Baseline August 29	1997
28	67	NASA JSC-USAF Phillips Laboratories technical interchange meeting-- Technologies for Center Operation Automation.	1997
28	68	Brinkley's Russian Issues Review and Chilton's Training Meeting	1997
28	70	Message-- DO Recommendations for START Class "Passing" Criteria	1997
28	71	Message-- Program Operating Plan 97 (POP97) addendum 1.	1997
28	72	Letter-- from Mary Atkins to DT/Head of Space Flight Training Division requesting a tour of the JSC Facilities.	1997

28	73	"General Program Status: Deployment and Traffic Management at the Stage of the ISS Deployment [translation from Russian]	1997
28	74	Message-- For Distribution: Customer Identification and Perspective, April 12 (one page)	1997
28	75	Space Station Utilization Advisory Committee (SSUAS) Meeting Member List (January 1997)	1997
28	76	Agenda-- Space Station Utilization Advisory Subcommittee (SSUAS) Johnson Space Center (Nassau Bay Hilton) February 11-13, 1997	1997
28	77	Mission Operation Directorate (MOD) Space Station Mock-up Trainer Facility (SSMTF) Level B/C Training Requirements through flight 8A June, 1997	1997
28	78	Message-- To DA/Director, Mission Operations Directorate; From MA2/Manager, space shuttle program integration: Astronaut office crew recommendations (STS-81 and STS-82)	1997
28	79	News Article-- New Opportunities, Concerns for Cheap Access to space: A report on the Space Access '97 conference, Jeff Foust	1997
29	1	Development/Career Materials-- Hand written interview notes; Letter of Appreciation, performance appraisals; Presentation-- Carolyn LaRue Johnson	1997
29	7	Monthly Association Administrators' Report (MAAR) Inputs and Revised Meeting Schedule for the remainder	1997
29	8	Space Transportation System-83 (STS-83) Refight Flight Integration Manager	1997
29	9	Space Transportation System -81 (STS-81) Space Shuttle Mission Report (NSTS-37412) March	1997
29	10	Plan for the Training of the group ISS-1 for the Period of 21.04-25.04 [Translated from Russians]	1997
29	11	The Daily-- Cyber Space Round-up, Nasa Public Affairs Office - Education and Information Service Branch April 18	1997
29	15	Training Readiness Review Action Items	1997
29	16	JST Requirements Comments (Draft)	1997
29	32	Presentation-- Space Station Mock-up and Training Facility (SSMTF) Training Overview March 18,	1997
29	39	Proposal from Rutgers University- EVA Virtual Reality Training with Force Feedback, March 28	1997
29	41	Moody Garden Team Meeting Materials June 30	1997
29	42	Protocol Working Group Meeting on ISS Crew Training Star City, Russia June 23- July 2	1997
29	44	Mission Operations Directorate Space Flight Training Division, Russian Segment Trainer Trouble May 13	1997
29	45	Mission Operations Directorate (MOD) Space Station Operations Concept Version 1.1 June 21	1997

