NOTISes

The Newsletter for NOTIS Users

In This Issue

Back On Track

This issue of NOTISes combines numbers 37 and 38 for December 1988 and January 1989. We combine these two numbers to re-establish a timely publishing schedule. From now on you will receive each issue of NOTISes in the month identified on the cover.

For anyone with a paid subscription which includes issue numbers 37 or 38, we are adding an extra issue to your paid subscription.

*The previous two issues of **NOTISes** have featured interviews with the originators of the Northwestern Online Totally Integrated System (NOTIS), Dr. James Aagaard and Velma Veneziano.*

*To complete this series of interviews relating to the history of NOTIS, we now present an interview with NOTIS Systems' President Jane Burke. This interview was originally published in Northwestern University Library's **Computing News** under the title, "NOTIS In The Outside World." **NOTISes** thanks NUL and interviewer Vince McCoy for permission to use this material.*

Into The Future:

A Conversation With Jane Burke

Q: How did you get involved in library automation?

JB: I've been involved in library automation now for 15 years. I received a library degree from Rosary in 1970. After I got my degree, I worked for four years as head of Adult Services in the public library in Libertyville, Illinois. During that time the library was one of nine public libraries in the northern suburbs [of Chicago] that joined together to buy an automated library system. As far as I know it was the very first time that a system was purchased by a joint group with the intention from the very beginning that more than one library would share the same system. As a result of my experience with this system, I went to work for CLSI (Computer Library Systems, Inc.). I started as a trainer. Later, I switched to marketing, eventually becoming a regional manager. I joined NUL as

the Director of Information Services in December 1983.

Q: What had you heard about NOTIS prior to coming to NUL? Did you feel it would become a viable commercial product with a future?

JB: I had certainly heard about NOTIS. I knew the University of Florida and Harvard had installed it, but I don't think that it was considered, at least in the type of libraries where I worked, to be a widely available commercial alternative. I frankly didn't know anything about it functionally. It wasn't until I started interviewing and talking to the library that I really came to understand all the things that it did. For example, I was quite surprised to find out that it had a serials control module. I didn't have any marketing expectations for the first six weeks; but after I went to ALA Midwinter in January 1984 and

> **"We still don't put any money into advertising. We try to put our efforts into keeping customers happy. Happy customers make our best references."**

the booth was just packed with people, it began to dawn on me that this was something in which people were very inter-
ested. If we could not only make it available but support it very well, it could be a very well established system.

Q: How big was your staff when you first started?

JB: When I joined, I was the fourth person. Kenton Andersen was the systems engineer and tech support person. Peggy Steele had come to the NOTIS Office in the summer of 1983 as the full-time training and documentation person. Doris Warner did all of the administrative things.

Q: One thing that led to the incorporation of the NOTIS Office was the attempt to sell it to

TBG (a multinational corporation that owned several bibliographic utilities such as BRS). Do you have any regrets that the TBG deal fell through?

JB: I don't have any regrets. I certainly felt when we first started talking with TBG and signed the letter of intent that the sale would be a good thing. It would be a good way to get some capital to do some expansion. But as the months wore on, I saw that TBG was really looking for very short term profits and looking for ways to avoid putting in the initial capital.

Q: As a separate corporation owned by NU, do you feel part of the University?

JB: I don't think we feel part of the University operationally. As a separate corporation we must make our own way in the world. On the other hand we are very aware that we are an entity of the University. Our job is, in the end, to increase the value of NOTIS Systems, Inc., to the University so that it is receiving something for all its years of technical and monetary support.

Most of that support and hard work came directly from NUL staff. I wouldn't want the

library staff to forget it was John McGowan who went year after year to the administration to ensure that resources were available for NOTIS development. There are many universities that started doing little automation efforts. But their administrations did not continue to support them in the way that John won support for NOTIS.

