

2752-87

[Viewgraphs presented during DCA Contract Discussions held at
DDN Network Information Center on November 23, 1987]

Present for client: Ty Smallwood, DCA Contract Monitor
Cecelia Jones, DECCO, Capt. Tatum, DECCO,
Capt. Mike St. John, DCA

November 23, 1987

Present for NIC:

Org. Director:	Elizabeth Feinler
Project Administrator:	Barbara Haley
Management Staff:	Ken Harrenstien
	Vivian Neou
	Francine Perillo
	Fred Ostapik
	Elizabeth Redfield
	Mary Stahl

SRI: Barbara Camph

REPORTS



REPORTS

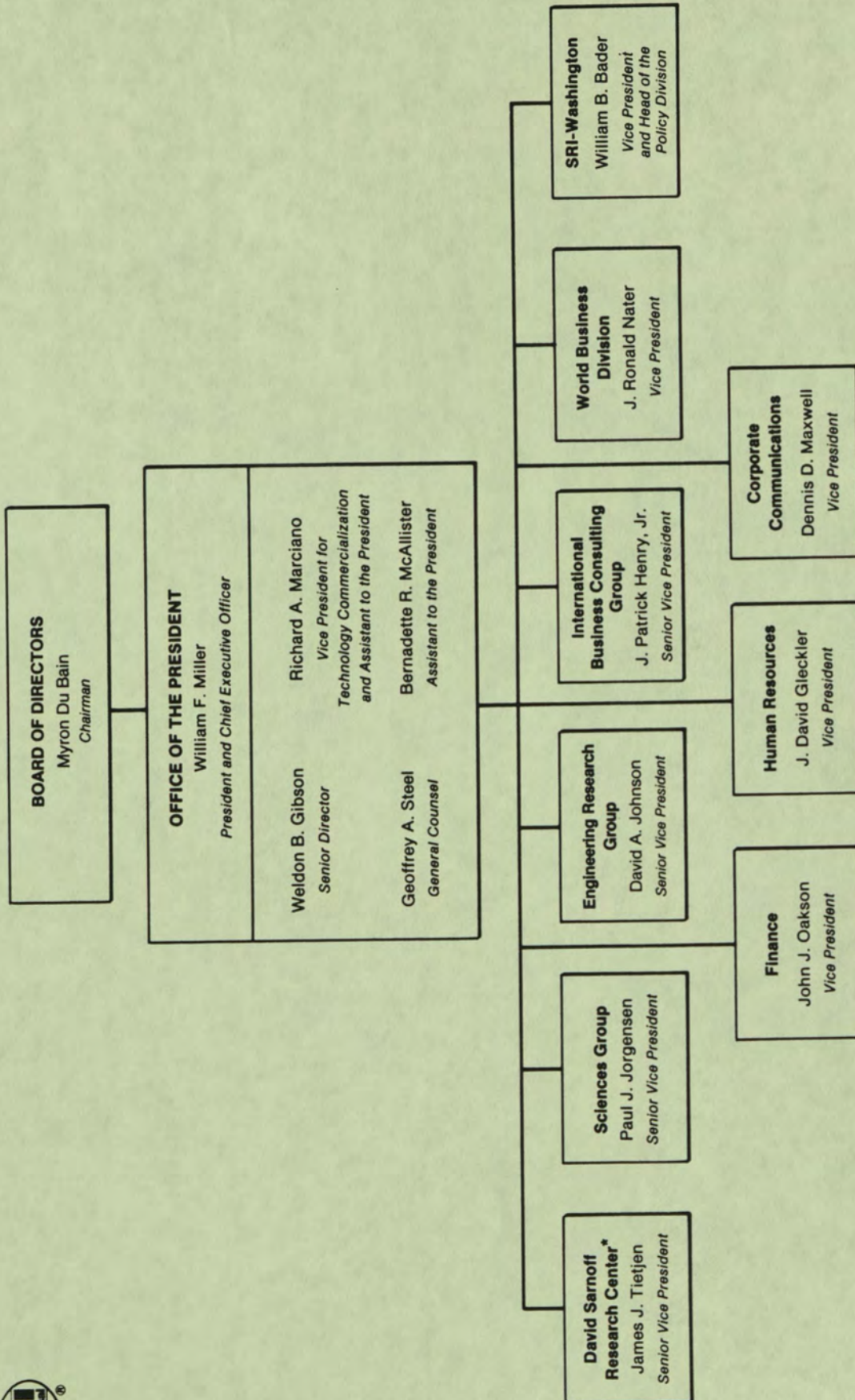
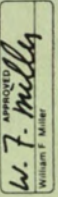
formerly

STANFORD RESEARCH INSTITUTE



SRI STRENGTHS

- MULTIDISCIPLINARY ORGANIZATION
- BROAD-BASED EXPERIENCE IN C3I
- CAPABILITY FOR TOTAL SYSTEM DEVELOPMENT AND SUPPORT
- HIGH-LEVEL PARTICIPATION IN NATIONAL SECURITY PROGRAMS
- NON-PROFIT STATUS
 - UNBIASED BY PROPRIETARY INTERESTS
 - MAINTAINS PRIVACY OF PROPRIETARY INFORMATION
- STABLE PROFESSIONAL STAFF EXPERIENCED IN DoD PROGRAMS
- SIGNIFICANT CLASSIFIED ACCESSES
- A LEADER IN RDT&E



* A wholly owned subsidiary of SRI.



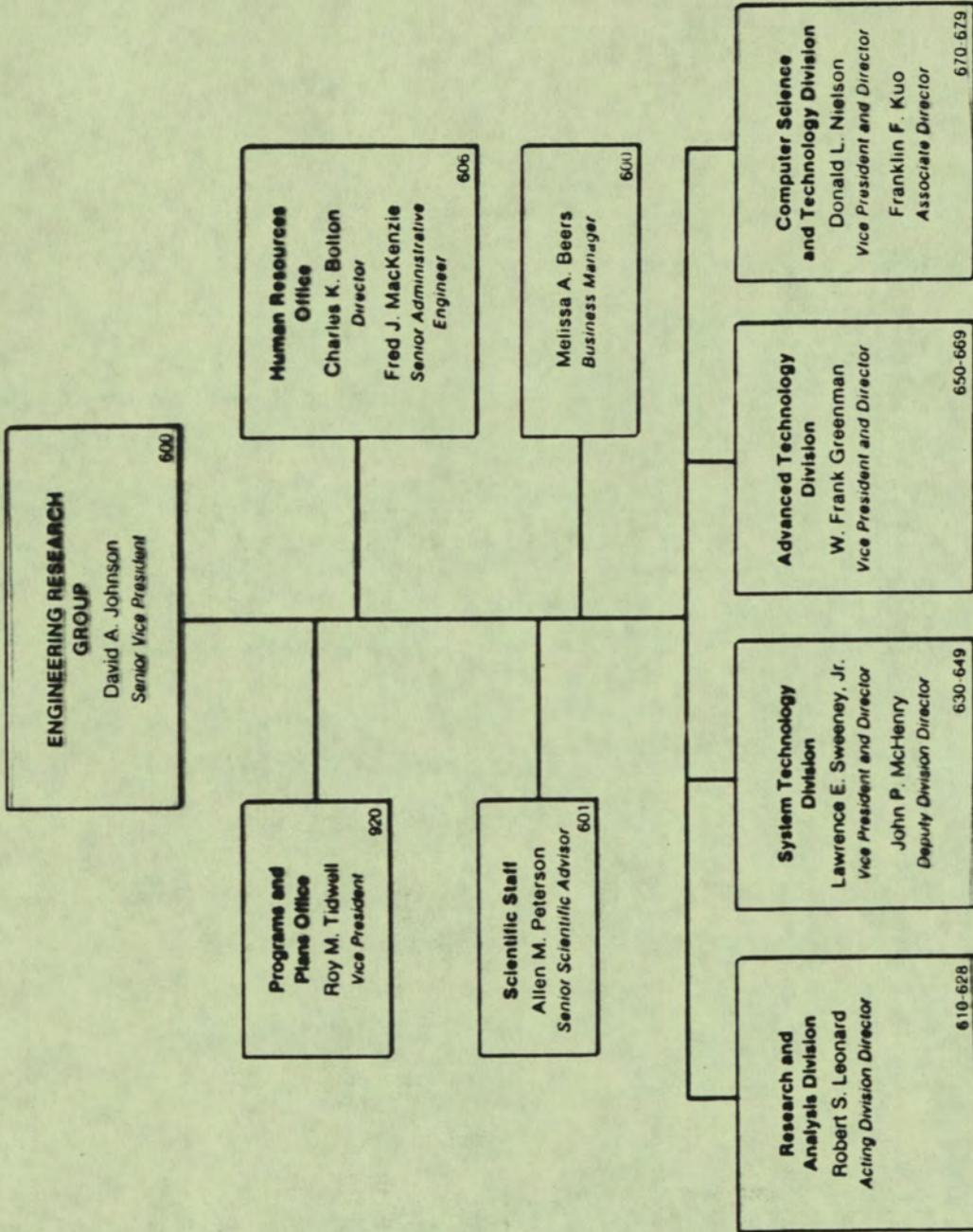
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- TECHNOLOGY R&D
- PRODUCT DEVELOPMENT
- TECHNOLOGY TRANSFER
- TECHNOLOGY APPLICATIONS
- PROGRAM MANAGER AND SETA
- ADVISOR -- EVALUATION -- CONSULTANT
- SYSTEM ANALYSIS -- SYSTEM TEST AND EVALUATION
- EXPERIMENTS -- TESTBEDS

(80% HARD SCIENCE AND TECHNOLOGY LABORATORY)



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William J. [Name]



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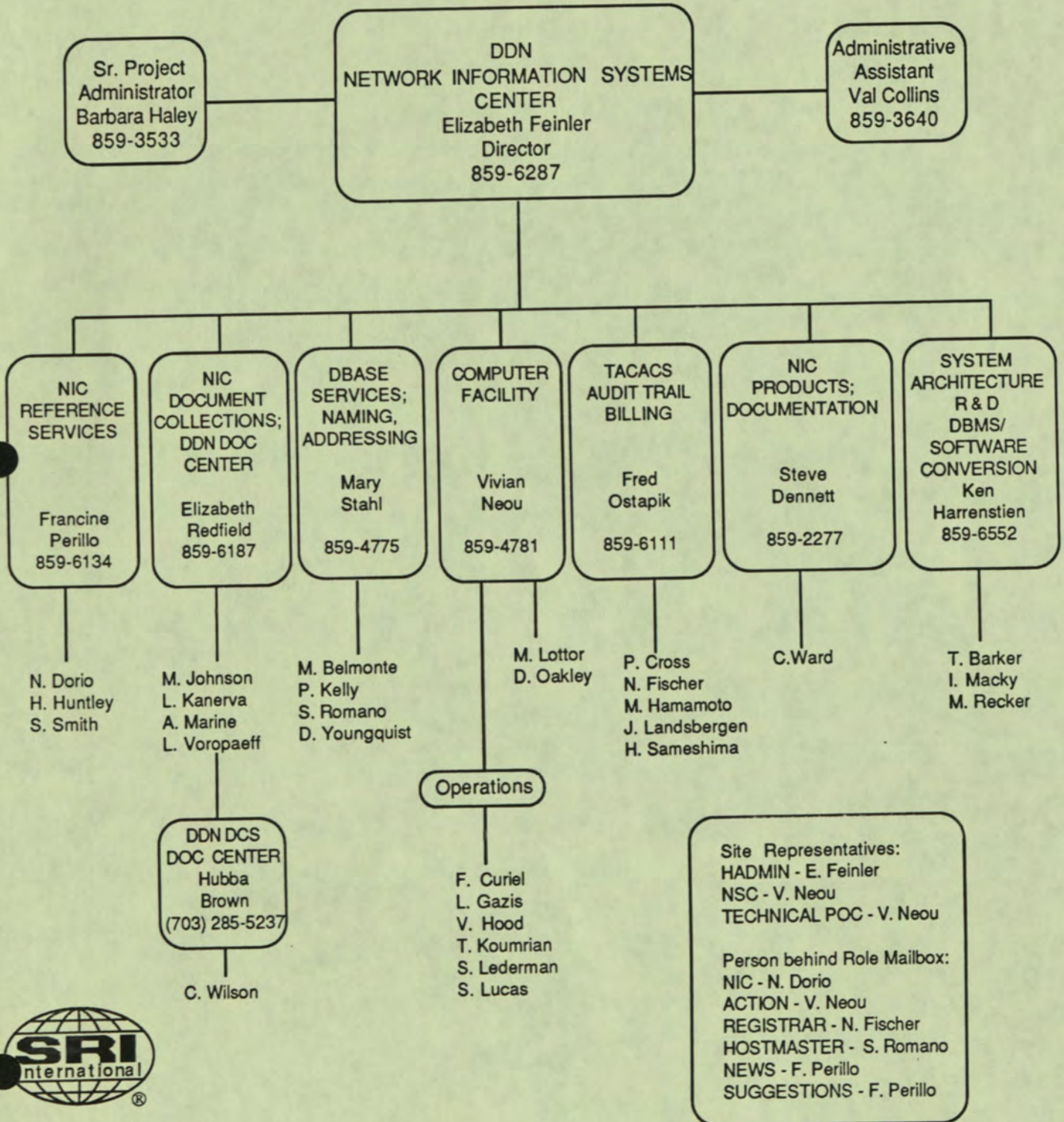
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System Design
Roy H. Stehle
Program Manager 680

Cambridge Computer Science Research Centre
Robert Moore
Director 675

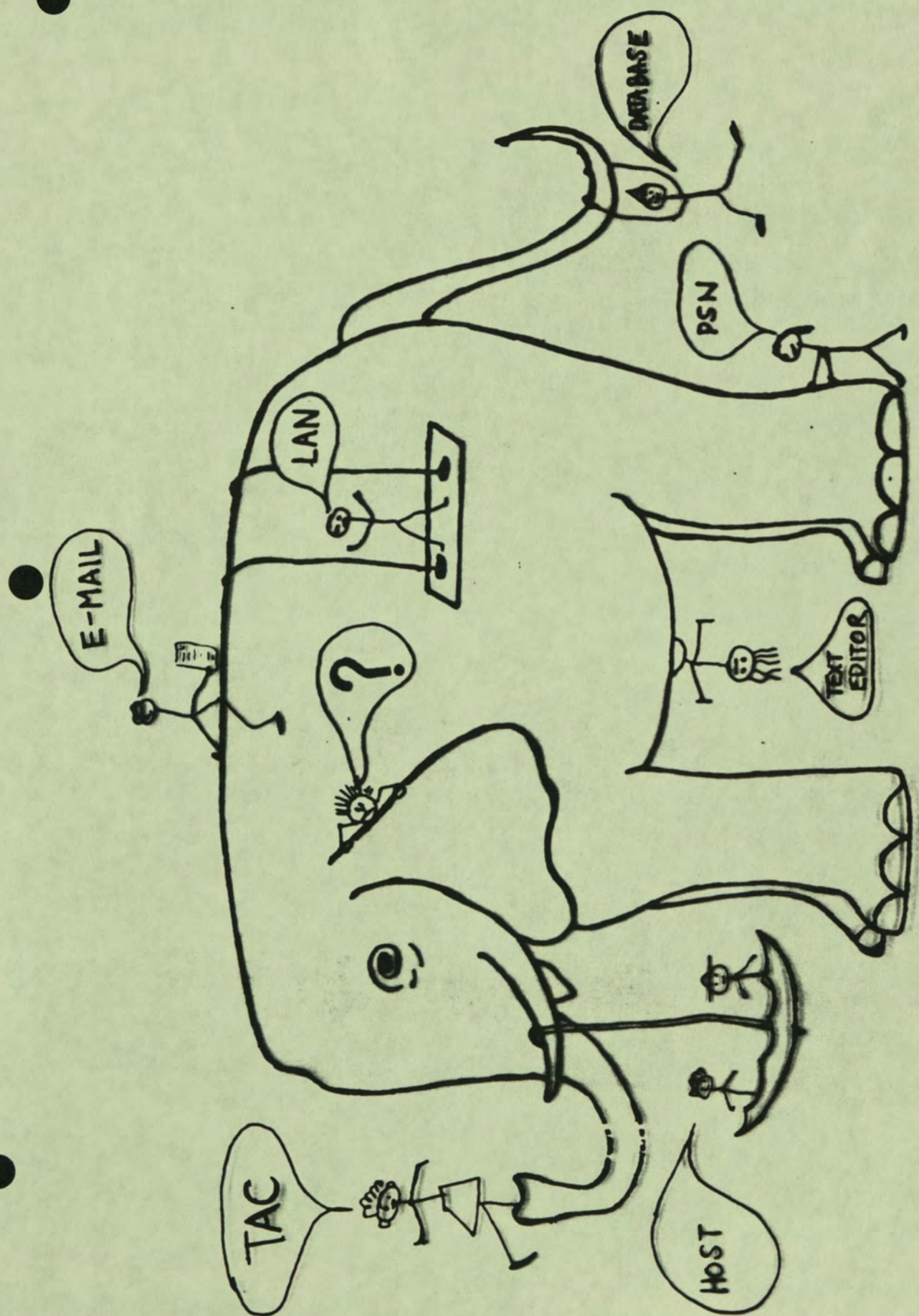
DDN Network Information Systems Center
SRI International
Menlo Park, CA



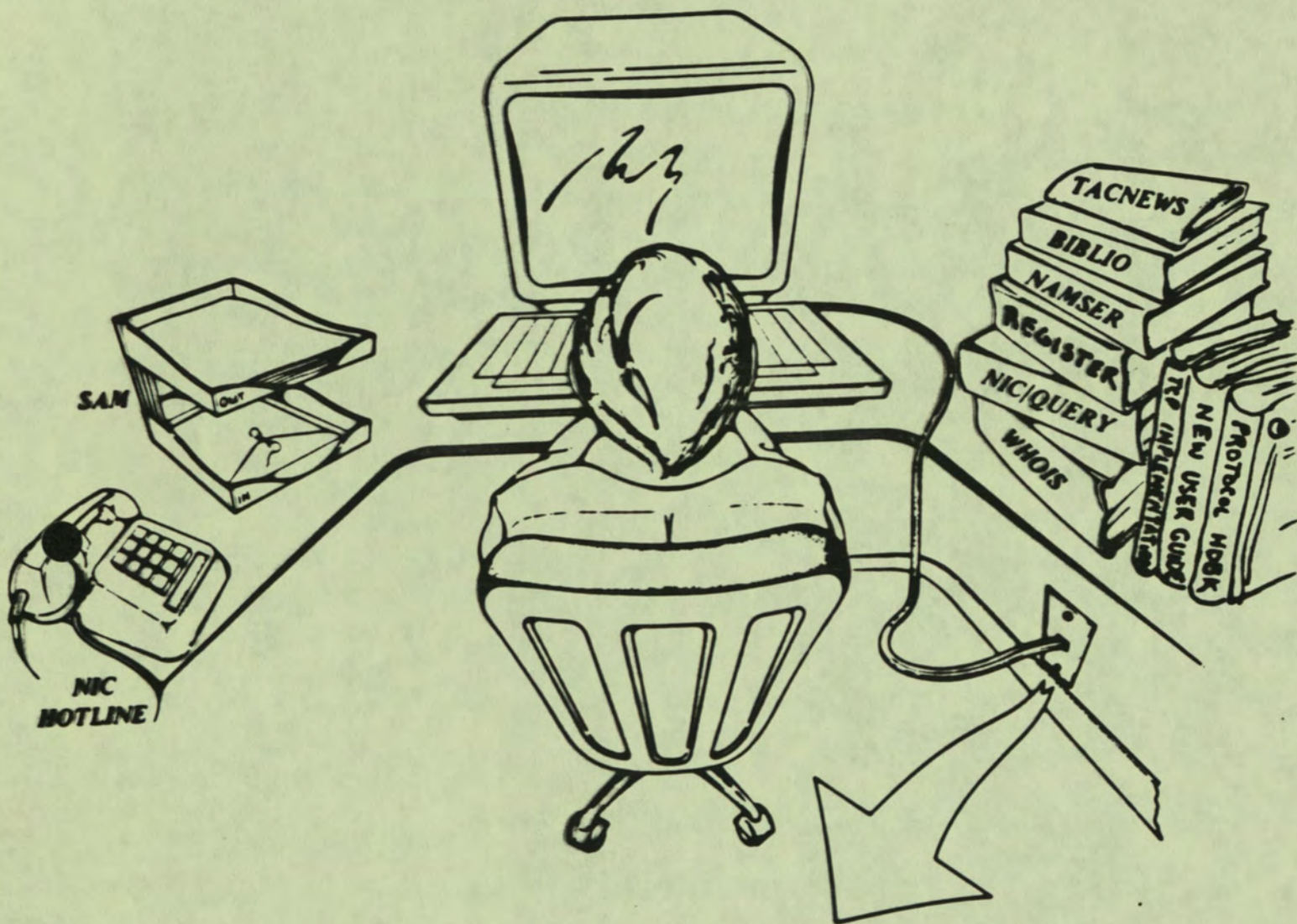
WHAT SRI DOES NOW FOR DCA

- Provide User and System Services
- Sound the Alert
- Direct Traffic
- Explain Policy
- Transfer Technology
- Aid Interoperability and Interconnectivity
- Provide One-Stop Info Shopping
- Share Resources
- Create Goodwill

**PROVIDE USER AND
SYSTEM SERVICES**



"ACCESS TO THE DDN"