29	46	Email Chain-- Assessment of Proposal Boeing Task Transfer	1997
29	47	Email--Cleaned and Revised budget June 6, (Rita Madden to Frank Hughes)	1997
29	48	Request for Nomination for NASA Fellowship Programs	1997
29	49	Astronaut Office Crew Recommendations (NASA-MIR2) June 4	1997
29	51	Schedule -- ISS Training Coordination Meetings 20 Week Plan-- May 12 -September 27	1997
29	52	Flight Operation Group 8:00-11:30 am (1 page)	1997
29	53	Presentation -- Mission Operations Directorate (MOD)/ Prime OPS Products Agreements	1997
29	54	Portable Computer System (PCS) Software Metrics (Draft)	1997
29	55	Presentation-- FOIG DK (6/11/97)	1997
29	56	JUNE 11, 1997 FOIG/Chart Review	1997
29	59	Mission Operation Directorate (MOD) DA6/Mission Integration and Schedule Management Office Station Flights Supportability 2A-5A DA6/Dennis R. Davidson June 11,	1997
29	60	Presentation-- Flight Operations Flight Management and Schedules United Space Alliance (USA) Shuttle Recon Supportability 88/2A Though 9/6A Thomas M. Connell June 11,	1997
29	61	Form-- Space Station Change Request: Kevin Window	1997
29	63	ISS Early OPS Certification-- Project Status Report 6/10/97	1997
29	64	Email Chain-- Regarding Email Policy	1997
29	65	Email Chain-- Training Materials Development Schedule May 29	1997
29	66	Presentations--ISS Training Issues	1997
29	67	Manual-- Dual Language Training Manual Development Guidelines 5/29/97	1997
29	68	Mission Operations Directorate (MOD) DA6/Mission Integration and Schedule Management office Station STATS May 21	1997
29	69	Email-- From Alex Lane, to Connie Van Praet-Cremis, -- Lexicon on the Web, June 11	1997
29	70	Mission Operations Directorate (MOD) Space Flight Training Division-- Russian segment Trainer Troubles, DT/Jeff Wilson, DK/Lamar Flanagan 6/13/97	1997
29	71	Quality System Declaration (Based on ISO 9001) May 29	1997
29	72	Email-- From Trainer, Debbie-- Minutes of RV IPT Telecon with RSC-- Energetic May 12	1997

29	73	Message-- DF and DO Roles in ISS Assembly and Checkout May 6,	1997
29	74	Message-- Space Transportation System 81 and 82 (STS-81 and STS-82) Mission Operations Directorate (MOD) Response to Astronaut Office Crew Recommendation June 11	1997
29	75	Plan of Preparation of the Group MKS-1 (Guy, Kirk, Shep) for the period of 9-13.06 1997 [Translated from Russian]	1997
29	76	Operations Nomenclature Intervention Space Program Baseline Revision A, June	1997
29	77	Message-- Cost Impact for Implementing SIGI and Star Trackers of ISS May 30,	1997
29	78	Message-- David Leestma to Boeing-- Crew Consensus Report	1997
29	80	GNS Activity Schedule Motion Base Activity Schedule ISS Advanced activity Schedule	1997
29	81	Email Chain-- Medical Information June 9	1997
29	82	Message-- Delegation of Authority - in the absence of Theodore Eggleston June 10	1997
29	83	NASA Messages	1997
29	84	June 4, 1997 FOIG/Saturday Chart Review	1997
29	85	Data Integration Task ISS Avionics May 29	1997
29	87	Message-- Mission Operation Directorate (MOD) Support Assignment	1997
29	88	Schedules-- ISS Advanced Activity; Motion Base Activity; GNS Activity	1997
29	89	NASA Training Implementation Plan (TIP)-- International Space Station Program Mission Operations Directorate (MOD) Space Flight Training Division Draft May 23	1997
29	90	Message-- Flight Rate Capabilities June 2	1997
29	91	Message -- Space Transportation System 81 and 82 (STS-81 and STS-82) Post Flight External Report May 29	1997
29	92	Correspondence-- -Frank Culbertson to General Glazkov March 30, 1997 -Douglas Ward to Jennifer Matocha June 2, 1997	1997
29	93	Email Chain-- Visible MIR Passes-- May 30 1997; Attached NASA/NASDA Training TIM	1997
29	94	Presentation-- Space Shuttle Program May 22	1997
29	95	Presentation-- The Flight Operations Vision, by Harold Draughon May 6	1997
29	96	Presentation-- SSTF/PTC/PTT AST Return to Guidelines Impacts June 10	1997
29	98	Email- Elizabeth Spence to Thomas Jones-- Russians Segment Crew Interface Training May 30	1997

