BUYERS LABORATORY INC.

RECOMMENDED

20 · **TESTED** · **01**

Test period duration:
Three months, including
a 300,000-impression durability test

Manufacturer:
 Sharp Electronics Corporation
 Mahwah, NJ
 Made in Japan

Serial Number: 06600273

Suggested retail price: $14,900; $24,575 as tested with the optional AR-FN3 three-bin finisher ($3,350), AR-LC1N 3,000-sheet large-capacity tray ($1,255), stand with AR-DE7 500-sheet drawer ($1,210), network scanner expansion kit ($1,295), embedded Sharp AR-PB2A print controller with network interface card ($2,495) and two 32-MB memory upgrades at an estimated price of ($35) each.

Type: Console, stationary flatbed CCD digital scanner, laser printing, dual-component developing system, heat-and-pressure fusing multifunctional device with standard copying and both optional network print and scan with OCR capabilities (network scanning possible with the optional AR-PB2A controller and Network Scanner Option Kit).

Manufacturer's recommended monthly volume: Up to 200,000 impressions.

BLI's recommended monthly volume for optimum performance: 15,000 to 125,000 impressions.

GENERAL APPRAISAL

The Sharp AR-507 IMAGER, as tested with its optional embedded AR-PB2A print controller and optional Network Scan Expansion Kit, gave a good overall performance during its three-month BLI evaluation. This 50-ppm Segment 4 multifunctional unit required just one service call in addition to two preventive maintenance calls throughout the 300,000-impression test, translating to a Mean Impressions Between Service rate of 100,000 impressions. Four misfeeds were also logged for a misfeed rate of one per 75,000 impressions.

BLI's evaluation also revealed a number of other positive attributes of the Sharp AR-507 IMAGER. The unit, which scans originals at up to 600 dpi and prints at 600 x 600 dpi, produced output that earned BLI's
continued

General Appraisal *continued*

highest image quality rating for text, line art, halftones and solids in both print and copy modes and it offers efficiency rates that are competitive in all copy modes. Particularly noteworthy is that in print mode, its first-page-out time of 9.08 seconds is among the quickest for units tested to date in this segment. In fact, the AR-507 IMAGER is one of only five units tested to date with a first-print-out time of under 10 seconds.

The Sharp AR-507 IMAGER was also easy to use both from the well-designed control panel, which incorporates a "Help" key, and via the well-laid-out print drivers. Moreover, overall ease of use is enhanced by very good feedback regarding device status. Users can receive pop-up or sound messages to notify them of conditions such as off-line, paper jam, toner low, toner empty, paper empty, cover open, printer error and paper low or can check device status using either the administrative or status monitor utilities bundled with the system or the Web page. Other than a listing of secure print jobs, however, status information regarding print jobs is not available to users.

Also contributing to ease of use are good documentation as well as easy procedures overall for removing misfeeds and loading paper.

Connectivity

The test unit was connected to BLI's test network via the optional embedded AR-PB2A print controller, which includes a 10/100BaseT network interface card and PostScript 2 and PCL 5e and PCL 6 drivers for Windows 95/98 and NT 4.0. Secure printing and RIP while print are supported and extensive device status information is available either via pop-up or audible alerts or by checking the Printer Status Monitor or Printer Administration Utility, which provides a graphical representation of the Sharp AR-507 IMAGER. Management Access Program (MAP), which is launched through a Web browser and displays HTTP links to all available Sharp printers with an AR-PB2A controller, allows network administrators to access all basic network settings and to organize access to multiple devices. Remote E-mail Diagnostics (RED) is designed to generate e-mail messages detailing the machine's condition on a scheduled or event-driven basis to an administrator or key operator. RED is accessed through the IMAGER Web page, which can also be used for scanning setup, checking device status and verifying network configuration. Also noteworthy is that an EFI-developed print controller, the Sharp AR-LXII, is available for the Sharp AR-507 IMAGER (see test report on page 2727).

The optional scan function of the Sharp AR-507 IMAGER, enabled by the Network Scan Expansion Kit, also performed well in the tests. The software package includes Sharpdesk for both document management and OCR capability as well as Composer for image editing and manipulation. The scan package is very intuitive, allowing PC users the convenience of creating and defining personal destinations that upload to the AR-507 as control panel choices. Users are also able to scan to e-mail addresses and FTP sites.

Other Strengths

In addition to its basic offering of features for a unit in this range, the Sharp AR-507 IM-

continued

General Appraisal *continued*

AGER offers a few features and options that are not always offered, including 1) the above-mentioned scanning option (requires the AR-PB2A print controller) and another scan option that was not tested; 2) an optional tandem copy kit (when configured with the AR-PB2A print controller); 3) an optional security feature (hard disk erase) that automatically erases copy and print jobs from the hard drive following completion; 4) an intelligent 50-sheet stack-feed bypass; 5) the ability of the key operator to disable the document feeder, duplex tray and/or optional output device to keep the unit operational while waiting for service; 6) editing modes that are programmable in inches rather than the metric measures used on some competitive models; 7) detailed copy usage and costing data for up to 500 accounts that can be printed directly from the AR-507 IMAGER; 8) auto centering, image overlay, negative/positive reversal and image repeat.

Shortcomings

When compared to other units in this speed range, the Sharp AR-507 IMAGER, as tested with the AR-PB2A print controller, has the following shortcomings: 1) Unlike most other devices in its class tested to date, the Sharp AR-507 IMAGER does not allow users to reserve a copy job while another copy job is in progress and consequently, its multitasking capability is limited. Walk-up users can, however, preprogram a single fully featured copy job before pausing printing to initiate the job (many competitive units limit access to features when interrupting print jobs). Moreover, scanning cannot be initiated when the device is busy with copy or print jobs. 2) The print control-ler spooled and printed one print job at a time, whereas other tested controllers spool multiple print jobs to the devices to reduce network traffic. 3) The Sharp AR-507's print efficiency rates, as tested with the AR-PB2A controller, are well below average. Note that when configured with Sharp's Fiery LXII controller (see test report on page 2727), the Sharp AR-507 offered superior printing efficiency in BLI's tests. 4) The Sharp AR-507 IMAGER's standard paper capacity of 1,000 sheets, plus a 50-sheet bypass, is an average of nearly 3,000 sheets less than that of most models in this speed range tested to date. 5) The PM interval for this unit is shorter than average. In fact, only five of the 34 currently available models in this range have preventive maintenance intervals of less than 150,000 impressions as the AR-507 IMAGER does. Moreover, the unit's photoconductor yield is below average for units in this speed range and its tested toner yield is below average for tested Segment 4 units. 6) Ease of adjusting paper drawers and ease of replacing toner received "Fair" ratings. 7) Unlike with most other Segment 4 multifunctional models tested, an administrator has no control over print jobs such as being able to delete them, change their order in the queue or track them via a log, nor can users check the status of print jobs. 8) The Sharp AR-507 IMAGER lacks some features that are typically offered by units in this range, including image rotate and a choice of languages for the control panel. 9) Although ease of removing misfeeds in the main unit is rated "good," access to misfed sheets in the optional finisher tested by BLI is limited. Moreover, the unit's optional finisher does not offer hole-punching or saddle-stitching, two increasingly com-

General Appraisal *continued*

mon capabilities for multifunctional units in this range. Note, though, that Sharp's more recent products, including the AR-M350, AR-M450 and AR-650, do offer these capabilities. 10) Unlike most other units in this range that feed originals at a rate that matches output speed, the Sharp AR-507's standard RADF feeds originals at 47 originals per minute.

Pricing Analysis And Summary

BLI's retail price analysis revealed that the Sharp AR-507 IMAGER is priced competitively with the average for comparably equipped units in this speed range (note that BLI compensated for the AR-507's low standard paper capacity by adding in the cost of optional paper sources). Offering reliability, quality output and versatility, the Sharp AR-507 IMAGER with the AR-PB2A controller is recommended by BLI for offices in need of a multifunctional product for monthly volumes ranging from 15,000 to125,000 impressions.

Guarantee/Warranty: The Sharp AR-507 IMAGER w/Sharp AR-PB2A controller is backed by a 90-day warranty.

Copy Quality:
  Text: .... Good
  Line art: .... Good
  Halftones: .... Good
  Solids: .... Good

Print Quality:
  Text: .... Good
  Line art: .... Good
  Halftones: .... Good
  Solids: .... Good

Ease of use: .... Good

Ease of maintenance: .... Good.