I like the fact that we are owned by a university instead of a corporation looking for short term profits. It's been very beneficial to NOTIS Systems, and to all NOTIS customers, to have as our owner somebody with the

> **"What libraries are coming to expect is a system that will deliver all kinds of data bases to the user of the online catalog."**

same time frames and view of the future as the customer base. This allows us all to work together much better.

Q: Have you developed a profile of the typical NOTIS library (i.e., the one that could benefit most from having NOTIS)?

JB: Oh yes. NOTIS is a system which is most beneficial to libraries that are like its "mother library," large research-based academic institutions. We do not actively seek public libraries anymore. We are very careful to talk primarily with institutions that match the software.

We would, however, like to extend that view a little bit. While NOTIS is primarily an academic system (more than 80% of our customers are academic institutions), we also see that NOTIS fits very comfortably into research-based libraries and information centers in corporations and government. We would like to move more into this area.

Q: Are you still finding customers knocking on your door ?

JB: It's changing a little. We no longer have

people calling us up and simply saying in their first telephone call that they have decided they want NOTIS. Today we have to, and are willing to, compete for their business. But academic institutions continue to listen much more to their colleagues than anything else, so we still don't put any money into advertising. We try to put our efforts into keeping customers happy. Happy customers make our best references.

Q: As President of the corporation, do you find that you don't get to go out on road as much as you'd like?

JB: I'm not traveling as much as I used to, but I do make a point of visiting customers at least once a month to find out what they are thinking and feeling. I guess I agree with Sam Walton, founder of Walmart, who said that a lot of what the chief executive officer needs to

> **"We want to modify LUIS so that it is able to look at multiple data bases and do some linking back and forth."**

know can only be found by being out with the customers.
I continue to do all of the contract work myself so I visit every new customer at least once. With the

new customer you want to know at the beginning what their expectations are so you can do your best to have the organization meet those expectations.

Q: Can NOTIS Systems, Inc., handle international customers?

JB: I'm probably the person in the organization who is constraining us from going international. I continue to be concerned that we do a very good job with support. However, we do have one prospect in the Pacific that is being pretty insistent. I think we may do it.

Q: Does NOTIS Systems, Inc., have any kind of agreement with IBM by which you recommend each other's products to potential customers?

JB: Very much so. We have a formal joint marketing agreement with IBM called an IMAP (Industry Marketing Assistance Program). Through this program we work much more closely with IBM. We do joint proposals now, in which IBM does the hardware proposal to accompany our software proposal. There are certain situations in which we actually receive dollars from IBM, in which the institution buys a new computer just for running NOTIS. The most important aspect of the IMAP is the flow of information back and forth between IBM and NOTIS Systems, Inc. We have much better contacts at IBM than we would otherwise.

> "NOTIS Systems is trying to develop the tools that will allow the library to remain the central information resource on campus."

Q: What products and services will libraries be looking for in the 1990s and how will NOTIS Systems, Inc., meet these needs?

JB: I have a really firm opinion about that and I hope that the way I have interpreted the future is correct. We are seeing a dramatic shift in what libraries expect from "integrated library systems." In the 1970s and early 1980s libraries concentrated very hard on using automation to help them manage their own collections. What libraries are coming to expect, and by the 1990s will demand, is a system that will deliver all kinds of data bases to the user of the online catalog in the same way that the online catalog today delivers information about the library's holdings.

The focus has shifted from tech services-based concerns to the delivery of information through the online catalog. NOTIS Systems is building for the 1990s a system that delivers journal articles, other kinds of citation-based data bases, and eventually full-text retrieval at the same terminal using the

same interactive conversation that you use now.

Our first step in this area is to mount the data bases right inside of NOTIS itself instead of, for example, linking a machine running NOTIS to a machine running MEDLINE. These data bases would then be just as available to the user as the library's own catalog. We want to modify LUIS to make it more powerful so that it is able to look at multiple data bases and do some linking back and forth. For example, if a user looks at the ERIC data base and finds a citation for a particular journal, we'd like the system to be able to indicate whether this issue is available in the library.

