Internal Memo

To: Wendell Shultz Date:

18 May 1977

From:

Ron Rider

Location:

Palo Alto

Subject: Progress, Image Processing

Organization:

SDD/SD/IP

XEROX

This month the Dipole/9200 portion of the Durango project became operational. It is meeting or exceeding all expectations. The controller modification allows complete control of the 9200 including random access to each sorter bin and both paper trays. The 9200 is still fully functional as a duplicator and can be maintained by 9200 field service personnel. The transition from duplicator to Dipole mode is under control on the computer. A mode change requires eight seconds. The ROS 9-wire interface is also performing exceedingly well. The Dipole/9200 is currently cabled to an Alto/Orbit via this interface. The Alto/Orbit can drive the Dipole/9200 at 300 lines/inch. This progress report



is printed using Alto/Orbit/Dipole/9200. Notice that the halftoned insert is reasonably good considering it is screened at 50 lines/inch. A number of experiments are now being performed including the incorporation of a grating bit clock. The new clock should greatly improve screened pictures at higher resolutions such as 500 lines/inch.

The next Durango related project is the image generation unit. This image generator will use the Orbit concept and be interfaced to a D0 processor. It will have about five to six times the performance of Alto/Orbit and will incorporate an integral data decompressor for full imaginal capabilities. new image generator should be ready for test as soon as a DO is available.

The printing software that is generalized for use on Durango, Sequoia, and Dover is progressing well. The initial part of the software package which parses a Press file, sorts the entities, and generates a band list for Orbit-like devices is now running on a test file. An Orbit simulator is currently in progress. It is believed that a simple Press file (e.g. from Bravo or Sil) will be printable on Durango, Sequoia, and Dover within two months. Following this milestone, the software will be augmented to handle arbitrary Press files. Finally complete spooler services will be provided.

The Sequoia project is proceeding very well. The laser noise problems seem to be solved and initial copy quality is excellent. Laser life is still an unknown. This could be an annoying problem but is not a show stopper. Final integration of the ROS adapter and Sequoia is in progress. The first Seguoia is expected in Palo Alto about June 1.

Copies to: Irby, Lynch, Stottlemyre, Wallace, Metcalfe, Simonyi, Szelong