

ENHANCEMENT PRIORITIES TALLIED

The NOTIS Office has tallied your lists of enhancement priorities, and that list appears at the end of this issue. We computed an average value for each enhancement based on your responses. We also tallied the number of respondents for each enhancement. That number appears in parentheses. We'll be notifying you soon regarding plans for implementing these enhancements.

Enhancement receiving the highest priority were:

1. <2.9> Index redesign: all phases.
2. <2.8> Online display of items currently charged to a patron.
3. <2.8> Online shelflist.
4. <2.8> Suppress display of specified bibliographic records in Public Access Catalog.
5. <2.7> Redesign of Acquisitions module (Harvard enhancements).
6. <2.7> Full browse capability of indexes and bib/copy holdings records in LUIS.
7. <2.6> Online financial obligations package.
8. <2.6> Normalize searches to retrieve acronyms and initials with or without periods.
9. <2.5> Implementation of MARC holdings format.
10. <2.5> Spine label printing program using copy holdings and item record data.

NEW APPOINTMENTS TO THE SUPPORT SERVICES STAFF

We are happy to announce the appointment of two new Support Services Librarians to the NOTIS Office staff.

Tom McGinn joined us on August 12. Tom has most recently been Head of Technical Services at the Yeary Library in Laredo, Texas. The Yeary Library serves both Laredo State University and Laredo Junior College. From 1978-1983, Tom was Technical Coordinator in the Technical Services Division of the National Library of Venezuela in Caracas where he was responsible for directing the automation of technical services activities using NOTIS.

Kathy Cunningham will join us on September 23. Since 1980, Kathy has worked with the Suburban Library System which serves over 100 libraries in the western suburbs of Chicago. Her first job with SLS was Circulation Services Manager and most recently she has been the CLSI Automation System Manager.

Both Tom and Kathy bring a wealth of experience and talent to our staff. We welcome them with much enthusiasm.

With these appointments, we now have four Support Services Librarians in the NOTIS Office. Their responsibilities include writing user documentation (the NOTIS Terminal Operator's Manual and the NOTIS Library Implementation Manual) and providing training and ongoing consultation to library personnel at NOTIS customer sites. Peggy Steele is Manager of Support Services. Roberta Kirby and Ben Burrows are our other Support Services Librarians.

BEEP

At the NOTIS Users Meeting, the circulation discussion group suggested that the following information be included in an issue of NOTISES. A Telex 476L or 479 L terminal that will be used for circulation functions should be ordered with the audible alarm feature, feature number 35. This is an additional \$55.00, and it can be installed on site. The alarm (actually a "beep" tone) sounds when a normal charge, renew, or discharge transaction is completed in NOTIS. The absence of the "beep" is a signal for the operator to look at the screen for an exception message.

The feature is not available on other Telex terminal models.

THEN PRINT

At the NOTIS Users Meeting, the circulation discussion group also suggested that the following information be included in NOTISES.

A Telex 281B printer may have to be modified to print date due, discharge, hold and other slips, depending on the width of the slips. At Northwestern the slip is 3-1/4" wide, including the paper feed holes. (This dimension was chosen so that the slips could fit into existing book pockets without tearing off the left and right paper feeds, which would take too much time and might cause the slip to be torn.) However, the sprocket tractors wouldn't slide close enough together to hold paper of this dimension.

To determine whether your 281B printer may need modification, adjust the two sprocket tractors to the dimension for the date due slips you'll be using. You may have to make a sample slip to try this. If the sprocket tractors don't slide close enough together,

measure the remaining distance carefully. (It may be as small as 1/16".) Remove the tractors using the instructions included at the end of this issue, take them to a milling shop, and have each tractor milled down by half this distance. Then re-insert the tractors and measure again. To be safe, try just one pair of tractors first, possibly milling a bit less the first time.

INDEX REGENERATION SCHEDULES AT NUL

We include in this issue the index regeneration schedule in effect at Northwestern. The schedule includes the time needed to perform regeneration of the different indexes. Please note that timetables for regeneration on NUL's schedule depend on the hardware configuration in place at NUL. With a larger CPU and faster tape drives and disks, the time it takes to regenerate the various indexes could be cut considerably. Conversely, index regenerations could take longer with a smaller CPU and slower tape drives and disks.