Estimated waste: .... Low

Estimated downtime: .... Low

Misfeeds: 4

Misfeed rate: .... One per 75,000 impressions

Total service calls: 3
  (including PMs)

MIBF: .... Not applicable

MIBS: 100,000
Toner yield: .... 26,680 impressions
  (at 6% coverage)

FEATURES

Automatic selection features: Automatic exposure control; automatic paper selection; automatic reduction/ enlargement selection; automatic original detection; auto tray switching; auto power shut-off (can be set by the key operator for up to four hours in one-minute increments; default setting, 90 minutes); auto energy-save mode.

Book copy: Yes (referred to as "dual-page copy" by Sharp).

Bypass: Standard "intelligent" 50-sheet stack-feed bypass. See "Performance Of Tested Special Features."

Control codes: Up to 500 five-digit "copy management" accounts for tracking and/or restricting copy usage. Copy totals for each user/department can be printed from the AR-507's control panel. The AR-507 IMAGER utilizes separate electronic meters, which cannot be reset, for tracking each copy function (copies/duplex/document feeder/stapler); data can be monitored or printed from the control panel.

Document feeder: Standard 50-sheet reversing automatic

FEATURES *continued*

document feeder (RADF). See "Performance Of Tested Special Features."

Duplexing: Standard trayless duplex unit. See "Performance Of Tested Special Features."

Energy-save mode: Reduces power consumption after a default 15 minutes of non-use (user-adjustable from one to 240 minutes in one-minute increments).

Exposure controls: Automatic exposure; manual exposure (keys are used to manually control the density over a range of nine settings); text, text/photo and photo modes.

Fax features: Not applicable.

Image manipulation features: Margin shift (user-adjustable from 0 to 1" in 1/8" increments for one or both sides of copies, either right, left, up or down; default setting, 1/2"); edge erase (user-adjustable from 0 to 1" in 1/8" increments; default setting, 1/2"); image combination (2-in-1, 4-in-1, 8-in-1 or 16-in-1; with or without border lines); negative/positive reversal; text stamp (date, page number, watermark); repeat image (used to repeat an image multiple times on a copy).

Insertion features: Cover mode (front and/or back covers can be copied or blank on both sides); OHP transparency interleaving (blank or copied insert sheets).

Interface: Standard Centronics IEEE 1284 bidirectional port (with optional AR-PB2A print controller); optional 10/100BaseT Ethernet interface. (Note: The embedded print controller includes the network interface card (NIC), but the NIC may also be purchased separately if a different print controller is used. See "Sharp AR-507 IMAGER Accessories.")

Job management features: Interrupt key; job programming (settings for up to nine copy jobs can be stored and recalled); job review (lists the settings for the current copy job); and job build (allows storage of up to 120 8-1/2" x 11" originals when the number of originals exceeds the capacity of the document feeder).

Languages: English.

Memory: Standard 16 MB of RAM and two 32-MB upgrades for a total of 80 MB of memory; 4-GB shared copier/printer hard disk.

Operating system support: Macintosh System 7, Microsoft Windows 3.1, 95, 98, 2000 and NT 4.0. Note: Sharp claims the Windows 2000 driver is available from its Web site or by users contacting their dealerships.

Output device: Optional finisher. See "Performance Of Tested Special Features."

Printer features: Optional embedded AR-PB2A print controller uses a 150-MHz, 64-bit MIPS, R4700 processor and supports 600-x-600-dpi printing via PostScript 2 PCL 6 and PCL 5e print drivers. It has 16 MB of standard memory, accommodates an additional 64 MB of memory for a total of 80 MB, and has a 4-GB hard drive. See "Accessories" and "Performance of Printer Functions." Note: the memory upgrades are not provided by Sharp; they must be purchased independently and then installed by an authorized Sharp technician. It should also be noted that when configured with the optional AR-NS1 (network scanning expansion kit), the print controller requires an additional 32 MB of RAM.

Reduction/enlargement features: Variable reduction/enlargement from 25% to 400% in 1% increments; preset reduction ratios of 25%, 50%, 64%, 77%, and 95%, and preset enlargement ratios of 121%, 129%, 141%, 200% and 400%; XY zoom.

Resolution (maximum): 400-dpi scanning with 600-dpi output in copy mode; 600-dpi printing.

User programs: Default settings are programmable by the user via touch-screen menus (key operator codes can be found in the Key Operator's Guide).

Other features/software: Scan-once/print-many capability; toner-save mode; Printer Status Monitor and Sharp Administration Utility used to monitor the AR-507. Sharpdesk is a document management program that provides basic image editing features as well as customizable destinations for scanned images and documents. IMAGER Home Page functionality includes Remote E-mail Diagnostics (RED) and scanning set-up, as well as device status and network configuration verification. RED enables scheduled and/or event driven notifications of paper jam, toner low, no toner, paper out, service required and/or PM required to be sent via e-mail to a specified recipient.

FEATURES *continued*

Control Panel

Type: Combination hard keys and a 5-1/2" x 3-1/2" graphic touch-screen LCD display.

Help key: Yes.

Indicators/prompts: In addition to illuminated LED indicators, messages are shown on the LCD display when a misfeed or problem has occurred or when service is required (a graphic display of the copier indicates the location of a misfeed).

Quantity display/selector: Three-digit LCD display. Makes 1 to 999 copies/prints. Approximately one minute after the last copy is made, the quantity select display resets to "0" and all selected features reset to the default setting (user-adjustable from 10 to 240 seconds in 10-second increments).

Sharp AR-507 IMAGER Accessories

3,000-Sheet LCT (AR-LC1N), Suggested retail price, $1,255. See "Performance Of Tested Special Features."

Stand w/500-Sheet Drawer (AR-DE7): Suggested retail price, $1,210. See "Performance Of Tested Special Features."

Three-Tray Finisher (AR-FN3): Suggested retail price, $3,350. See "Performance Of Tested Special Features."

Tandem Copy Kit (AR-CA1): Suggested retail price, $252. (For use only with units that are equipped with the AR-PB2A print controller.)

Deluxe Cabinet: Suggested retail price, $232.

500-Sheet Drawer (AR-CS3): Suggested retail price, $352. The additional 500-sheet drawer is user-adjustable for sizes ranging from 8-1/2" x 11" to 11" x 17". Acceptable paper weights, 15 to 28 lbs. This drawer can be added when configured with the optional system stand (AR-DE7).

Exit Tray (AR-TE1): Suggested retail price, $65.

Sharp AR-LXII Print Controller (Fiery LXII): Suggested retail price, $4,495.

Sharp Print Controller (AR-PB2A): Suggested retail price, $2,095. An embedded print controller that offers network scanning capabilities when configured with the Network Scanner Expansion Kit.

Network Scanner Expansion Kit (AR-NS1): Suggested retail price, $1,295. (For use only with the AR-PB2A print controller.) See "Performance of Scanner Functions."

Hard Disk Erase Capability: Suggested retail price, $500. Security feature that automatically erases each copy or print from the hard disk following job completion.

Ethernet NIC (AR-NC3D): Suggested retail price, $420. (For AR-PB2A print controller only.)

Sharp Print Controller (AR-PB2A) w/Ethernet NIC: Suggested retail price, $2,495. See "Performance of Printer Functions."

Axis 7000 Scan Server And Mounting Kit (AR-AX700A): Suggested retail price, $1,695.

Token-Ring Option For Sharp AR-LXII (AR-TK1): Suggested retail price, $899.

TEST RESULTS AND OBSERVATIONS

Test equipment: BLI's dedicated test network consists of NetWare 4.11 servers, Windows NT 4.0 servers, Windows 95, 98 and NT 4.0 workstations, 10/100Base TX network switches and CAT5 cabling.

Reliability

PMs/Malfunctions	Service Required	Meter Count (Impressions)	Impressions Between Service
Meter count (beginning of test)		0	
PM	Performed PM	156,712	
Misfeeding	Replaced LCT feed rollers	174,942	18,230
PM	Performed PM	260,000	85,058
End of test period		300,000	
Total Misfeeds/Misfeed Rate	4 / 1 per 75,000 impressions		
Service Calls	1		
PMs	2		
Total Service Calls (including PMs)	3		
M.I.B.F.[1]	Not Applicable		
M.I.B.S.[2]	150,000		

[1] Mean Impressions Between Failures (To obtain this number, BLI divides the total number of impressions produced during the test period by the number of service calls required. In actuality, it reflects the average number of impressions produced without a malfunction.)