29	99	Presentation-- NASA-- NASDA Meeting on Basic Training June	1997
29	100	Basic Training Requirements for the International Space Station Astronaut Candidate -- Detailed Requirements May 27	1997
29	101	NASA Training Implementation Plan (TIP) International Space Station Program Mission Operations Directorate (MOD) Space Flight Training Division (Draft) May 23	1997
29	103	Presentation -- Mission Operations Directorate (MOD) Space Flight Training Division Operational Readiness Review (ORR) Frank Hughes 3/7	1997
29	105	International Space Station (ISS) Operational Policy Review (Operations Summit) February 28	1997
29	108	Message-- Astronaut Office to XA/Manager, Extravehicular Activity (EVA) Project Office, CA/ Director, Flight Crew Operations-- Astronaut Office Crew Recommendations (STS-80) February 13	1997
29	109	Message- Astronaut Office to OA/Manager, Space Station Program Office-- Astronaut Crew Recommendation (STS-80) February	1997
29	110	Message-- Astronaut Office to MA/Manager, Space Shuttle Program CA/Director, Flight Crew Operative-- Astronaut Office Crew Recommendations (STS-80) February	1997
29	111	Post Flight Crew Recommendation Process February 6	1997
29	113	Meeting Protocol -- NASA/RSA Bilateral Crew Operations Panel (BCOP) January 30-31, 1997 Star City, Russia	1997
30	33	National Space Development Agency of Japan (NASDA) Agency Report	1997
30	44	Russian / English Language Training Plan Astronaut as Cosmonaut Space Flight Training Division Mission Operations Directorate	1997
30	47	Email- OIG Report on MIR	1997
30	69	DT Technology Retreat Minutes Regents Part III, Room 214	1997
30	145	Memo-Patient Computer Support for Protective Environment	1997
31	23	Mission Operations Directorate DA6/Mission Integration and Schedule Management Office	1997
31	37	Space Flight Training Division FY95 CS/LOE Requirements	1997
32	11	Replacement pages for training and development opportunities catalog	1997
32	17	Operation control agreement document for flight 2A	1997
32	48	Presentation International space station training	1997

33	5	FY97 Center discretionary Fund Proposal: Rendezvous and Docking Demonstration using distributable interactive simulation (DIS) technology	1997
33	8	PPT Project Plan outline (Training Document)	1997
33	9	Service Module Option	1997
33	10	Discovery Museum Exhibits Contacts and Summary	1997
33	11	Activity schedule for: fixed base, sls, Motion Base, GNS	1997
33	15	Hand written and printed notes on organization core competencies	1997
33	17	Mission Operations Directorate -2A/STS-88 ISS Flight specific training DT26, Deborah Musgrove	1997 February 3
33	34	Mission Operations Directorate Space Flight Training Division Russian Segment Training Status Frank E. Hughes	1997, April 11
33	18	Training Readiness Review Action Items	1997, February
33	3	Presentation- Mission Operations Directorate 2A/STS-88 ISS Flight Specific Training DT26/Deborah Musgrove	1997, February 3
33	16	Training Readiness review action items	1997, February 4
33	19	Message - Training Telecon	1997, February 11
32	63	TTI Translation/interpretation contract MOD Processes and contacts	1997, January
33	2	Diagram- Station Training Assignments	1997, January
33	4	Meeting Protocol Document: NASA/RSA Bilateral Crew Operations Panel (BCOP) January 30-31, 1997 Star city, Russia	1997, January
32	19	Letter from V.A Gagarin Cosmonaut Training Center	1997, January 6
32	21	Memorandum- Russian segment training plan (DT-97-03)	1997, January 15
33	12	Mission Operations Directorate DA6/ Mission Integration and schedule Management office- station STATS	1997, January 29
33	35	Message— John Young Memo on Experiment training	1997, October 8

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7	26	Program Operating Plan - 98 (POP-98)	1998
7	27	Enhancing Compatibility for Long - Duration Space Flight Crew, Draft Report	1998
7	28	American Segment Trainer History	1998
7	29	1998 Astronaut Candidate Training Program	1998