- BILLING
- ACCESS PERMISSION
- NAME SERVICE
- PROTOCOL INTERCONNECTION
- PRIVACY/AUDIT TRAIL

DDN TAC ACCESS CARD

HOST ADMINISTRATOR

USER LOGIN NAME
USER PHONE
USER PRIMARY NET MAILBOX

USER ID

ACCESS CODE

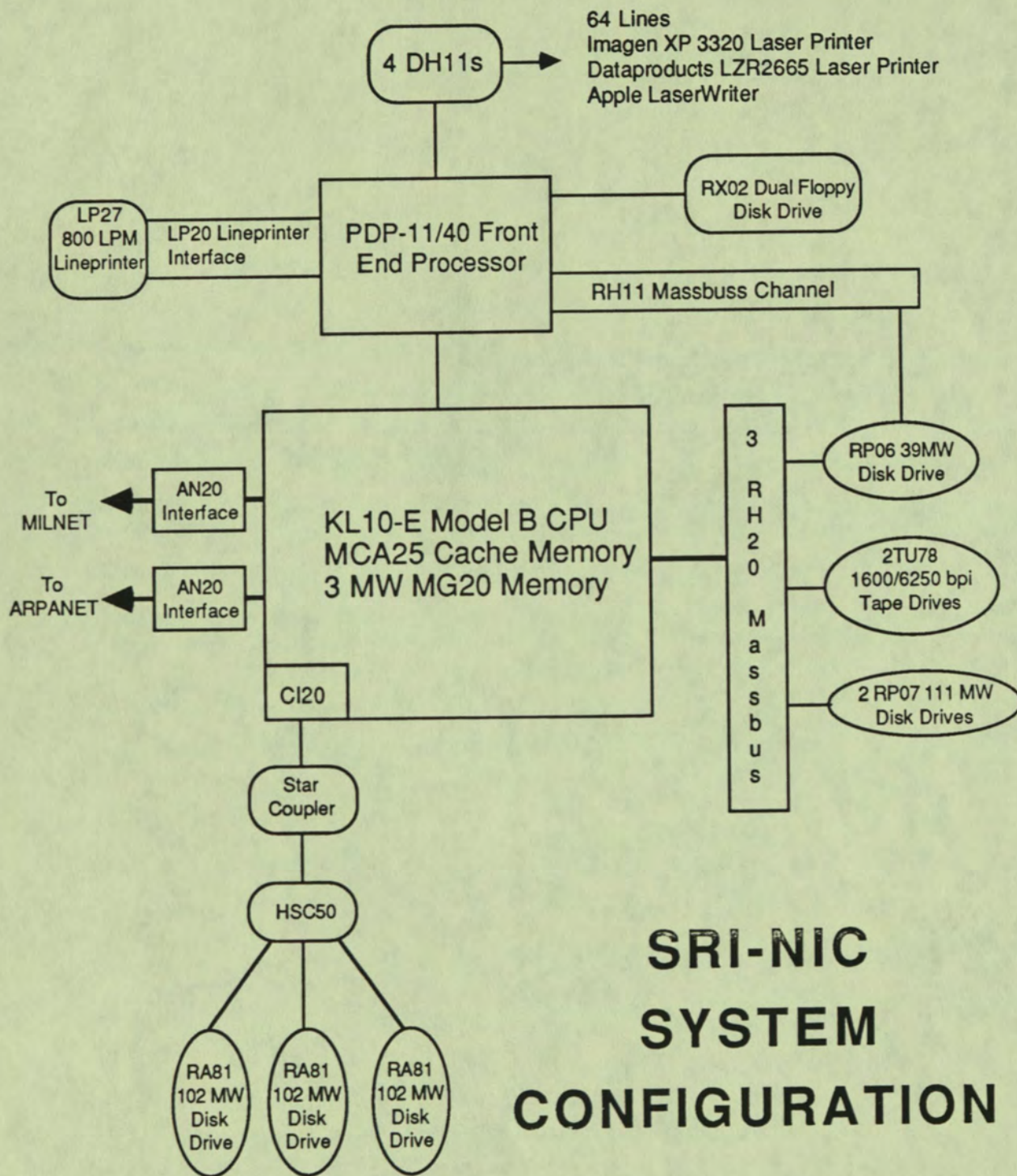
NAME

ISSUED

CARD NO

IN CASE OF LOSS CONTACT
THE NETWORK INFORMATION CENTER
NET MAILBOX REGISTRAR@SRI-NIC. PHONE (415) 860-3800

USER INSTRUCTIONS: The enclosed TAC Access Card contains a user ID and access code needed to access MILNET via a TAC dial-up port. It must not be copied or duplicated, nor may the user ID and access code be given to another person. The user named is responsible for all use made of this card and misuse can result in loss of network privileges. Authorized use of the DDN is limited to the conduct of or support of government business.
To access MILNET, establish a connection to a dial-up port on a MILNET TAC in your area. You will be prompted for your user ID and access code when you attempt to open a connection to a host. Errors can be erased with **backspace** or **control-U**.



SRI-NIC SYSTEM CONFIGURATION

SOUND THE ALERT

- Send All-Points Messages
- Notify POCs
- Notify Users
- Notify DDN DCS
- Notify NMCs

EXPLAIN POLICY

- Management Bulletins
- Online Directives
- NIC Documents
- Telephone "Hotline"

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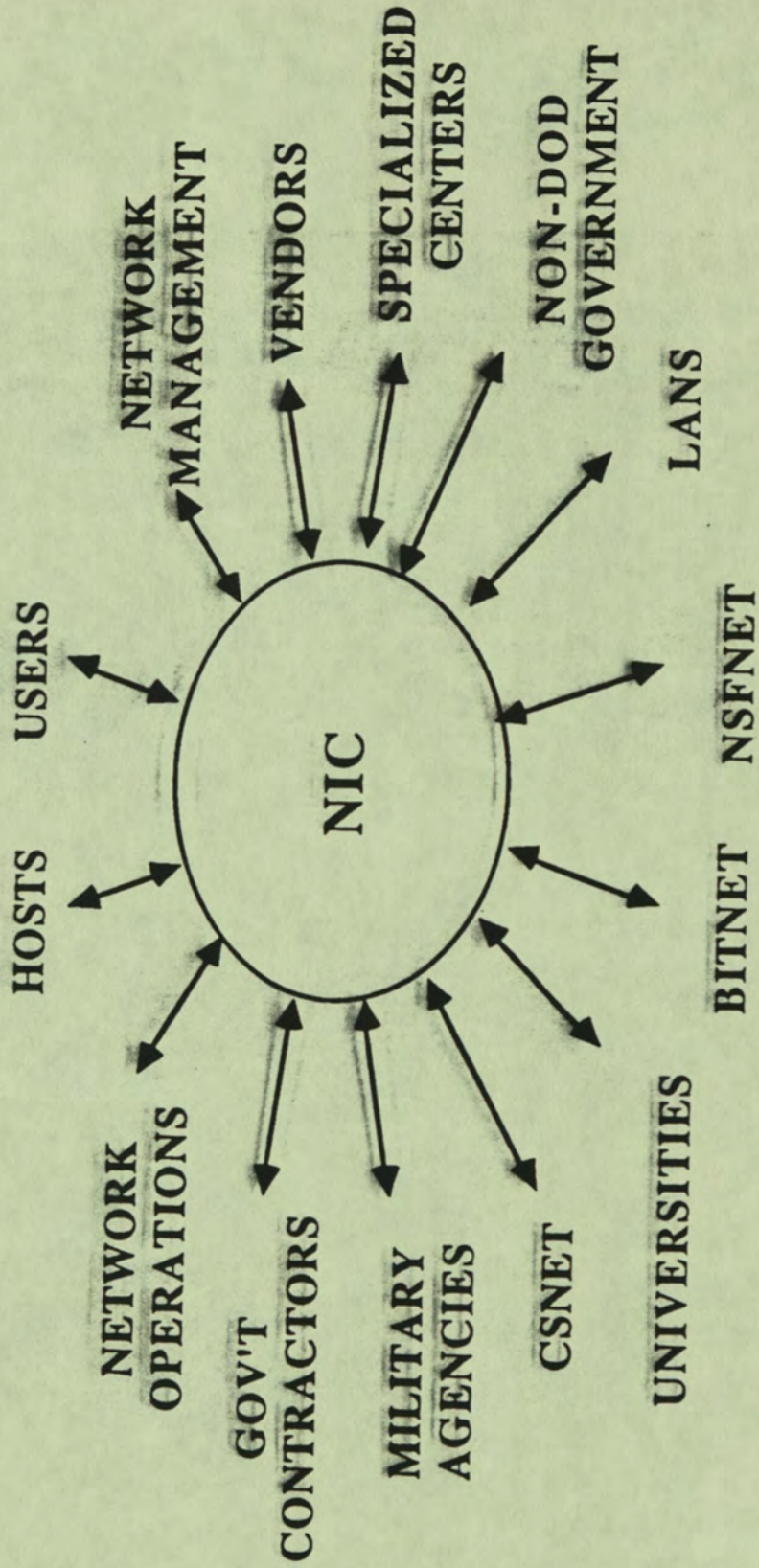
TRANSFER TECHNOLOGY

- RFCs
- Protocol Handbook
- Vendor's Guide
- Hardcopy Documents
- Newsletters
- Telephone "Hotline"

AID INTEROPERABILITY AND INTERCONNECTIVITY

- Trouble Shooting
- Testing
- Maintain Reference Host Tables

INTERCONNECTIVITY



PROVIDE ONE-STOP INFORMATION SHOPPING

- Answer Questions
- Provide POCs
- Identify Related Documents
- Provide Document Ordering Info
- Provide Documents Themselves
 - Low Cost, Pay-As-You-Go Services
 - Special Handling
 - Not Printed With Govt Funds
- Provide Info Products
 - Built on Commercial Software Pkgs
 - Tailored to Equipment in Use

SHARE RESOURCES

- Host Tables
- Name Server
- Domain Name Server
- "C" Compiler
- VOID DBMS
- User-Interface Programs to Servers

CREATE GOODWILL

- Welcome Users to the Network
- Go That Extra Step for Answers
- Treat Customers Curteously
- Make a Good Showing on Behalf of
DDN DCS

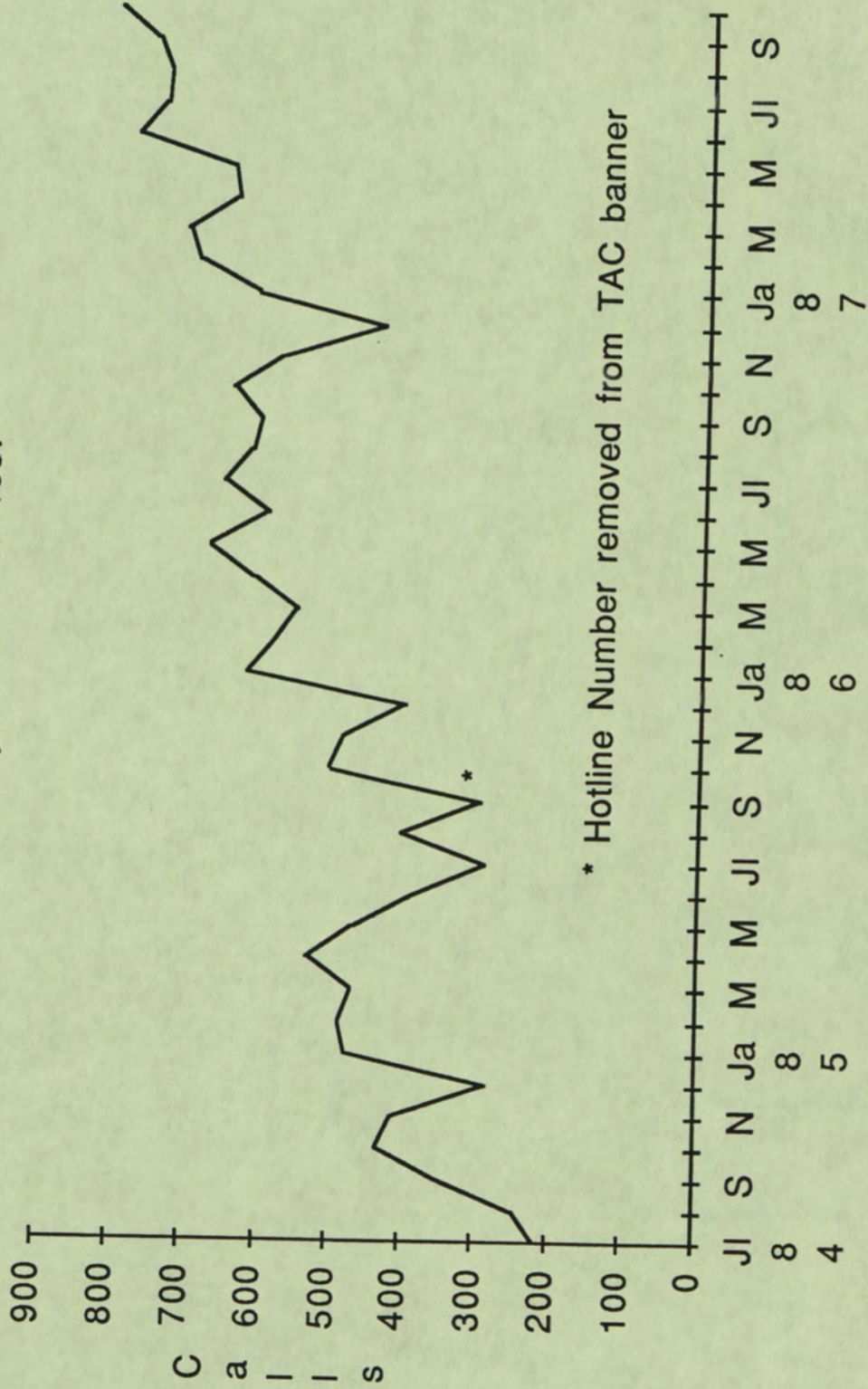
RECENT ACCOMPLISHMENTS

TASK 1 - CORE NIC

- Handled 50% More Queries
- Updated Online Documents
- Info Table at TCP/IP Conference
- Assisted New NICs
- Provided SERVICE Server
- Built New Cataloging Tools
- Enhanced WHOIS
- Began Database Transition

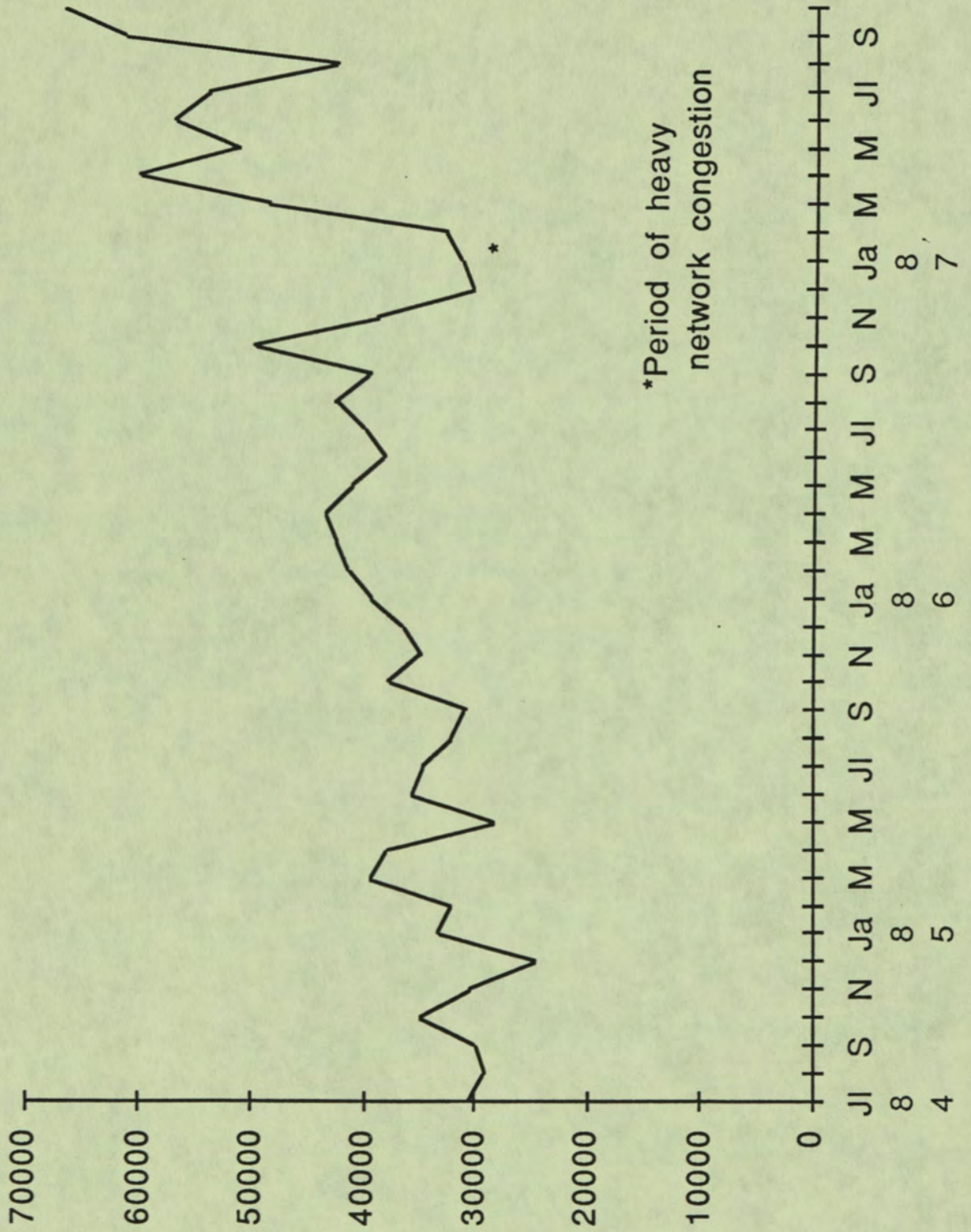
DDN Hotline Usage

July 1984 - Oct. 1987



DDN Whois Usage

July 1984 - Oct. 1987

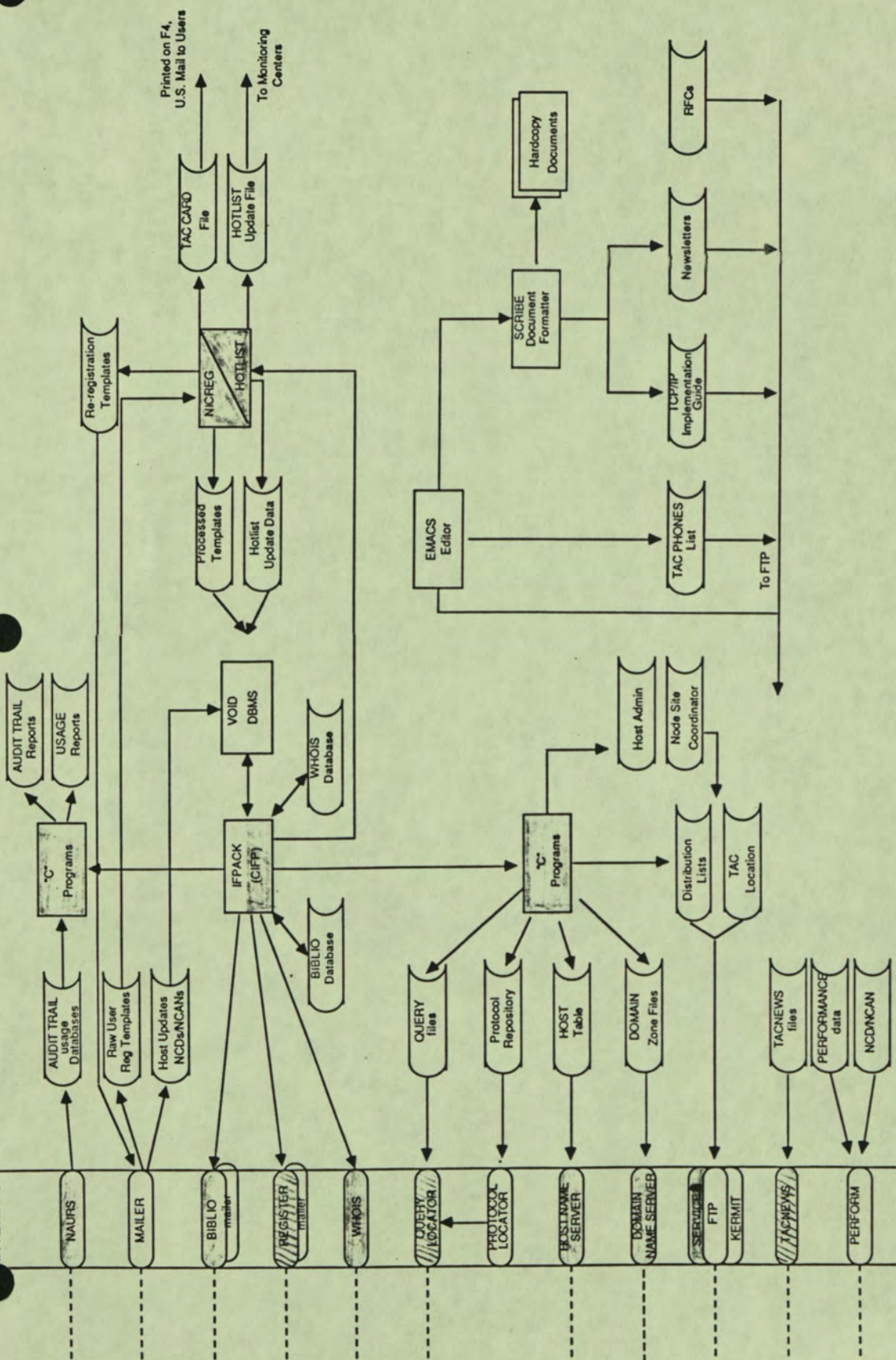


TASK 2 - SOFTWARE CONVERSION AND DOCUMENTATION

- Completed "C" Compiler
- Built "C" Program Library
- Converted Much Code to "C"
- Phased out AUGMENT
- Evaluated DBMSs
- Prepared Documentation