Q: Wouldn't it be a significant investment for a library to purchase these large data bases and keep them current? How would a small library afford that?

JB: I'm not sure we understand all of the economics yet. One of the things that libraries tell me they don't like is the uncertainty of transaction charges when they use online services such as BRS or DIALOG. They understand that buying and mounting the data bases on their own system is expensive but at least they know exactly what the costs are going to be. Georgia Tech has documented the fact that locally-mounted data bases are used more heavily. If we mount that data locally, more people will be able to use it and we will get more use for the same dollar.

Technologically, I hope we will see optical storage, similar to what we now see on single user CD ROM stations, that is robust enough and fast enough to put on a mainframe for multiple user access. Our job will then be to broaden the online catalog and build the user interface in such a way that the user is not aware that one file is optical storage and one file is magnetic storage.

Libraries have kept the searching of remote data bases very much in the hands of librari-

ans. If we are going to offer our end users what they need for the 1990s, we are going to have to make those data bases available directly to them. Just as we've come to accept an online catalog as part of what we must now offer our community, we will find that offering data bases will be part of what they will expect. If libraries are going to stay central to their institutions as more than repositories for books, they must make these outside resources available. NOTIS Systems, Inc., is trying to develop the tools that will allow the library to remain the central information resource on campus.

Q: Is the development work done by N. U.'s Information Systems Development Office (ISDO) still important to NOTIS Systems, Inc.?

JB: We certainly continue to see that the development work done by ISDO is very, very important. For example, we look at the Merged Heading Index and see something that probably could only have been done within the setting where it was developed, where there is a dialog virtually on an hour-by-hour basis between the librarians working in the collections and the people doing the development.

In this way we certainly do feel that the work of ISDO is extremely valuable to NOTIS Systems, and to the 120 installed users of the

NOTIS SYSTEMS' Status Report

Highlights of Jane Burke's Year-End Report to the Board of Directors

TO: Board of Directors
FROM: Jane
DATE: December 28, 1988

As we close our first full year of operations, I'd like to note our status in several important areas.

REVENUE
Our first year's revenue goal has been achieved. We installed thirty new Library Management Systems this year. Eleven are Association of Research Libraries (ARL) institutions.

This target could not have been achieved without the diligent efforts of everyone on our staff. They have all worked very hard to "make the number".

Kudos must go especially to the Conversion Services Group, which has exceeded its goals.

STAFF SIZE
We close the year with all managerial slots filled. Four Senior Managers are in place, reporting to the President:
Customer Services — Maribeth Ward
Systems Development — John Kolman
Marketing — Michael Benedict
Administrative Operations — Gaye Preston
Nine middle managers are also in place.

Total staff size is now 73. There are also several openings due to internal promotions and new positions in 1989, including two new sales positions.

PUBLICITY
At a recent meeting of **CAUSE**, which is an administrative computing users' group, John Scully, the President of Apple, featured NOTIS in his talk. He was demonstrating an Apple front end to the NOTIS online catalog, and used NOTIS as an example of an organization and

a product that has facilitated the creation of such tools for end users.

NEW PRODUCTS
In December, we shipped the first few copies of the new GTO software product. This software, which runs on a microcomputer, acts as a link between the national cataloging utilities and the database in the NOTIS system. These early copies are being used at test sites, and we are getting valuable feedback.

Work continues on the MultiDatabase Product. We are working very closely with our research and development site, Vanderbilt University.

This product responds to a growing need to make available more than library inventory in the library's online catalog.

NOTIS software. However, the context, the setting, and the machine support under which that kind of development work is carried out is not something we have any right to comment upon. It is an operational issue for the University itself.

Q: Is NUL the only NOTIS user doing development?

