May - September 1984

February & April 1984

March - April 1984

## SHUTTLE SERIES CANEX PAYLOAD DOCUMENTS

Integration Attached Payloads Office. They consist of the case files for the Canadian Experiment Package which flew on STS 41-G in October 1984. This was a crew compartment payload consisting of the following experiments. A Space Technology experiment, VISET, the Space Vision System Experiment Development Tests, had as primary objectives the calibration of closed circuit TV and Canadian target system combinations as well as the collection of annotated video on target maneuvers. ACOMEX, Advanced Composite Material Exposure, was another space technology experiment. This one looked at the degradation of polymers in the orbiter environment and was similar to some experiments on the LDEF (Long Duration Exposure Facility). Space science experiments included OGLOW, SPEAM and PHOTONS. OGLOW, Orbital Glow and Atmospheric Emissions took spectral readings and measured the intensity of orbiter and earth's limb emissions. SPEAM was the Sun Photometer Earth Atmosphere Measurements and PHOTONS was the Photometric Thermospheric Oxygen Nightglow Study. A Life Sciences experiment, SASSE (Space Adaptation Syndrome Supplemental Experiments), expanded the available data on vestibulo-ocular reflex, awareness of object positions, proprioceptive illusions, limb sensory functions, and space motion sickness. Because this collection represents a good snapshot of payload management activities very little was done to change the organization of the documents. The collection has been maintained in its original file folders with keywords and date ranges noted. Original folder titles are in bold type on the inventory. The folders are filed chronologically by the latest date on the folder. Materials within the folders are filed chronologically from earliest to latest date with undated material at the end of the folder. Dates range from February 1984 through February 1986.

Canadian Personnel

CPI - PHOTONS, Photometric Thermospheric Oxygen Nightglow

Description, Requirements, Information CPI - Form 100, Request for Flight

Study Experiment Proposal,

## Inventory

Inventory	
Box Number: 1	
CANEX - Camera Testing, Notes	August 7, 1984
CPI - ACOMEX, Advanced Composite Materials Exposure Experiment Proposal, Notes, Charts	March - August 1984
CPI - SASSE, Space Adaptation Syndrome Supplemental Experiments Proposal, Requirements, Description & Correspondence	March - August 1984
CPI Illustrations, CANEX Payload Engineering Drawings, Concept Drawings, General Arrangement Drawings	April 1983 - August 1984
CANEX - PLAID Views, PLAID Computer Graphics Program Views for Planning VISET and ACOMEX Procedures, Includes Notes, Drawings, Correspondence, Charts & ERBS Deploy Checklist (JSC-19314)	May - August 1984
CANEX Safety Rev 6/25-26/84, Principal Investigators Meeting Agenda, Notes, Correspondence, Ephemera	June - August 1984
CANEX KSC Safety, Payload Safety Review Material	August 1984
CANEX PAO CR 8/24/84, International Press Conference Change Request	August 1984
CANEX - Wt & C.G. Info, Weight & Center of Gravity Test Preparation Sheet	September 19, 1984
CPI - SPEAM, Measurement of Earth Atmospheric Constituents Using a Sun Photometer, Experiment Proposal, Requirements, Notes, Correspondence	March - September 1984
CPI - Visit Clearances, CANEX -	May - September 1984

Assignment Experimental Equipment for Canadian Payload Specialist CPI - Stowage, Modular Locker Layout March - May 1984 Charts CPI - Proposals, Canadian Payload Specialists "October '84" Mission April - May 1984 Proposal, Correspondence & Notes CPI - Meeting, Putting CPI on STS-17, May 9, 1984 Notes CANEX - TV W.G. Recommendations, Television Working Group Memo June 14, 1984 "Revised STS 41-G (17) Inflight Television & Photo Recommendations" CPI - VISET, Space Vision System **Experiment Development Tests** February - June 1984 (VISET) Proposal, Charts, Correspondence CANEX Security Clearances, Badge June 1984 Requests, Meeting Agenda CPI - ICD not baselined, CANEX ICD July 17, 1984 Interface Revision Notice CANEX - FDF Procedures, Flight Data July 26, 1984 File Meeting Notes CPI - Decals, CANEX/VISET Targets July 1984 on ERBS Request/Status & Notes CPI - PIP, JSC-18456, Canadian Payload Investigation (CPI) Payload May - July 1984 Integration Plan (PIP) Interface Control Document (ICD) Review SASSE Mtg., Experiment Description, Meeting Agenda, Notes & Agreements June - July 1984 Reached Included CANEX Parts List, Locker Item List July 1984 Box Number: 2 CANEX Safety Rev 8/1/84, Minutes, Correspondence, Safety Packages, Safety Compliance Data, Meeting June - September 1984 Agenda, Hazard Reports, Certificates of Compliance & Presentation Material **CANEX OGLOW Side Hatch Camera** August - September 1984 Cover CANEX, VISET GFE Requirements, EGSE Experiment Ground Support August - September 1984 Equipment CANEX Checklist, PCNs (page September 1984 change notices) CANEX Flt Dir & Cont Mts 9-20-84, CANEX-1 Flight Director & Contractor September 1984 Meeting Notes, Press Kit Included **CANEX Mission Support** September 1984 Requirements CPI - P/L Spec. Info, Canadian Astronaut Program Press Kit including May - October 1984 Biographical Information, Photos, English and French CANEX Annex 6, JSC-18456, Orbiter Crew Compartment Annex, Canadian August & October 1984 Experiment, Basic, October 1984, with Related Material **CANEX Photographs** August & October 1984 CANEX - Post Flight Questions, STS September - October 41-G 1984 CANEX - Path Tape Info, SPEAM October 1984 Trajectory & Altitude Data OGLOW CANEX - SPEAM Side Hatch October 1984 Calibration OV-104

June - November 1984

CANEX - SPEAM Window Cal Notes &

SubHeading:

OMRSD, STS Window Calibration Procedure, Notes, Correspondence, Printouts CANEX 1027s, JSC Flight Equipment Acceptance

CPI - Materials Testing, Notes &

Memos

SubHeading: Box Number: 3

CPI - OGLOW, Measurement of
Optical Emissions on and from the
Shuttle Orbiter (OGLOW) Proposal,
Description, Charts, Newsletters

March 1984 - January
1985

September & November

May - December 1984

September 1985

n.d.

CPI - Notes, 41G CANEX April 1984 - January 1985

CANEX - Post Flight Briefing to HQS February 1985

CPI - Official Correspondence, CANEX April 1984 - July 1985

CANEX-1 Technical Reports, Canadian Aeronautics & Space Journal 31 #3, 41G Canadian Medical Experiment, OGLOW, SPEAM, Sunphotometer Advanced Composite Materials

CANEX-1 Orbiter Window Calibration November 1985 - Numbers February

CANEX - SPEAM Post Flight Report February 1986

CANEX PIP Rev. Actions, Payload Integration Plan Revision, Action Notes

DSO 0303 (EOIM), Evaluation of
Oxygen Interactions with Materials
excerpted from JSC-16725 Rev C