[2] Mean Impressions Between Service (To obtain this number, BLI divides the total number of impressions produced during the test period by the number of service calls, including preventive maintenance calls, required. In actuality, it reflects the average number of impressions produced without a service call.)

Maintenance

When the "ADD TONER. PRESS 'I' [information key] FOR GUIDANCE." indicator appeared, the user was required to add toner. A 925.3g toner canister yielded 26,680 impressions when tested in print mode at 600-dpi resolution using the BLI Toner Yield Test Original, which has 6% coverage (Sharp claims a yield of 25,000 copies per canister when an original with 6% coverage is used). PMs are scheduled every 125,000 impressions, when the cleaning blade should be replaced. The developer, organic drum, and both upper and lower fuser rollers have an expected life of 250,000 impressions each. (Unless otherwise noted, all of the above consumables that would normally be replaced during the course of this test met or exceeded the life expectancy specified by the vendor.)

TONER YIELD (BASED ON 6% PAGE COVERAGE)				
Toner Canister Weight				
Full	Empty	Net Weight	Toner Yield (Impressions)	Impressions Per Gram
925.3 grams	221.1 grams	704.2 grams	26,680	37.9

TEST RESULTS AND OBSERVATIONS *continued*

User-Replaceable Consumables

Toner cartridge: Suggested retail price, $108. Manufacturer's rated yield, 25,000 pages at 6% page coverage.

Ease of replacing toner: Fair. When "ADD TONER. PRESS 'I' [information key] FOR GUIDANCE" appears on the display, the toner canister needs to be changed. The user opens the front panel, releases the spring-loaded toner hopper lock lever, and draws out the toner hopper a few inches until it stops. The user then lines up the new canister with the notches on the hopper, slides the canister into position, and removes the tape and seal from the canister so the toner can drain into the hopper. Although the procedure was not difficult, BLI technicians observed that if the canister was not allowed to stay on the toner hopper for at least 50 seconds before being removed, toner remained in the canister and spilled onto the front cover of the machine and the floor. Most other tested units have a wider opening to accept toner, resulting in less wait and no spillage. It should be noted that unlike most other units in this class, the inner front cover does not include illustrations or instructions on installation or removal of supplies. However, the Operator's Manual does inform users that they should shake the canister at least 20 times and allow it to remain on the toner hopper for at least 50 seconds before being removed.

Guarantee/Warranty: The Sharp AR-507 IMAGER is backed by a 90-day warranty.
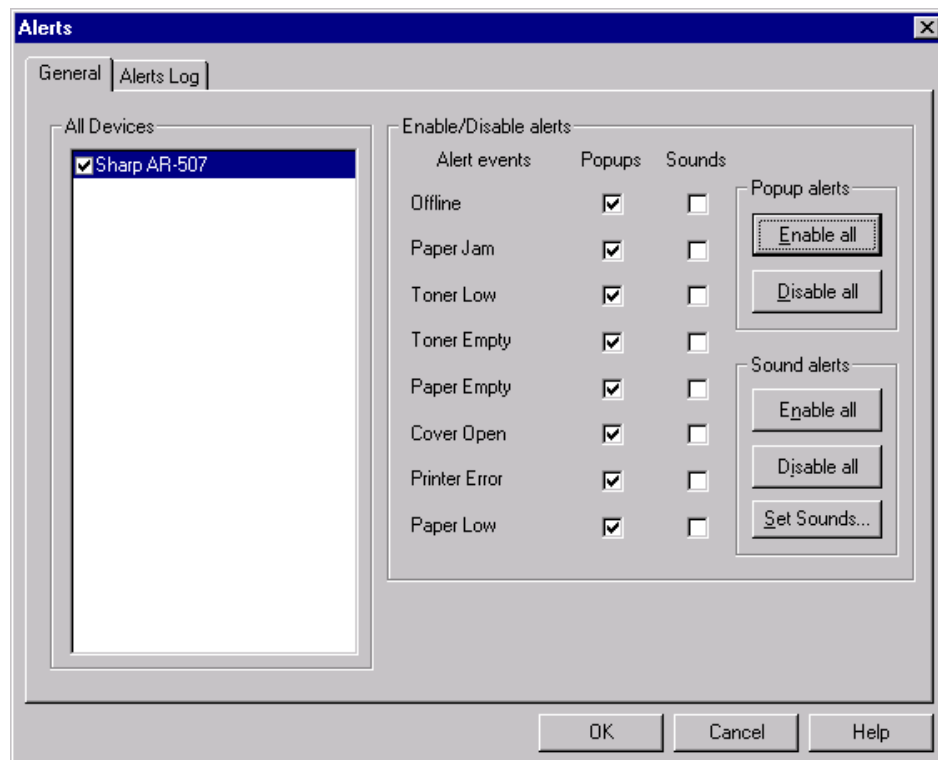
Ease of Operation

Documentation: Good. Two manuals are included with the Sharp AR-507 IMAGER, an Operation Manual and a Key Operator's Guide. In addition to containing information on key operator/system administration functions and basic maintenance procedures such as replacing toner and clearing paper jams, both copier manuals include helpful illustrations of the device and control panel. Although the manuals lack an index, which would make it easier for the user to locate a specific function, they include a helpful "Table of Contents." The optional print controller and network scanner manuals offer illustrations and step-by-step instructions for installation and usage. The scanning software also includes on-line help files as well as PDF files that can be viewed or printed.

Ease of use: Good. The control panel's menu system is set up well and the user can easily find desired functions. In addition, the LCD panel is adjustable for varying lighting conditions (via the "Custom Settings" key) and easy to read. Each function (print, copy and scan) has a main selection key, which, when pressed, brings up the menu for that function. From the print-function menu, the user can print a configuration page, print PostScript or PCL font lists, print a test page or edit network parameters. The print drivers were also easy to use, offering a good layout and graphic representation of most feature selections. However, a job list, which would display the order of print jobs in the print queue, is not available for walk-up users.

Feedback to PC workstations: Good. End users can receive pop-up messages provided by the Printer Status Monitor utility (offline, paper jam, toner low, toner empty, paper empty, cover open, printer error and paper low) or sound messages from the Printer Administration Utility Version 2.3, which can be opened to view the status of device. When an error occurs, the icon in the system tray changes in color from green to red to prompt the user for attention. See "Networking and connectivity" under "Performance of Printer Functions."

TEST RESULTS AND OBSERVATIONS *continued*

Alerts

General | Alerts Log

All Devices
☑ Sharp AR-507

Enable/Disable alerts

Alert events	Popups	Sounds
Offline	☑	☐
Paper Jam	☑	☐
Toner Low	☑	☐
Toner Empty	☑	☐
Paper Empty	☑	☐
Cover Open	☑	☐
Printer Error	☑	☐
Paper Low	☑	☐

Popup alerts
- Enable all
- Disable all

Sound alerts
- Enable all
- Disable all
- Set Sounds...

OK | Cancel | Help

paper size will result in the machine registering the wrong size paper, resulting in wasted copies/prints and possible misfeeding.

Operator error: If the paper size lever is not set to indicate the correct paper size when changing the paper size in the drawers, walk-up users will be misinformed of the paper size and may copy/print onto the wrong size paper, possibly resulting in jamming. An "on-line/off-line" button is easily accessible on the control panel; if a user fails to put the unit back on-line after taking it off-line, print jobs may stack up. However, the Sharp Administration Utility and the Printer Status Monitor software allow administrators to view the status of the device from their workstation. If the user neglects to wait at least 50 seconds before removing the canister from the hopper, toner will remain inside the canister and fall onto the front cover of the machine and the floor when it is removed.

Throughput Capabilities/Materials

Standard paper supply: Two user-adjustable 500-sheet drawers and a 50-sheet stack-feed bypass. The two drawers are adjustable for sheets ranging in size from 5-1/2" x 8-1/2" to 11" x 17" and in weight from 14 to 20 lbs.

Maximum number of available on-line paper sources with options (including bypass): Six.

Maximum on-line paper capacity with options (including bypass): 5,050 sheets.

Maximum image size: 10-53/64" x 16-3/4". Makes copies from 5-1/2" x 8-1/2" to 11" x 17".