NIG SERVICES

NETWORK USER INTERFACE



TASK 3 - TAC ACCESS AND USER REGISTRATION

- Redesigned TAC Card
- Registered 20% More Users
- Helped with Transition to ARPANET
TACACS
- Began Administration of ARPANET
TACACS

TASK 4 - AUDIT TRAIL

- Designed Modular, Portable System
- Completed Functional Spec
- Built prototype
- Evaluated Equipment Proposals
- Converted Much Code to "C"
- Developing Analysis System

TASK 5 - NAMING AND ADDRESSING

- Distributed Name Service
- Provided SRI-NIC Name Resolver
- Took Over Assignment of Network Numbers
- Wrote Three RFCs
- Coordinating BIND Software Release
- Participated in NBS/OSI Directory W.G.
- Assisted MITRE with COG Presentation
- On Panel at TCP/IP Meeting

DDN NAMING AND ADDRESSING

	Oct. 1986	Oct. 1987
ARPANET/MILNET Hosts	581	1064
Internet Hosts (includes ARPANET/MILNET)	3295	4871
TACs	132	161
ARPANET/MILNET Gateways	198	225
ARPANET/MILNET Nodes	107	147
Internet Gateways (includes ARPANET/MILNET)	151	198
Connected Networks	524	752
Domains (top-level and 2nd-level)	183	406
Hostmaster online mail	961	2022

TASK 6 - USAGE AND BILLING

- Attended W.G. Meeting at DDN DCS
- Coordinated System with OMB, BBN, DCA
- Completed Functional Spec
- Converted Much Code to "C"

TASK 7 - ADMINISTRATION

- All Deliverables Up To Date
- Provided Definitization Detail

TASK 8 - DDN DCS DOCUMENT CENTER

- Moved Collection Twice
- Shelved and Cataloged Approx. 1000 Items
- Hired Assistant
- Updated DDN Documents/ MIL STDS Lists
- Provided Reference DIDs

TASK 9 - NIC COMPUTER FACILITY

- Maintained Operational Facility
- Upgraded System Code
- Installed SRI51-MIT77 Satellite Link
- Assisted Wollongong
- Helped Trouble-Shoot Congestion
- Installed New Servers

NIC DOCUMENTS/PRODUCTS

- Vendor's Guide
- NIC Brochure
- Hardcopy RFCs and RFC Subscription
- New SAM Release

NIC Publications

- 190 docs calls/month (average)
- 475 docs/month shipped (average)
- 125 orders/month (average)
- 3100 documents printed in 1987
- \$51k spent on printing in 1987

Features Requested by SAM 1.0 Users Added to SAM 2.0

- background operation
- editor search capability
- enhanced Kermit capabilities
- improved password protection
- increased basket capacity
- message archiving
- new services
- online screen buffer
- print through DOS
- send/receive mail in interactive mode

Additional Enhancements

- address book distribution lists
- flexible message size
- multiple phone numbers
- receive large messages as files
- redial capability
- VT100 emulation in mail service
- work on files during file lookup
- Zenith COM3 port support

VALUE ADDED SERVICES

- Replication
- Generic Implementations
- Interoperability/Interconnection
- Internic Cooperation
- Neutrality and Objectivity
- Save Time for DDN DCS Personnel

WHAT SRI COULD DO FOR DCA

- Replicate the TACACs/Audit Trial System
- Expert System to Analyze Audit Trails
- Assist with DECCO Billing System
- Mail Service and "Starter Kits" for HAdmins
- Develop a Distributed WHOIS
- Save Time/Provide Backup for DDN DCS
- Develop Information Protocols
- Assist with OSI/ISO Transition
- Design Routing Algorithms
- Survey Users



DEFENSE COMMUNICATIONS AGENCY
DEFENSE COMMERCIAL COMMUNICATIONS OFFICE
SCOTT AIR FORCE BASE, ILLINOIS 62225-8300

IN REPLY
REFER TO:

D560

02 December 1987

SRI International
ATTN: Ms. Barbara Camph, Sr. Contracts Administrator
333 Ravenswood Ave.
Menlo Park, CA 94025

SUBJECT: Minutes of Program Review at SRI International 23 - 24 Nov. 1987

Dear Ms. Camph:

Enclosed please find a copy of the minutes that took place last week. As you can see, there are a lot of action items that the Government and SRI need to adhere to. Because of the holiday season coming up, some issues may not be addressed in as timely a fashion as previously stated. However, it is hoped that such matters will be brought to the attention of the responsible person, through the proper channels of communication.

There are still some concerns about the direction, as well as pace that the DBMS selection is taking. In this regard, the Government will research SRI efforts/recommendations to date in order to ensure that it can meet its requirements. If you have any questions or comments, please feel free to call me at (618)256-3094.

Sincerely,

Cecelia M. Jones
CECELIA M. JONES
Contract Specialist

Encl. a/s

Copy to:
SRI International (E. Feinler)

DCA/Code B622 (Mr. Smallwood)

MINUTES OF MEETING BETWEEN SRI AND GOVERNMENT - 23 NOV. - 24 NOV. 1987

Note: All action items will be annotated with the responsible person/entity named.

23 NOV. 8:30 a.m.

Introductions were made for SRI, DECCO, and DCSDS. In attendance: Trudy Barber (SRI), Steve Dennett (SRI), Elizabeth Feinler (SRI), Cecelia Jones (DECCO), Barbara Haley (SRI), Ken Harrenstien (SRI), Vivian Neou (SRI), Fred Ostapik (SRI), Francine Perillo (SRI), Elizabeth Redfield (SRI), Captain St. Johns (DCA), Tyrone Smallwood (DCA), Mary Stahl (SRI), Captain Tatum (DECCO)

Captain Tatum opened up the meeting with an explanation of the purpose of the meeting was to do a program review in light of the fact that we were nearing the end of the contract period. All contracts were being reviewed. Everyone has a copy of the agenda to follow along.

NIC Accomplishments and Efforts for the DDN -

Ms. Feinler presented a slide presentation of SRI International. Handouts were given to everyone to follow. An organization chart which had previously been requested from SRI was included in the handout. There was some brief discussion on various parts of the presentation that were marked for later discussion. Purpose of user and system services - main function to direct traffic on and through the network. There is a major problem because there are many "users" without mailboxes. Question: How much of the network is on-line and how much is hard copy. There has been a lot of biblio cataloging. Service (Server) New item to government. Some comments about value added items. Discussion about providing documents. An arrangement had been made with Major Tucker instead of an actual tasking of the contractor. There is a schedule of fees. Will discuss later.

DBMS Selection/Licensing -

Government raised the question with SRI, "Where are we with the DBMS selection?" Previous notes indicate that SRI had asked to purchase a commercial DBMS in the past. Also some information with the proposal package indicated some research had been done into DBMS selection. SRI comments: TACACS - Could rewrite with no problem. TOPS 20 presents a problem. Can't run UNIX on TOPS 20. No commitments have been made with Sybase or Ingres. There is only one machine available at SRI for test purposes. At this point SRI doesn't know if one relational DBMS is possible for the DDN requirement. Lucy Sanders at DCSDS is looking into the report from SRI which recommended further testing of Sybase and Ingres. It will be approximately two to three weeks before she can complete her review. ACTION ITEM Need time suspense for review from DCSDS.

Question from Government, "What is the reason for this?" SRI stated that the DBMS is not as portable as stated. Some adaptations have to be made. Discussion then ensued about the purpose of the equipment. Captain St. Johns stated it was for use of the Audit Trail (Task 4 and 6). SRI disagreed and stated it was more than that. Discussion continued briefly concerning this matter. Ms. Jones then asked that the DBMS Selection discussion be tabled until we had more definite information.

Award of Equipment -

Discussion to be moved to Tuesday morning. Still under review.

Software Conversion - Most of the conversion of Augment has taken place.

Discussion ensued around the issue of the difference between commercial and portable software and being able to move into a competitive environment.

NAURS - Prototype has been converted except actual interface. It will take one to two months testing to complete.

Mailer - All C code.

Status Report Conversion versus Portable by module - ACTION ITEM - SRI directed to provide this to the government. They had begun this effort prior to leaving on Tuesday evening. Gave government a rough draft for verbal review

Register - Coded C. Interfaces to be worked out.

WHOIS - All C coded.

(NIC) Query Locator - A lot of raw files.

Protocol Locator and Host Name Server - All C coded. Domain Name Server - Generating data for programs in C.

Services - Assembler language.

Detailed discussion followed concerning what kind of time line or performance line should be indicated and how. SRI stated they would color code handout page. (Schema on NIC SERVICES pages given to C. Jones by E. Feinler 24 Nov.)

Lengthy discussion followed concerning VOID DBMS and IFPAC. SRI stated these two data bases belong to DBMS. SRI wants to convert this into C even though this is not a requirement. IFPAC is an assembler language. The concern for the government is what rights we would have to this data if conversion efforts are done at this time. SRI stated the government could use it but they didn't want their competitors to have access to it.

Mr. Harrenstien again raised the question, "What level of detail do we want on the conversion efforts?" Discussion. ACTION ITEM SRI is to present this information on a quarterly basis, in the monthly document; the first report being due in the January monthly report.

Mr. Smallwood raised the concern whether or not SRI had a TASK ORDER PLAN. It had not been previously required of SRI. This will be discussed for the option year contract.

Government Issues -

Travel - Discussed at length. Mr. Smallwood had concerns about the way travel was being handled in that it was not going through the COR. He stated that changes would be made for the option year. Capt. St. Johns said this was discussed in detail during negotiations and what was supposed to happen is that certain meetings/trips should go through DECCO or COR first e.g. trips outside of a 50 mile radius.

Service Server - This server was new to DECCO and DCSDS. SRI stated this was built because of military requests in conjunction with the CORE NIC. The requests were verbal. SRI didn't know who to ask. SRI stated this really isn't something new. Discussion ensued at length concerning lines of communication and the contractor doing over and above what the contract calls for.

800 Calls - Explanation provided by SRI. Whereas stats are given on the number of calls per month there is no line item for this. ACTION ITEM The costs for this item are to be spelled out either on the invoice or in the cost status report. SRI will provide.

Biblio - Catalogued deliverables. Discussion. ACTION ITEM DCSDS will have to review what they want to do with Biblio since SRI says it's needed and some at DCSDS don't feel the need for it.

Develop - What does this actually mean as it is repeated several times throughout the tasks. SRI response. This does not always mean new initiation as such but actually means to set up.

Publicity - Discussion. DECCO will probably okay if needed and printing prices warrant SRI providing copies of government documents since they can do them in a more timely fashion. ACTION ITEM SRI is to provide a price list to DECCO for review.

Newsletter - How often is this done? SRI - On a random basis. Does DCSDS want to set a schedule? ACTION ITEMS DCSDS needs to implement a policy. Also, reference to the DDN PMO needs to be corrected to DDN DCS.

TASKS:

1f - SRI says they use it for NCDs. Government sent e-mail to SRI stating they will continue to provide this information to SRI. Costing has been worked up for price adjustment for deleting this task.

1h -

2b - Table documentation - COR needs to see this on a quarterly basis. Annually, is not often enough. S006H is the deliverable. Since this is the end of the contract year. It was decided this would be changed during the option year contract. ACTION ITEM This is to be provided by SRI for the current contract 60 days from Nov. 30.

2c - Service - Further discussion. Didn't get prior approval from the COR. How do we want the source code? - SRI. Government - Printout. ACTION ITEM SRI to provide by the end of the contract year. Source code - Only what government owns. Further discussion on protocols. ACTION ITEM DCSDS will have to address this issue of protocols. Discussion concerning RFCs. SRI stated no one would want the Protocol since it's user accessible. Government approves. Therefore SRI has to provide. ACTION ITEM Describe as RFC, not as a protocol. COR approves based on task monitor input. Government use only.

2d - Discussion - User/Service Overlap.

3c - Hotlist will go away. UDH/Microvax installed. Question raised about interaction between BBN and SRI. BBN provides the check of user ID. SRI provides user database. BBN maintains the equipment background. Data sent to SRI to analyze and determine who should get what. Programming funding cut. BBN to load. 950 is the average monthly trend. 1200 is the limit. There should be no problems for a year. Question: no deliverable? Answer - Task 4 reports on Task 3. Only report or milestone at end of contract year?

4 - ACTION ITEMS St. Johns to respond to format for Audit Trail Functional Description. DCSDS to develop this requirement for misuse of the network. This is to be done by B602 who implement administrative procedures and policy guidelines.

Discussion about who the security officer was for DCSDS in the past. No one currently knows who that is. ACTION ITEM COR to provide the name of the current security officer as a point of contact when necessary.

6 - Discussion concerning accounting and analysis procedures and the cost recovery scheme. ACTION ITEM DECCO to provide when the equipment is in place and has been tested and is operational.

Skipped Task 5 since person responsible for Task 6 was present and Task 5 action person was not.

ACTION ITEM DECCO to provide corrected copy of S.O.W. to SRI. Some page numbers were different between DECCO copy and SRI copy.

Adjournment: 4:25 p.m.

11-24-87 8:30 a.m.

Government Issues/Tasks Continued -

5 - DCSDS has provided the TAC User Guide to SRI for comments. There may have been one submitted by the User's Requirement Group. Mr. Snively at DCSDS is the task monitor who normally provides this information. The DDN Operating Procedures has been reviewed before. SRI makes comments within 30 days. SRI has revised the 1985 DDN User's Guide by updating with minor changes. SRI would like to send out 200 copies per Europe DCA request. ACTION ITEM DECCO will respond within a week once the price list is received.

SRI is concerned about lines of communications with DCSDS concerning DCSDS updates of some documents without SRI input or prior knowledge. Also, SRI has been told they can't receive copies of the DDN Brochure for distribution which they feel would be helpful to DCSDS. ACTION ITEM COR needs to check on DCSDS policy and forward to SRI.

The monthly report concerning a new table hasn't started yet. This is based on need. Because of all the extra time that has been mandated for this task, an extra person will be added to the staff.

Capt. asked SRI did they have a Product Support Plan. No they don't. Task 4 mentions this somewhat but it doesn't tell the contractor how to do this. ACTION ITEM Capt. Tatum said he will forward a couple of samples.

Discussion centered around purpose of this task. SRI attempted to clarify this. They stated the problem with the task is the way the tasks were broken out. In reality, this task should be under the CORE NIC. ACTION ITEM SRI to put in writing what we actually get from this task. Three RFCs have been received by Capt. St. Johns for this task. ACTION ITEM Capt. St. Johns is to provide this information to Mr. Smallwood.

7 - Discussion again centered on biblio. "MITRE didn't want it." Check this conflict. SRI maintains this is imbedded in many of the required efforts. ACTION ITEM DCSDS - Repeat - should this be deleted?

Monthly Reports - Mr. Smallwood would like to see the reports done differently. SRI says the format is done according to 7935 Standard. The following changes for monthly report and cost status schedule report are ACTION ITEMS for SRI. (1) Identify the tasks for areas of concern. (2) Travel is to be included on page two of the Cost Status Schedule report. (3) Both travel and salaries are to be broken out by tasks. (4) A chart should be established with expenditures by tasks. Ms. Haley copied the format that Mr. Smallwood presented on the board, which included such items such as staff hours, estimated funds, resources used monthly/cumulative. (5) Eliminate CDRLS Sec. 3 of the Cost Status Schedule report. (6) There is to be separate section for Tasks/Travel only for SRI NIC Contract. (7) Combine Task 5 with CORE NIC. ACTION ITEM for DECCO - Send follow-up letter to Barbara Campb concerning invoices. Invoice format is done by DCAA after SRI sends invoices

to them. That can't be changed. Changing the cost status schedule report will resolve the invoicing solution by tasks.

*
8 - Document Center - Discussion centered around use of this Center. Is this a library service? What is unique about this center? What is the usage? SRI stated that it's on the premises. Usage has been low because they have had to move twice. They could provide a service if they knew what the policy was to be. Everything is supposed to be deposited at the Document Center not at DTIC. SRI doesn't feel DCSDS staff can really give accurate feedback on the Center because it hasn't been there long enough. ACTION ITEM DCSDS is to provide a policy and direction to SRI about the Documentation Center.

Areas of Concern by SRI - Disks are sorely needed. Too many things being done on too little equipment. Can get some through government surplus. What is the procedure? ACTION ITEM DECCO to check immediately and get back with SRI. However no action is to be undertaken by SRI unless directed by DECCO. Also, items under Areas of Concern in the monthly reports are not to be acted on until authorized by the COR. Mr. Smallwood has indicated that issues under Areas of Concern in the monthly reports will be addressed more quickly in the future.

9 - Mr. Smallwood requested an inventory list of equipment (GPE) at SRI. ACTION ITEM for SRI to provide. He stated this was not adequate enough to provide receipt information of equipment to SRI. Discussion. ACTION ITEM Mr. Smallwood is to check government documentation (form) for acceptance of GPE.

Ms. Jones asked what has happened to the Kurzweil lease since correspondence came in from SRI that the lease was to go away in August and in September an evaluation was still being done for replacement equipment. ACTION ITEM SRI is to send into DECCO a proposal for adjustment of this lease or what replaced it.

Discussion on equipment indicated that SRI has not bought all the proposed equipment under the facilities contract. Also some items were bought cheaper than proposed. Some of the equipment is actually peripheral. They would like to buy some other needed equipment such as disks/work stations. ACTION ITEM SRI will have to send in a request for other equipment and show what it would be replacing and the necessity for the buy.

Question: "When will the Foonley be phased out?" Within 6 months after the new equipment is in place. DEC 2065 will be around until the end of the contract of the option year.

9b - Provide 10 directories. Discussion. Capt. St. Johns has been monitoring because it serves the CORE billing. Discussion centered around points of contacts at DCSDS. It was reemphasized by the Government what the lines of communications are and always have been. SRI maintains they have gone through the right persons. ACTION ITEM Mr. Smallwood will send out the current task monitors list for the NIC contract immediately.

CDRLs/Milestones tabled.

ACTION ITEM Mr. Smallwood will review and send out a revised list based on any changes at this meeting as well as some deliverables that say annually at end of contract period, but do not specify 30 days or 60 days after contract expires.

Award of Equipment -

Capt. St. Johns asked SRI the following questions or made comments about the proposals and evaluation on the NAURS equipment submitted to DECCO and DECCO's preliminary input.

1. How can Falcon offer source code and SUN did not?
2. Did SRI go back to SUN about optical equipment? Yes and they still didn't quote.
3. Meantime from DEC - Should have only given 0 points concerning nondisclosure.
4. 260 - SUN Went back twice to SUN. Still can't meet spec.
5. Clarification about hard copy terminals.
6. Did SUN have available the laser printers?
7. Clarification about cost summary - evaluating non-responsiveness - adding equivalent prices.
8. Why did only 3 companies of 45 companies respond to RFP. ACTION ITEM SRI to provide the original list of those who requested RFP package.
9. Has SRI asked Falcon about partial source code? Yes. SRI felt on Option equipment that they would get quotes from anywhere. That didn't happen. Only one vendor could supply everything within environment asked for. Spec was not restrictive. Option for the 360s from Falcon offered. The 350s won't be able to do the job. The equipment would only be good for 4 or 5 years. Maybe they would just have some of the work stations upgraded. Disk storage however is the priority with SRI.
10. Miscellaneous equipment, is not optional equipment. DCSDS gave the verbal authorization to go ahead for the purchase of the miscellaneous equipment. ACTION ITEMS DCSDS to send to DECCO purchase request for the miscellaneous equipment. DCSDS to provide recommendation to DECCO in writing immediately so that SRI can go ahead with award of the equipment.
11. ACTION ITEMS SRI to provide to DECCO a list of persons who were on the evaluation team for the equipment selection; a copy of vendor requests and a follow-up to negotiations whereby SRI stated they had followed up with the quoters; and a PNM which is being written by Julie. SRI provided copies of the vendor requests and a list of evaluation team participants before DECCO left SRI.

Open Items -

Publicity - A copy of copying charges already requested from SRI. Discussion concerning funds built up from carryover of other copying. There's a balance of \$57,000, where SRI has recouped their charges and is able to get items copied and bill for the effort.

Organization Chart - Received in packet at beginning of Monday's session.

Invoices - Letter to be forwarded to Barbara Camph. Resolved.

X
Data Rights - Biblio- SRI needs the tool to know what they have, for tracking purposes. A suggestion was made that SRI should document why biblio is the backbone. ACTION ITEM From SRI if they want to defend their position. VOID DBMS issue hasn't been resolved to the extent of what level of rights the Government has. Ms. Feinler on record that the matter is a contractual issue for legal to resolve. However, Ms. Jones acknowledged the fact that it has to be resolved prior to including it as part of the contract, Section H.

Discussion about subcontractors - though this is not an open item. To be reviewed again for option year if any cuts are or have been made. Sherwood Associates did the biblio and conversion to C efforts. Kariel did or will do the bind (Unix). USC is the designer of naming domain (Namer on Tops 20). They're also responsible for the Milnet transition. Telematics is responsible for the protocol locator (OSI). SRI interacts with the subcontractors in a working group environment.

