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OX CART/IDEALIST

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Copy of 10

10 NOV 1966

ACTIVITY REPORT
OFFICE OF SPECIAL ACTIVITIES
OCTOBER 1966

I. OX CART

A. DEVELOPMENT SUMMARY AND PROGRESS

1. AIRFRAME

a. Aircraft 127 made its first flight on 11 October after service bulletin modifications were completed. On 18 October, aircraft 127 flew a seven hour, forty minute mission which represents the longest A-12 flight to date. On 12 October, aircraft 129 had flown a seven hour, thirty-five minute flight which was the previous record.

b. A meeting was held at Project Headquarters of the Headquarters' members of the OXCART Aircraft Configuration and Flight Test Control Board. The purpose of this meeting was to review completed staff actions resulting from the CCB meeting held on 22 September

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2. PROPULSION

a. Fuel conforming to the revised (523-E) fuel specification is presently being received. The new fuel should eliminate the contamination problem that has affected certain engine fuel system components. By flushing aircraft fuel systems and through a program of monitoring fuel system components, already installed, just delivered from overhaul verification; it will be established that the fuel contaminant accumulation problem has been eliminated.

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b. On 25 October, following the sixth failure of a Hamilton Standard, Engine Main Fuel Control T_{T2} Sensor (compressor inlet temperature), all articles were grounded until the problem could be resolved. As an interim solution, the sensors of the design, which have been failing will be replaced by an earlier design which are currently used as the Afterburner Fuel Control T_{T2} Sensors.

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NRO REVIEW COMPLETED

GROUP 1
Excluded from automatic
downgrading and
declassification

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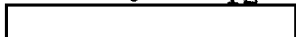
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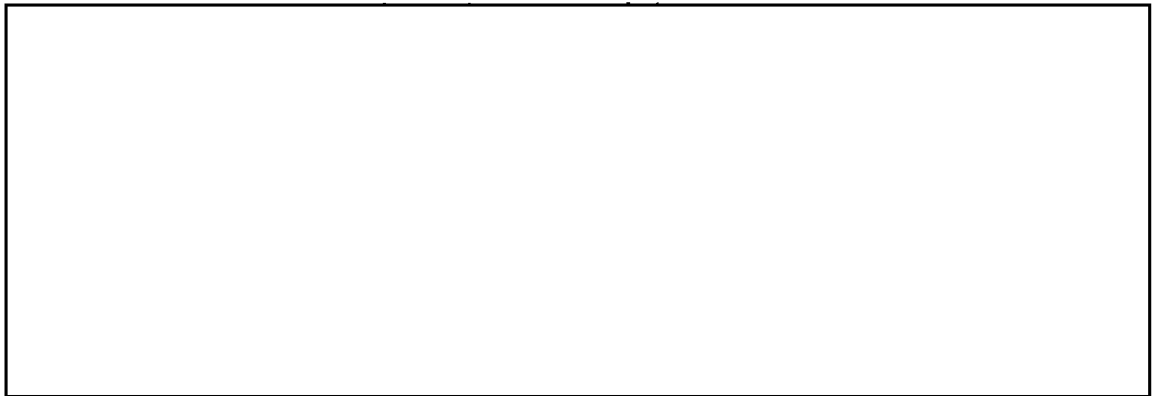
The older sensors have a more rugged design than the later models but have a slower response rate. It is expected that the Afterburner Fuel Control T_{T2} Sensor will provide adequate main fuel control with the possible exception that the pilot will have to perform more hand trimming of the exhaust gas temperature. At present fourteen spare afterburner control type sensors are available and are being installed on engines. If necessary more sensors can be obtained by borrowing from inactive afterburner controls.

c. Procurement has been initiated for two new T_{T2} Sensor designs for the main fuel control from Hamilton Standard. Sensors reflecting these changes will start being received on or about 23 November 1966. In addition, there are a total of nine YJ engines equipped with Bendix main fuel controls which utilize a different style T_{T2} sensor. Seven of these engines are now  being brought up to BLACKSHIELD configuration on an expedited basis.