Paper output: There are three external output trays. In copy mode, copies exit face down to the top tray or the lower/offset tray; print jobs exit face down to the top tray, middle tray or the lower/offset tray. Both copy and print jobs output

Ease of removing misfeeds: Good, except for misfeeds at the entrance to the finisher, where misfed sheets can be difficult to access because of the lack of release levers. Non-clamshell design with 11 misfeed locations, including one for the RADF. When a misfeed occurs, a graphic display of the AR-507 appears on the LCD panel to indicate the area of the misfeed. The following message is then displayed: "A MISFEED HAS OCCURRED. CLEAR INDICATED AREA. PRESS 'I' [information key] FOR RECOVERY INSTRUCTIONS."

Ease of loading paper: Good. Loading paper is easy as there are no corner separators or spring-loaded ramps to lock down. The user can change or add paper to a drawer while the unit is running if that drawer is not in use.

Ease of adjusting paper drawers: Fair. The user must adjust side-guide lock plates, a simple procedure, but then must adjust the paper size selection slider at the rear of the drawer in order for the AR-507 to register the correct paper size. Although the slider is clearly labeled to indicate the available paper sizes, failure to set the slider to the correct

TEST RESULTS AND OBSERVATIONS *continued*

in correct page sequence to all trays. Stapled sets in both copy and print modes exit to the lower/offset tray.

Ability to process self-adhesive address labels: Avery #5351 labels performed satisfactorily in the tests.

Ability to process transparencies: 3M PP2500 transparencies performed satisfactorily in the tests.

Void area: There is a void area of 3/16" along the leading edge, 1/16" along the trailing edge, 1/16" along the top edge and 5/64" along the bottom edge of copies.

Performance of Copier Functions

Copy Quality

Density of solid black copied image (based on eight readings corresponding to eight different locations on the original):

Density of original: Range, 1.69 to 1.74 (on a scale of 0 to 2.5, with 2.5 being as dark as would be possible under most circumstances).

Density of copy: Range, 1.36 to 1.43 (on a scale of 0 to 2.5, with 2.5 being as dark as would be possible under most circumstances).

Density range for copiers tested to date: 0.96 to 1.63.

HALFTONE FIDELITY READINGS			
Halftone Level	**Coverage Of Original**	**Coverage Of Copy**	**% Difference**
1	100%	100%	0%
2	94	97	3
3	91	95	4
4	83	90	8
5	76	82	8
6	52	55	6
7	28	25	-11
8	14	6	-57

Note: Halftone fidelity—average of two readings for each of eight levels of halftones, with the first level being a solid black and the eighth level being the lightest. Negative values indicate a loss of coverage. Ideally, the copy of a halftone would have a coverage reading that is equal to that of the original halftone; thus, 0% difference is optimal.

Average difference between copy of halftone and original halftone (root mean square value): 21%; range for copiers tested to date, 4% to 59%.

Copy quality:
  Text: Good
  Line art: Good
  Halftones: Good
  Solids: Good

Copier Productivity

Warm-up: Two minutes and 12.2 seconds from a cold start.

Copying speed (8-1/2" x 11" copies):

First-copy time from the platen: 7.1 seconds (time was the same regardless of the automatic modes selected).

First-copy time from the document feeder: 7.7 seconds (time was the same regardless of the automatic modes selected).

Number of copies per minute: 51

Number of copies per minute (including first copy): 45

TEST RESULTS AND OBSERVATIONS *continued*

COPIER THROUGHPUT SPEEDS/EFFICIENCY (Based on a 10-Page Document)						
COPY MODE	**1:1**	**1:2**	**2:2**	**2:1**	**Finishing Time (seconds)**	
1 Set (non-sort mode)						
Total Time	20.7	29.9	52.3	46.8		
Images per Minute	29.0	20.1	22.9	25.6		
Efficiency[1]	58.0%	40.2%	45.8%	51.2%		
1 Set (sort mode)						
Total Time	21.9	32.1	55.0	47.9	1.8	2.8
Images per Minute	27.4	18.7	21.8	25.1		
Efficiency[1]	54.8%	37.4%	43.6%	50.2%		
3 Sets						
Total Time	46.3	58.1	1:47.1	1:36.9	5.9	10.2
Images per Minute	38.9	31.0	33.6	37.2		
Efficiency[1]	77.8%	62.0%	67.2%	74.4%		
5 Sets						
Total Time	1:10.3	1:24.3	2:39.5	2:27.1	10.3	16.8
Images per Minute	42.7	35.6	37.6	40.8		
Efficiency[1]	85.4%	71.2%	75.2%	81.6%		
10 Sets						
Total Time	2:11.2	2:28.7	4:49.7	4:26.1	20.5	33.4
Images per Minute	45.7	40.3	41.4	45.1		
Efficiency[1]	91.4%	80.6%	82.8%	90.2%		
20 Sets						
Total Time	4:13.2	4:39.3	9:11.0	8:38.1	40.6	1:07.0
Images per Minute	47.4	43.0	43.6	46.3		
Efficiency[1]	94.8%	86.0%	87.2%	92.6%		
30 Sets						
Total Time	6:13.3	6:49.8	13:43.6	12:23.4	1:03.0	1:44.9
Images per Minute	48.2	43.9	43.7	48.4		
Efficiency[1]		96.2%	87.8%	87.4%	96.8%	
50 Sets						
Total Time	10:31.1	11:21.3	21:58.5	20:31.8	1:39.3	2:48.3
Images per Minute	47.5	44.0	45.5	48.7		
Efficiency[1]		95.0%	88.0%	91.0%	97.4%	
50 Sets[2]						
Total Time	30:18.7	32:57.2	1:06:09.0	N/A		
Images per Minute	49.5	45.5	45.4	N/A		
Efficiency[1]	99.0%	91.0%	90.8%	N/A		
OVERALL EFFICIENCY[3]	87.2%	75.9%	78.4%	83.5%		

[1] BLI obtains this percentage by dividing the tested speed of the copier by the rated speed, and then multiplying by 100 determine the efficiency ratings for each run length.

[2] Tested using a 30-page document.

[3] BLI obtains this percentage by averaging the efficiency ratings for each copy mode.

TEST RESULTS AND OBSERVATIONS *continued*

Performance of Printer Functions

General: The Sharp AR-507 IMAGER was tested as a network copier/printer using the optional Sharp AR-PB2A embedded print controller, which includes a 10/100BaseT network interface. The print controller included PCL 5e, PCL 6 and PostScript 2 print drivers for Windows 95/98 and NT 4.0. Sharp claims the Windows 2000 driver is available from its Web site or by users contacting their dealerships.

Print Quality

Text: Good
Line art: Good
Halftones: Good
Solids: Good

Comments: Output produced by the Sharp AR-507 IMAGER's PostScript print driver at its highest resolution (600 dpi) was good. Solids were dark and consistent, text and lines were sharp and there were distinct transitions between grayscale levels.

Compatibility (units are tested for compatibility with Microsoft Word 97, Microsoft PowerPoint 97, Adobe PageMaker 6.5, Adobe PhotoShop 5.0 and Adobe Acrobat 3.0 using 70 application test files, which contain text, graphics, halftone images, tables, etc., enabling BLI technicians to evaluate memory usage, file processing, font-rendering and grayscale capability): Good. The Sharp AR-507 IMAGER, as tested with the PostScript 2 print driver, was found to be fully compatible with all five programs used in testing, with no problems encountered.

Print drivers: The Sharp AR-507 was tested with PCL 5e, PCL 6 and PostScript 2 print drivers that support Windows 95, 98 and NT 4.0 operating systems. Drivers are provided on one CD-ROM. As no setup utility is provided to automatically configure the drivers, the Add Printer utility of MS Windows must be used. Set up in a tab menu system, the print drivers for Windows 95, 98 and NT 4.0 are well-laid-out and easy to use, offering some graphic representations of selected features. While they offer basic selections—such as paper source, paper size, orientation, duplex printing, output tray selection and stapling, the drivers lack a paper supply status gauge.