JB: No. There are several NOTIS users who do development, but the type and depth of NUL projects are unique. NUL tackles without fear some of the most intricate areas, and I think none of us should take that for granted. The NUL system has evolved and has changed massively over the years based upon the fact that users continue to need more from online systems. This is a real tribute to Jim Aagaard, Velma Veneziano, and the library staff. Their willingness to do things like taking the entire index structure and throwing it away to try something new is unique. OCLC has never done that in twenty years.

> "The NOTIS system is a very good product, developed by NUL with a vision that has made it possible for other libraries to use it. All I've done is help create delivery and support mechanisms so libraries can trust that the system will be supported into the future."

Q: What kind of cooperative efforts do you see possible between ISDO and NOTIS Systems?

JB: Lots of things. Jim Aagaard and John Kolman, our Manager of Software Development, meet monthly. They go into great detail about designs that we're thinking about working on, getting Jim's advice on how we might do things better, and sharing information in general. There is very good cooperation right now. I certainly hope it can continue.

Q: Are there any projects right now that ISDO is working on that NOTIS Systems is waiting for?

JB: At the moment we are certainly relying on ISDO for the Merged Heading Index project in all its phases. While to NUL staff it may seem like a completed project, our customers have not yet received the software. We are waiting anxiously as each fine point of the software evolves in the library and becomes available to us. Right now, I don't think there are any other projects, but that doesn't mean there won't be within a few months.

Q: Is there anything you'd like to add to what we've already discussed?

JB: As I said when you asked me to do this interview, I don't really think that I am a person who is terribly responsible for the success of NOTIS. The NOTIS system is a very good product that was developed by NUL with a vision that has made it possible for other libraries to use it. All I've done is help create delivery and support mechanisms so libraries can trust that the NOTIS system will continue to be supported into the future. ∎

"New CICS Direction": The Impact on NOTIS

In October, 1988, IBM issued a new "CICS Statement of Direction." The announcement said, in part:

> IBM intends to provide a new CICS code base which operates only in an MVS/ESA environment and which excludes some old function, particularly, support for macro-level applications and devices and controllers accessed using BTAM.

According to this statement, the NOTIS CICS macro-level interface will not be supported in "the new CICS."

What does this mean for NOTIS users?

Very little, actually. NOTIS was made aware of this announcement in plenty of time to plan for its eventual effect. NOTIS has already begun migration of its product to a command interface. All new development is occurring on the command interface. NOTIS programmers have already begun the task of locating and documenting existing CICS macro calls so that they can be evolved into command calls.

Second, there is a time lag between such announcements and the actual implementation of a new release of CICS among IBM customers. The new release of CICS that is the subject of this announcement will follow release 2.1 (XRF). Most NOTIS customers are just now migrating to release 1.7. Macro-level applications are supported in both 1.7 and 2.1. By the time NOTIS customers are ready to migrate from 2.1 to the announced new release of CICS, NOTIS will have completed the necessary maintenance of its software.

Third, the new release of CICS will be compatible with older releases through the use of MRO (Multiple Region Option) in CICS. MRO allows communications between CICS regions. IBM has specifically stated that mixed "new release" and "older release" systems will operate correctly under MRO. For those users who dedicate a separate CICS region to NOTIS, this capability ensures that NOTIS can continue to operate as before.

Fourth, not all machine environments will be affected by the discontinued macro-level support. The new release only operates under MVS/ESA, which will only run on selected models of the 4381 and 3090 series (those models with an E or S model number, e.g., 3090-170S). It will be a long time before many NOTIS sites are able to implement MVS/ESA.

To sum up: NOTIS plans to support its customers by migrating from CICS macro calls to command calls well within the timeframe announced for "the new CICS".

NOTIS Offers Class In Use of SAS Utility

NOTIS will present a three-day intensive course in the use of SAS (Statistical Analysis System) as a NOTIS data extraction utility. The course, to be held during the second week of February in the NOTIS training facility, will cover all aspects of SAS code relevant to our extract jobs, the design and operations of the extract jobs, and a detailed look at the NOTIS record structure.