INDEX	FREQUENCY OF REGEN	NUMBER OF INDEX RECORDS	NUMBER OF RECORDS EXAMINED	INDEX REGEN TIME	INDEX LOAD TIME	TOTAL TIME
Author/Title	Biweekly	2,100,000	750,000 (Bib.)	55 min	25 min	75 min
Subject	Monthly	363,200	750,000 (Bib.) + 750,000 (Hldg)	105 min	20 min	125 min
Call Number	Weekly	1,300,000	750,000 (Hldg) + 750,000 (Item)	60 min	10 min	70 min
Author-ity	Weekly	283,000	125,000 (Bib.)			9 min
Stand'd Number	Monthly	356,000	750,000 (Bib.)	35 min	2 min	37 min
Item ID	Semi-Monthly	1,520,000	1,520,000			30 min
Patron File	Weekly	85,000	28,000			3 min

ACCOUNT MANAGEMENT COMES TO SUPPORT SERVICES

Beginning September 1, the NOTIS Support Services Group has adopted a new approach to working with library personnel at the NOTIS installations. It's called "account management." Each NOTIS site has been assigned an account representative who has full responsibility for scheduling and providing implementation visits, training, and ongoing consultation for library personnel at the site.

What this means in practical terms is that you as a NOTIS customer now have one person from Support Services assigned to work with your library. You may call this person with all your questions about training and use of the system from the library point of view. Technical questions about the software, telecommunications, and hardware will continue to be handled by our Systems Engineers.

When your representative is not in the office to receive your call, someone else from the Support Services Group will take your questions and communicate them to the appropriate person.

We feel that account management will provide you with a greater sense of continuity in dealing with Support Services than in the past. Because your account representative will be the person most knowledgeable about the status of NOTIS at your library, we feel you will be getting the most consistent and useful service we can provide.

Consult the list below to find the name of your account representative. Initially, accounts have assigned to Roberta Kirby, Ben Burrows, and Tom McGinn. In January 1986, accounts will also be assigned to Kathy Cunningham, our newest Support Services Librarian. A small number of older accounts will be shifted at that time from Roberta or Ben to Kathy.

Library	Account Representative
Arlington Co.\Public Library	Roberta Kirby
Auburn University	Tom McGinn
Banco de la Republica, Colombia	Tom McGinn
Biblioteca Nacional, Chile	Tom McGinn
Biblioteca Nacional, Venezuela	Tom McGinn
Brigham Young Univ.	Roberta Kirby
Central State Univ.	Ben Burrows
Clemson Univ.	Roberta Kirby
Colorado State Univ.	Roberta Kirby
Dallas Co.\Comm. Coll.	Ben Burrows
DeKalb Library System	Roberta Kirby
Florida Ctr.\Lib.\Autm.	Roberta Kirby
Harvard University	Ben Burrows

Library

Indiana State Univ.
 Long Beach Public Library
 Louisiana State Univ.
 Montgomery Co.\Comm.\Coll.
 NASA
 Northeast Missouri St.\Univ.
 Patuxent River Naval Air Stn.
 Rice University
 Shell Oil
 State Library of Penna.
 St.\Louis Comm.\Coll.
 Tulsa City-County Library
 University of Delaware
 University of Evansville
 University of Illinois, Chi.
 University of Pennsylvania
 University of Pittsburgh
 University of South Alabama
 University of Texas, El Paso
 Vanderbilt University
 Washington University
 White Plains Public Library
 Wichita Public Schools
 Wichita State Univ.

Account Representative

Roberta Kirby
 Ben Burrows
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 Ben Burrows
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 Tom McGinn
 Tom McGinn
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CURRENT STATUS OF BRS

To date, BRS has been successfully installed under MVS as supplied. We are currently in the process of converting the data base files and some of the work files from DA to VSAM under MVS. This is required so that they will run on the 3370s (FBA) here at Notis. Once this is completed, and additional source code is received from BRS, then the DOS conversion can begin.

RESPONSE TIME STUDIES

The staff at NOTIS frequently receive inquiries about system response time. We know generally what this is but are interested in acquiring some actual statistics. If you have compiled such data, we would appreciate your sending them to us at NOTIS. Please send them to the attention of Randy Menakes.

***** NOTIS NEEDS YOUR HELP *****

The NOTIS Office and the Informations Systems Development Office are currently revising the Acquisitions Module. We are designing a Fund Record based on the model created by Harvard University. We need your help! Below you will find a brief questionnaire requesting information about accounting matters. Please fill out the questionnaire and return it care of Ben Burrows in Support Services with your comments, suggestions, and requests for additional enhancements by ~~SEPTEMBER 30th~~

October 15.