7	30	Wellness Training and Support Program (WTSP-Status)	1998
9	27	ISS Expedition Crew 1-4 Training Template	1998
10	28	Spaces Flight 1997 - The Year in Review by Jessore Von Puttkamer	1998
11	20	Astronaut Candidate Training Plan (SFOC - FL2406)	1998
11	21	Roles Responsibilities Draft - Johnson Space Center (JSC)	1998
13	25	On Board Training - Space Station	1998
14	17	Space Station Russian Mock-up Requirements for the SSMTF	1998
15	24	Flight Data File Automated Control and Tracking Development Overview	1998
18	2	NASA/NASDA Team O Protocol (Training)	1998
19	31	Integrated DT-GCTC Training Manual Development Status	1998
19	32	Protocol - Working Group Meeting on ISS Crew Training	1998
20	2	Training Requirements for Primary Expedition Cosmonauts (astronauts) on ISS RS Onboard Systems	1998
20	3	SSTF Flight 5A Training Load Availability	1998
20	4	NASA/RSA Joint Program Review Protocol	1998
20	5	Stafford Task Force - UTKIN Advisory Expert Council Joint Working Group Protocol	1998
24	13	Social Behavior, Psychology and Performance During the Capsules short Duration Space Flight Mission	1998
24	24	Draft Statement of Work (SOW) For ISS Virtual Reality Simulator	1998
27	9	Fax-logistics Operations Center (loc) Involvement in On-Orbit Training/Maintenance	1998
28	33	Promotional Material-- Gesture Recognition System and Kiosk Interface User's Manual Cybernet System Corporation	1998
28	34	Advisory Committee for the International Space Station (ACISS) Meeting Materials	1998
28	35	Presentation _ISS Crew training - JSC Mission Operations Directorate DA/Dennis Webb x34925	1998
28	36	Presentation-- ISS training Talking Paper, by Frank Hughes	1998
28	82	Presentation-- Assy Sequence Options OM5/J. LaRochelle	1998
28	86	DT Russian Travel Plan	1998
28	88	Presentation-- Mission Operation Philosophy	1998
29	36	Preliminary Training Template for 12/98 Service Module Option	1998

29	135	Canadian Space Agency (CSA) International Training Control Board Face-to-Face	1998
30	2	Multimodal Perception and Multi-criterion Control of Nested Systems: II Constraint on Crew Members During Space Vehicle Abort, Entry and Landing	1998
30	15	Ethic Training	1998
30	32	NASA Strategic Plan-NASA Policy Directive (NPD)-1000.1	1998
30	46	Proposal for Service proposal for service Contracted From GCTC & RSC-E	1998
30	61	VETL (Houston) Information	1998
30	62	HACA (MKC2-MKC4)	1998
30	72	Travel Assignments	1998
30	92	Core Assessment Study "Draft"	1998
30	93	Core Technical Capabilities "Draft"	1998
30	124	Schedule of Meeting in Moscow	1998
30	138	NASA Star City Office (NSCO) Status Report -1	1998
30	146	Conference List (Guests)	1998
31	42	HSG/ISS Operation Issues Items Where Russians Could Help	1998
31	64	Technical Personnel Exchange Program (Proposal)	1998
31	65	IAAP Report ISS Training NASA/ Frank Hughes	1998
31	75	Fax to Colonel Karapolov--Expedition 1 Travel	1998
31	76	Frank Hughes- Itineraries-- February 25, 1998 to March 9, 1998; March 26, 1998; April 8, 1998	1998
31	83	Mission Operations Directorate Space Flight Training Division -- IIAP Report Space Station Training	1998
32	32	Training Readiness Review (T.R.R.)	1998

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9	28	International Training Control Board	1999
9	29	Crew Consensus Report for the International; Space Station Automation Story Boarding and Authoring Program (ASAP) Evaluation	1999
28	39	International Space Station Operations and Planning Training Manual ISSOPS and PLTM21109 Mission Operations Directorate Space Flight Training Division Branch March 1999	1999
30	63	Agenda- OBT CBT Meeting	1999
30	96	Letter- Moody Gardens and Mars Habitat	1999
30	125	Memo-Hughes Notice of Retirement	1999
30	142	ISS Training Coordination Meetings	1999
31	45	New DT Division Management	1999
31	66	Organizational Chart-- Astronaut Office	1999

31	68	Memo- Formation of a Mission Operation Directorate (MOD) Mission Integration Plan MIP Annex Work Process Improvement Team	1999
32	7	Tentative Audit Steps for Validating Astronauts Response.	1999

