Attachment 2

XB-70A 001

FLIGHT 1-50 -

CONFIGURATION STATUS

ALIGHTING AND ARRESTING GEAR AND HYDRAULICS

- LH BOGIE REPLACED WITH NEW BOGIE.
- NOSE AND MAIN GEAR EMERGENCY EXTEND SWITCHES INSTALLED IN EE BAY.
- BRAKE ACTUATOR POSITION INDICATOR LIGHTS INSTALLED IN COCKPIT. BRAKE EMERGENCY POWER SWITCH INSTALLED IN EE BAY.
- TESTS ACCOMPLISHED TO ISOLATE THE SLOW MAIN LDG GEAR DOOR CLOSE PROBLEM.
- BOGIE "J" BOX VITONED FOR SHORT PROTECTION.
- GEAR OPERATIONS PERFORMED.
- LH MAIN LDG GEAR STRUT REPLACED BECAUSE OF DAMAGE SUSTAINED WHEN FIRST REWORKED BOGIE FAILED.
- INCREASED AREA AND VOLUME SKID PLATES ADDED TO BOGIES.
- ADDITIONAL ~~MAIN~~ NOSE LDG GEAR STEERING SHUTOFF VALVE ADDED IN SERIES WITH EXISTING VALVE.
- REVISED DRAG CHUTE INSTALLED.
- RELIEF VALVES ADDED IN MAIN LDG GEAR DOWN LINES.
- BRAKE RETURN SPRINGS ADDED.
- REVISED UTILITY PUMP COMPENSATORS INSTALLED IN BAYS 4, 5, AND 6.
- BRAKE COMPUTER MODIFIED.

ESCAPE SYSTEM

- CAPSULE ALTITUDE WARNING SYSTEM ACTUATION LEVER MODIFIED & BKHD STIFFENED.
- DECAL ADDED TO CAPSULE INTERIOR TO IDENTIFY IMPACT ATTENUATOR LEVER. INTERIOR LIGHT ADDED TO ILLUMINATE NEW DECAL.
- "HOT INTERCOM" CIRCUIT REVISED.
- ALL BALLISTIC HOSES REPLACED.
- CAPSULE PERIODIC INSPECTION COMPLETED.
- INSPECTION HOLES CUT IN BULKHEADS FOR IMPACT ATTENUATOR PRESSURE GAGE INSPECTION.
- ENCAPSULATION INSTRUCTION PLATE INSTALLED ON WINDSHIELD FRAME.

STRUCTURAL REPAIRS

- STRUCTURAL AND FUEL LEAK REPAIRS ACCOMPLISHED IN TANKS 1, 2, 3, 4, 6L, AND 6R.
- STRUCTURAL REPAIRS ACCOMPLISHED IN UPPER LH AND RH WING, LOWER LH AND RH INTERMEDIATE FUSELAGE, AND ALL WHEEL WELLS.

STRUCTURAL IMPROVEMENTS

- PERC PINS ADDED TO LH AND RH DUCT TRUSS-CUP AREAS.
- LH AND RH WING LEADING EDGES PINNED.
- SUGAR SCOOP CENTER DIVIDER BEEFED UP.
- INLET DUCT DIVIDER BETWEEN ENGINES NO. 3 AND 4 BEEFED UP.
- WEAPONS BAY WALLS STIFFENED AND PERC PINS ADDED AT FRAMES.
- MHB PANELS PINNED IN BYPASS AREA.
- CANTED FRAME IN BYPASS AREA PINNED.
- BYPASS DOOR SEALS REVISED.
- WING LOWER SURFACE AFT OF APEX AND FWD OF DUCT SPLITTER PINNED.
- INSPECTION HOLES ADDED IN WEAPONS BAY WALLS.
- INLET DUCT RAMP SEALS REPLACED WITH IMPROVED SEALS.
- IMPROVED TRUSS STUDS INSTALLED.

FLIGHT CONTROLS

- ELEVON PITCH LIMITS CHANGED FROM 25 DEG UP AND 15 DEG DOWN TO 20 DEG UP AND 20 DEG DOWN.
- CLAD ELEVON CABLES INSTALLED.
- REVISED FLAP VALVES AND FILTERS INSTALLED.
- WING FOLD POWER HINGES REPLACED.
- WING FOLD SPEED REDUCERS REPLACED.
- STICK FORCE RECORDINGS ACCOMPLISHED ON ALL THREE AXES.

AVIONICS

- FLOODLIGHTS INSTALLED AT THIRD CREW STATION.
- STANDBY GENERATOR AND CSD INSTALLED IN NO. 2 ADS BAY.
- CADS AND STANDBY AIRSPEED SYSTEM CALIBRATED.

PROPULSION

- THROTTLE QUADRANT IDLE STOP ADDED TO PREVENT INADVERTENT SHUTDOWN.
- IMPROVED NO. 22 FUEL NOZZLES INSTALLED IN ENGINES 1, 2, AND 3.