NOTIS FUND RECORD QUESTIONNAIRE

1. Official Fund Account Identifier: This field is intended to be a free-text field used to record the full official identification of a fund as established, for instance, by a library's parent organization.

What is the maximum number of characters -- including intervening punctuation -- that you deem necessary for this field?

___ characters. EXAMPLE:

2. Fund Name: This is a free-text field used to record the full name of the fund. What do you consider a sufficient number of characters to accomodate you current fund names?

___ characters. EXAMPLE:

3. Sub-funds: What is the maximum number of sub-funds (i.e., expenditures by class: books, serials, microproducts, media, postage, service charges, etc.) that you require?

MASTER

NOTIS

July 3, 1985

Dear NOTIS User,

Please write a "3" for high priority, a "2" for medium priority or a "1" for low priority beside each of the enhancements under consideration on the attached list. This will allow us to schedule development work earliest on the features needed most by NOTIS users. Please add any features you need which are not on the list, in the line marked "Other" or on a separate sheet of paper. Be sure to number these also.

Thank you; please return your institution's list to me by July 31.

Sincerely,

Jane A. Burke
Jane A. Burke
Director, NOTIS

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enc.

Date: January 31, 1985

To: NOTIS Office staff

From: Bruce Miller

Re: NOTIS features to be considered for implementation

I. General features

- (28) 1.1 1. MVS conversion of NOTIS 3 programs.
- (30) 1.7 2. Rewrite of OCLC load programs, including creation of linked item records and update of existing records.
- (35) 2.6 3. Keyword/Boolean searching.
- (29) 1.4 4. Media and facilities booking
- (31) 2.0 5. OCLC on-line transfer using M300 microcomputer. Also enhance transfer using existitng terminals.
- (30) 1.0 6. Hebrew and Cyrillic character support.
- (20) 1.4 7. Improve book materials module.
- (33) 2.5 8. Print spine labels using data in copy holdings and item records.
- (34) 2.1 9. Linked systems capability.
- (33) 1.3 10. Interface NOTIS with standard office automation systems.
- (28) 1.7 11. More flexible method of indicating the desired action in an action date listing.
- (28) 1.8 12. More flexible method of routing expired action date listings, including routing to a particular person.
- (33) 1.7 13. "Help" screens for staff responsible for creating or updating records.
- (32) 1.7 14. Method of identifying the end of a user session and the beginning of another session for transaction logs.
- (34) 2.1 15. Bindery control module, including on-line interface with vendors (see pp. 3-75-6 of Cornell RFP for ideas.)
- (29) 0.9 16. Scholar workstation

NOTIS features to be considered for implementation

- (30) 2.5 17. Print spine labels from copy holdings statement and item record data.
- (30) 1.0 18. Revise catalog card request/book materials program to generate the standard profile of cards plus item record creation with one command.
- (26) 0.8 19. Interface with ADR's ETC text-editor package.
- 20. Other: *Deliver documentation in machine-readable form; ...*

II. Circulation features

- (30) 2.1 1. Batch purge of patron records.
- (25) 1.8 2. Batch collection of inventory data and matching this with item file.
- (28) 2.0 3. Batch program to match an inventory file with the copy holdings file, to create linked and unlinked item records.
- (34) 2.8 4. On-line program to display items currently charged to a patron.
- (21) 1.5 5. Define additional item record status values.
- (31) 2.3 6. More efficient way to create linked item records (change default command on screen after create: consider a command equivalent to "derive").
- (32) 1.8 7. Suppress printing of an overdue notice by an authorized operator.
- (29) 2.6 8. On-line program to create, update and display financial obligations file, with necessary changes to existing batch programs and discharge program.
- (30) 2.5 9. Microcomputer programs to collect charge and discharge transactions and interact with charge and discharge programs.
- (28) 2.2 10. Expand recall/hold to get first item returned within a location, within a location group, within a title, or within multiple titles (e.g. editions).
- (30) 2.0 11. Add course reserve fields to item record, batch programs to generate indexes to these, and modify on-line programs to query the indexes in both staff mode and LUIS.