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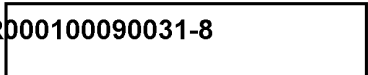
3. PAYLOAD

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c. Eleven (11) photo configuration sorties were flown during October with the following results.

<u>Type</u>	<u>No. of Flights</u>	<u>Remarks</u>
I	Six (6)	Satisfactory
II	Two (2)	Satisfactory
IV	Two (2)	Satisfactory
	One (1)	Failure - After twenty-two minutes operation, one shuffle roller malfunctioned and jammed into the film. Simple modification will prevent recurrence



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4. AIRCRAFT FLIGHT TEST SUMMARY

<u>Aircraft</u>	<u>Flights October</u>	<u>Time October</u>	<u>Total Flights</u>	<u>Total Hours</u>
121	3	7:10	249	266:13
122	-	-	157	169:39
123	-	-	78	136:10
124	14	25:00	514	907:10
125	5	9:15	194	313:15
126	-	-	104	169:16
127	3	10:55	176	300:25
128	2	4:45	158	289:55
129	6	16:00	182	229:49
130	4	10:15	144	249:48
131	2	4:35	92	147:20
132	4	8:40	125	207:42
133	-	-	9	8:17
Totals	43	96:35	2182	3394:59

B. OPERATIONAL SUMMARY AND PROGRESS

1. EMERGENCY CAPABILITY (SKYLARK):

A SKYLARK type MPX was conducted 25-26 October 1966. This was an In-House MPX between Flight Planners at Headquarters [redacted] Message exchange was limited to Mission Alert Message, Mission Plan Messages, and Camera Programming Message. Canned SKYLARK departure and withdrawal routes were used with penetration route planned to cover maximum land mass. This route will be retained [redacted] as a possible canned mission until such time as the SKYLARK A/R areas are revised.

2. CONTINGENCY PLANNING - FAR EAST [redacted]

No change.

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3. [redacted] DEPLOYMENT PLANS:

a. A revised Operations Plan 51-66 [redacted] was published and distributed on 20 October 1966.

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b. [redacted] - No change.

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4. FORWARD BASE EXERCISE:

a. The quarterly Forward Base Exercise (FBX-03) was conducted at [redacted] during the period 11 through 14 October 66. The purpose of FBX-03 was to exercise forward base facilities and perform flushing/fueling of KC-135.

b. Critique comments from all participants subsequent to exercise termination were favorable.

5. CPX PANEL:

On 25 October, a Planning Conference was convened at Project Headquarters to finalize plans for a BLACKSHIELD/CPX to be conducted from Kadena AB, Okinawa. Representatives from AFRDR, SAC Hqs., 903ARFS, [redacted] and Project Headquarters staff sections attended this conference. CPX is scheduled for the week of 14 November 1966.

6. A-12 DIVERSION [redacted]

a. On 19 October, Aircraft #125 experienced a rise in EGT followed by numerous compressor stalls requiring the pilot to shut down number two engine. The aircraft diverted to Kirtland AFB, New Mexico, and landed without incident at 1834Z.

b. Pre-packed recovery kits and support personnel were flown to Kirtland aboard the [redacted] C-130 and F-27 aircraft. [redacted] Security representative and Maintenance Supervisor arrived at Kirtland 19 October/2100Z, to monitor the secure handling and guarding of the A-12 and pilot. A Beale AFB, KC-135 tanker arrived at Kirtland with PF-1A fuel on 20 October/2200Z. The A-12 "buddied" [redacted] with the KC-135 on 22 October with an F-101 "flying chase". The flight [redacted] was completed without incident.

7. PROJECT PILOT INVENTORY:

a. [redacted] Project Pilots are currently classed as operationally ready.

b. One new pilot candidate was assigned Project Pilot duties on 28 October 66.

c. One new Project Pilot is under consideration with a scheduled contract date of 4 November 66.

8. A-12 AIRCRAFT:

[redacted] aircraft are assigned to [redacted] of [redacted] which [redacted] are assigned to the Detachment and [redacted] to the Flight Test Center. Aircraft #124 is a J-75 equipped, dual seat trainer, all other aircraft are J-58 equipped.