TEST RESULTS AND OBSERVATIONS *continued*
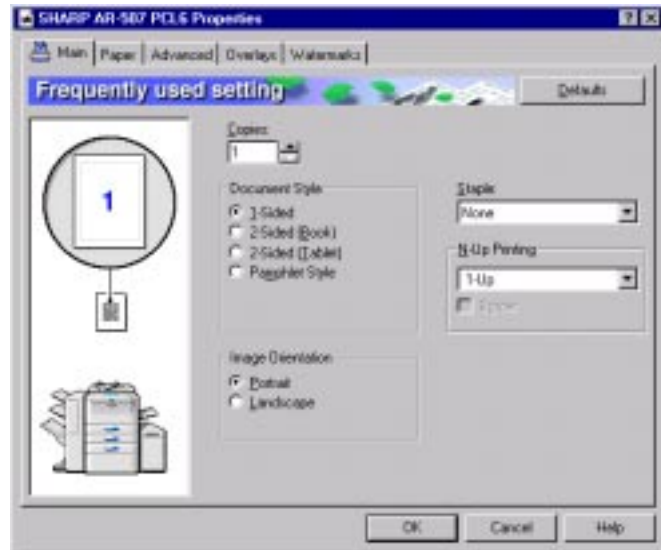
SHARP AR-507 IMAGER PRINT DRIVER COMPARISON CHART						
Features	**Windows 95/98 PCL 5e**	**Windows 95/98 PCL 6**	**Windows 95/98 Adobe PostScript 2**	**Windows NT 4.0 PCL 5e**	**Windows NT 4.0 PCL 6**	**Windows NT 4.0 Adobe PostScript 2**
Auto Feature/ Device Detection	No	No	No	No	No	No
Booklet Printing	Yes	Yes	Yes	Yes	Yes	No
Collate Sets	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
Correct Page Order Output	Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
Cover Mode (Different Paper Source for First /Other Page)	Yes First Page	Yes First Page	Yes First Page	Yes First Page	Yes First Page	No
Duplex	Yes	Yes	Yes	Yes	Yes	Yes
Mirror Image	No	No	No	No	No	No
Negative Image	No	No	No	No	No	No
N-up Printing	No	2 to 16	2 to 16	No	2 to 16	No
Output Tray Selection	Top Tray Middle tray Shift tray	Top Tray Middle tray Shift tray	Top Tray Middle tray Shift tray	Top Tray Middle tray Shift tray	Top Tray Middle tray Shift tray	Top Tray Middle tray Shift tray
Paper Gauge	No	No	No	No	No	No
Quantity Selection	Up to 999	Up to 999	Up to 999	Up to 999	Up to 999	Up to 999
Reduction/ Enlargement	Yes Automatic	Yes Automatic	Yes Automatic	Yes Automatic	Yes Automatic	1%-1,000%
Resolution Modes	600 x 600 dpi	600 x 600 dpi	600 x 600 dpi	600 x 600 dpi	600 x 600 dpi	600 x 600 dpi
Secure Printing	Yes	Yes	Yes	Yes	Yes	No
Stapling	Yes	Yes	Yes	Yes	Yes	Yes
Transparency Interleaving	Yes	Yes	Yes	Yes	Yes	Yes
Watermarks / Custom Watermarks	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	Yes/Yes	No/No

TEST RESULTS AND OBSERVATIONS *continued*

Windows NT PostScript Driver

Windows NT PCL 6 Driver

Sharp AR-507 IMAGER
COPY AND PRINT QUALITY INDEX

Buyers Laboratory Inc.

Magnified view of black text.
Unit set to "Print Mode - 600-dpi."
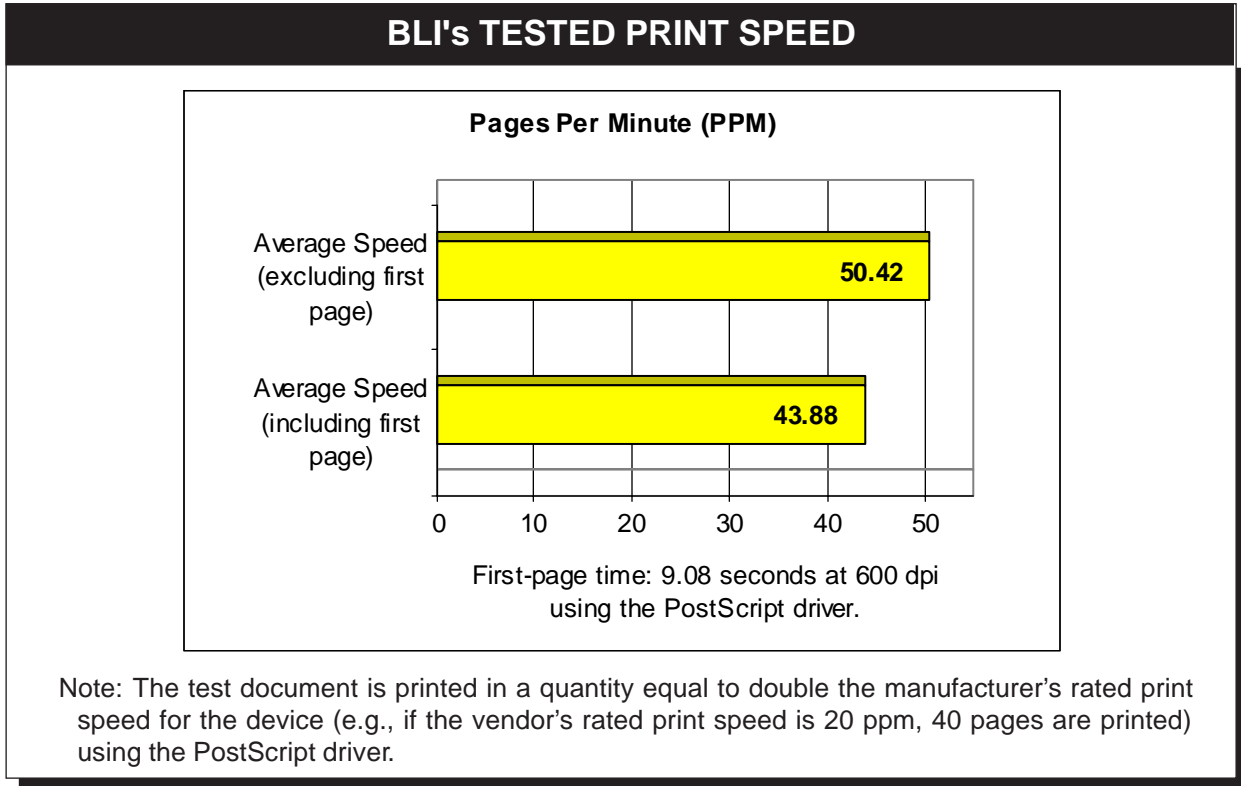Printed on plain-paper stock.

Buyers Laboratory Inc.

Magnified view of black text.
Unit set to "Copy Mode-600-dpi."
Printed on plain-paper stock.

RIP while print: In testing, the unit demonstrated RIP-while-print capability for all print jobs.

Job log accounting: None.

Mailbox copying/printing: The unit supports secure printing.

TEST RESULTS AND OBSERVATIONS *continued*

Print Productivity

BLI's TESTED PRINT SPEED

Pages Per Minute (PPM)

Average Speed (excluding first page)	50.42
Average Speed (including first page)	43.88

Scale: 0   10   20   30   40   50

First-page time: 9.08 seconds at 600 dpi using the PostScript driver.

Note: The test document is printed in a quantity equal to double the manufacturer's rated print speed for the device (e.g., if the vendor's rated print speed is 20 ppm, 40 pages are printed) using the PostScript driver.

TEST RESULTS AND OBSERVATIONS *continued*

COPY/PRINT EFFICIENCY COMPARISON

1:1 Mode Efficiency

	1	3	5	10	20	30	50	50*	Overall Efficienc
Copy Mode	58.0%	77.8%	85.4%	91.4%	94.8%	96.2%	95.0%	99.0%	87.2%
Print Mode	10.0%	24.8%	36.0%	52.8%	68.8%	76.8%	84.8%	85.8%	55.0%

Number of Sets

1:2 Mode Efficiency

	1	3	5	10	20	30	50	50*	Overall Efficienc
Copy Mode	40.2%	62.0%	71.2%	80.6%	86.0%	87.8%	88.0%	91.0%	75.9%
Print Mode	9.2%	22.8%	32.8%	48.2%	63.6%	71.0%	77.8%	79.8%	50.7%