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<u>Box</u>	<u>Folder</u>	<u>Title</u>	<u>Date</u>
28	20	Message from Russian Space Agency to NASA concerning milestones: - 0001C2 Issues subcontracts - 005D1 FY94 subcontracts awards - 005D2 additional FY94 subcontracts and beyond FY94	Undated
28	60	Technical White Paper-- The uses of reality for maintenance training, by Dr. Chris Esposito of Boeing Virtual Environments Group November 29, 1995	Undated
5	22	SSOTF-123: Operations Task Force Report. - "Space Station Operations Concepts"	Undated
31	68	Ground and Flight Operations	Undated
2	22	SSOTF-21: Funding Difficulties for Community: Mission Control Center Upgrade Funding History	Undated
4	6	SSOTF-67: Space Station Utilization During Assembly Phase	Undated
5	10	SSOTF-120;110: Topic Analysis Sheet- Role of Training in Offsetting Loss of Skills (Affects Sustaining Engineering)	Undated
5	12	SSOTF-112: UARS Project - Goddard: Region of the Atmosphere Investigated	Undated
5	14	SSOTF-114: Space Telescope (ST) Mission Operation Ground System	Undated
5	15	SSOTF-115: IUE Ground Observatory Block Diagram	Undated
5	19	SSOTF-119: Topic Analysis Sheet - Roles of International Partners in Development, Administration and Conduct of Training (Canada, ESA, Japan)	Undated
5	20	SSOTF-121: Topic Analysis Sheet- Program-Wide Commonality of Training Methods, Medi and Evaluations	Undated
5	23	SSOTF-122: Topic Analysis Sheet - Crew Role in IACO Identify Skill Required	Undated
5	26	SSOTF-127: Operations Task Force Topic Tracking Log	Undated
8	5	Delivery / Development Standard for Computer Based on Board Training (TBD)	Undated
8	6	DT Station Level-of-Effort (LOE) Fact Finding Budget Assessment	Undated

8	9	ISS Intelligent Virtual Database System: Development Roadmap	Undated
8	11	Simulation Virtual Machine	Undated
8	14	"Top Gun" Philosophy	Undated
8	15	Coordinate System Lesson Plan (SAMPLE)	Undated
9	1	ISS Crew Training Templates (TBD)	Undated
9	2	FGB Operations Concept	Undated
9	3	ISS Testing Philosophy	Undated
9	4	Flight Controller Simulation (STSOC-TG-001230A)	Undated
10	16	Space Flight Training Division Strategic Planning	Undated
11	4	The International Challenge: Continuous Operations	Undated
12	1	Management of Major System Program and Projects (NMI 7120.4)	Undated
13	19	SSTF Session Reduction Assessment	Undated
14	2	Training Plan Development for ISS Payload from Glenn Research Center	Undated
15	1	Proposed DT Guidelines for Specialist Training Flow Supervisor and Team Lead - Standardized Lesson Planning Working Group Crew Training Catalog Responsibilities and Selection	Undated
15	2	Basic Instructor Training -Advanced Instructor Training - Execute Summary for Supervisors	Undated
18	1	JEM Segment Trainer (JST) Specification Design Review (SDR); JST System Requirements; JST Development Specification; JST Design Review Plan; JST to Control System Trainer (CST) Interface Control Document (ICD)	Undated
19	2	Space Station Alpha with Russia Training Concept — the Russians are Coming- Article	Undated
19	3	Phase 1 Lessons Learned - Based on Tsup Experience and Comments from Crew Member Debriefs	Undated
19	4	Russian Training Issues Summary (Draft)	Undated
19	5	Memorandum of Understanding MOU Between the National Aeronautics and Space Administration of the USA and the Russian Space Agency Concerning Cooperation on the civil international space Station	Undated
20	7	NASA Instructor Tour do Duty to CSA	Undated
21	1	Ford Foundation Awards Program	Undated
21	20	Space Station Issues/Traders Task #0-4.6 Training for Users	Undated
21	21	Training Division Management Retreat	Undated
22	2	Apollo Program - Apollo Mission Simulator 3 Nominal Mission Description - AS-503A Mission	Undated
22	3	Apollo Program - Test of the Command Module Computer (CMC) Test 1A,2,4,5A,5B,6,7, 8,9,11,12,13,14,15	Undated