Overtime - There are two kinds of premiums: other premium and overtime premium. There is no problem with the other premium. Overtime is paid at the rate of time and a half to hourly workers and not salaried personnel. There are two full time persons for hourly operations. Captain Tatum commented that SRI is to pay their people because it's a management issue but they have to notify DECCO that overtime was worked. ACTION ITEM DECCO and DCSDS resolve by next Friday.

Monthly meeting - Discussion centered around who will come and what the Government will expect. It was suggested that all tasks be presented on one chart.

SRI wanted to know if there was a working group looking at data elements? Also, is DCSDS developing data base strategies? Who's the point of contact clearinghouse for these type issues? SRI feels there's some duplicate work with the data flow and is unable to determine who's doing what. Discussion around these areas along with comments concerning URDB, the NAC, and TACACS. ACTION ITEM Captain Tatum will arrange a meeting between the Government people and SRI on Tuesday, Dec. 8 so that these concerns can be addressed. Aydin and BBN CORs will also be asked to attend. This will be a step towards bringing SRI "back into the loop."

Communication channels - Discussion. Additional comment from SRI "cognizant of who are your customers."

ACTION ITEM - DECCO to change mod P00006 to Contract DCA20087C0020 to Dec. 2 in order for it to meet 30 day response time. This will correspond to the cover letter which had 2 Dec. date. The reduction for Task 1f will be \$8900.00.

NIC Brochure delivered under Contract DCA20084C0024. SRI presented another copy to Mr. Smallwood for review since another previously sent to DCSDS had not been approved. ACTION ITEM The COR is to approve and send written response. SRI is ready to send these out to the public.

Ms. Jones asked what account is mail under since invoices aren't broken out. No one was sure. ACTION ITEM SRI to provide response to DECCO.

Videotape - Mr. Smallwood is still awaiting the costs for the videotaping. SRI is putting together text script and some costs.

SAM/Transend - Discussion about invoices and Transend's involvement. SRI made a counteroffer that we pay the invoice "with no dates" for work done in November and December, and that we not pay the one that has service date of 6/1/87 through 6/30/87. Ms. Jones stated this was still unacceptable because there was no clear evidence when the work for the previous invoice was done. The company kept poor books while someone was out of town. There was some hours printed up by SRI but the information is not "original evidence." Further discussion ensued on SAM license for the software and Transend's agreement. Source code built on top of commercial software. Government owns everything except what Transend owns. SRI still has a letter from DECCO to respond to.

Ms. Feinler indicated that some persons had not previously been hired because the contract had only been incrementally funded. Therefore some things not operational. This led into discussion about the remainder of the contract year whereby there will be funds leftover because the effort of work is behind. SRI asked that the contract be extended for a month. It was explained to her that we would not extend the contract for a year because we already had an option year requirement set to start immediately following expiration of the current contract. Since SRI already had personnel lined up for contract purposes a verbal agreement was given to Ms. Feinler that they go ahead and hire the programmer and domain staff. Training that was to be done for this year's contract will have to be added to the option year. ACTION ITEM for when the option year contract is looked at again. SRI asked if positive log-in scheme could go in. They were advised if this is in addition to the contract they would need to submit a proposal.

Discussion again ensued concerning Sybase and Ingres and whether or not SRI had authorization to buy the source code. DCSDS asked SRI weren't they able to get performance standards for the source code. Discussion centered around the VOID DBMS again and SRI's desire to convert this to C. The concern is what happens if they convert this is on government money and whether or not this really needs to be converted. Captain Tatum asked if the database is only a backup, and why convert VOID to Unix. SRI responded that the VOID can also be compared to the Sybase environment. However, they would have to buy the Sybase. Question also raised by Captain Tatum, "What happens to Ifpac?" This can be converted.

ACTION ITEM Captain Tatum directed Trudy to schedule a CDR for the NAURS equipment and to include it on the milestone time line. SRI says the milestones are already in the monthly reports. Government not sure which report and if it is in the monthly report that Ms. Jones gets, actions are discussed but milestones are not clearly defined.

Formal discussion ended at 5:30 p.m. A tour of the computer facilities was provided to Government staff by SRI.

R8/SR1NE/89/2800



**CONCEPT FOR A
SECURE NETWORK INFORMATION CENTER
(SENIC)**

24 JANUARY 1989

SRI INTERNATIONAL

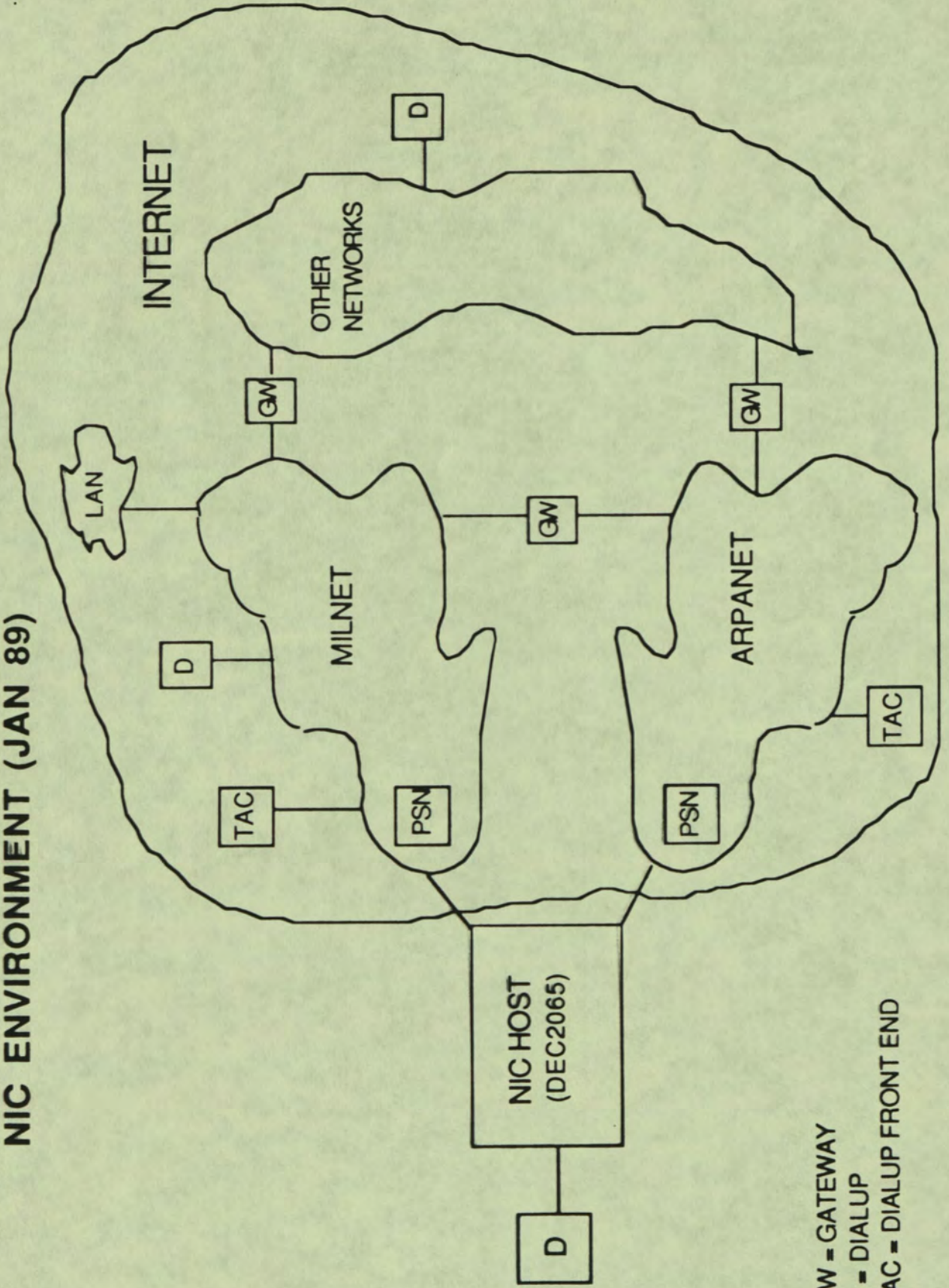
PREPARED BY: FRANK KUJO
FRED OSTAPIK
JOHN MULHERN

PREPARED FOR: CAPT. MICHAEL ST. JOHNS, DCA
MR. DENNIS MORRIS, DCA

REPORTS



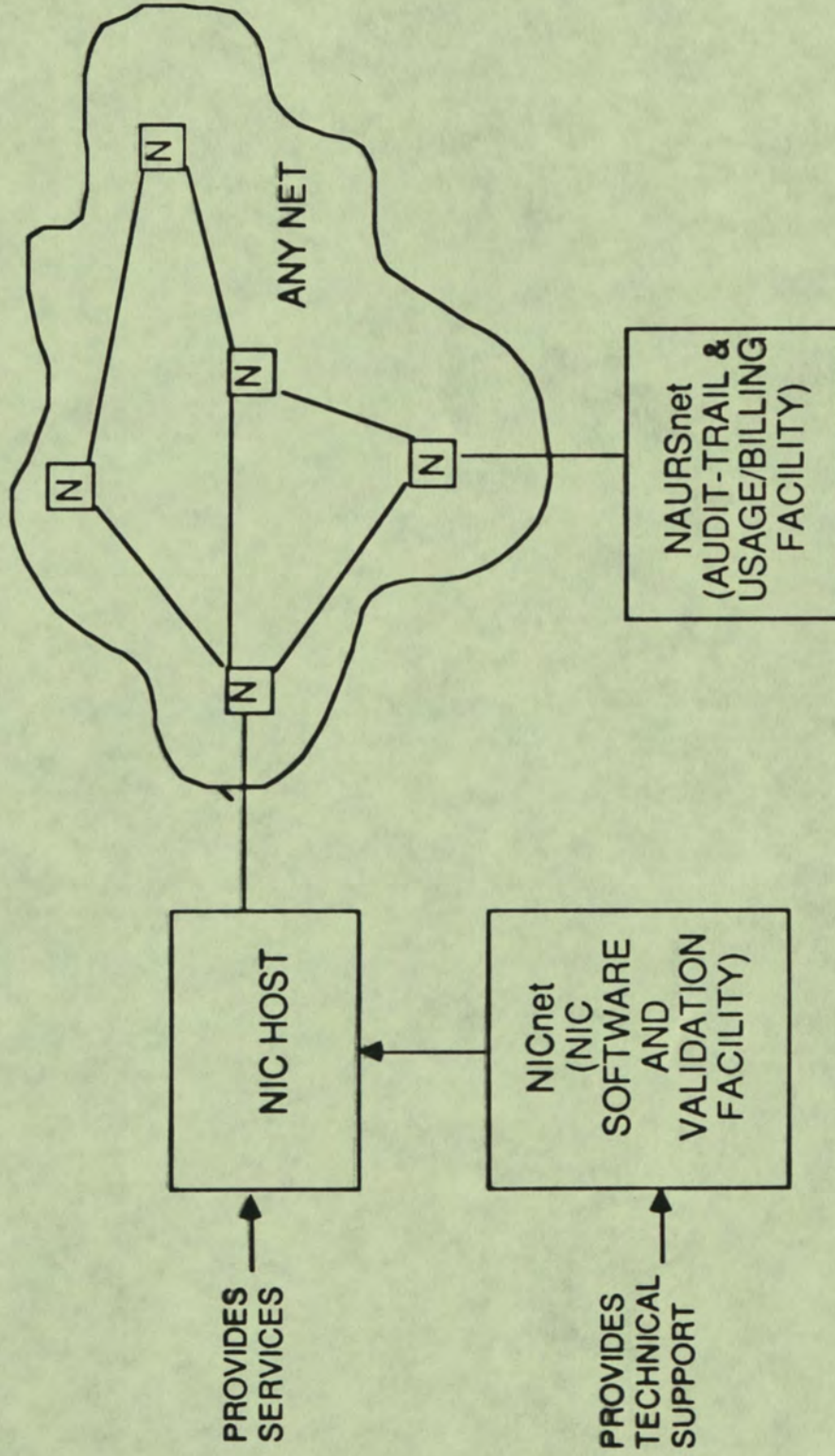
NIC ENVIRONMENT (JAN 89)



GW - GATEWAY
D - DIALUP
TAC - DIALUP FRONT END



SIMPLIFIED GENERIC NIC CONFIGURATION

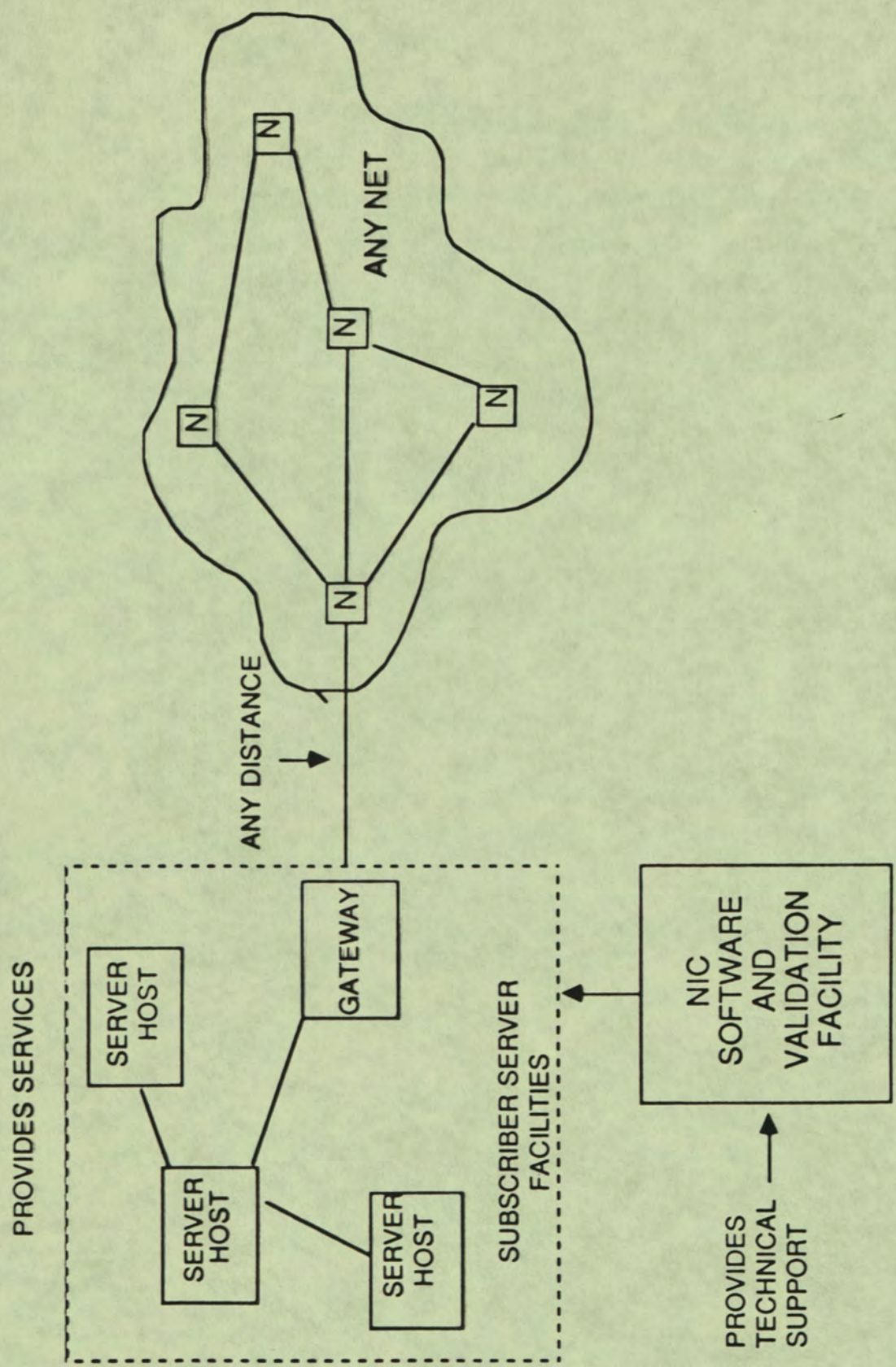


N = NODE (PACKET SWITCH)

NICNET AND NAURSNET ARE LANS CONSISTING OF SUN WORKSTATIONS CONNECTED BY ETHERNET



SIMPLIFIED PROPOSED NIC CONFIGURATION



PROVIDES TECHNICAL SUPPORT

NIC SOFTWARE AND VALIDATION FACILITY

SUBSCRIBER SERVER FACILITIES

GATEWAY

SERVER HOST

SERVER HOST

SERVER HOST

ANY DISTANCE

ANY NET

N

N

N

N

N



GENERAL PROPERTIES OF CLASSIFIED NETWORKS

- Access must be restricted to cleared personnel with need-to-know.
- Geographical separation means COMSEC requirements must be met.
- Use of COMSEC requires Tempest requirements be met by every network node, host and user.
- Classified ADP requirements must be met by every processor.
 - Audit trails
 - Physical security
 - Operating procedures
- Trusted system techniques fulfill need-to-know requirements and implement classified ADP requirements.
- Support services must be provided for configuration control, key distribution, user orientation, etc.
- Software must be validated before network use.



SENIC TECHNICAL APPROACH

- Formalize requirements for a classified NIC
- Apply NIC resources to plan a generic SENIC:
 - Software products
 - Name server
 - Data base products
 - Audit trail
 - Usage billing
 - User services expertise
- Prepare:
 - Specification
 - Configuration preliminary design
 - Security plan
 - Transition plan
 - Preliminary operating procedures

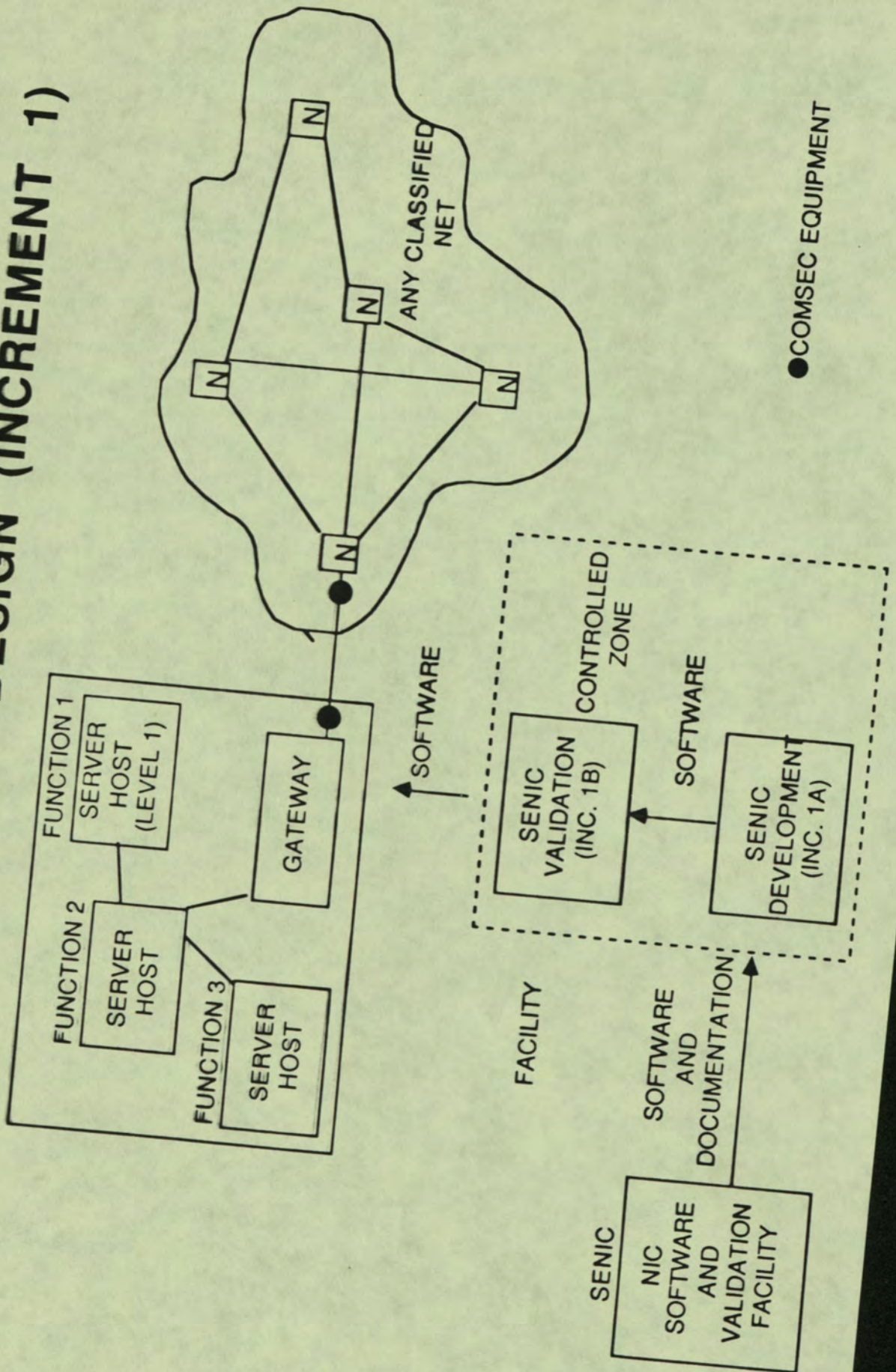


SENIC TECHNICAL APPROACH - CONT

- Project will require:
 - Cleared staff
 - Cleared facilities
 - Processing resources
 - Network interface
- Proposed development and implementation to follow:
 - Formal system development practices
 - Incremental development approach