Number of Sets
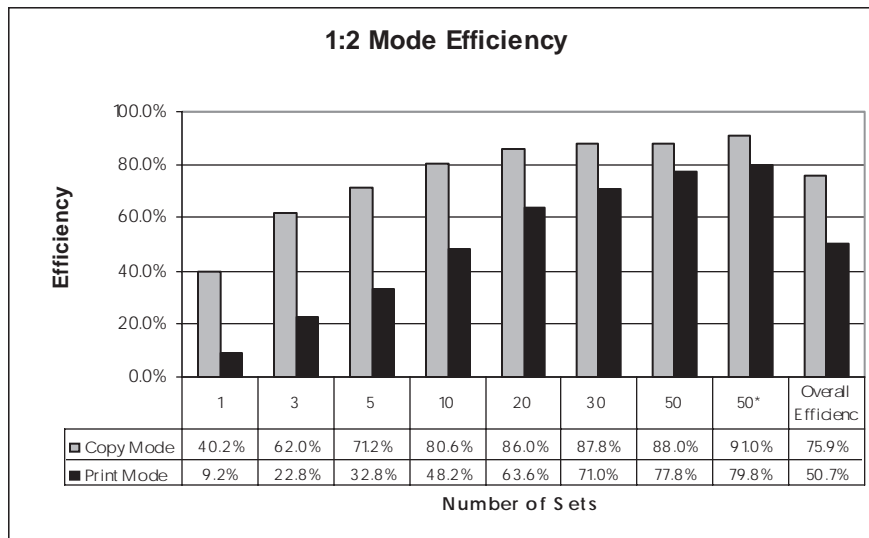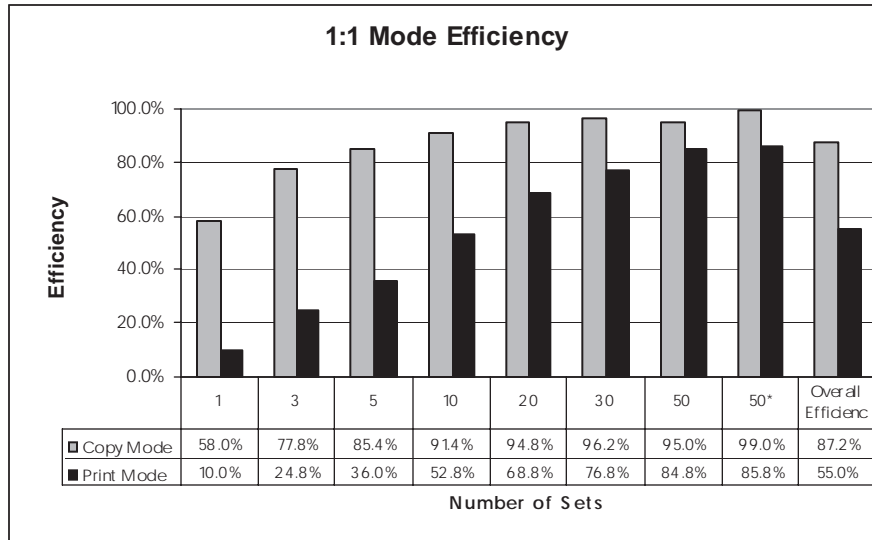
BLI obtains the overall efficiency for each copy/print mode by averaging the efficiency ratings (derived by dividing the tested speed of the device by the rated speed, and then multiplying by 100) for each run length.

TEST RESULTS AND OBSERVATIONS *continued*

Networking and connectivity: The Sharp AR-PB2A controller is supplied with Management Access Program (MAP) version 3.50, a software utility used to remotely access the HTTP-based setup utility. MAP can be loaded on any Microsoft Windows 95/98 or Windows NT 4.0 workstation using the setup utility provided on CD-ROM. The workstation must be running either TCP/IP or IPX/SPX protocol and have an Internet browser such as Netscape or Internet Explorer installed in order to access the AR-507. When launched, the browser will load and MAP will display an HTTP link to all available Sharp printers with an AR-PB2A controller installed. MAP can be used to organize access to multiple devices, which can be accessed one at a time. A Web browser such as Netscape or Internet Explorer can be used to remotely access the HTTP utility via TCP/IP protocol. The utility allows network administrators access to all basic network settings for TCP/IP and NetWare (IPX/SPX) configuration. No on-line help is provided, although there is a very thorough manual provided with the print controller. As with most other systems tested to date, NetWare utility programs are required to complete the installation of the Sharp AR-507 IMAGER.

Sharp's Printer Status Monitor Version 2.3 and Printer Administration Utility Version 2.3 are included with the AR-PB2A print controller option. Both the status monitor and administration utility were easy to install in Windows 95/98/NT environments. The software must be loaded at each workstation that will be printing to a Sharp printer. Like other network administration software programs tested, the monitor first establishes communication over the network with the AR-507 via its Media Access Control (MAC) address. Once the communication has been established, the administrator can choose the preference tab and select the various settings for the monitor. The options for setup include notification method to the end user via either sound or pop-up displays, the status update interval and the printer to be monitored. Along with the pop-up messaging that is provided with the Printer Status Monitor utility, a status screen can be viewed to check the status of the unit and/or paper supply. IMAGER Home Page functionality includes Remote E-mail Diagnostics (RED) and scanning setup, as well as device status and network configuration verification. RED enables scheduled and/or event driven notifications of paper jam, toner low, no toner, paper out, service required and/or PM required

to be sent via e-mail to a specified recipient.
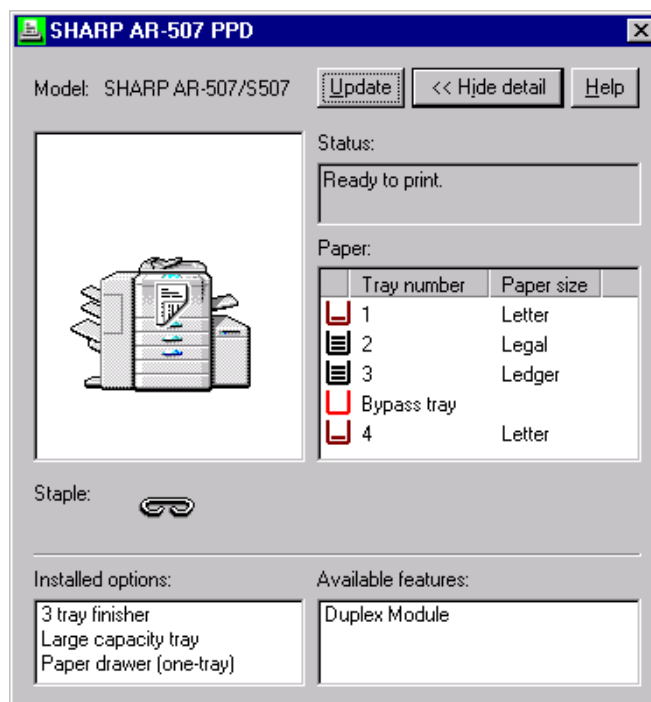
Sharp's Printer Status Monitor

The Printer Administration utility can simultaneously administer multiple Sharp devices that are equipped with an AR-PB2A print controller. The "device" tab displays a graphical representation of the AR-507 and any error or warning messages. However, unlike with some other models, there is no change to the graphic when a problem (such as a paper jam) occurs. The graphic, though, does illustrate paper levels for each paper source. Messages indicating a problem that will not allow the unit to run appear in red. Alert events that can be monitored from the PC workstation are off-line, paper jam, toner low, toner empty, cover open, printer error and paper low. The messages were accurate and helpful. Users can quickly see what paper size is loaded and how much paper is left in each drawer via a real-time paper gauge.

The Printer Administration utility has various setup and information screens for the utility and the device. The administrator can identify the unit, indicate its location (which is helpful if the device is on a different floor), and indicate how the device is configured by listing its properties. The status of the toner ("Okay" or "Toner

TEST RESULTS AND OBSERVATIONS *continued*

empty"), disposal bottle and the total impressions may be viewed through the resources tab. The input paper size/supply and output configuration can also be viewed; however, BLI technicians observed that during testing the output paper level indicators did not function.

Performance of Scanner Functions

When the AR-PB2A controller is configured with the optional Network Scanner Expansion Kit (AR-NS1) to provide scan capabilities, bundled PC software includes Network Scan Tool, Sharpdesk and Sharpdesk Viewer, all of which are contained on one CD-ROM.

The Network Scanner Tool simplifies the scanning process by allowing the creation of user-defined destinations that upload to the AR-507 as control panel choices. Destination attributes that are user-definable include image processing (despeckle, straighten, auto crop), convert by OCR (single column, multi-column, text and pictures, text only), quality (letter, dot-matrix, degraded quality) and default application if other than Sharpdesk, which displays

documents in thumbnail form. Once the user clicks the "Apply" button, the destination becomes a choice on the AR-507 control panel. Scan destinations can be reopened, deleted and edited from within the Network Scanner Tool.