9. PERFORMANCE STATISTICS:

- | | |
|--|--------------|
| a. Maximum Speed | 3.29 Mach |
| 1. Art. #125, Flt. No. 105, 8 May 65 | |
| b. Maximum Take-Off-Gross Weight | 123,750 lbs. |
| 1. Art. #129, Flt. No. 105, 8 May 65 | |
| c. Maximum Altitude | 90,000 ft. |
| 1. Art. #129, Flt. No. 138, 14 Aug. 65 | |
| d. Maximum Endurance - Subsonic/Supersonic | 7:40 (4 A/R) |
| 1. Art. #127, Flt. No. 175, 18 Oct. 66 | |
| e. Maximum Endurance - Subsonic Only | 5:50 (1 A/R) |
| 1. Art. #129, Flt. No. 139, 19 Aug. 65 | |
| f. Maximum Sustained Time at/above 3.0 Mach | 1:17 |
| 1. Art. #129, Flt. No. 130, 22 July 65 | |
| g. Maximum Sustained Time at/above 3.2 Mach | 1:14 |
| 1. Art. #129, Flt. No. 130, 22 July 65 | |
| h. Maximum Cumulative time at/above 3.0 Mach | 3:50 |
| 1. Art. #130, Flt. No. 54, 12 November 65 | |
| i. Average A-12 Time - Detachment Pilots | 326 |
| j. Detachment Pilots Mach 3.2 qualified | 6 |

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II. IDEALIST

A. DEVELOPMENT SUMMARY AND PROGRESS

1. The initial U-2R Development Progress Report from Lockheed stated that work is proceeding according to schedule. A late November review of the basic structural design and mock-up engineering has been scheduled at the LAC facility for Headquarter's representatives.

B. OPERATIONAL SUMMARY AND PROGRESS

1. GENERAL SUMMARY

a. There were no Agency U-2 overflights during the month of October. Operations at the [redacted] Detachment were curtailed on 17 October due to President Johnson's Far East trip and the Manila Conference.

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b. [redacted] completed requirements on 3 October for CAT I status.

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c. [redacted] completed training at Edwards AFB on 6 October and has returned to [redacted] for local upgrading.

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d. [redacted] System 20 tests, were successfully completed on 6 October.

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e. The first two flight tests for Project [redacted] were flown during the month. The first test was a safety [redacted] which was successful. The second test provided enough fuel data to enable the planning of future tests and operational missions on the assumption that the U-2 will carry [redacted]. It also disclosed a [redacted] which has since been corrected.

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2. PRODUCT IMPROVEMENT

a. Project [redacted] flight tests were successfully performed during the month with targets covered as scheduled.

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b. The ASN-66 tests were conducted in conjunction with the [redacted] flight tests. Lockheed is preparing an ECP for procurement and installation of Doppler/ASN-66 equipment. This ECP is due in Headquarters early next month.

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c. The Air Data Computer/Tape altimeter tests were suspended due to the necessity of having to remove certain portions of the equipment to perform higher priority tests. Completion of the interrupted tests is scheduled during November.

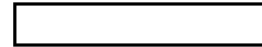
d. The "H" Camera, S/N 002, has been modified and interfaced with the autopilot to provide for a four-position scan and quick cage capability. Two tests were flown (26 and 27 October) with unsatisfactory results. The problem is with the take-up of material during caging. The caging action places a side load on the film during film transport, resulting in film jam, on the take-up spool. Corrections are being made and testing will continue on the first of November.

e. A series of successful System 12B and 13A tests were performed during the month. The System 12B used on the 4 October test had the original ATI amplifier and antenna plate with ATC blanking.

III. ISINGLASS

No change.

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MARD/COMPT/OSA:  (9 Nov 66)

Distribution:

- Cy 1, 2, 3, 4 - C/P&PS/DD/S&T
- Cy 5 - D/SA
- Cy 6 - D/O/OSA
- Cy 7 - D/R&D/OSA
- Cy 8, 9 - BPD/OSA
- Cy 10 - RB/OSA

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