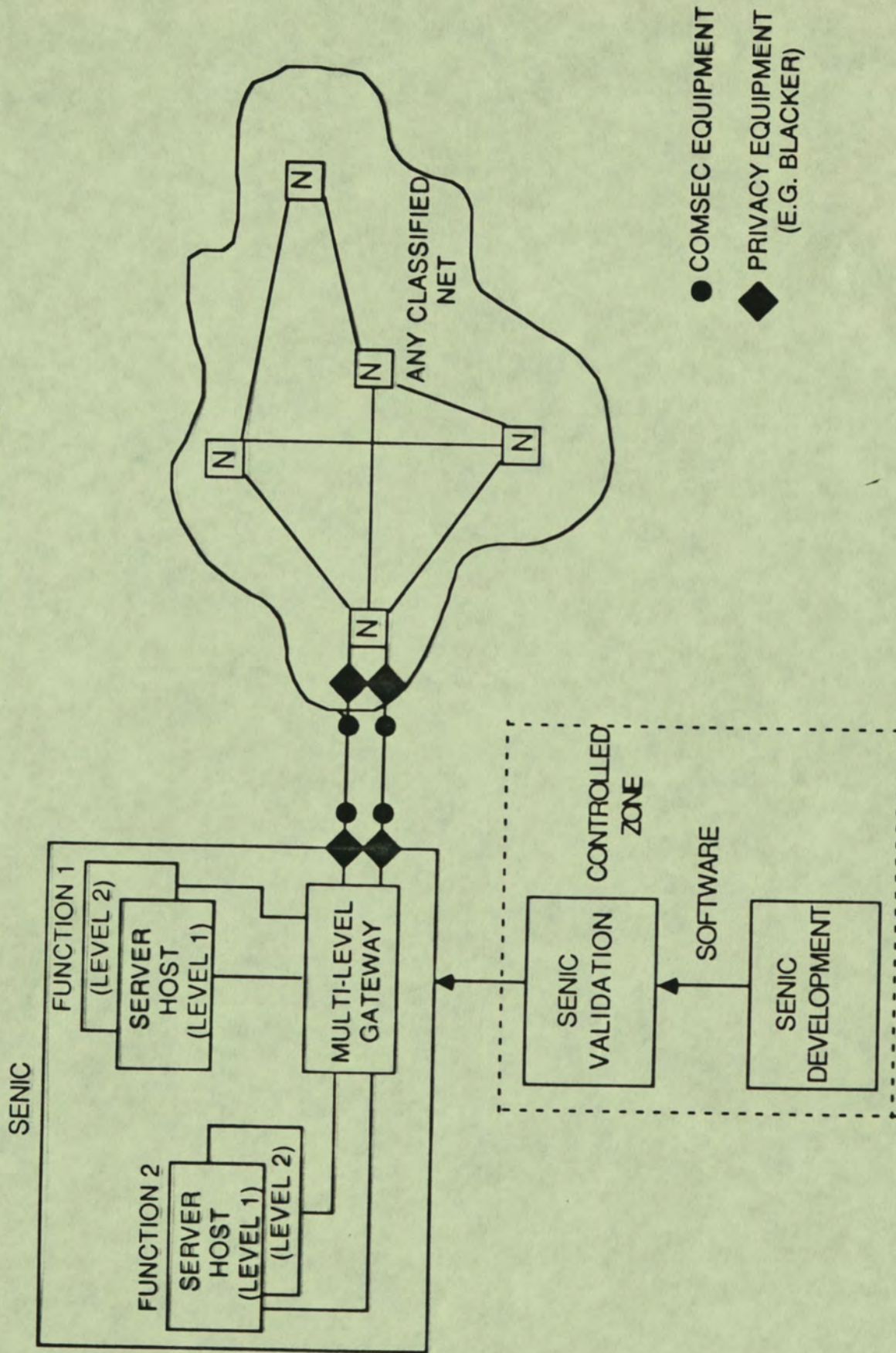


PRELIMINARY DESIGN (INCREMENT 1)



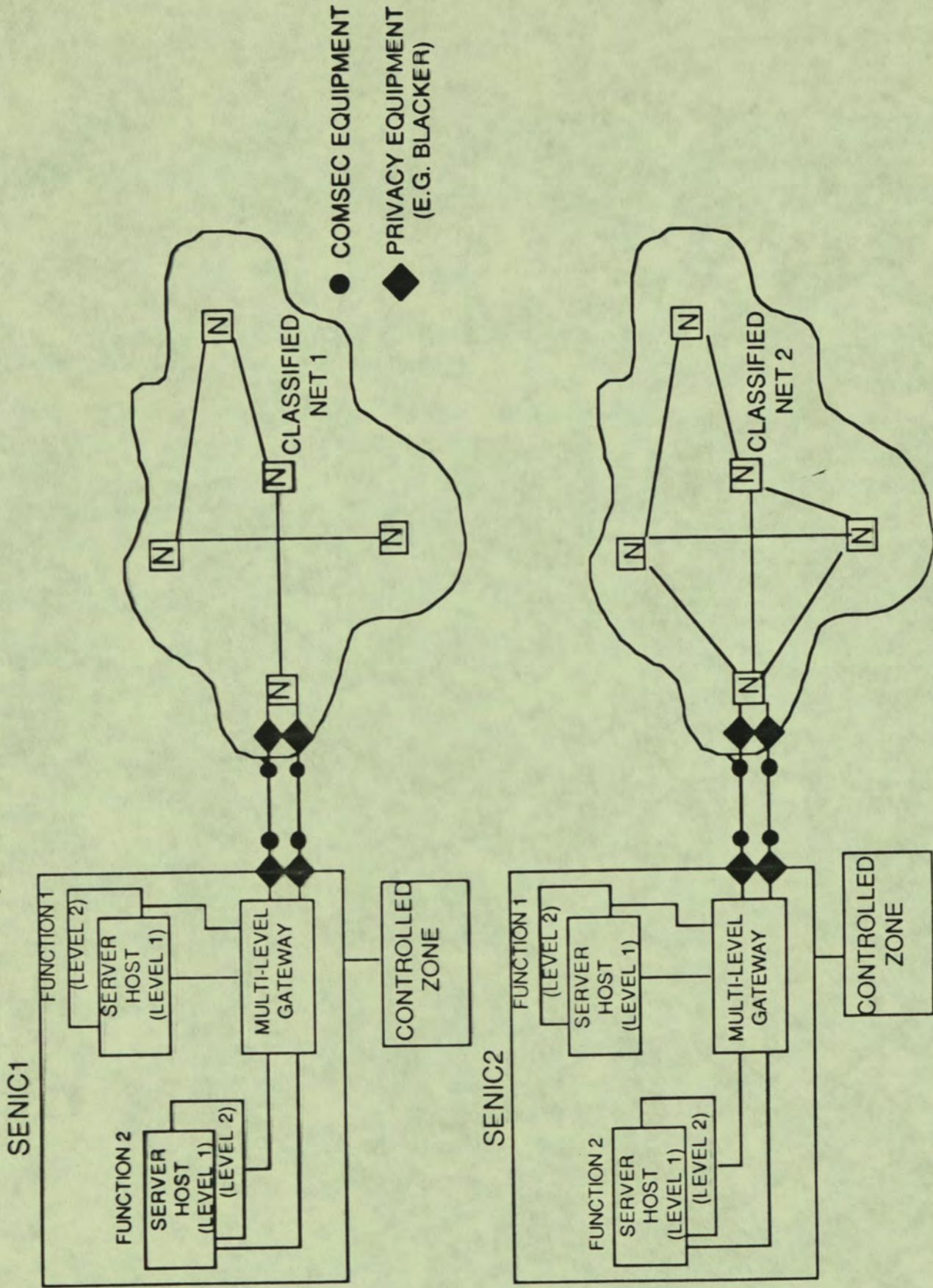


PRELIMINARY DESIGN (INCREMENT 2)



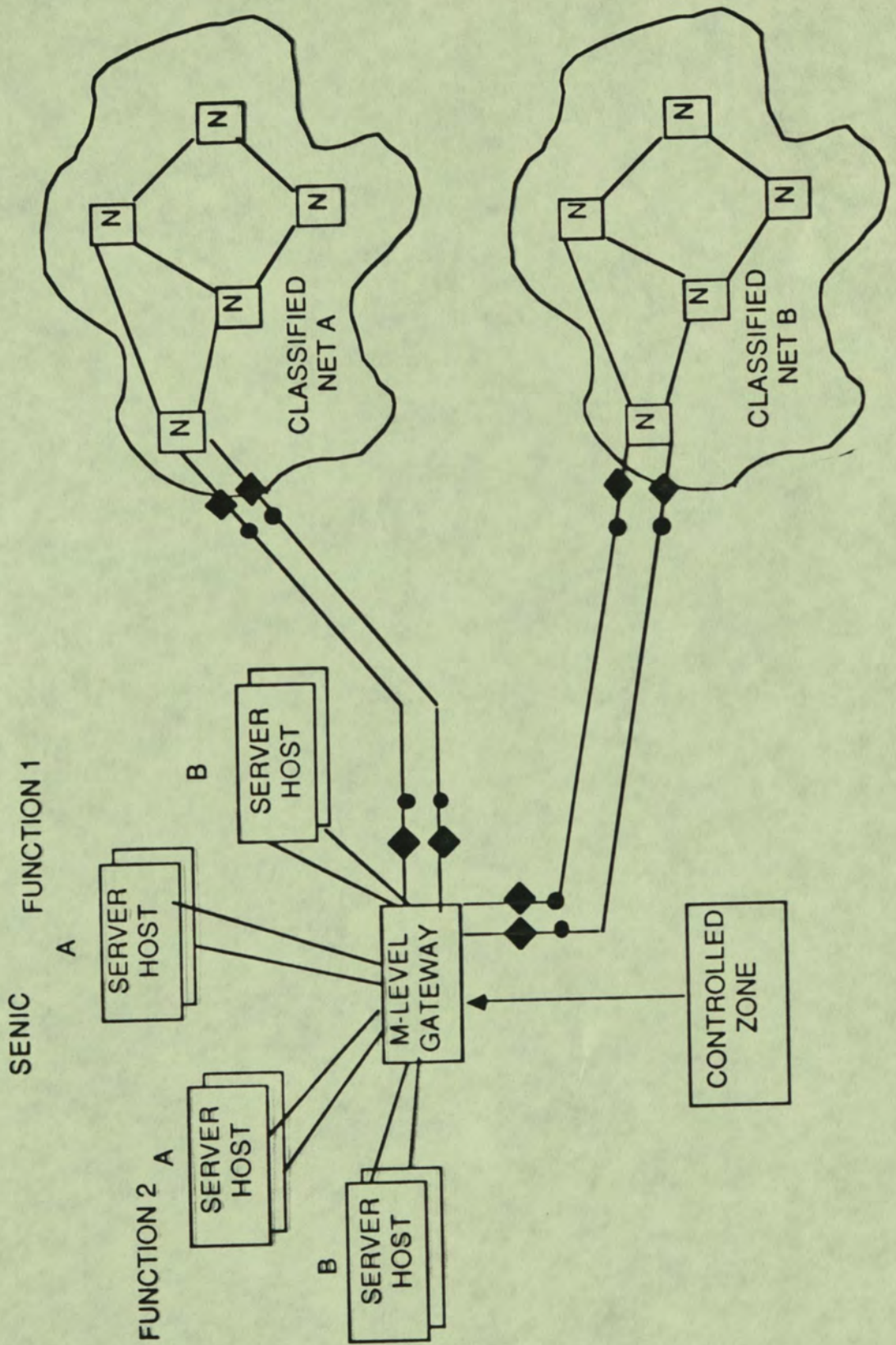


**PRELIMINARY DESIGN (INCREMENT 2A)
Replicated NICS - one per classified NET**





PRELIMINARY DESIGN (INCREMENT 3)





MODIFICATIONS TO NIC SYSTEM TO MEET SENIC REQUIREMENTS

	LEVEL 1 (FOR SECRET PROCESSING)	LEVEL 2 (FOR TOP SECRET PROCESSING)	LEVEL 3 (...)
NIC SOFTWARE & SERVICES			
USAGE/BILLING	<ul style="list-style-type: none"> • HOST, TAC USER • NETWORK USAGE • SENSITIVE BILLING 		
AUDIT TRAIL	<ul style="list-style-type: none"> • TAC AUDITING • INCIDENT REPORTING • EVENT SEARCHING 		
TACACS	<ul style="list-style-type: none"> • REGISTRATION OF TAC USERS • TAC PASSWORD AUTHENTICATION • USER INFORMATION BASE 		
SECURITY COORDINATION CENTER	<ul style="list-style-type: none"> • NETWORK SECURITY PROBLEM TRACKING/REPORTING • SECURITY PROBLEM INFORMATION DISSEMINATION • COORDINATE DEVELOPMENT/VALIDATION OF PATCHES TO SOFTWARE/HARDWARE SECURITY PROBLEMS 		

TO BE DETERMINED

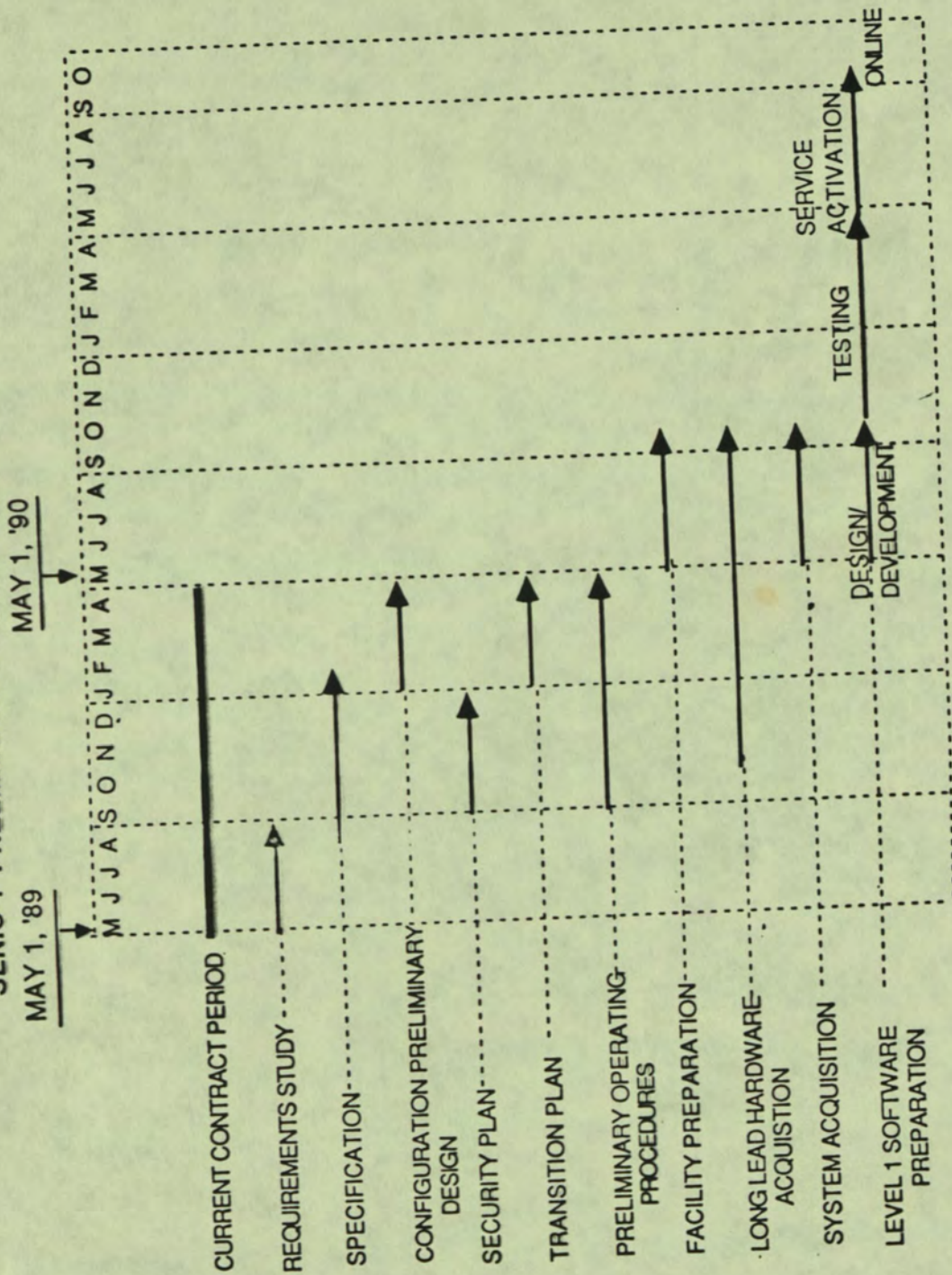


**MODIFICATIONS TO NIC SYSTEM TO MEET SENIC
REQUIREMENTS
(CONT)**

NIC SOFTWARE & SERVICES	CURRENT FEATURE	LEVEL 1 (FOR SECRET PROCESSING)	LEVEL 2 (FOR TOP SECRET PROCESSING)	LEVEL 3 (...)
DATABASE SERVICES INFORMATION RETRIEVAL SYSTEMS WHOIS QUERY SERVICE	<ul style="list-style-type: none"> ● MAINTENANCE OF DATA ABOUT: <ul style="list-style-type: none"> - HOST & BACKBONE CONFIGURATIONS - REGISTERED NETWORK USERS - DOMAINS - HOST ADMINISTRATORS ● PARAMETER-DRIVEN ● MENU-DRIVEN ● MAILER ACCESSIBLE 	<p align="center">TO BE DETERMINED</p>	<p align="center">TO BE DETERMINED</p>	<p align="center">TO BE DETERMINED</p>



SENIC-1 PRELIMINARY MILESTONE CHART



TESTING
SERVICE ACTIVATION
ONLINE

DESIGN/DEVELOPMENT

*Bones
et Beaulieu
Cop*

*8/85
mtg*

**INTERNET
NAME SERVICE**



- **HOST NAMES/NUMBERS**
- **NET NAMES/NUMBERS**
- **DOMAIN NAMES/NUMBERS**
- **HOST ATTRIBUTES**
- **NAME SERVER**

**DATA COMPUTER
DOCUMENT ARCHIVES**



- PERFORMANCE DATA
- AUDIT TRAIL DATA
- USAGE DATA
- BIBLIOGRAPHIC DATA
- RFCS AND SIG ARCHIVES
- PROTOCOLS AND STANDARDS

**NETWORK DOCUMENTATION
AND INFO PRODUCTS**



- DDN NEW USER GUIDE
- DDN PROTOCOL HANDBOOK
- DDN DIRECTORY
- DDN MGT BULLETINS/NEWS
- ARPANET INFO BROCHURE
- SUBSCRIPTIONS
- SPECIAL USER PRODUCTS

**NETWORK CONTACT
COORDINATION**



- **HOST ADMINISTRATORS**
- **NETWORK LIAISON**
- **NODE SITE COORDINATORS**
- **RESPONSIBLE PERSONS**

SRI INTERNATIONAL
Network Information Center



- NETWORK INFORMATION SERVICES
- NETWORK ACCESS SERVICES
- NETWORK DOCUMENTATION
- DATA AND DOCUMENT ARCHIVES
- NETWORK LIAISON

SRI INTERNATIONAL
Menlo Park, CA



Not-for-Profit Research Institute providing R & D in

- COMPUTER SCIENCE
- ARTIFICIAL INTELLIGENCE
- TELECOMMUNICATIONS
- NETWORK SECURITY
- NETWORK SERVICES
- NETWORK PROTOCOLS & ARCHITECTURE

SRI INTERNATIONAL
Network Information Center



- NETWORK INFORMATION SERVICES
- NETWORK ACCESS SERVICES
- NETWORK DOCUMENTATION
- DATA AND DOCUMENT ARCHIVES
- NETWORK LIAISON

NETWORK STATISTICS



- NETWORKS 231
- GATEWAYS 82
- MILNET HOSTS 218
- MILNET TACS 74
- ARPANET HOSTS 108
- ARPANET TACS 14

NETWORK INFORMATION SERVICES



- REFERENCE SERVICES
- NETWORK SERVERS
- ONLINE REFERENCE FILES
- NIC REPOSITORY

NIC REFERENCE SERVICES



- NIC 'Hotline', 7am-4pm PST
800-235-3155

- NIC Online Feedback
NIC@SRI-NIC

- U.S. Mail

DDN Network Information Center
SRI International
Room EJ297
Menlo Park, CA 94025

NETWORK SERVICE MAILBOXES



- NIC@SRI-NIC
- REGISTRAR@SRI-NIC
- HOSTMASTER@SRI-NIC
- ACTION@SRI-NIC
- NEWS@SRI-NIC

NETWORK SERVERS



- WHOIS
- TACNEWS
- NAMSER
- NIC/QUERY
- BIBLIO
- REGISTER
- DATASERV
- SAM

REPOSITORY & REFERENCE FILES



- OFFICIAL NAME TABLES
- TAC PHONE NUMBERS
- NET CONTACT LISTS
- MGT BULLETINS/NEWS
- TCP/IP PRODUCTS LIST
- PROTOCOLS, RFCS, SIGS

NETWORK ACCESS SERVICES



- TAC ACCESS SERVICES
- USER REGISTRATION
- NETWORK PRIVACY ISSUES
- AUDIT TRAIL/USAGE ANALYSIS
- INTERNET NAME SERVICE

**TAC ACCESS
SERVICES**



- REGISTER MILNET TAC USERS
- ISSUE MILNET TAC CARDS
- COORDINATE REGISTRATION

SAMPLE USER REGISTRATION TEMPLATE



Handle: SK4

Full name: Kahn, Susan

U.S. mail address: SRI International
Telecommunication Services
Network Information Center
333 Ravenswood Avenue
Menlo Park, California 94025

Phone: (415) 859-6111

Authorizing host: SRI-NIC

Primary login name: SKAHN

Primary network mailbox: SKAHN@SRI-NIC

Alternate network mailboxes: SKAHN@SRI-KL

TAC access requested? (y/n): y

Delete? (y/n):

**AUDIT TRAIL
PRIVACY ISSUES**



- MAINTAIN NET 'HOTLIST'
- COLLECT AUDIT TRAIL/USAGE DATA
- ANALYZE AND ADMINISTER DATA
- REPORT ACCESS PROBLEMS

NIC KNACKS

Volume 1, Number 1

11 April 1985

PURPOSE OF NIC KNACKS

This is the first edition of the **NIC KNACKS** newsletter. **NIC KNACKS** is intended to provide the staff of the DDN PMO with information on the services provided by the DDN Network Information Center. It will be issued periodically as services are changed or enhanced.