NOTIS features to be considered for implementation

- Also modify batch programs to send notices to persons in recall/hold queue when item goes to course reserve.
- (30) 1.5 12. Interface with OCLC and RLIN interlibrary loan systems, including printing shipping labels and insurance slips.
- (28) 1.2 13. Rewrite charge, renew and recall to be used at self-service terminals.
- (28) 1.9 14. On-line shelf reading.
- (24) 1.5 15. Add department loan code and temporary loan code fields to item record.
- (18) 1.4 16. Paging capability.
- (27) 1.7 17. Command to merge two item records.
- (30) 1.8 18. On-line mass renewal capability.
- (29) 2.1 19. Modify on-line OCLC transfer to create linked item records.
- (27) 1.9 20. "Refer between" item records (as in the case of classed together analyzed series and sets).
- (32) 2.0 21. Automatic notification to individuals when items they have requested for ordering have been received.
- (28) 1.4 22. Create recall or hold entry but delay effective date.
- (26) 1.7 23. Add institution group option: threshold for listing item on operations report for buying added copies calculated from just number of recalls on item, or include number of holds also.
- (30) 1.6 24. Allow easier override of recall/hold queue when charging an item to a person not the first in the queue.
- (27) 1.6 25. Allow "date not needed" field in item record queue entry to be modified when displaying item record.
- (28) 1.7 26. Add institution group option: LUIS display for charged item include number of holds as well as recalls, and say "HOLDS" or "RECALLS".
- (29) 1.6 27. Print phone number of requestor on hold slip when item discharged.
- (27) 1.9 28. Allow any authorized terminal to link or relink item record, even if item is currently charged.

NOTIS features to be considered for implementation

- (27) 2.2 19. Better way to handle analytic added entries.
- (28) 1.5 20. Extend validation to include control of subfield repeatability.
- (28) 1.8 21. Better method of coping with changes in publication pattern (including "new series") which, although they do not require recataloging, change processing requirements.
- (27) 1.4 22. More "processing type" codes.
- (29) 2.1 23. Direct linkage between a component part and a host record.
- (30) 1.7 24. Create substandard records in union file without jeopardizing authority control (e.g. course reserve).
- (27) 1.5 25. Addition of provisional added entry fields to all bibliographic formats and to the indexes.
- (25) 0.8 26. Development or refinement of programs to send NUC reports to LC on tape.

27. Other:

IV. Holdings features

- (31) 2.5 1. Implement MARC holdings format.
- (28) 2.1 2. Implement NISO detailed volume holdings format.
- (29) 2.0 3. Multiple copies in a single copy holdings statement.
- (29) 1.5 4. Suppress call number display when an item is shelved alphabetically.
- (29) 2.0 5. Method for "collecting" holdings from more than one bibliographic record, as in the case of a title change.
- (30) 2.4 6. Suppress LUIS display of a bibliographic record.
- (28) 1.9 7. Include publication and binding pattern information (IVPY) in copy holdings record.
- (31) 1.7 8. Better and more "standard" way to handle "stamps" over and under call numbers.
- (24) 1.4 9. Collection management units able to "annotate" holdings data.

NOTIS features to be considered for implementation

29. Other:

III. Bibliographic data features

- (27) 1.2 1. RLIN batch load program, including creation of linked item records.
- (27) 1.4 2. RLIN on-line transfer, including linked item creation.
- (26) 1.1 3. NOTIS batch load of updates and new records to RLIN.
- (33) 1.7 4. Produce "want" lists of titles, such as replacements or hard-to-get works.
- (27) 1.6 5. Action date in bibliographic record.
- (28) 1.3 6. Implement "local encoding level" field in bibliographic record.
- (28) 1.5 7. LC MARC indexes or complete records on-line.
- (29) 1.4 8. On-line transfer of LC MARC records from laser disk.
- (28) 1.0 9. Add code or field in bibliographic record (or copy holdings record) to indicate MARC search pending.
- (34) 1.9 10. Add GPO tapes.
- (27) 0.9 11. Automatic production of NUC tapes.
- (31) 1.6 12. Multiple processing units able to share a single bibliographic record.
- (27) 2.0 13. Revise input requirements for 010 field (LC card number).
- (32) 2.2 14. Implement MARC machine-readable data files format, technical reports format and archives and manuscripts format.
- (30) 2.2 15. Merge multiple bibliographic and copy holdings records.
- (26) 1.4 16. Increase level of validation in bibliographic record.
- (33) 2.0 17. "Copy" a field (especially a heading) from one bibliographic record to another.
- (27) 1.3 18. Each "firm" field in a bibliographic record have a corresponding "provisional" version.

