

Memorandum

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STATOTHR

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STATOTHR

Memo No: 1040

TO: Contracting Officer

FROM: [Redacted] Project Engineer, E80 STATOTHR

SUBJECT: Bi Monthly Progress Report, Contract [Redacted]

DATE: 30 December 1963

3383

A. General

The progress report is separated into several sections, the first of which is a percentage summary of the schedule. This is followed by a statement on the progress and remarks on work completed, work in process and planned work effort. Finally a table showing each task and the percentage complete is supplied.

B. Schedule

	<u>Major Project Tasks</u>	<u>Percent Complete</u>	<u>Percent Required By Project Schedule</u>
I	System Engineering	75%	100%
II	Subsystem Design	50%	50%
III	Construction and/or Purchasing and Assembly	10%	10%
IV	Testing and Debugging	0%	0%
V	Final Inspection	0%	0%

As indicated in the project completion percentages, the project is progressing according to schedule with the exception of two tasks identified in the listing in Table 1. It is expected that these will be completed in January.

C. Summary of Progress

1. General

The major effort has been directed toward specifying the components having long delivery times; such as motors, large machined parts, special heat sinks, instrumentation, etc.

2. Coordinatograph

The coordinatograph structure has been designed, detailed and released for manufacture. Since the delivery time for this assembly is approximately 16 weeks, it is planned to prepare a test rig to check the power controls. The drive motors and some of the test apparatus will be used in the final assembly as well. The motors have been ordered and the delivery of one is expected by January 20. In the operation of this test apparatus, cold air from outside the building will be used for extracting heat from the motors and control console. Measurements will be made on air temperature and volume required to confirm predictions.

3. Power Control

The motor power control circuitry except for the power supply portion, has been designed and some of the parts have already been received. All the copper heat sinks and the frames that hold them have arrived.

4. Electronic Control

The data handling logic has been nearly completed; the computer interface amplifiers are being designed. More communication with the [REDACTED] engineers will be necessary to determine the best way to terminate the 75 foot long computer lines supplied to the plotter room.

5. Meeting

A meeting was held at the installation, December 10, 1963, to discuss the air cooling and vacuum system requirements. It was decided that the existing cool air supply in the building was insufficient and that an auxiliary conditioner would be installed to produce about 600 cfm of 42°F air. A separate vacuum system to supply about 80 cfm at 1 psi vacuum would also be installed.

D. Planned Work Effort

As the components arrive, the plan is to incorporate them into a test program that will prepare sub-systems for immediate assembly into the final system without loss of time.

The general schedule is as follows

January

1. Complete specifications on power supply and computer interface.
2. Complete cabinetry design
3. Complete writing head design
4. Specify temperature sensing system

February

1. Assemble servo test apparatus
2. Wire electronic racks
3. Begin testing electronic racks

March

1. Test servo apparatus
2. Test cooling systems.
3. Test electronic racks

April

1. Assemble and wire coordinatograph
2. System test

E. Detailed Progress Report

Detailed estimates of progress on all project tasks are listed in Table 1. The following is an explanation of the progress approximations listed.

- 0% Tasks not started
- 10% Tasks started but not 25% accomplished
- 25% Tasks over 25% accomplished but less than 50% accomplished
- 50% Tasks over 50% accomplished but less than 75% accomplished
- 75% Tasks over 75% accomplished but less than 100% accomplished
- 100% Tasks completed

TABLE I

<u>Progress Report on Project Tasks</u>	
<u>Project Tasks</u>	<u>Labor Effort Percent Complete</u>
<u>1. System Engineering - Develop Subassembly Specifications</u>	
<u>A. Coordinatograph</u>	
1. Structure	100
2. Drive System	75
3. Human Engineering	100
4. Paper Feed Subsystem	100
5. Writing Head	100
<u>B. Electronics Control</u>	75

Progress Report on Project Tasks

Project Tasks	Labor Effort Percent Complete
II. <u>Subsystem Design</u>	
A. <u>Coordinatograph</u>	
1. Structure	
a. Support and Table	100
b. Gantry and Carriage	100
c. Vacuum Platen	100
2. Drive System	
a. Power Control	100
b. Power Supply	50
c. Test Apparatus	100
d. Heat Load Calculations	100
3. Human Engineering	
a. Manual Controls	50
b. Cabinetry	50
4. Paper Feed Subsystem	50
5. Writing Head	75
B. <u>Electronic Control</u>	
1. Detailed Logic	75
2. Special Circuit Design	50
3. Rack and Cable Allotment	10
4. Axis Instrumentation	100
5. Heat Load Calculation	100

Project Tasks	Labor Effort Percent Complete
<u>III. Construction and/or Purchasing and Assembly</u>	
<u>A. Coordinatograph</u>	
1. Structure	
a. Support and Table	10
b. Gantry and Carriage	10
c. Vacuum Platen	10
2. Drive System	
a. Power Control	10
b. Power Supply	0
c. Servo System Test Apparatus	0
d. Temperature Sensors	0
3. Human Engineering	
a. Manual Controls	50
b. Cabinetry	0
4. Paper Feed Subsystem	0
5. Writing Head	0
<u>B. Electronic Control</u>	
1. Standard Logic Board Fabrication	25
2. Special Logic Board Fabrication	0
3. Intra-rack Wiring	0
4. Inter Rack Wiring	0
5. Axis Instrumentation	75

Progress Report on Project Tasks

Project Tasks	Labor Effort Percent Complete
IV. <u>Testing and Debugging</u>	
A. <u>Coordinatograph</u>	
1. Structure	
a. Support and Table	0
b. Gantry and Carriage	0
c. Vacuum Platen	0
2. Drive System	
a. Power Control	0
b. Power Supply	0
c. Test Apparatus	0
d. Cooling System	0
3. Human Engineering	
a. Manual Controls	0
b. Cabinetry	0
4. Paper Feed Subsystem	
5. Writing Head	
0	
B. <u>Electronic Control</u>	
1. Logic Circuits	
0	
2. Axis Instrumentation	
0	