ACCESSING THE NIC SYSTEM

The NIC system, whose official hostname is SRI-NIC.ARPA, has an address on both the MILNET and the ARPANET. The MILNET address is [26.0.0.73] and the ARPANET address is [10.0.0.51]. From a MILNET TAC, the command to access the NIC system for general use is:

o 26.0.0.73

which may be abbreviated

o 73

The NIC system normally operates 24 hours a day 7 days a week. Problems or questions concerning access to the NIC system may be directed to the NIC Hotline service at (800)235-3155. The Hotline is fully staffed weekdays from 11am until 7pm Eastern time. The Computer Operator answers the Hotline number when it is not staffed. A Computer Operator is on duty weekdays 7am to 3pm, 4pm to 9pm and 10 pm to 2am time, and weekends 11am to 3am Eastern time.

REMOTE HOST ACCESS TO NIC SERVICES

Much of the NIC service is provided through access to servers on the SRI-NIC host from other hosts. This issue will focus on the WHOIS or NICNAME service. On many hosts, including DDN1, a program is provided through which users may query the WHOIS/NICNAME server on SRI-NIC. This provides a convenient interface for the user, who can intersperse queries to the NIC with his routine work his own host.

The search keys given for the WHOIS database are the same whether a program is run on a remote host or on SRI-NIC. The command used does vary from host to host. On SRI-NIC the command is "WHOIS" whereas on DDN1 it is "NICNAME."

R1/SRIN/85/2803

REPORTS

WHOIS DATABASE

There are many ways to use the NIC WHOIS database. Besides records for individuals, it contains a records for hosts, network nodes, networks, and gateways. Below are examples of querying the database for different kinds of records. The examples are based on opening a connection to SRI-NIC (26.0.0.73) from a TAC. After logging in to the TAC and connecting to the NIC system, the commands shown may be issued without any other kind of login to the NIC host.

1. Looking up a host by name. This is handled by simply supplying the desired host name (in this case NWC-387B) as the search key. The first items shown are the name and address of the organization operating the host. The name of the host appears in parenthesis.

```
@whois nwc-387b
```

```
Naval Weapons Center (NWC-143B)
  China Lake, California 93555
```

```
NetAddress: 26.3.0.85
Nicknames: NWC-387B
```

```
Host Administrator and Liaison:
  Oswald, Tom (TO6) OSWALD@NWC-143B
  (619) 939-2401 (AV) 437-2401
```

To see the membership list, repeat the command, preceding the argument with a star, e.g. "*nwc-387b" instead of "nwc-387b".

2. Looking up a record by NIC handle. The NIC handle or ident is a unique identifier for each record. The handle for the record of the Host Administrator shown in the last example is displayed in parenthesis. In this case it is "TO6." To find the full address of the Host Administrator, his record can be conveniently displayed using the NIC handle.

```
@whois to6
```

```
Oswald, Tom (TO6) OSWALD@NWC-143B
  Naval Weapons Center
  Code 3871
  China Lake, California 93555
  Phone: (619) 939-2401 (AV) 437-2401
```

3. Displaying individuals by name. In this example, the name "Hammond" is the target. The search will reveal multiple records, and explain how to single out one.

```
@whois hammond
```

```
Hammond, David C. (DCH5) HAMMOND@NADC (215) 441-1416 (AV) 441-1416
Hammond, Glenn E. (GEH5) ghammond@JPL-VLSI (317) 542-2147
Hammond, J. (JH72) JHAMMOND@OFFICE-8 (AV) 238-6161
Hammond, James (JH33) JHH@NCSC (904) 234-4407
Hammond, John (JH5) hammond@NOSC (619) 225-2391 (AV) 933-2391
Hammond, Jr., Russell J. (RJH1) SAI-ACCAT@USC-ISI (703) 734-4091
Hammond, Linda A. (LAH2) LAHAMMOND@RADC-MULTICS (315) 330-3053 (AV) 587-30
53 (FTS) 952-3053
Hammond, Michael C. (MCH2) ADMIN@TESLA (607) 256-3586
Hammond, Steven W. (SH21) HAMMOND@GE-CRD (518) 386-8514
```

To single out any one of these, repeat the command, using "IDENT" or "!IDENT" instead of "NAME". The ident is in parenthesis and follows the name.

As explained in the typeout, to see full information on one of the individuals, another search can be done specifying the individual's unique identifier, the NIC handle or ident. The use of the "!" makes the search more efficient by narrowing it to matches on the handle only, excluding the checking of name entries.

0whois !jh5

```
Hammond, John (JH5)          hammond@NOSC
  Naval Ocean Systems Center
  Code 713
  271 Catalina Boulevard
  San Diego, California 92152
  Phone: (619) 225-2391 (AV) 933-2391
  MILNET TAC user
```

4. Searching for partial matches. A partial match may be allowed by the use of trailing periods on the search key. The search used checks for matches by both name and NIC handle. So, in this example all records whose names or handles start with "ZD" will be found.

0whois zd...

```
Doty, Zelpha (ZD)           LWS@WPAFB-INFO1      (AV) 833-0149
Zdanowicz, Joseph R. (JRZ1) Zdanowicz@RADC-MULTICS (315) 330-3224 (AV) 587-32
24 (FTS) 952-3224
Zdonik, Stanley B. (SBZ)   SBZ@MIT-XX           (617) 253-1409
Zdybel, Frank (FZ1)       ZDYBEL@BBNC         (617) 497-3347
Zdziebko, Bernadette (BZ1) BZdziebko@RADC-MULTICS (315) 330-4117 (AV) 587-41
17 (FTS) 952-4117
```

To single out any one of these, repeat the command, using "IDENT" or "!IDENT" instead of "NAME". The ident is in parenthesis and follows the name.

A partial match could have been used to narrow down the response to a previous example. The following search displays records of individuals with last name "Hammond" and first names starting with "J."

0whois hammond, j...

```
Hammond, J. (JH72)         JHAMMOND@OFFICE-8    (AV) 238-6161
Hammond, James (JH33)     JHH@NCSC             (904) 234-4407
Hammond, John (JH5)       hammond@NOSC         (619) 225-2391 (AV) 933-2391
Hammond, Jr., Russell J. (RJH1) SAI-ACCAT@USC-ISI   (703) 734-4091
```

To single out any one of these, repeat the command, using "IDENT" or "!IDENT" instead of "NAME". The ident is in parenthesis and follows the name.

5. Finding a node by its name. All DDN nodes are listed in the WHOIS database. The standard names are used as the NIC handle. The standard name consist of an alphabetic part that is unique to the site. If there are multiple nodes at a site, each node name includes a numeric part that is the node number. In this example the node "SRI73" is shown.

0whois sri73-imp

SRI International (SRI73-IMP)
333 Ravenswood Avenue
Menlo Park, California 94025
Phone: (415) 859-5921 [A] (415) 859-3550

IMP 73 on network 26.0.0.0 (MILNET)

26.0.0.73	SRI-NIC
26.1.0.73	SRI-WARF
26.2.0.73	SRI-MILNET-GW
26.3.0.73	SRI-MIL-TAC
26.4.0.73	SRI-NAURS

Node Site Coordinator:
Roode, R. David (DAVE) ROODE@SRI-NIC
(415) 859-2774

As you can see, in the display of a node record, the addresses and names of all hosts connected via the node are shown.

NIC KNACKS

INTRODUCTION TO NIC KNACKS

Number 1

17 May 1985

PURPOSE OF NIC KNACKS

This is the first edition of **NIC KNACKS**. **NIC KNACKS** are intended to provide the staff of the DDN PMO with a quick reference on how to use the services provided by the DDN Network Information Center. **NIC KNACKS** will be issued periodically as services are changed or enhanced.

Further issues of this document may cover subjects such as a reference list of files and documents available from the NIC, how to use the TACNEWS program, who to contact at the NIC, how to get RFCs and the like. Please let us know what you would find useful. Send your ideas and feedback by electronic mail to **NIC@SRI-NIC**.

NIC KNACKS

HOW TO REACH THE NIC

Number 2

17 May 1985

There are several ways to reach NIC personnel or the NIC host. The NIC host, whose official hostname is SRI-NIC, has an address on both the MILNET and the ARPANET. The MILNET address is [26.0.0.73] and the ARPANET address is [10.0.0.51]. This host computer normally operates 24 hours a day 7 days a week except for scheduled downtime. Operators are on duty weekdays 10am to 6pm, 7pm to 12pm and 1 am to 5am Eastern Time, and weekends 11am to 3am Eastern Time. Questions about the host computer SRI-NIC may be sent to ACTION@SRI-NIC or you may call the NIC Hotline (see below).

1. ACCESSING THE NIC HOST BY TAC

From a MILNET TAC, the command to access the NIC host for general use is:

```
@o 26.0.0.73<return>
```

which may be abbreviated

```
@o 73<return>
```

2. ACCESSING THE NIC HOST BY ELECTRONIC MAIL

To send messages to the NIC host via electronic mail, use these addresses:

DDN User Assistance	NIC@SRI-NIC.ARPA
Computer Operations	ACTION@SRI-NIC.ARPA
WHOIS updates, user registration	REGISTRAR@SRI-NIC.ARPA
Host changes, updates or problems	HOSTMASTER@SRI-NIC.ARPA
Items for newsletters	NEWS@SRI-NIC.ARPA
Contract or Management Issues	FEINLER@SRI-NIC.ARPA

3. ACCESSING THE NIC HOST BY TELNET

To connect to the SRI-NIC host from another host, use the TELNET service.

```
DDN2->telnet<return>  
*conn sri-nic<return>
```

4. ACCESSING THE NIC HOTLINE

1-800-235-3155

Problems or questions concerning access to the NIC may be directed to the NIC Hotline service. The Hotline is fully staffed by reference personnel weekdays, and is backed up by the operations staff on off hours and weekends.

5. SENDING SURFACE MAIL TO THE NIC

U.S. MAIL ADDRESS: **DDN Network Information Center**
SRI International EJ200
333 Ravenswood Ave.
Menlo Park, CA 94025

RAPID DELIVERY: SRI MAIL POUCH -- daily delivery from
Washington, D.C. to Menlo Park by air

1. Notify Valarie Collins 1-415-859-3640 that you have a mail delivery for the SRI Mail Pouch.
2. Leave mail to be picked up by SRI Courier at the DDN PMO Guard Desk in an envelope marked

SRI International, Menlo Park, CA
Attn: Elizabeth Feinler

FEDERAL EXPRESS

1. Call the Federal Express office in MacLean, VA, 703-953-3333, and request pick-up of your mail for delivery to

SRI International, Menlo Park, CA.,
Attn: Elizabeth Feinler.
2. Charge the cost to 0951-0454-1 and give them the instructions for mail pick-up from your site.

NIC KNACKS

HOW TO USE THE TACNEWS PROGRAM

Number 3

19 August 1985

TACNEWS is a news server provided by the NIC to assist network users with TAC login procedures, and to provide MILNET and ARPANET TAC dial-up numbers. It also allows users to read the most recent issues of the DDN Newsletters and DDN Management Bulletins as well as announcements of general interest. The following scenarios show how to connect to and use the TACNEWS program. User input is underlined and machine output is in square brackets.

CONNECTING TO TACNEWS

1. From a MILNET TAC, type "@n<Return>" and then give your MILNET TAC User-Id and Access Code.

```
@n<Return>  
[TAC Userid:]USER-ID<Return>  
[Access Code:]ACCESS-CODE<Return>  
[Login OK  
TCP Trying...Open]  
@]tacnews<Return>
```

2. From a MILNET Host, type

```
[DDN2->]telnet<Return>  
[TELNET>]connect sri-nic<Return>  
[SRI-NIC, TOPS-20 Monitor 5.3(751)-1  
***  
* For TACNEWS, enter: tacnews<RETURN>  
* To find the host administrator for host xy-z, enter: whois xy-z  
* Report system problems to Action@SRI-NIC or call (415)859-5921  
***  
@]tacnews<Return>
```

NOTE: It is usually much faster to access TACNEWS from a TAC. In the future typing "@n<Return>" to the TAC will call up the program directly, and you will no longer need to type "tacnews<Return>". Login to the TAC will still be required, however.

SETTING THE SCREEN LENGTH

Once you have typed "tacnews<Return>" you will be asked if you want to stop output to your terminal.

```
[SRI-NIC TACnews 1.3(34)-2...  
Send bugs or comments to TACNEWS@SRI-NIC.ARPA  
Stop output every 24 lines? (Y/N/length/?)]
```

If you type "y", output to the screen will stop at every 24 lines of text. If you type "n", output will scroll continuously. If you wish to change the number of output lines from 24 to 20 lines, for example, type "20" as the number of lines you wish to display.

CURRENT TACNEWS MENU

Once you have set the screen length, the program will show its main menu.

- [1. Announcements (updated 12-Aug-85)
 - *2. Dial-Ups (MILNET/ARPANET TAC telephone numbers, updated 19-AUG-85, 13K chars)
 - *3. Login (Help with TAC login, updated 24-Aug-84, 5K chars)
 - 4. Newsletters (DDN News, updated 1-Jul-85)
 - 5. Bulletins (DDN Management bulletins, updated 14-Jun-85)
- Type a menu number ('HELP<CR>' for more info):]

READING MANAGEMENT BULLETINS

Select menu item "5", and the TACNEWS program will present a list of the most recent management bulletins, e.g.,

[Type a menu number ('HELP<CR>' for more info):]5<Return>

[12 issues are available online. The latest:
28 14-Mar-85 IMPLEMENTATION OF ARPANET TAC ACCESS CONTROL UNDERWAY
29 30-Apr-85 NEW LOCATION FOR CONUS MILNET MONITORING CENTER
30 14-Jun-85 MILNET HOST ADMINISTRATOR SURVEY REQUEST
To view, type an issue number. 'HELP<CR>' for help, 'QUIT<CR>' to exit.
TACnews>]

Type 29<Return> to display the actual text of Bulletin 29.

TACnews>]29<Return>
[*****
DDN MGT Bulletin 29 DCA DDN Program Mgt Office
30 Apr 85 Published by: Network Info Center
(NIC@SRI-NIC.ARPA) 1-800-235-3155
.....
-----END-OF-ISSUE-----
To view, type an issue number. 'HELP<CR>' for help, 'QUIT<CR>' to exit.]

TACNEWS COMMANDS

TACNEWS has a help feature which explains all the commands. Typing "help" at the TACnews> prompt provides the following:

<u>Command</u>	<u>Result</u>
top	return to main menu
next	to view next item in list
previous	to view previous item in list
list	shows index of all current issues
help	summary of these command choices
?	list of available commands
quit	ends the program

QUITTING FROM THE TACNEWS PROGRAM

To leave the program, type "quit<Return>". This returns you to the SRI-NIC "@>" prompt. Log out of the host, and if you are also finished using the TAC, log off the TAC as well.

[TACnews>]quit<Return>
[@]logout<Return>
@l<Return>

NIC KNACKS

WHOIS/NICNAME

Number 4

23 September 1985

WHOIS/NICNAME is a network service provided by the DDN Network Information Center (NIC) and is available to DDN PMO personnel on the DDN1, DDN2, and SRI-NIC machines. It delivers information about individuals, hosts, nodes and TACs, including TAC dial-up phone numbers. The command used to access the service on DDN1 and DDN2 is "NICNAME", and it is "WHOIS" on SRI-NIC. (To access the WHOIS service on SRI-NIC, you will need to connect to that host by typing Go 26.0.0.73<Return> from a TAC.) Below are examples of a user at the DDN1 prompt making various queries. In these examples, user input is underlined and computer output is contained in square brackets [] for reader convenience. Help for NICNAME is available online through the command nickname help<Return> or you may call the NIC User Assistance Service at 1-800-235-3155.

SEARCH BY INDIVIDUAL'S LAST NAME

```
[DDN1->]nickname roscoe<Return>
[ROSCOE, Joe A. (JAR)          JROSCOE@HOST-1
Air Force Data Systems Design Center/SDTS
Willits Air Force Base, W.Va. 12345
Phone: (123) 456-7890 (AV) 654-7890
MILNET TAC user]
```

There is only one "Roscoe", so a complete entry is displayed for him.

SEARCH BY PARTIAL NAME. You may search for a partial name, of either an individual or a host, by typing the partial name followed by three dots (...). Note: This feature will only work if the three dots follow the partial spelling. Also, this kind of search is apt to produce multiple "hits". For example:

```
[DDN1->]nickname ros...<Return>
[Rosati, David (DR16)          Rosati@BAR          (234) 567-8901
Roscoe, Joe A. (JAR)          Roscoe@HOST-1      (123) 456-7890
.
Schuman, Richard O. (ROS)     Schuman@F00        (456) 789-0123]
```

Notice that the partial search also finds any NIC Handles that begin with "ros". The Handle is a unique identifier in parentheses located after the name.

SEARCH BY HANDLE. To single out an individual from a list, as in the above list, search with an exclamation mark (!) preceding the Handle.

```
[DDN1->]nickname !jar<Return>
[ROSCOE, Joe A. (JAR)          JROSCOE@HOST-1
Air Force Data Systems Design Center/SDTS
Willits Air Force Base, W.Va. 12345
Phone: (123) 456-7890 (AV) 654-7890
MILNET TAC user]
```

SEARCH BY HOSTNAME. A search on a particular host name, such as "DDN1", returns

information about the host location, network address, nickname, and POCs.

[DDN1->]nickname DDN1<Return>
[Bolt Beranek and Newman Inc. (DDN1)
Suite 400
1300 North 17th Street
Arlington, Virginia 22209

NetAddress: 26.4.0.106
NickNames: DDN-1
Host Administrator:
Schutz, Michelle L. (MLS6) mschutz@DDN1
(703) 524-4870
Liaison:
Burnett, Jr., Edgar E. (EEB) Burkett@BBN-UNIX
(703) 524-4870

To see the list of registered DDN1 users, repeat the command, preceding the argument with a star (*), e.g., [DDN1->]nickname *DDN1<Return>.

SEARCH BY NODE NAME. A search by node (PSN) name returns the location and POC for the node as well as the names and addresses of hosts and/or TACs attached to the node. A list of node names for MILNET and ARPANET respectively may be obtained by FTPing the files, NETINFO:MIL-NSC.TXT and NETINFO:ARPA-NSC.TXT from SRI-NIC.

