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SPECIFICATIONS FOR RAPID INTERPRETATION PRINTER-PROCESSOR

1. General

1.1 This specification covers the requirements for a Rapid Interpretation Printer Processor.

1.2 Printer-Processors are to be identical to the unit delivered under [redacted] except for modifications listed in this specification.

25X1

2. Items Required

2.1 The following items are desired by the Government:

2.1.1 Printer-Processor delivered under [redacted] to be modified according to the specifications listed herein.

25X1  
25X1

2.1.2 Five Printer-Processors to be fabricated according to the specifications listed herein.

2.1.3 If fuses are used, one extra fuse of each type to be provided for each Printer-Processor.

2.1.4 One full tank of ammonia and one full chamber of unused desiccant to be provided with each Printer-Processor.

2.1.5 Ten copies, Operations Instruction Manual.

2.1.6 Ten copies, Maintenance Manual.

3. Government Furnished Equipment

3.1 One Printer-Processor delivered under [redacted] will be supplied for modification.

25X1  
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3.2 Five Richards GFL-940 MCE Light Tables.

4. Printer-Processor Modifications

4.1 The following modifications apply to all six Printer-Processors to be supplied. However, the previously furnished processor will be modified, tested and accepted by the Government before the contractor begins fabrication of additional units.

4.1.1 A resettable elapsed time-recording meter to record running time of the processor.

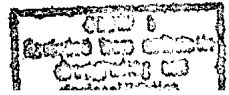
4.1.2 An improved ammonia flow control to provide reliable ammonia regulation. All gauges positioned to permit front viewing.

*As per memo in file  
1. These specs are acceptable*

*3. Your unit will be refurbished & then spec'd at no increase in contract price*

*2. We will provide 1 unit*

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- 4.1.3 An improved water control system to provide positive control of the water level within the processing chamber. An indicator alerting the operator when the water level is below an acceptable minimum and in a circuit with an automatic valve to simultaneously turn off the ammonia.
- 4.1.4 An indicator alerting the operator when the desiccant has expended between 70 to 90 percent of its ability to remove ammonia from the plenum chamber gases.

5. Test of Pre-Production Model

- 5.1 After completing modifications to the first Printer-Processor, but before beginning fabrication of the additional five, the following acceptance test will be performed. In order to conserve time, the test will be of a limited duration. The acceptance of the first unit on the basis of this limited test does not relieve the contractor of any liability in meeting the more complete test specifications of the additional five units. The fact that the additional five units may be constructed identically to the first accepted one does not in itself constitute acceptance.
- 5.1.1 The test will be performed at the contractor's facilities, using his personnel. At the Government's discretion, the Contracting Officer's representative may be present during all or a portion of the test.
- 5.1.2 The equipment must run for ninety-six continuous hours without failure of any component. If failure occurs before this period, it may be repaired at the discretion of the Contracting Officer's representative and the test begun again or the representative may direct that further equipment modifications be made to rectify the cause of failure.
- 5.1.3 During each twenty-four hour period of the test, at least fifty sheets of Diazo material must be run through the processor. To conserve material, the same sheet can be run fifty times.
- 5.1.4 During each twenty-four hour period of the test, 0.12 inch thick material must be run through the processor at least ten times. To conserve material, the same sheet can be run ten times.
- 5.1.5 The minimum water level indicator light and automatic shut off must be demonstrated satisfactorily at least four times.
- 5.1.6 The visual desiccant indicator must show color change at least once during test.

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- 5.1.7 Motor power readings are to be made while processor is running normal thickness Diazo material. These power readings must be within the ratings of the motor.
- 5.1.8 At the completion of the test all parts are to be free from appreciable wear or deformation.

## 6. Production Model Modification

- 6.1 The five production Printer-Processors will incorporate those modifications previously listed in Section 4, as well as the following:
  - 6.1.1 A miniature light source in the printer light box to provide sufficient illumination for aligning the area to be copied with the copy material.
  - 6.1.2 An exposure indicator lamp to indicate when an exposure is being made.
  - 6.1.3 Storage container for the material located in a vertical position on the left-hand side of the control panel.
  - 6.1.4 All labels epoxy silk-screened.
  - 6.1.5 Entrance port to the processor tapered and widened to permit easier insertion of the exposed material.
  - 6.1.6 A resettable counter to indicate the number of exposures made.
  - 6.1.7 A pressure gauge to display the pressure in the ammonia storage tank.
  - 6.1.8 Location of the film notch for proper exposure on the glass exposure surface.
  - 6.1.9 Improved drive mechanism within the processing chamber.
  - 6.1.10 Reduced processor warm-up time and power requirements.
  - 6.1.11 Forced ammonia agitation within the processing chamber.
  - 6.1.12 All low pressure tubes and fittings containing ammonia must withstand at least 10 psig pressure without leakage.

## 7. Test of Five Production Models

- 7.1 After delivery, the Government will test each unit before final acceptance.

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- 7.2 The time-recording meter on each unit must be accurate to within +5% as measured during any twenty-four hour period. For the purposes of this test each unit's time meter will be used to measure the length of time each unit is in operation.
- 7.3 Each unit must operate a minimum of 200 hours before needing maintenance. If a unit fails or needs repeated adjustment, before the 200 hour period, its time of failure will be recorded and repairs will be made by the contractor. The unit will be started again and will attempt to operate 200 hours as measured from the time of the last repair. If, at the end of the 90 day period after receipt of equipment, any unit has not run for 200 hours or longer before needing maintenance, it will not be accepted by the Government. If the minimum at that time is less than 200 hours, an additional 90 day test period may be run at the discretion of the Government.
- 7.4 The five units must operate for an average of at least 400 hours before needing maintenance. This average will be taken 90 days after receipt of equipment. If the average at that time is less than 400 hours, an additional 90 day test period may be run at the discretion of the Government.
- 7.5 With each unit placed in a room of at least 2000 cubic feet, in which the air is completely replaced every 10 minutes, it must not cause a concentration of ammonia greater than 100 parts per million to exist during normal operation.
- 7.6 The minimum water level indicator light and automatic shut-off must be demonstrated satisfactorily at least four times.
- 7.7 The visual desiccant indicator must show color change at least once during test.
- 7.8 In all respects, each unit must perform at least as well as the unit delivered under previous contract. The resultant prints must be of at least the same quality as those produced from the previously delivered unit.
- 7.9 At the discretion of the Government, failures of light bulbs, fuses, and similar components, where used within the specified ratings of the components, need not be considered as a failure for purposes of the acceptance test. A continuing failure of replaced components will be considered to be the fault of the unit's construction.

8. Maintenance

- 8.1 The contractor must provide 90 day period of free maintenance for each unit (commencing on the date each unit is accepted by the Government). The contractor must pay for wages, parts, travel and all other expenses. The contractor must provide

such service within forty-eight hours after receipt of a verbal request by the Government.

- 8.2 The contractor must provide an additional nine month period of Government reimbursed maintenance for each unit (commencing on the date the maintenance period described in 8.1 is completed). The Government will bear all expenses for this service. The contractor must provide such service within ninety-six hours after receipt of a verbal request.
9. Delivery to commence within fifteen weeks after receipt of five GFE Richards GFL 940 MCE Light Tables and acceptance of first modified unit.