22	6	Apollo Mission Simulator Programming Support Activity Summary	Undated
22	7	Logging Program and Post - Processor Program for the Interpretive Simulation of the Apollo Command Module Computer (ISCMC)	Undated
22	8	Apollo Mission Simulator / Apollo Guidance Computer (AMS/AGC) Open - Loop Verification Report Pre- Processor Program (REF IBM #67-0409)	Undated
24	16	1993 Circadian Workshop	Undated
24	17	Crew Wellness Training	Undated
24	18	Russian Training	Undated
24	19	ISSA Training Requirements - Comm Training Flow	Undated
24	22	SSTF Requirements Option Proposal	Undated
24	27	English Language Certification	Undated
24	30	Basic Training- Partner Elements	Undated
25	1	Integrating Learning and Forgetting Curves for the Control of Knowledge and Skill Acquisition and Retention for Repetitive Training and Re-Training	Undated
25	17	Reading Material / Reports / Articles on Classroom Teaching /Training	Undated
25	18	The Stages of Training and Teaching - Training the Training	Undated
26	4	Command Module Simulator (CMS) -base Line Configuration for AS-204	Undated
28	5	Unlabeled Portrait Photograph-- Young Woman	Undated
28	6	"A White Paper" -- a Response to "Red Team White Paper" Composition -Covering Mission of NASA	Undated
28	12	Directory-- Classified Listing -RCS-Energeia From JSC Dial 87+	Undated
28	15	Space Station Training Facility (SSFT) Product Vision	Undated
29	12	DT Station Master List (Draft and Content)	Undated
29	13	Draft- DT Process of Redline/ Review	Undated
29	14	ISS Debrief Questions for John Blaha	Undated
29	17	Note-Frank Hughes - ISO 9001 Certification and the Training Function	Undated
29	19	Presentation-- Automation and Flight Desk Design: Some Lessons from Commercial Aviation, By Kathy H. Abbot, Ph.D. NASA Langley Research Center	Undated
29	29	Transparency--Training Technology Development Timeline	Undated
29	30	General VMDB Drawing Information	Undated
29	37	Information Retrieval Flowchart	Undated
29	38	Possible-- Screenshots of Digital Rendering of Emergency Systems on the system ISS	Undated
29	50	Presentation-- Mission Operation Directorate (MOD)- - Part Task Trainer	Undated

29	57	Presentation -- ISS Avionics Ingt. /Recon STATUS	Undated
29	58	Chart--3A, 4A, and 5A FSW and DATA Production Schedule CY 1997--CY 1998	Undated
29	62	Recommendations-- Training, Travel, and Scheduling	Undated
29	79	Announcement-- Electronic Distribution of SMS Schedule	Undated
29	86	Presentation-- Boeing Task Transfer Assessment	Undated
29	97	Level of Detail: This issue is within DTs means of rectifying	Undated
29	106	Correspondence-- Victoria House Press to Frank Hughes-- Lunar Lander Pictures	Undated
29	114	Space Flight Training Division Strategic Planning	Undated
29	120	ISS Crew Interface Team	Undated
29	130	Chart-- English /Russian Training Cross Reference	Undated
31	1	Training Restructure Option 25	Undated
31	3	SSTF Malfunction Requirement Definition	Undated
31	4	DT Technical Data Requirements	Undated
31	7	Operation Concept Study: Training Focus Group Meeting #2-4	Undated
31	19	Handwritten Notes-- "Training System Transition," Caution of Point of Contact for all Freedom Training Activities," Engineering Directorate TRNG Activities"	Undated
31	20	Training Efficiencies Report	Undated
31	24	Training Division Software Library	Undated
31	27	TOS Logo Letterhead Sample	Undated
31	28	Training Technology Roadmaps	Undated
31	39	5 Ground Control Loop	Undated
31	44	Actions for SSTD Strategic Planning Session	Undated
31	49	Station Development Hrs.	Undated
31	53	Management Assessment Guidelines	Undated
31	56	Table 1 Training Facility Capabilities Astronaut AIT: ISSA OPS Training Facilities Overview	Undated
31	57	EVA Task Training	Undated
31	58	RST SRR Requirements Issues Summary	Undated
31	60	Station Core Training	Undated
31	67	ISS Training Agenda	Undated
31	67	Back-Up Crew Assessment	Undated
31	73	Organization Chart-- Space Flight Training	Undated
31	74	Memo-- Space Station Operations Concepts	Undated
31	80	PIT Development	Undated
31	81	Typed Notes-- Comments to "Addressing Question of a Cadillac SSTF"	Undated
31	86	SES Options (Keith Todd)	Undated