[DDN1->]nickname sri73-imp<Return>
[SRI International (SRI73-IMP)
Room EK289
333 Ravenswood Avenue
Menlo Park, California 94025
Phone: (415) 859-5921 [A] (415) 859-3550 or 859-5921

IMP 73 on network 26.0.0.0 (MILNET)
26.0.0.73 SRI-NIC
26.1.0.73 SRI-WARF
26.2.0.73 SRI-MILNET-GW
26.3.0.73 SRI-MIL-TAC
26.4.0.73 SRI-NAURS

Node Site Coordinator:
Jacobsen, Ole J. (OLE) OLE@SRI-NIC
(415) 859-4536]

FINDING TAC PHONE NUMBERS AND LOCATIONS. A search for a specific TAC name, such as "GUNTER-TAC", returns the location, network address, and POC for that TAC. It returns dial-up phone numbers for the TAC also. A list of all the TAC names and phone numbers can be obtained using TACNEWS (see NIC Knack No. 3)

[DDN1->]nickname gunter-tac<Return>
[Air Force Data Systems Design Center/DMTD (GUNTER TAC)
Gunter Air Force Station, Alabama 36114
Phone: (205) 279-3576 [300 bps] (205) 279-4682 [300 bps]

NetAddress: 26.2.0.13
Nicknames: GUNT
Coordinator:
Taylor, William R. (WRT) WTAYLOR@GUNTER-ADAM
(205) 279-4345 (AV) 446-4345]

2805-87

Viewgraphs presented at the BBN NSF Network Service Center
in Boston on May 11, 1987

SRI International, DDN Network Information Center
Menlo Park, CA 94025

May 11, 1987

REPORTS



formerly

STANFORD RESEARCH INSTITUTE

OVERVIEW

- .What is the NIC?
- .Who are our users?
- .What do we do?
- .Guidelines for new nics
- .Resources NIC shares
- .Working Together

Who We Are



DDN Network Information Center

"NIC"

SRI International
333 Ravenswood Avenue
Menlo Park, California 94025

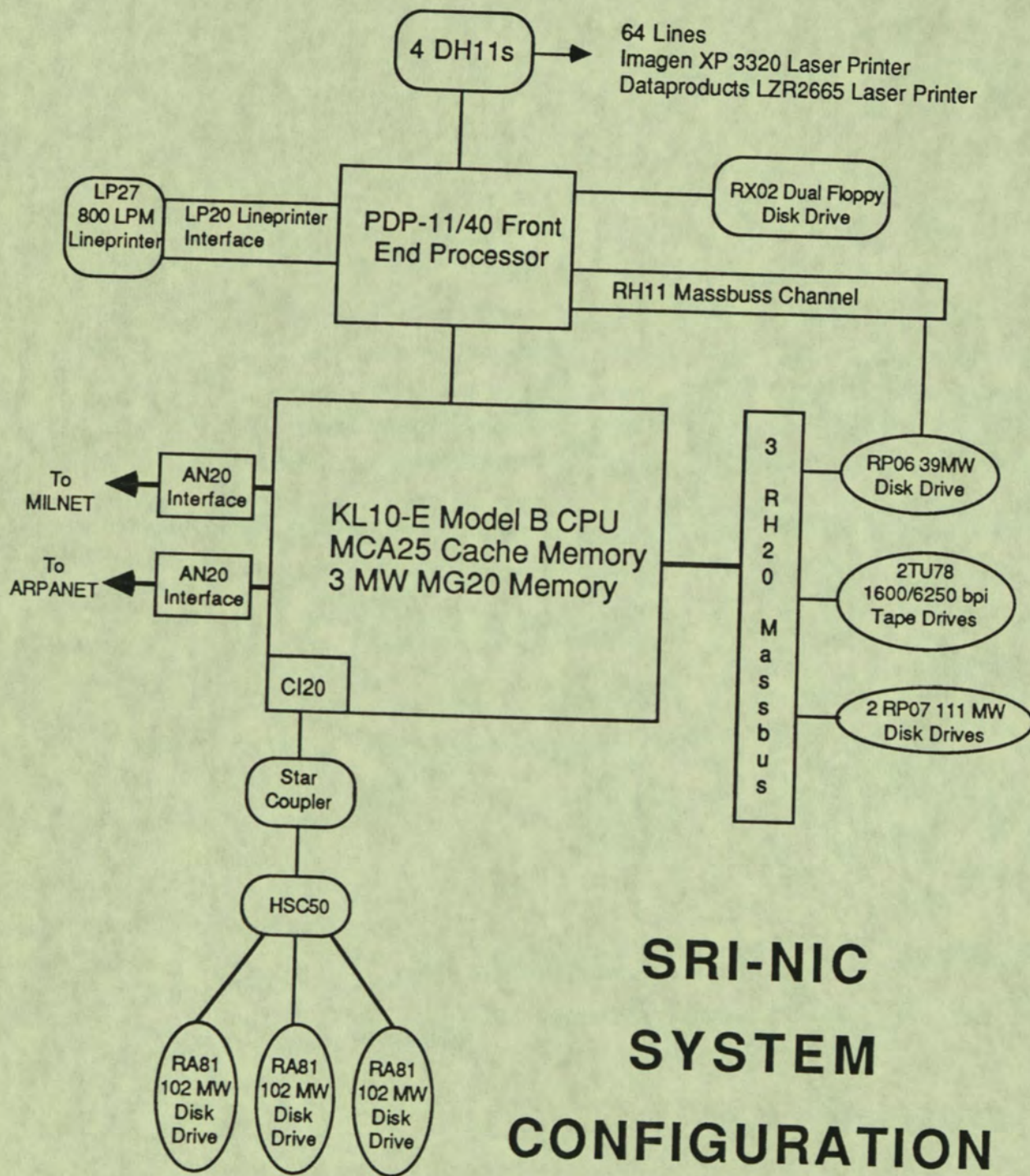
DDN Network Information Center



Phone: (800) 235-3155

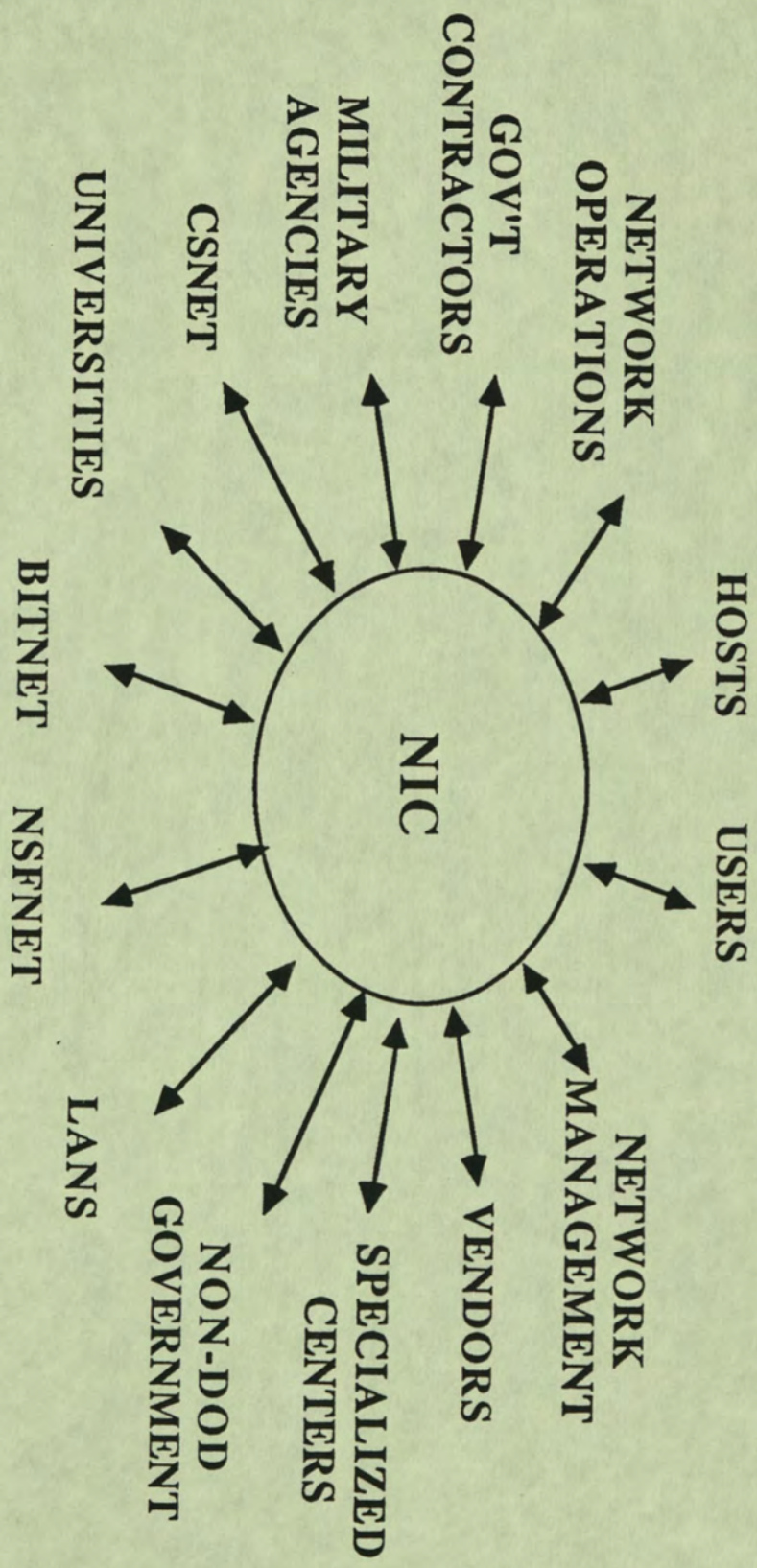
(415) 859-3695

Email: NIC@SRI-NIC.ARPA



SRI-NIC SYSTEM CONFIGURATION

INTERCONNECTIVITY



WHAT DO WE DO?

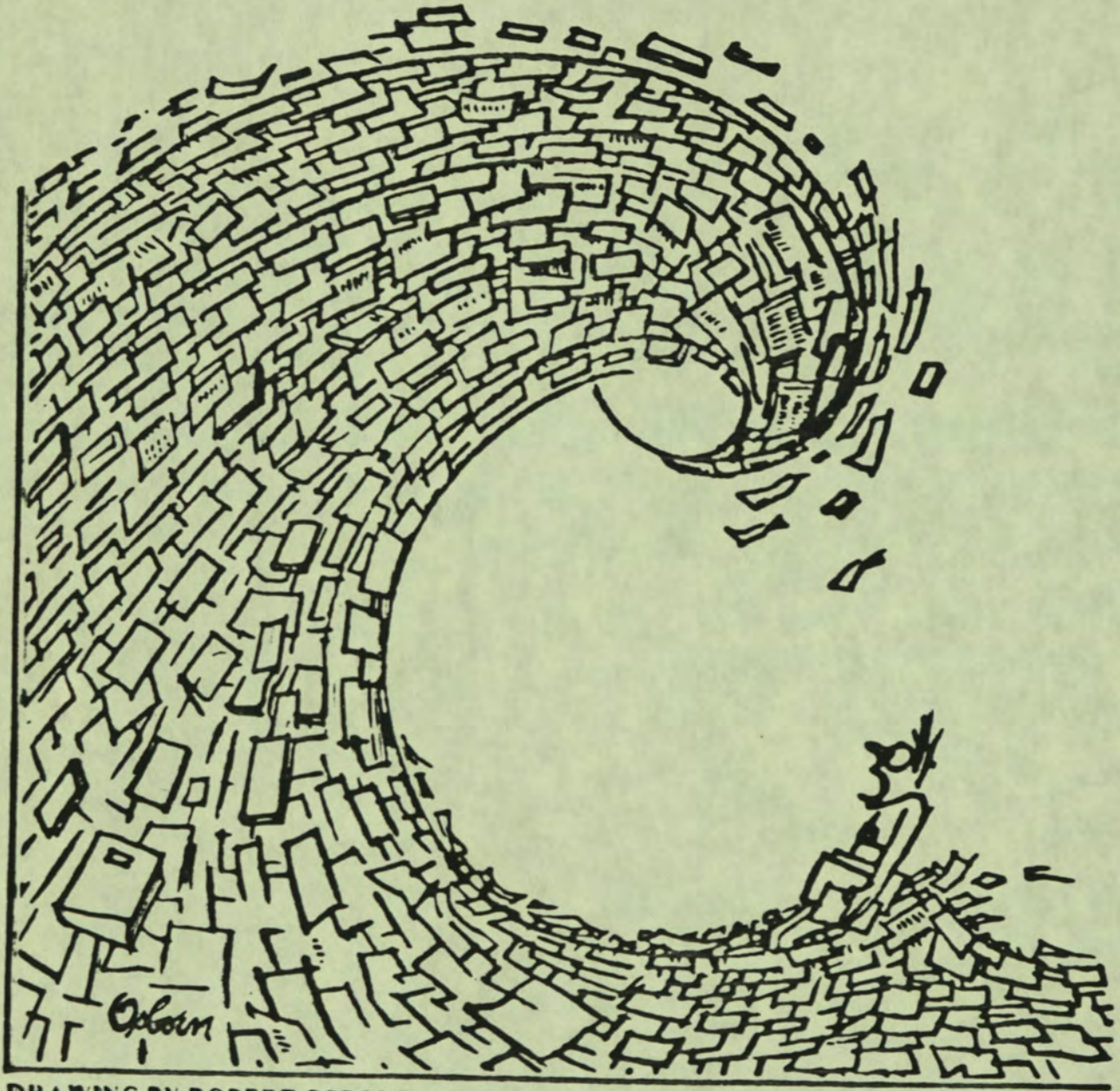
**PROVIDE KNOWLEDGE WORKERS
WITH COMPUTER-BASED TOOLS,
CONTACTS, AND INFORMATION
TO DO THEIR WORK.**

DDN NETWORK INFORMATION CENTER



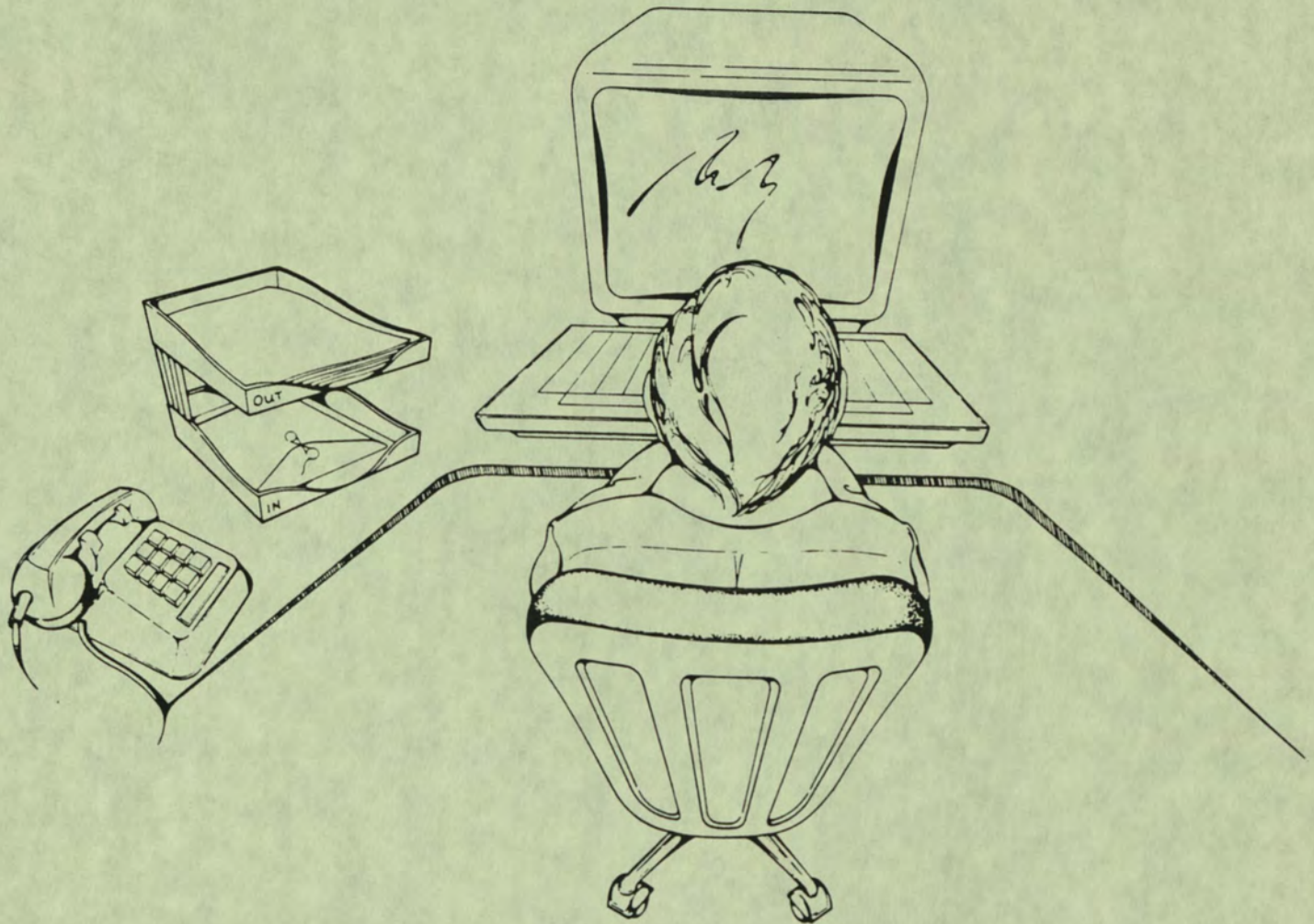
- REFERENCE SERVICES
- INFORMATION SERVERS
- USER REGISTRATION
- TAC ACCESS CONTROL
- AUDIT TRAIL AND USAGE
- NAME SERVICE
- DOCUMENTS, FILES, DATABASES
- INFORMATION PRODUCTS
- NIC COMPUTER FACILITY

THE PROBLEM

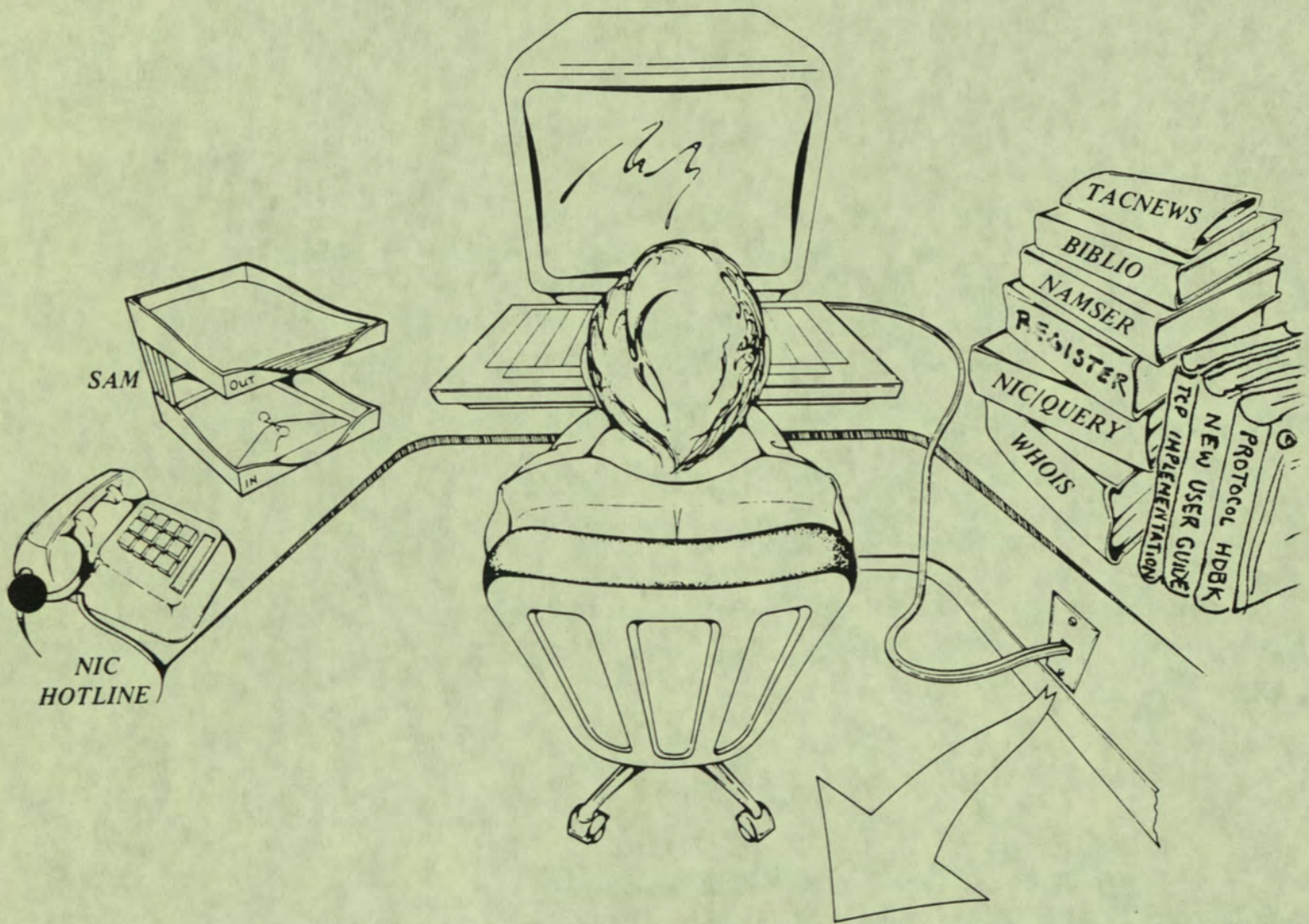


DRAWING BY ROBERT OSBORN

HOW WE HAVE APPROACHED THE PROBLEM



- GIVEN A TELEPHONE, A TERMINAL,
AND THE NETWORK
- WE BRING INFORMATION TOOLS
TO THE KNOWLEDGE WORKER
ELECTRONICALLY



- BILLING
- ACCESS PERMISSION
- NAME SERVICE
- PROTOCOL INTERCONNECTION
- PRIVACY/AUDIT TRAIL

TYPICAL INTERACTIONS

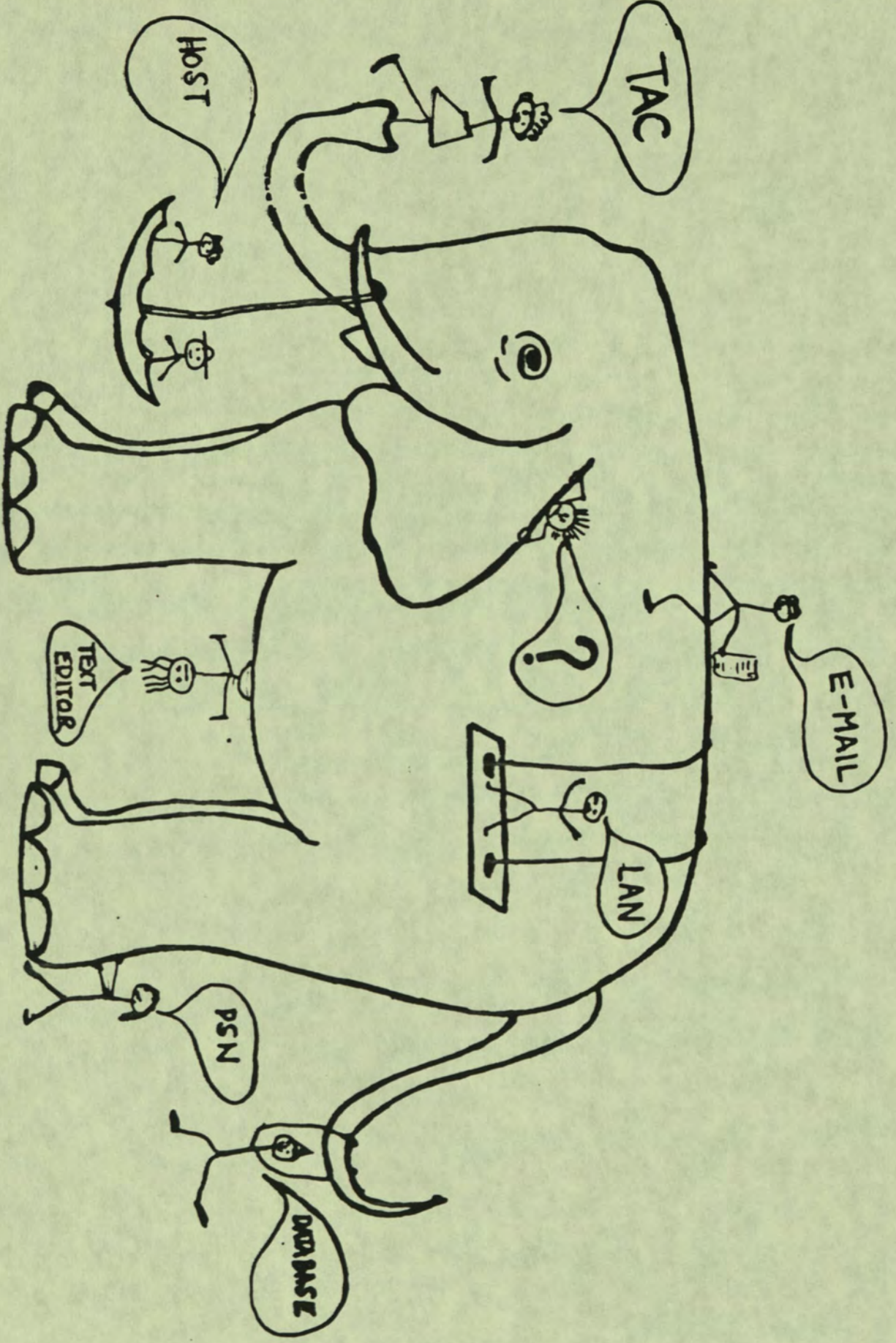
- .NIC <=> Net users
- .NIC <=> Subscribers
- .NIC <=> Non-net customers
- .NIC <=> HAdmins/NSCs/POCs
- .NIC <=> NOCs/NMCs
- .NIC <=> Net Mgrs
- .NIC <=> Internics

IDENTIFY REQUESTORS

- . Novice users
- . Experienced users
- . System administrators
- . Site representatives
- . Users at wrong net/nic
- . General public

● CATEGORIES OF QUERIES

- Help, I'm stuck!
- Is it down or broken?
- Am I authorized?
- Can I register?
- Who's the expert on...?
- Who's the contact for...?
- Where are the files?
- How do I order hardcopy?
- Does anyone have a...?
- Anyone interested in...?
- Has anyone written...?
- Who offers service xyz?
- What are the protocols?
- Any implementations?
- What equipment do I need?
- Who sells it?
- How does it mesh?



