1. TECHNICAL

1.1 TECH PUBS DEVELOPS AUTOMATED ILLUSTRATION METHOD

The F-111 Technical Publications department (182) has developed a new method of drawing schematic and electrical wiring diagrams through the use of the numerically controlled drafting machine.

Conventional drawing preparation methods usually require a pencil layout, an ink tracing to increase contrast, and pasting up of nomenclature. The new method, however, does away with these steps, and instead produces an ink equivalent, nomenclature included, with no hand effort.

In the preparation of an automated drawing, a writer or illustrator, working from various source data, prepares an input sheet that describes the desired drawing in terms of code letters and x, y, coordinates. Then the input sheet is submitted to the computer lab for processing. A punched paper tape is produced which is used by the numerically controlled drafting machine to produce the drawing.

At present, drawings are being prepared by the new method in about one third the manhours formerly required to prepare drawings of similar complexity by conventional methods. With normal learning curve advances and refinements of symbol storage/recall techniques, further reductions can be realized.

This publication is for informational purposes only and is not to be construed as authority for making changes on aircraft or equipment, or as superseding any established operational or maintenance procedures or policies.
This technique, which produces drawings conforming to all applicable specifications, will be expanded to encompass more work as the limits of existing machine capability increases.

1.2 IMPROVED ENGINE FOR NAVY BIRD

During the week of 10-14 October 1966, direction was received from the F-111 System Project Office to install TF30-P-12 engines on F-111B aircraft Nos. 6 and subsequent.

Among the improvements expected to be offered by the TF30-P-12 are a better single engine rate of climb and better acceleration characteristics at supersonic speeds.

1.3 LOGISTIC SUPPORT PLANNING CONFERENCE

On 10-13 October 1966, System Support Manager personnel from the Sacramento Air Materiel Area, representatives from the Oklahoma City Air Materiel Area, F-111 System Project Office, and Fort Worth Division met to review the overall depot Logistics Support posture on the following F-111 Systems:

Central Air Data Computer
Flight Controls
Maximum Safe Mach Assembly
Feel and Trim Assembly

Also in attendance were representatives from the Navy Programs Office of the AFPRO, Eclipse-Pioneer, Division of Bendix Corporation, General Electric (Johnson City), Overhaul and Repair Naval Air Station, Norva, Virginia, and NASC.

During the conference, problem areas were defined and action agencies assigned to resolve these problems. In addition, Status Reports required by OCAMA were requested. Upon receipt of this information, OCAMA will update the Depot Logistic Support Plan for each system. (Ref. AFLCM 375-1, chapter 27).
1.4 TIME COMPLIANCE TECHNICAL ORDER

URGENT ACTION
TCTO 1F-111A-620
30 SEPTEMBER 1966

INSPECTION OF 12C966
FLIGHT CONTROL TUBE
ASSEMBLIES F-111A
AIRCRAFT

Provides instructions for assuring proper contact between boltheads and control tube clevises.

Effective on F-111A aircraft Nos. 1 and 5 through 10.

Work is to be accomplished immediately.

Contractor will accomplish the intent of this TCTO on F-111A aircraft No. 11 and on.

2. GENERAL

2.1 FACTS AND FIGURES

2.1.1 FLIGHT SUMMARIES

For two weeks ending 23 October 1966:

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<thead>
<tr>
<th></th>
<th>Total Flts</th>
<th>Total Hrs</th>
<th>S/S Flts</th>
<th>S/S Hrs</th>
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<tr>
<td>F-111A</td>
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<td>95.5</td>
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<td>3.3</td>
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<tr>
<td>F-111B</td>
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<td>14.6</td>
<td>1</td>
<td>0.2</td>
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<tr>
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Cumulative through 23 October 1966:

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<th>Total Hrs</th>
<th>S/S Flts</th>
<th>S/S Hrs</th>
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</thead>
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<tr>
<td>F-111A</td>
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<td>1608.2</td>
<td>346</td>
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<td>F-111B</td>
<td>138</td>
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<td>Grand Total:</td>
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<td>1804.4</td>
<td>386</td>
<td>70.9</td>
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</table>
2.1.2 AIRCRAFT LOCATIONS

Edwards AFB: TAC 1, 6, 8, and 9
Eglin AFB: TAC 5 and 7
Hughes: NAVY 3
Howard AFB, Canal Zone: TAC 10
Grumman: NAVY 1, 2, 4, and 5
Fort Worth: TAC 2, 3, 4, 12, 14, 15, and 16
11 (Held for Recon DT&E)
13 (Previously Held for Ground Airloads Tests; now in Primary)

2.2 MTU DEMONSTRATION SUCCESSFUL

On 17-19 October 1966, the Surface Control System Trainer (T10) and the Utility Hydraulic System Trainer (T11) were demonstrated successfully to the Air Force. Following their First Article Configuration Inspection (FACI), these trainers will be delivered to Cannon AFB, New Mexico, for F-111A-1 MTU.