31	94	"Vision of JSC Simulators"	Undated
31	95	Training Building Block Approach	Undated
31	97	Handwritten Note-- Your Request to Bring to your Attention any Ideas for Productivity	Undated
31	100	Uniqueness of US Manned Space Flight Operation Training	Undated
30	166	The Human Body Sensory Suit System Touch and Muscle Force Reflection	Undated
29	134	Booklets — Space Station training Facility —Space Station Part Task Trainer	Undated
30	6	MOD— Operations Technology— Initiatives	Undated
30	16	POIC Cadre Training (Payloads Operations Integration Center)	Undated
30	29	Long Duration Mission Support Operations Concepts	Undated
30	40	Preparations of Russian Segment Alpha	Undated
30	43	Organization Chart- Gagarin Cosmonaut Training Center	Undated
30	45	ISS Russian Segment Training Objectives and Training Flows Points of Contact	Undated
30	48	International Space Station Phase I Shuttle -MIR Program Lesson Learned for Joint Operations Charlie Pre-court Astronaut	Undated
30	49	Boeing Crew Resource Management	Undated
30	53	Training Operations TIM #14 Goals	Undated
30	56	Chart AST Architecture	Undated
30	59	ISSA Program Problems	Undated
30	60	Memo Report— Management Plan Question	Undated
30	64	Space Flight Training Division Training operations Issues States and Dispositions	Undated
30	66	PowerPoint Enabling Technology (Printed)	Undated
30	67	Use of Hypermedia Tools to Produce Rapid Prototypes of User/Computer Interfaces, by Frank L. Greitzer	Undated
30	73	Whole Station Training Scenarios	Undated
30	75	ISS Russian Segment Training Objectives Training Flows Points of Contact	Undated
30	82	Reconfiguration Logistics International Agreement	Undated
30	83	International Training AIT Team Execution Plan	Undated
30	86	Integrated Training Facility Strategic Plan	Undated
30	94	Sequence of Everts During MA-6 Flight (Book Photo Copies)	Undated
30	95	Handwritten Note-Training Planning Check List	Undated
30	98	Shuttle crew Training Templates	Undated
30	109	RS Tone Discussion Topics	Undated
30	112	Correspondence— Ven Fengto Michael Hieber	Undated

30	115	If the Life Science Payloads were to move into the SLS, What Would Need to Happen	Undated
30	118	Handwritten Notes: Training Budget	Undated
30	121	Frances E. Mount Resume	Undated
30	123	Social Interaction Chart, Different Nationalities	Undated
30	126	Photocopied Drawing: Man, Computer and Cat	Undated
30	127	Performance Plan	Undated
30	130	Russian Travel and training Information (VISA)	Undated
30	134	SES- Offload Question	Undated
30	137	SSF off-Nominal Scenarios Action Summary	Undated
30	143	Memo- ISS Familiarization	Undated
30	144	Fax Cover Page	Undated
30	150	Training Inputs to the Vehicle Architecture Reviews	Undated
30	153	SSCC Console Position	Undated
30	159	Table of Contents ISS	Undated
30	161	CCC Budget Option Comparison	Undated
30	164	Space Shuttle Program Potential Technology Innovations for Efficiency Improvement and Cost Reduction	Undated
27	41	Fax- 'Subj--Issue List' NASDA Position and Rationale in response to previous teleconference	Undated
27	12	Pre- Coordination Process for Change LII Documents Training FCD	Undated
27	55	Brochure-- The First United States Microgravity Laboratory	Undated
27	56	Brochure-- First International Microgravity Laboratory	Undated
27	60	The Role of the International Partner Personnel in SSF Operations	Undated
27	63	Version B (Only Payload crew training at JSC)	Undated
27	67	Notes for PTC White Paper Development	Undated
27	70	New Employee Orientation Materials	Undated
27	84	Management and budget: system design implementation and international issues (Symposium on space station)	Undated
27	94	Management and Budget: Space launch system-- Current United States plans and the next logical steps through 2000	Undated
27	96	Management and budget: The impact of launch vehicle constraints on U.S. Space Station design and operation	Undated
27	102	Management and budget: An integrated space /terrestrial communications network for Europe, by P. Bartolome and J. Case	Undated
27	103	Management and budget: Autonomous of robotics technology Application to JEM	Undated