NOTIS features to be considered for implementation

- (33) 2.8 10. "Shelf listing" capability, which would make a manual shelf list unnecessary.
- (32) 2.1 11. Group copy holdings statements, where a single copy encompasses materials in different formats, publication patterns, etc.
- (25) 1.5 12. More "classification type" codes.
- (28) 1.5 13. Expand the number of processing codes.
- (27) 2.1 14. Add data fields approved during earlier copy holdings redesign meetings, such as local and LUIS note fields and data fields which will enable automatic production of management statistics such as the number of titles cataloged by type of cataloging and by cataloger's name.
15. Other:

V. Acquisitions and serials features

- (31) 2.7 1. Harvard redesign (includes some of the features listed below).
- (26) 2.3 2. Multiple copies in one division of an order.
- (30) 2.2 3. Increase account number to 15 characters.
- (27) 2.1 4. Piece-level statistics.
- (28) 1.7 5. Currency conversion.
- (28) 2.4 6. Add number of items ordered, payment period and other fields usable for vendor performance analysis.
- (28) 2.0 7. On-line or off-line transmission of orders and claims and receipt of claims responses using the BISAC and SISAX standards when approved.
- (32) 2.4 8. Ability to accept invoices from major vendors in machine-readable form.
- (25) 1.0 9. Increase number of copies field to 2 bytes. to allow more than 255 copies.
- (32) 2.5 10. Improve access to vendor address file (vendor name, SAN and cross references).
- (28) 1.6 11. Increase "ship to" code to 2 bytes.

NOTIS features to be considered for implementation

- (32) 2.2 12. Lists of new acquisitions.
- (26) 2.2 13. Alert operator and block invoice processing if vendors are not identical.
- (25) 1.6 14. Increase maximum number of copy statements activated in the copy holdings record at one time from 9 to a higher value.
- (30) 1.8 15. More rational way to handle orders which have to be shifted because of a title change.
- (18) 1.6 16. Number of divisions in an order record set as an installation option, not hard-coded at 12 in program LI854.
- (31) 1.9 17. Routing system for periodicals and routing slips.
- (24) 2.0 18. Print NV field data on claim memo.
- (28) 2.4 19. Accounts payable subsystem.
- (25) 2.1 20. Re-link order records.
- (29) 2.4 21. Automatic creation of linked item record during receipt processing.
- (22) 1.6 22. Library or branch able to specify which data elements are required for order record creation, particularly for receipt purposes.
- (30) 2.1 23. "Next issue" prediction.
- (29) 2.1 24. Cross references to vendors.
- (31) 2.4 25. SAN (Standard Address Number) and name access to vendor file.
- (28) 2.4 26. "Link" vendor file to open orders and invoices.

VI. Authority control features

- (23) 1.7 1. Add to heading review list, cases where the same entry occurs in more than one bibliographic record for the same processing unit.
- (23) 1.6 2. Increase level of validation of authority records.
- (26) 1.9 3. Modify "new/dropped" subject headings list to include processing unit of record in which subject heading occurs. Also print listing in upper and lower case with all punctuation and diacriticals.

NOTIS features to be considered for implementation

- (26) 2.4 4. Add local note field to authorities format.
- (27) 1.8 5. Better handling of multiple subject heading schemes.
- (29) 2.4 6. Copy a field (especially a heading) from one authority record to another.
- (28) 2.2 7. Add action date to authority record.
- (20) 1.9 8. Re-link volume holdings records. - ?
- (26) 1.7 9. Derive authority record from authority file such as BNA, UTLAS.
- 10. Other:

VII. Index features

- (35) 2.9 1. Index redesign, including cross references, conflict detection and reporting, blind reference detection, heading review list, indexing on linking entry fields, notification of new headings, combined heading index and search limiting.
- (31) 2.3 2. Duplicate detection -- not see two identical index entries.
- (29) 1.2 3. Include or exclude journal articles in LUIS indexes.
- (26) 1.6 4. Index and display files not under authority control, such as analytics and course reserve.
- (24) 1.7 5. Add heading level to index record, for "catalog management" view of indexes.
- (34) 2.4 6. Create cross references from non-hyphenated entries to hyphenated form (e.g. online see on-line).
- (32) 2.0 7. Redesign "guide" index display.
- (28) 1.4 8. More generalized "help" function.
- (30) 1.9 9. Eliminate need for explicit "m" (next record) LUIS command.
- (35) 2.7 10. Browse backward in LUIS index and bibliographic/copy holdings displays.
- (30) 2.2 11. Hard-copy printout for LUIS search. *1 staff*
- (28) 1.4 12. On-line suggestion capability for LUIS_A users.