2.3 F-111 MODEL/CEI/TV CROSS REFERENCE

The following cross reference and explanation showing the relationship between the model designation, contract end item number, and the type/version is published as a service to its readers by the 111 LOG:

<table>
<thead>
<tr>
<th>MODEL</th>
<th>CEI NO.</th>
<th>T/V</th>
<th>USING ACT.</th>
<th>T/V SEQ.</th>
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<tbody>
<tr>
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<td>A11000</td>
<td>A1</td>
<td>RDT&amp;E</td>
<td>1-10, 12-17</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>RF-111A*</td>
<td>11</td>
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<tr>
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<td>FB-111A*</td>
<td>18</td>
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<td></td>
<td></td>
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<td>R&amp;M Demonstration</td>
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<td></td>
<td></td>
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<td>TAC 1st Wing</td>
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</table>

*Prototype
Cross Reference (Cont'd)

<table>
<thead>
<tr>
<th>MODEL</th>
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<th>USING ACT.</th>
<th>T/V SEQ.</th>
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<td>F-111C</td>
<td>J11000</td>
<td>D1</td>
<td>RAAF</td>
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<td>F-111D</td>
<td>G11000</td>
<td></td>
<td>TAC 2nd Wing</td>
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<tr>
<td>F-111E</td>
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<td>RAF</td>
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<td>RF-111A</td>
<td>D11000</td>
<td>A5</td>
<td>TAC</td>
<td></td>
</tr>
<tr>
<td>RF-111B</td>
<td>E11000</td>
<td></td>
<td>Navy</td>
<td></td>
</tr>
</tbody>
</table>

Contract End Item Number:

A permanent number assigned to identify a contract end item. The number is a common identification for all units in a CEI mission-design-series and serves as a permanent address for all actions and documentation applicable to the type-model-series.

Type/Version:

A code, for contractor use only, used on List of Materials, Engineering Change Notices, Aerospace Change Analyses, etc., to designate the airplane model. The two position code is necessary due to electronic data processing space requirements.

NOTE: The omissions in Columns CEI NO., T/V, and MFG. SEQ. of the Cross Reference, are due to the fact that these numbers have not yet been assigned.
3.1 F-111 FLIGHT TEST PROGRAM HIGHLIGHTS

SUPersonic FLIGHTS:
To date of 23 October 1966: 386.
Of this number, 101 at Mach 2.0 or above.

TAC 10 LOGS SECOND LONGEST FLIGHT:
On 8 October 1966, TAC 10 made the second longest flight of the F-111 Flight Test Program. The flight, which took five hours and twenty minutes, was the ferry mission to Howard AFB, Canal Zone from Wright-Patterson AFB, Ohio.

The flight, the longest flight for TAC 10, was assisted by a mid-air refuel operation, during which eight thousand pounds were transferred.

MACH 2 MILESTONE
On 22 October, TAC 16 chalked up the one hundredth flight at Mach 2.0 or above for the F-111 Flight Test Program.

This flight was doubly significant in that it was not only the first Mach 2.0 flight for TAC 16, but the initial shakedown flight for the aircraft.

3.2 GENERAL DYNAMICS REPRESENTED AT PENSACOLA FAIR

On 17-23 October, the General Dynamics force at Eglin AFB participated, by invitation, in the Interstate Fair (Florida-Alabama-Mississippi) at Pensacola, Florida. A quarter scale static display of the F-111A was the keystone of the Armed Forces exhibits.

3.3 F-111 MOVIES GET FAVORABLE REVIEW

On 7 October 1966, Mr. F. Novek, an independent movie producer, was at Edwards AFB to review F-111 movies which he has been commissioned to update.

Mr. Novek reviewed the films at the Test Center photo lab, got the necessary ideas for his script, and will return within the next month to select film copies. He was of the opinion that the movies (both in-flight and on the ground) taken at Edwards were about the best that he had seen.