28	50	Handwritten notes on the subject of Guiding on the job training (OJT) (2 pages)	Undated
28	51	Photocopy of 21 business card (3 pages)	Undated
28	52	Handwritten note- Training approach to technical and non-technical information.	Undated
28	69	Joint Recommendations on RST Training	Undated
28	100	Organization Chart-- International Space Station Alpha-- Product Team Structure	Undated
32	20	Draft- Payload training re-Organization exercise	Undated
32	26	Copies and transparencies of training for station	Undated
33	20	Handwritten notes - Training	Undated
33	21	Presentation Printout— Space Flight Training System Concept	Undated
27	19	Fax-Training Telecon Paper	Undated
27	21	Crew Training Template PMC (co-flight/year	Undated
27	30	FAX- Subject Whole P/L Training Issue Summary	Undated
27	34	SSVT Loading Study	Undated
27	35	Preparation for TOS Tokyo Meeting	Undated
27	38	FAX- Papers for Telecon about training issue	Undated
27	42	Chart-NASA Training Operation Concepts	Undated
27	47	Brown NASA Envelop that housed the material in folders 48-56	Undated
27	50	Definitions-- United States Operations Centers (USOC), Payload Operations Integration Center (POIC), Payload Training Complex (PTC)	Undated
27	53	Pamphlet-Protein Crystal Growth	Undated
27	54	Pamphlet -Glove box	Undated
27	81	Management and budget: United States Space Station Technical and programmatic interfaces	Undated
27	101	Management and budget: a strategy for the development of the man-tended platform, by Daniel H. Herman and David Black	Undated
27	105	Management and budget: Man-tended flyer interior equipment for manned and automated operation	Undated
27	106	Management and budget: The Evolution of the services and standards of ESA's Operational ground tracking network within the international space community, by H. K. Uhrog	Undated
28	17	Structure of Russian Segment Simulator ISS (Draft) in Russian and annotated in English	Undated
28	32	Proton Promotional materials	Undated
28	48	Top Gun Initialization Process	Undated
28	59	Presentation-- Distributed Interactive Technology for Training operations.	Undated
28	61	Technical White Paper-- Advanced training capabilities impact, by Cybernet Systems Corporation	Undated

28	64	Printed Instruction to access CompuServe internet service provided through the Infonet Network in Russia	Undated
28	65	Untitled Manuscript--- Reducing Cost to the shuttle program	Undated
28	81	[Funding] Options Summary Access to space for Research and Development	Undated
28	83	Flow chart illustrating the process of data retrieved from online sources	Undated
28	84	Presentation panel-- ISS training issues facing the program	Undated
28	85	Presentation Panel-Operational Issues Facing Training	Undated
28	87	Schedule Review Process	Undated
28	95	Handwritten note-- Concerning "SMS"	Undated
28	99	Organization Chart-- Training Structure International Training Forum AIT	Undated
28	103	Presentation-- Training Operations and Capability Development: JSC Mission Operations Directorate Space Station	Undated
28	105	Organization Chart-- International Training Forum AIT	Undated
28	106	Chart-- Crew Training Template PMC (6 Flight/year)	Undated
32	2	Autonomy (STS)	Undated
32	3	MOPS Status research	Undated
32	4	MOPS Status Research	Undated
32	52	Civil Service Diagrams	Undated
33	6	TIM #7 Detailed Agenda - Team 7a Training	Undated
33	7	SSFT "Model One Pagers" summaries	Undated