MISCELLANEOUS

- 100-HOUR AIR VEHICLE INSPECTION ACCOMPLISHED.
- UPDATED FREON PACKAGE WITH STEEL LINES, CONDENSOR, AND EXTERNAL FILTER INSTALLED.
- AIR VEHICLE WEIGHED AND BALANCED.
- COMPASS CALIBRATED.
- RAM-AIR SCOOP STRUCTURE BEEFED UP.
- WATER DRAIN AND VENT SYSTEM FOR RAM-AIR HEAT EXCHANGER REVISED.

Attachment 3

FLIGHT SQUAWKS - FLT. 1-49

MAIN GEAR REMAINED IN WELL ON EXTEND CYCLE. NOSE GEAR CAME DOWN AND LOCKED. ALL DOORS CAME OPEN AND RAMAINED OPEN AND APPEARED TO BE POWERED OPEN.

- EXTEND POWER NOT SUPPLIED THROUGH RELAY. PRIOR TO CHANGES, GEAR CYCLED AND FLIGHT SQUAWK VERIFIED. RELAY CHANGED AND GEAR CYCLED NORMALLY.

REFRIGERATION PACKAGE INOPERATIVE.

- UPDATED PACKAGE INSTALLED.

GLYCOL LEAK ON NOSE GEAR DOOR.

- LINE REPAIRED AND IMPROVED CLAMPING METHOD USED.

AUXILIARY INTERCOM CORD BROKEN.

- CORD REPLACED.

PITCH AUG DISENGAGED SEVERAL TIMES DURING FLIGHT.

- PITCH COMPUTER REPAIRED.

NO. 2 RADIO VERY POOR.

- RADIO REPLACED.

AMMONIA CONSUMPTION RATE APPEARED EXCESSIVE DURING LATTER PART OF FLIGHT.

- AMMONIA PACKAGE AND QUANTITY-SENSING UNIT REPLACED.

Attachment 4

FLIGHT 1-50 ENGINE STATUS

ENGINE CONFIGURATION CHANGES
SINCE FLIGHT 1-49

• DEACTIVATE ENGINE SPEED LOCKUP	ENGINES NO. 1 THRU 6
• IMPROVED AIR START MAIN FUEL NOZZLE	ENGINES NO. 1 THRU 3
• IMPROVED MAIN ENGINE FUEL CONTROL AND REAR STATOR FEEDBACK ARM	ENGINES NO. 4 AND 5
• IGNITION BOX MODIFICATIONS	ENGINES NO. 1, 2, 4, AND 5

INSTALLED ENGINE STATUS

ENG POS NO.	ENG S / N	TIME REMAINING	INSPECTION DUE
1	170-556	17:30	HOT SECTION
2	170-555	12:30	HOT SECTION
3	170-557	13:43	50 HR JEFM
4	170-559	17:30	HOT SECTION
5	170-581	12:30	HOT SECTION
6	170-576	9:16	HOT SECTION

Attachment 10

FLIGHT 1-50

PRIMARY TEST OBJECTIVES

- SYSTEMS FUNCTIONAL CHECK
- AIRSPEED CALIBRATION
- STABILITY AND HANDLING QUALITIES
- SONIC BOOM
- LATERAL BOBWEIGHT OPERATIONS

FLIGHT 1-50

ENGINE START GROSS WEIGHT 505,000 lbs.

BRAKE RELEASE GROSS WEIGHT 485,000 lbs.

TAKEOFF GROSS WEIGHT 480,000 lbs.

OUTSIDE AIR TEMPERATURE 50° F

TAKEOFF DISTANCE 7,000 FEET

TAKEOFF SPEED 195 KNOTS

REFUSAL SPEED 176 KNOTS

REFUSAL DISTANCE 5,700 FEET

CRITICAL FIELD LENGTH 8,100 FEET

Attachment 11

FLIGHT COUNTDOWN SCHEDULE

Work Day/Time	Action
• Tuesday of week preceding flight	AFFTC Form 16 submitted (JTF)
• T. O. - 5 Days:	
	Flight Cards to NAA and DRV (JTF)
• T. O. - 2 Days	
	Flight Schedule Review (JTF/NAA)
	Instrumentation Review (NASA/NAA)
	Final Approval and Publication of Flight Plan (JTF/JTF Director)
	Control room Personnel Designated (JTF)
	Flight Crew Designated (JTF Director)
	Schedule Flight Briefing (JTF)
• T. O. - 1 Days:	
	Distribution of Flight Plans (JTF)
	Obtain Weather Forecast (JTF Flight Planners)
	Obtain Lake Bed Status (JTF Flight Planners)
	Obtain Chase/Pace Status (JTF Flight Planners)
	Check Notams (JTF Flight Planners)
	Confirmation of Support Requirements (JTF Flight Planners)

EVENT SCHEDULE (Continued)

Flight Briefing (JTF)

Submit PRESTO Report (JTF)

Check on Support Availability (JTF Flight Planners)

Request Yuletide Clearance (JTF Flight Planners)

- Flight Day:

0600 - Review of A/V Inspection Records (JTF/NAA/AFQA)

Review of A/V Maintenance Status (JTF/NAA/AFQA)

Review of A/V Instrumentation Status (JTF/NAA/AFQA)

0630 - Dispatch Up-range Chase Aircraft (JTF)

Pilots' Pre-Flight Inspection (Pilots)

0700 - Final Briefing (JTF/NAA Flt Contr.)