Each of the three days will consist of lecture sessions and a hands-on lab session. In the lab sessions each attendee will be running various forms of the SAS extract jobs on the NOTIS mainframe.

The purpose of this course is to help NOTIS users gain familiarity with some useful SAS coding procedures, the NOTIS extract

jobs, and the record structure of NOTIS online data files.

Course topics include:

- the structure of SAS code

- how to code basic SAS "DATA" statements and utilities, and useful SAS functions

- the NOTIS record structure and how to deal with NOTIS files using the SAS language

- the NOTIS data extract programs: what they do and how they do it

- methods for "tuning" SAS jobs to run efficiently against a NOTIS data base

- methods for job submission and scheduling (e.g., interactive vs. batch jobs)

We believe there is a need for this type of information and education. Since it is the responsibility of each NOTIS site to create and customize its own collection of management and performance reports, a course such as this should speed the implementation of a SAS report system for your NOTIS data base.

We are proud to say that the feedback from those attending the first two NOTIS SAS seminars has been positive. We hope that you or someone from your institution will be able to attend what we feel is a very valuable course for our users.

Course dates are February 8, 9, and 10, 1989.

Please notify Cassie Gibson if you are interested in this SAS course, at (312)-866-0127. This upcoming session has only a few more seats available, so early reservations are encouraged.

The cost of the SAS course is $900 per person, $600 per person if more than 1 person attends from a single site.

User Services

Mary Crompton Joins User Services

On December 12, Mary Crompton began work with NOTIS Systems as a User Services Librarian.

Mary has worked for the past seven years at the University of Wisconsin–Madison. From 1982 to 1986, Mary was Head Librarian in the Social Science Reference Library. From 1986 to the present, Mary was Head Librarian in the Virginia Franks Social Work Library.

In addition to a wide range of library experience, Mary also has had experience with NOTIS. She has worked with the NOTIS acquisitions and serials modules on a daily basis. She participated on a committee to reorganize the workflow of new materials through the acquisitions and cataloging departments.

Most recently, Mary was a member of the NOTIS circulation implementation planning committee. The committee's charge was to determine the policies and procedures for online circulation across the UW-Madison campus.

1989 NOTIS HOLIDAYS

President's Day—February 20
Memorial Day—May 29
Independence Day—July 4
Labor Day—September 4
Thanksgiving—November 23-24
Christmas Day—December 25

News From Users

Northwestern University Library Transaction Statistics

Terminal Group		Low	High	Average
7 public terminals at information desk	Period 1	41	315	141
	Period 2	120	198	153
3 public terminals near conference (a less prominent location)	Period 1	65	169	109
	Period 2	81	165	118
13 terminals in catalog department	Period 1	0	731	89
	Period 2	0	203	116
2 circulation charge/ discharge terminals at main circulation desk	Period 1	83	283	123
	Period 2	174	308	241

In an attempt to measure the level of activity which can be expected from NOTIS and LUIS terminals in a real environment, Northwestern University Library recently logged terminal message counts (one terminal message = one press of the ENTER key) for two one-hour periods in which heavy usage of the system was expected.

The periods were 11 a.m. to 12 noon on Thursday, November 12, 1988, and 2–3 p.m. on Tuesday, November 22, 1988.

Listed above are the lowest message count, the highest message count, and the average count for some selected groups of terminals.

St. Louis Community College Offers Dial-Up

St. Louis Community College at Florissant Valley (Missouri) now offers dial-up access to its NOTIS data base. See the attachment at the end of this newsletter for a description of the dial-up procedures for the NOTIS online public catalog at St. Louis Community College at Florissant Valley.

If you would like to share information about dial-up capabilities at your institution, please send brochures or other descriptions to Tom McGinn, NOTIS User Services. We will make this information available to all NOTIS users.