A scan destination is accessed by pressing the "Scan" touch-sensitive key when the device is not busy copying or printing. The user is then presented with the scan menu of touch-sensitive keys with selections for "Quality" (200, 300 and 600 dpi; text, text/photo; darkness setting from one to nine), "Format" (TIFF G4, TIFF G3-1D, TIFF uncompressed, PDF G4 and PDF G3-1D); "Original" (1-sided, 2-sided booklet, 2-sided tablet, rotate, paper size [inch, metric or custom]). Once all desired settings are enabled, the user presses the touch-sensitive key for "Destination List," which includes preset addresses for e-mail, FTP or desktop destinations. When all settings are correct and the document is in place for scanning, the user highlights the scan destination and presses the "Start" key. The document is then scanned and transmitted over the network to the designated destination.
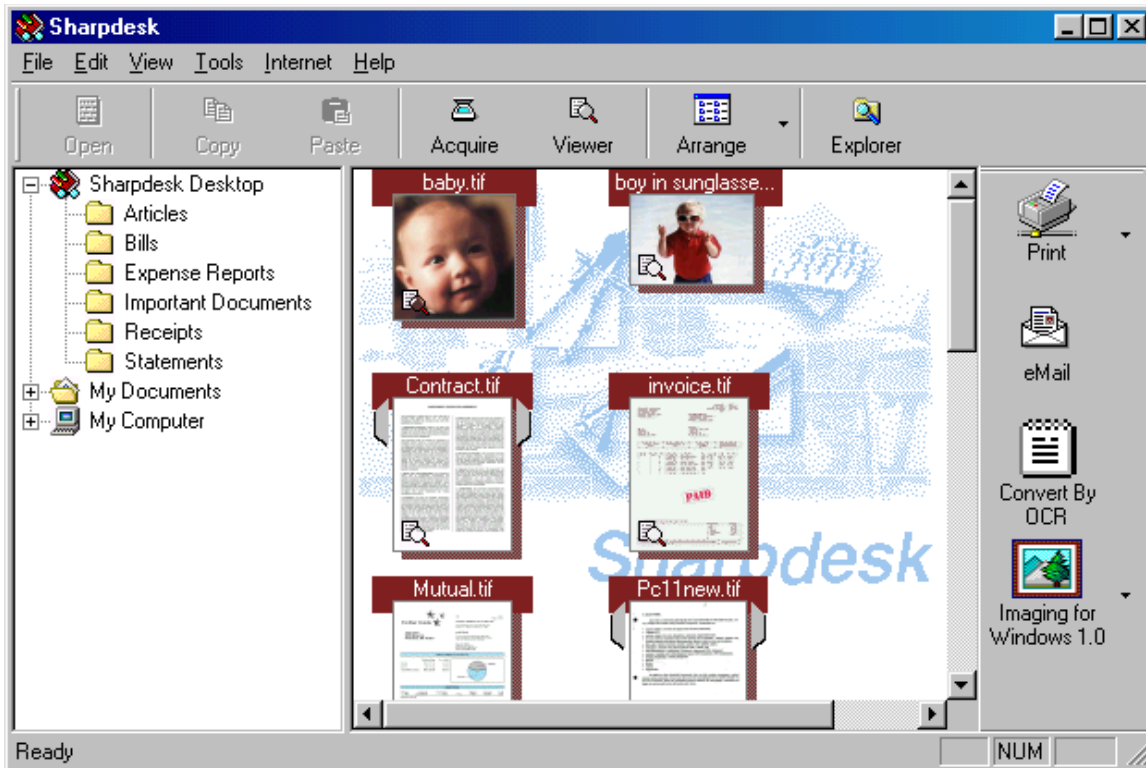
TEST RESULTS AND OBSERVATIONS *continued*

From the Sharpdesk utility, the user can view, print, copy, store, rename and delete images. Scanned files can also be sorted according to name, date, size or type. Scanned files can be dragged and dropped to any of the icons located on the right of Sharpdesk, including print and fax (both of which offer drop-down menus), e-mail, convert to OCR and choice of common office application such as Imaging for Windows via dropdown menu). Sharpdesk allows documents to be opened in a viewer that provides editing features such as zoom, remove dots, auto straighten, auto trim, auto sharpness, rotate and print (which allows for printing single or multiple copies). Upon completion of the test on the AR-507 Imager, Sharp supplied BLI with its new Sharpdesk software, which now offers more advanced editing features such as drawing tools, touch-up filters and the addition of stamps as well as the ability to combine files of different types into a single document.

OCR (Optical Character Recognition): Good. Documents are scanned and OCRed using Sharpdesk software and automatically opened into the default application
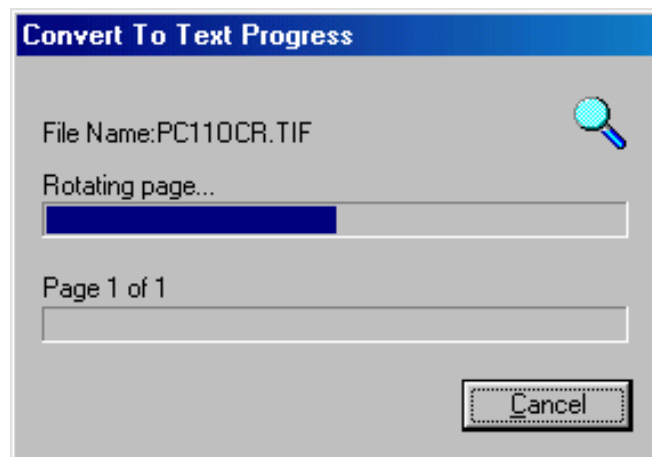
(Microsoft Word). A scan of the ITU-T Test Document #1 (also called "Slerexe letter") produced no text errors and only one format error. BLI technicians noted that the results were nearly the best tested to date.

PERFORMANCE OF TESTED SPECIAL FEATURES

Reversing Automatic Document Feeder

Satisfactory. The reversing automatic document feeder will automatically feed and invert up to 50 sheets of 20-lb. bond ranging in size from 5-1/2" x 8-1/2" to 11" x 17". Acceptable paper weights, 14 to 34 lbs. for single-sided originals or 14 to 29 lbs. for double-sided originals. When feeding a stack of mixed-size originals with automatic paper selection, the copier will automatically determine the most appropriate paper source for each original. Mixed-size originals must have the same-size lead edge.

Controls/indicators on unit: None.

Simplex-to-duplex copying procedures: Good. Originals are automatically copied in the correct sequence in the 1:2 copy mode regardless of whether there is an odd number of originals.

Document feeding speeds (8-1/2" x 11" originals; speeds were the same regardless of the automatic modes selected):

1:1 copy mode: 46.9 originals per minute.

1:2 copy mode: 46.9 originals per minute.

2:2 copy mode: 15.1 originals, or 30.2 images, per minute.

2:1 copy mode: 15.1 originals, or 30.2 images, per minute.

Three-Tray Finisher (AR-FN3)

Satisfactory. The finisher has upper, middle and lower trays with capacities of 500, 500 and 1,500 sheets, respectively. Acceptable paper weights, 14 to 53 lbs. for the top tray; 17 to 28 lbs. for the middle tray; and 17 to 34 lbs. for the lower tray. If the number of sheets exceeds a tray's capacity, the AR-507 will stop copying/printing and prompt the user to unload the tray. Some other tested devices will automatically switch to another tray and continue copying/printing. Users can choose to print to any of the three trays, although copier users are limited to selecting either the top or bottom. The upper and middle trays, which are stationary, each hold 500 sheets ranging in size from

PERFORMANCE OF TESTED SPECIAL FEATURES *continued*

5-1/2" x 8-1/2" to 11" x 17". The lower tray, which is a moving offset tray, holds 1,500 8-1/2" x 11" sheets or 750 sheets of paper larger than 8-1/2" x 11" (up to 11" x 17"). The lower tray also has built-in three-position stapling (upper-left vertical, lower-left vertical, and booklet mode with two staples on the left side of the page) of up to 50 sheets per set (or 25 sheets of 8-1/2" x 14" or 11" x 17"). Stapler capacity: 5,000 staples.

Controls/indicators on unit: None.

Stack-Feed Bypass

Satisfactory. The "intelligent" 50-sheet stack-feed bypass has double-geared, adjustable side guides that move in sync to accommodate sheets ranging in size from 5-1/2" x 8-1/2" to 11" x 17" and in weight from 14 to 34 lbs. The bypass tray is automatically selected and the correct paper size is displayed on the control panel when sheets are placed in the bypass tray.