Weather	Exceptional Release
Aircraft Status	Flight Plan Changes
T. O. Data	

0730 - Control Room Check Out (NAA)

Flight Crew Dons Pressure Suits (Pilots)

File Flight Clearance (JTF)

0800 - Flight Crew Ingress

Chase/Pace Check (JTF)

0815 - Engine Start

0830 - Taxi

EVENT SCHEDULE (Continued)

- Flight Day (Continued)

  0835 - Control Room Manned
  FAA Conference Call

  0855 - Chase Aircraft Takeoff

  0900 - B-70 Takeoff

  1100 - B-70 Landing

  1115 - Data Tapes Removed (NAA)

  1230 - Flight Debriefing (JTF)

  1315 - JTF Review of Maintenance & Instrumentation (JTF)

  1430 - Maintenance Schedule Meeting (JTF/NAA)

  1600 - Postflight PRESTO (JTF)

- T. 0.+ 1 Day:

  Quick Look Data Available

  Start Review of Data

- T. 0.+ 5 Days:

  Publish Summary Flight Report

COMMUNITY DISPLAYS

Attachment 12

CHASE CONTROLLER GVT FTTO	FLT PATH MONITOR GVT FAA	MISSION PLANNER GVT JTF	MISSION CONTROLLER GVT JTF	FLIGHT CONTROLLER NAA	SYSTEMS MONITOR NAA	SYSTEMS MONITOR NAA

RANGE CONTROLLER GVT FTTS	MISSION SUPERVISOR GVT	SYSTEMS MONITOR NAA	SYSTEMS MONITOR NAA	SYSTEMS MONITOR NAA	NAA MGT NAA

GVT. PROJ. ENGR. JTF

FORWARD DATA CONTROL ROOM

20 SEPT 66 SCHOFIELD

FORWARD DATA CONTROL ROOM MANNING

Gov't

Chase Controller ---------- Flight Test Operation

Flight Path Monitor ---------- FAA (RAPCON)

Mission Planner ---------- JTF (Flt Test Planning)

Mission Controller ---------- JTF (Project Engineer)

Range Controller ---------- Technical Facilities

Mission Supervisor ---------- Gov't Pilot

NAA (Operations)

Flight Controller

System Monitors

1. Propulsion & Fuel
2. AICS, Flt Controls & FACS
3. Environmental, Escape & Personnel Accommodations
4. Avionics
5. Hydraulics & Landing Gear

NAA Management

RECORDER #1
AICS
NAA GVT

RECORDER #2
PERFORM-ANCE
NAA GVT

RECORDER # 3
AICS AUXIL.
NAA

RECORDER # 4
STABILITY
NAA GVT

REC. #5
STRUCT & LOADS
NAA

AFT DATA CONTROL ROOM

RECORDER #6
SUBSYSTEMS
NAA

RECORDER #7
ENGINES
NAA GE

20 SEPT 66

AFT DATA CONTROL ROOM MANNING

TM Monitors

Gov't (NASA-FRC)

- AICS
- Performance
- Stability & Control

NAA (Design)

- AICS
- Performance
- Stability & Control (Flt Cont & FACS)
- Structural Loads
- Systems (Hydraulics & Gear)
- Engine

G. E.

- Engine

Design Consultants

NAA

- Sr. Proj Engineer
- Avionics
- Fuel Systems
- Wt & Bal Engineer
- Instrumentation

ATTACHMENT 15

PILOT PREPARTION FOR FLIGHT 1-50

- MANAGENT GROUND RULES REVIEW
  COTTON 21 SEP 66
- ESCAPE SYSTEM GROUND SCHOOL
  COTTON-FULTON-SHEPARD 18 OCT 66
- OPERATIONS AND SUPPORT REVIEW
  COTTON-FULTON 20 OCT 66
- AIRPLANE CONFIGURATION REVIEW
  COTTON-FULTON 20 OCT 66
  SHEPARD 21 OCT 66
- EMERGENCY PROCEDURE REVIEW
  COTTON-FULTON-SHEPARD 24 OCT 66
- X-2 CAPSULE TRAINING
  COTTON-FULTON-SHEPARD 24 OCT 66
- ENGINE RUNS
  COTTON-FULTON 24 OCT 66
  COTTON 25 OCT 66
- TAXI TEST
  COTTON-FULTON 27 OCT 66
- FORMAL GROUND SCHOOL
  COTTON-FULTON INTERMITTENT