# **Certificate of Volatility Request**

Manufacturer: \_\_\_\_\_XEROX CORPORATION\_\_\_\_

Equipment Name: \_\_\_\_Phaser\_\_\_

Model:\_\_\_\_\_7700\_\_\_\_\_

Configuration: This item is connected to: standalone\_\_\_\_\_; networked X\_\_\_\_ with operating system Win2000, Win 2003, UNIX

General description: This device will be connected to a Network.

Purpose: Color Printer

Type of memory:

**Volatile memory**: What is the amount? What period of time does the unit need to be powered off to completely erase this memory?

DRAM : DN model (128 Mbytes), DX Model (256 Mbytes), GX (256 Mbytes) for buffers, printing\*

1 second is sufficient to clear this memory

#### Non-Volatile Memory:

1. **Type:** What type(s) of non-volatile memory are included, EPROM, EEPROM, Flash memory, NVRAM, and battery backed, etc.(fill in)

Hard Disk: 10GB for secure print, saved jobs, driver / documentation installation, print job collation, holding embedded printer code EEPROM: 16 Kbytes for network, user parameters\*\* EEPROM: 32 Kbytes for engine code\*\* Flash / ROM: 4MB for holding controller boot code

Note:

Flash / ROM is used for Firmware code and contains no user data..

- \* DRAM memory can be upgraded to 1024MB for all models
- \*\* These EEPROM contains user network data and printer operational parameters. It does not contain user print data.

## Certificate of Volatility, continued

- 2. Accessibility: Is it accessible by accidental/intentional keystroke, or software malfunction? Yes
- 3. If "YES, it **is** accessible,
  - Describe location and purpose. *Hard Drive: for secure print, saved jobs, driver / documentation installation, print job collation, holding system code (printer code can be upgraded) Flash / ROM: Boot code can be upgraded EEPROM: Service can adjust system parameters*

Purpose: typical uses for non-volatile memory location are system identification number and system configuration, boot, and initialization parameters, for example (battery-backed NVRAM on SUNs); put in for future design needs, internal depot repair, clock circuit, "nice" to have, or to flag unauthorized software, etc.

If "NO", it is not accessible, \_\_\_\_\_. (Check here).

4. *Required memory:* Is device needed for normal operation, i.e. required for this processing period?

### Yes

5. *Removal consequences:* If device memory chip is erased, what impact will this have on operation and normal function of device?

Example: If the SUN is turned on without this means of checking for the authorized configuration, the system will not boot and therefore the data cannot be processed per the standard Practice Procedure (SPP).

*Removal of device non-volatile memory will disable system. System code, data (time, date, operating modes etc), are required for proper operation.* 

### Certificate of Volatility, continued

6. *Method of access:* How is it accessed? Is non-volatile memory location theoretically accessible with any system code, not just via the operating system or low level booting firmware?

Remember: Modifying internal programming to access is not the same thing as unknowingly accessing from an accidental keyboard stroke.

Memory is accessed in maintenance mode, and is not accessible through accidental keystroke. However, systems settings may be set, reset, or cleared to default from the user interface or CentreWare IS embedded web server utility. Updated system code may be downloaded to the hard drive sent as a specially configured print job.

7. *Warranty:* Does chip removal or EEPROM erasure void the warranty?

Not if instructed to by service

8. *Size:* How much memory is contained? Number of bytes, etc.

See Volatile and Non-Volatile memory items on page 1 of this document.

9. *Spacing:* Is the memory fully utilized or does it have available memory space for additional information to be placed?

*The Hard Drive is intended to have available memory for normal functionality* (for secure print, saved jobs, print job collation).

# Certificate of Volatility, continued

10. Can this non-volatile memory be addressed to ensure that only authorized information is resident? If yes, how?

#### No

Note: Terms like clearing, purging, and overwriting are explained in NCSC-TG-025 Version-2 "A Guide to Understanding Data Remanence in Automated Information Systems", dated September 1991. Direct any questions to the employee requesting this information. Further guidance is in Chapter 8, tables 1 & 2 in the NISPOMSUP

Evaluation and summary of this equipment was completed by the following:

(On File) (Signature)

\_<u>Greg Marshall</u>\_\_\_\_(Printed name)

\_Senior Hardware Engr\_\_\_\_ (Title)

\_Controller Hardware Lead\_\_\_\_ (Job function)