Duplex Unit

Satisfactory. The standard trayless duplex unit holds one sheet of standard bond ranging in size from 8-1/2" x 11" to 11" x 17" and in weight from 15 to 28 lbs.

3,000-Sheet LCT (AR-LC1N)

Satisfactory. The LCT accommodates 8-1/2" x 11" sheets and is non-adjustable. Acceptable paper weights, 15 to 28 lbs.

Stand w/500-Sheet Drawer (AR-DE7)

Satisfactory. The stand consists of one user-adjustable 500-sheet paper drawer that accommodates paper sizes ranging from 8-1/2" x 11" to 11" x 17". Acceptable paper weights, 15 to 28 lbs. Users can purchase an additional 500-sheet paper drawer (AR-CS3).

SHARP AR-507 IMAGER MULTITASKING EVALUATION

Primary Function \ Secondary Function	PRINT	SCAN	COPY
PRINT	Yes[1]	No[5]	Yes[1]
SCAN	Yes[1,6]	No[2]	No[2]
COPY	Yes[1]	No[4]	No[3]

1 Secondary function is completed *after* primary function. (3)
2 Document feeder/scanner is in use. (2)
3 Cannot program secondary function due to lack of program ahead or copy reserve during a copy job. (1)
4 Message is displayed on the control panel ("The mode will be changed after the preset job is finished"). The secondary function cannot be programmed or reserved during the primary function (1)
5 Message is displayed on the control panel ("Destinations cannot be selected until all jobs in queue are completed"). The secondary function cannot be programmed or reserved during the primary function . (1)
6 After one-minute of non-use the print job automatically begins. (1)
7 Print job is halted to run any walk-up copy job. After one minute of non-usage, the print job continues. (1)

NOTE: (X) indicates number of occurrences. A "Yes" indicates that the user can initiate the secondary function while the primary function is taking place and that no further user intervention will be required for the secondary function to take place.

Multitasking (More Than Two Functions/Jobs)

Note: In addition to a single-user multitasking test, which evaluates a unit's ability to initiate or perform one function while another function is already in progress (see chart above), BLI also tests a multifunctional product's ability to handle multiple jobs that would be likely to stack up in a multi-user networked environment. Depending on the number of different functions, three to six different job matrixes are run on each multifunctional device. The job streams within each matrix are designed to test not only for concurrent operation of various functions, but also to uncover peculiarities pertaining to multitasking as it relates to different software programs (Adobe Acrobat, Adobe

PERFORMANCE OF TESTED SPECIAL FEATURES *continued*

PageMaker, Microsoft Word 97, Microsoft Excel, PowerPoint), various paper sizes, various copy/print job sizes and various copy/print modes (e.g., simplex, duplex, finishing).

General summary: Unlike most other devices in its class tested to date, the Sharp AR-507 IMAGER does not offer copy reserve capability. Consequently, BLI technicians were not able to complete any of the three job matrixes involving copying and printing.

Mode priority: None.

Interrupt: The user can interrupt a print job with a copy job, with access to all copier features, by pressing the "Copy" key. The print job will stop while the user makes a copy and printing will resume following a 60-second timeout. See "Program ahead (reserve copy job while printing)." The user cannot interrupt a copy job with either another copy job or print job.

Memory allocation: Shared memory for copying and printing. In testing, the print controller spooled and printed one print job and the others remained in the print queue on the workstation. With some other products tested, print jobs spooled completely to the print controller, with none remaining in the Windows print queue.

Program ahead (reserve copy job) while copying: No. A second copy job cannot be preprogrammed or initiated while another copy job is in progress.

Program ahead (reserve copy job) while printing: A single copy job can be programmed and initiated while a print job is currently printing, with no restrictions on features. Once the "Start" key has been pressed, the copy job will start and the print job will be halted after the current set finishes stapling (if stapling is in use) or immediately if stapling has not been selected. Printing will resume 60 seconds after the copy job is complete.

Device/feature contention issues. None.

Control panel status messages/job access: Walk-up users can delete any print job currently running by pressing the "Offline" key. Once the print job is halted, the "OFFLINE. TO CLEAR DATA, PRESS [C]" message is displayed. Pressing the "Clear" (C) key, deletes the job. During data reception of a print job, the "Data" LED flashes. The Sharp

AR-507 IMAGER does not offer a job list key for users to view print jobs in the queue, manipulate print job order or edit finishing settings of print jobs.

Device status: Yes. Device status can be monitored via the Sharp Administration Utility or the Printer Status Monitor utilities at the user's PC. See "Feedback to PC workstations."

Paper size/supply gauge: Yes/Yes. From within the Sharp Administration Utility and the Printer Status Monitor, the administrator/user can view the current paper size as well as the paper level for each paper source. Although there is an indicator for finisher paper level, it did not properly function.

Status of jobs in queue: No. Status of jobs in queue is not available either from the utilities, the embedded Web page or control panel.

Error messages: Yes, via pop-up messages or the Printer Status Monitor, which automatically launches when the PC is started. The system tray icon will change color to indicate an error has occurred or attention is required. The administrator can also program the embedded Web page to automatically e-mail a key operator when an error occurs.

COST ANALYSIS

Rental: Contact your local Sharp dealer or subsidiary.

Service pricing: Contact your local Sharp dealer or subsidiary.

COST ANALYSIS *continued*

COST PER PAGE AS TESTED (PURCHASE)					
Monthly Volume	Depreciated Purchase Price[1]	Paper[2]	Supplies and Consumables[3]	Total Per Page*	Life-Cycle Cost[4]*
15,000	2.731¢	0.627¢	0.405¢	3.763¢	$33,867
30,000	1.365	0.619	0.405	2.389	$43,002
75,000	0.546	0.619	0.405	1.570	$70,650
100,000	0.410	0.619	0.405	1.434	$86,040
150,000	0.273	0.619	0.405	1.297	$116,730
200,000	0.205	0.619	0.405	1.229	$147,480

[1] The suggested retail price of the unit as tested ($24,575) was depreciated over a five-year period using a straight-line method.

[2] The cost of paper was based on an estimated price for 5,000-sheet cartons of 8-1/2" x 11" 20-lb. bond: 1-4 cartons, $36.15 each; 5-9 cartons, $34.80 each; 10-19 cartons, $33.05 each; 20-49 cartons, $31.35 each; and 50+ cartons, $30.95 each.

[3] The cost of the toner cannister was calculated based on BLI's tested toner yield of 26,680 pages when using the BLI Test Original (with 6% page coverage, see "Maintenance"), and Sharp's suggested retail price of $108 per 925.3g toner canister.

[4] Life-cycle cost for each monthly volume is calculated by multiplying the total cost per page by the monthly volume by 60 months (five years).

* Includes depreciated purchase price, supplies and paper. As of February 2001, BLI does not include service cost in the cost analysis because of variations in pricing from provider to provider, coverage provided by various contracts, and policies of various manufacturers/ vendors regarding whether or not they publish suggested pricing for their contracts. Buyers who intend to purchase a service contract should factor that cost in based on the actual pricing offered by their vendor. Please keep this in mind when comparing cost-per-page information with that of other models tested.

ENVIRONMENTAL SPECIFICATIONS

Electrical system: 120 V, 60 Hz, AC, 12 amps. The unit tested had a three-wire cord (grounded), 6' 7" in length, and carried UL, but not CSA, approval.

Energy Star compliance: Sharp states that the AR-507 IMAGER meets the criteria for Energy Star compliance.

Noise: Scale A, 66 db (single-point reading; running noise).

Range for RADF-equipped copiers tested to date by BLI, 60 to 82 db.

Paper fault: None. (Georgia-Pacific Spectrum Xerographic Bond and Georgia-Pacific GeoCycle recycled paper containing 20% post-consumer fiber were used in this test unit.)

PHYSICAL SPECIFICATIONS

DIMENSIONS AND WEIGHTS				
Copier/Accessories	**Height**	**Width**	**Depth**	**Weight**
Copier	30-7/16"	23-5/8"	27-9/16"	225 lbs.
Stand w/500-Sheet Paper Drawer	15-7/8"	23-5/8"	23-27/64"	55.2 lbs.
Three-Tray Finisher	39-19/64"	23-15/16"	22-1/16"	115 lbs.
3,000 Large Capacity Tray	22-61/64"	13"	21-17/64"	70.6 lbs.

(This report has been reprinted with the written permission of Buyers Laboratory Inc.)

7/01