NOTIS features to be considered for implementation

- (29) 2.1 13. Index author and title fields in unlinked item records.
- (27) 2.1 14. Display "brief citations" in subject indexes either chronologically by date or alphabetically by title.
- (27) 1.6 15. Suppress indexing on an individual record, on a field by field basis (as where some headings are correct and others are in conflict).
- (26) 1.6 16. One institution group able to index on certain fields (e.g. untraced series).
- (31) 2.0 17. Enhance call number index to allow searching by "catalog".
- (32) 2.0 18. Fuzzy matching of user search requests.
- (21) 1.6 19. Implement "keep" and "remove" commands, possibly with record changes not yet stored.
- (33) 2.8 20. Suppress public access to a bibliographic record, such as a withdrawn one.
- (28) 1.8 21. Include 210 field (abbreviated entry and title) entries in title index.
- (26) 1.4 22. Explore use of Soundex or Davidson sound-based coding system with name searching.
- (32) 2.2 23. Use "next" command to go from brief citation listing under one subject heading to the brief citation listing under the next subject heading.
- (28) 1.8 24. Show LUIS users holdings of multi-piece works (not periodicals) which are in process or which have only limited bibliographic control.
- (30) 2.0 25. Place general material designation in brackets in LUIS.
- (29) 2.1 26. Customized catalogs (e.g. index on certain records).
- (29) 1.8 27. Means of "redirecting" searches based on headings other than the one used for accessing the record.
- (29) 2.2 28. Easier to modify help screens.
- (30) 2.0 29. Save a search.
- (31) 1.5 30. ISSN index available in LUIS.

NOTIS features to be considered for implementation

- (26) 1.8 31. Display 245 field (title proper) on index screens for ISSN index search.
- (15) 1.8 32. Implement suggestions in Arlene Taylor article to increase chances of search "hits", particularly in LUIS.
- (33) 2.6 33. In title searches, normalize to include initials with or without periods.
- (31) 1.8 34. Add NOTIS record number to LUIS screens.
- (31) 1.9 35. Automatically change LUIS message from "on order" to "claimed" when item has been claimed.
- (25) 1.4 36. Change RUB (request for uncataloged book) message in LUIS.
- (24) 1.3 37. Use SMD (special material designator) instead of GMD in index entry.
- (27) 1.4 38. Remove comma in patron name.
- (24) 1.0 39. Add non-repeatable induced accession number field in item record.
40. Other:

NOTIS features to be considered for implementation

DIRECTIONS FOR CHANGING SPROCKET ON TELEX 281B PRINTER

(By Dr. James Sjaard)

Tools Required -- Phillips screwdriver, small screwdriver or awl and small long-nose pliers.

Step 1 - Remove carrier cover by lifting up at top of printer.

Step 2 - Remove paper cover.

Step 3 - Remove platen knob from right side of printer by pulling outward.

Step 4 - Turn printer on table until it is facing away from you. NOTE: Left and right directions in the following text will reference the printer in this position (e.g. the platen knob is now on the left).

Step 5 - Remove top cover by removing 4 screws (2 screws located lower rear and 2 screws located in wells near front of printer). LIFT CAREFULLY (wires connected at front of printer) and place flat at front of printer.

Step 6 - Move 2 sprocket tractors close together.

Step 7 - Locate the square rod near the rear of the printer which drives the sprocket tractors. The rod is held in place by a "C" clip on the right side of the printer.

Step 8 - Remove "C" clip by prying off with awl or small screwdriver (be careful that clip does not fly off).

Step 9 - Slide shaft slightly to left, grasp gear and pull slightly to left, lift, pull shaft to left and remove completely. Be careful not to lose small bushing at right side of printer.

Step 10 - Locate round shaft that supports sprocket tractors: It is held in place by a screw at each side of the printer. Remove the 2 screws and remove shaft and sprockets. NOTE: On some printers there may be a cable attached to this rod, if so, cut cable tie.

Step 11 - Slide sprockets from rod and replace with new ones.

REVERSE PROCESS TO REINSTALL

Step 12 - Replace round rod and 2 screws which hold it. One sprocket should be on each side of paper-out switch.

Step 13 - Set sprocket tractors in place.

Step 14 - Slide square rod through tractors. Check that pins of tractors are in same relative position on each tractor. If not slide rod out of right tractor, give it a quarter turn, and reinsert it.

Step 15 - Replace bushing on right end of square rod and position bushing at left end so it fits into slot.

Step 16 - Using long-nose pliers, replace "C" clip.

Step 17 - Replace top cover. Be careful not to pinch wires at left front of printer. Tighten 4 screws.

Step 18 - Replace paper cover.

Step 19 - Replace carrier cover.

Step 20 - Replace platen knob.