"ACCESS TO THE DDN"

USEFUL RESOURCES

- 800 Phone service
- Trained reference staff
- Ongoing training
- Computer resources
- Programming staff
- Data base mgt system
- Data base mgt staff
- Back-up reference tools
- Phone log

PHONE AND VISIT LOG

Name:

Date:

Documents

(ID) Req.

TAC Q.

Ref. Q.

Host

Protocols

PC/Kermit Q.

Address:

Time:

Phone:

Random

Silent caller

Wrong number

Online Mailbox:

CC:

Call Initiated By: Us _____ Them _____

Reason for Call:

Military

Corporate

University

Non-Military Govt.

Other

800 Instate

800 Out-of-state

859-3695

859-5921

Action:

Follow-up Needed: Yes _____ No _____ NIC personnel involved: _____

NIC INFO SERVICES

- .User, host => WHOIS, NAMSER
- .Protocol => RFCs, HDBK
- .Site => QUERY, WHOIS
- .Bibliographic => BIBLIO
- .Newsletters => TACNEWS
- .Info files => RFC: NETINFO:



Useful Documents

- DDN New User Guide

NETINFO:NUG.DOC

- DDN Protocol Handbook

- DDN Protocol Implementations and Vendors Guide

NETINFO:VENDORS-GUIDE.DOC

- DDN Subscriber Security Guide

- DDN Subscriber Interface Guide

- DDN X.25 Host Interface Specification

NETINFO:X25.DOC

- RFCs

RFC:RFCnnn.TXT

- TAC User Guide

NETINFO:TAC-USER.DOC

- User Registration Guide

(Most available from either NIC or DTIC)

Network News



- **DDN Management Bulletins**
(DDN-NEWS:DDN-MGT-BULLETIN-nn.TXT)
- **DDN Newsletters**
(DDN-NEWS:DDN-NEWS-nn.TXT)

2806-86

SRI viewgraphs presented at the second
Communications Operations Group (COG) meeting on May 20-21, 1986

SRI International, DDN Network Information Center
Menlo Park, CA 94025

May 20-21, 1986

REPORTS

SRI INTERNATIONAL
Menlo Park, CA



Not-for-Profit Research Institute providing R & D in

- **COMPUTER SCIENCE**
- **ARTIFICIAL INTELLIGENCE**
- **TELECOMMUNICATIONS**
- **NETWORK SECURITY**
- **NETWORK SERVICES**
- **NETWORK PROTOCOLS & ARCHITECTURE**

REPORTS

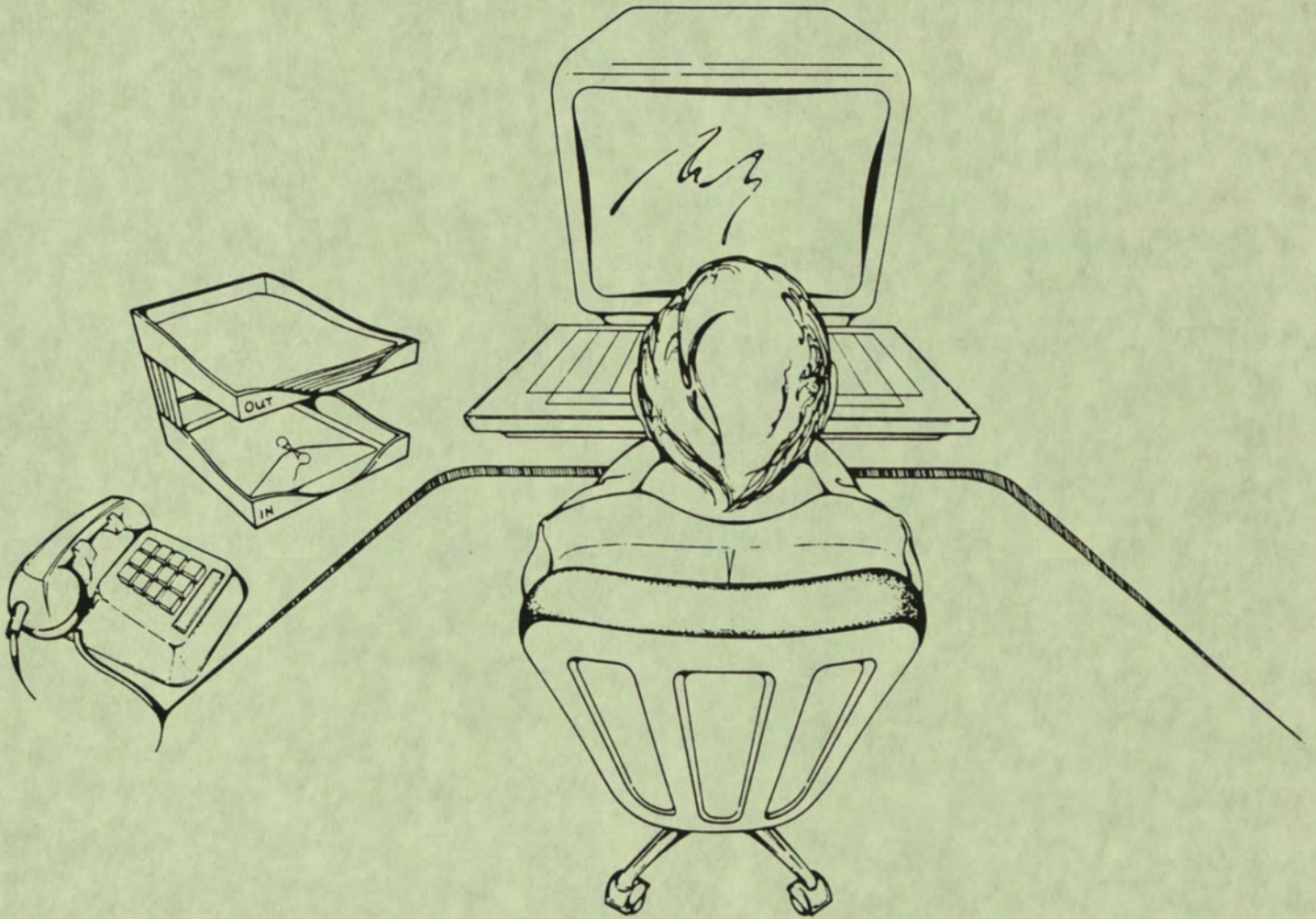
2806-86

DDN NETWORK INFORMATION CENTER

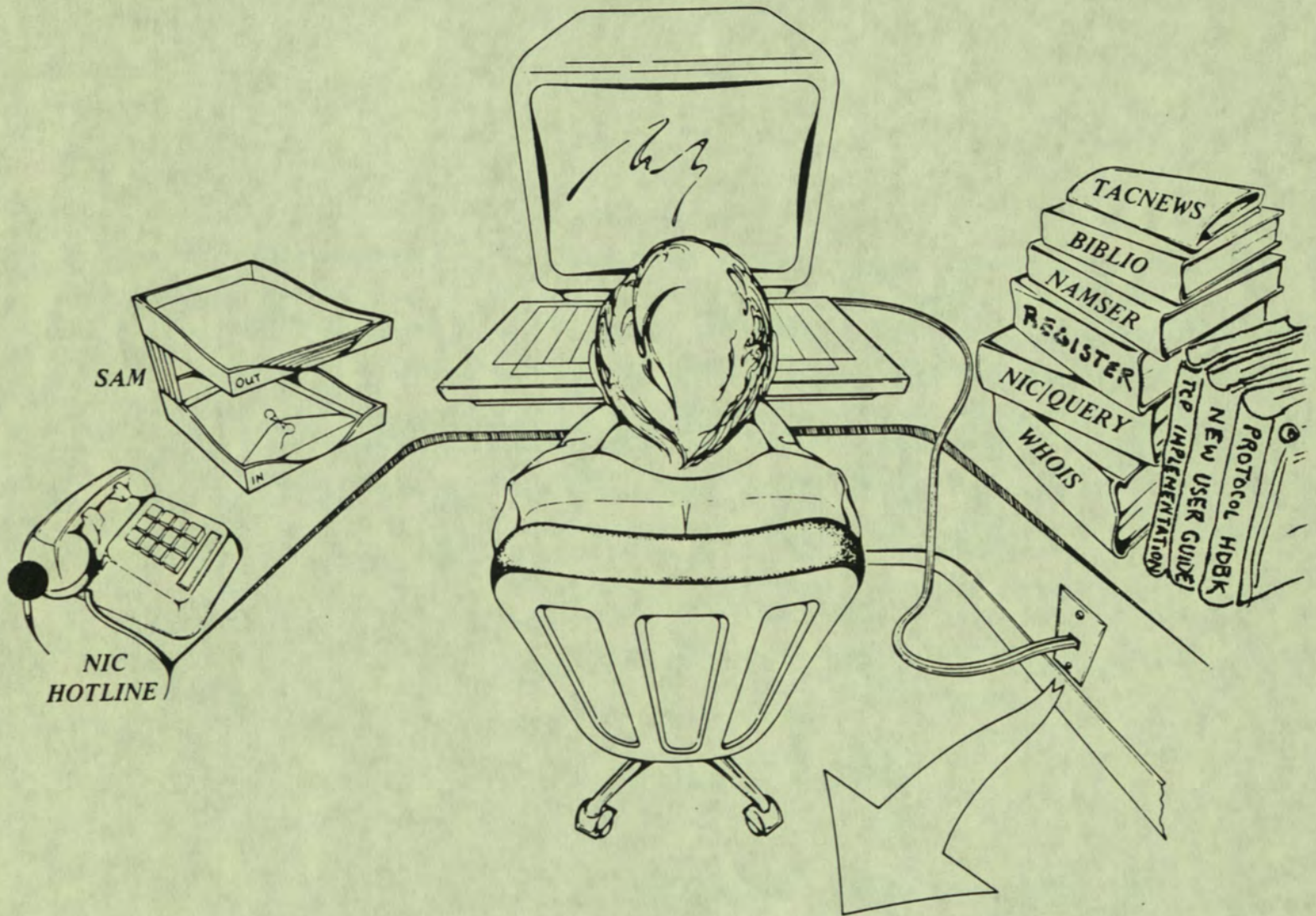


- REFERENCE SERVICES
- INFORMATION SERVERS
- USER REGISTRATION
- TAC ACCESS CONTROL
- AUDIT TRAIL AND USAGE
- NAME SERVICE
- DOCUMENTS, FILES, DATABASES
- INFORMATION PRODUCTS
- NIC COMPUTER FACILITY

HOW WE HAVE APPROACHED THE PROBLEM



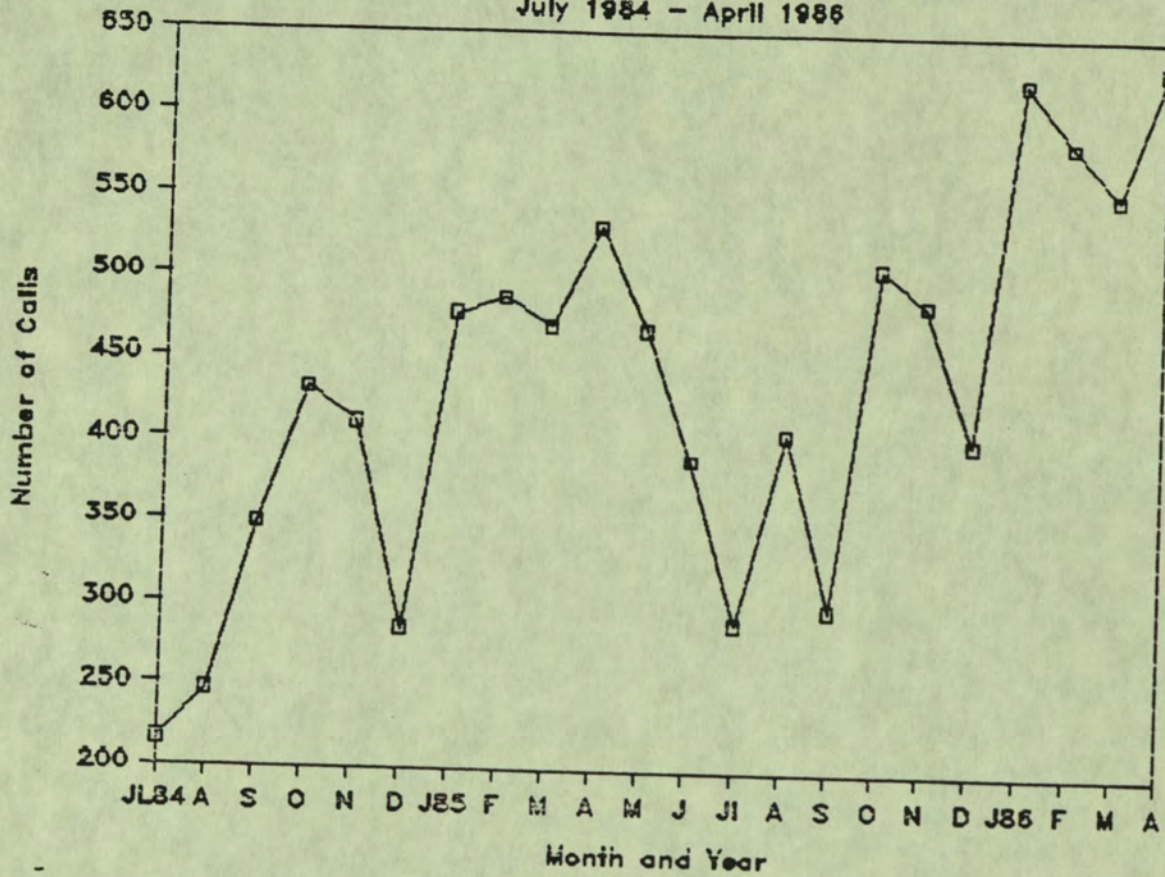
- GIVEN A TELEPHONE, A TERMINAL,
AND THE NETWORK
- WE BRING INFORMATION TOOLS
TO THE KNOWLEDGE WORKER
ELECTRONICALLY



- BILLING
- ACCESS PERMISSION
- NAME SERVICE
- PROTOCOL INTERCONNECTION
- PRIVACY/AUDIT TRAIL

DDN Hotline Usage

July 1984 - April 1986



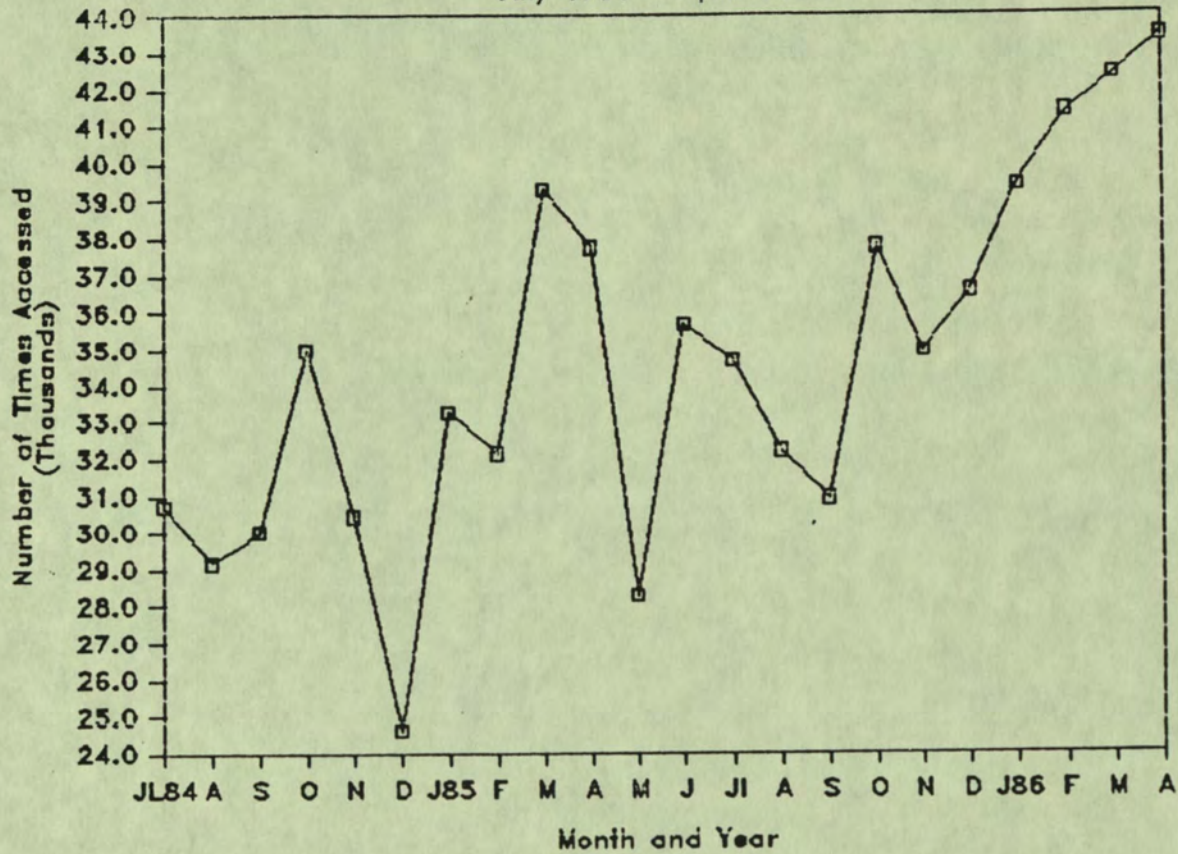
NEW WHOIS FEATURES



- Finds PSNs, Hosts, TACs by name or number
- Shows PSN port assignments
- Lists TAC phone numbers
- Allows search by network address

DDN NIC WHOIS Usage

July 1984 - April 1986



DOCUMENTS



- All available from DTIC and NIC
- Many available online
- Now recovering mail and handling costs
- RFCs available in hardcopy for \$ 5.00 ea.

PC SAM



- Simple access to electronic mail
- Simple access to NIC services
- Makes DDN use easier for PC users

PC SAM

Simple Access to e-Mail



Features

- Friendly User Interface
- Automatic Mail, Automatic Login
- VT100 Terminal Emulation
- Mail and DOS File Management

S A M Desktop



Alt + More functions		15 May 86 7:45 pm Msgs+Forms: 32/250 C: 7968K chars free	
Look at Basket	←F1 F2→	Exit from SWC Access	
Label Basket	←F3 F4→		
Print Basket Summary	←F5 F6→	Send & Receive Mail	
Print Desktop Summary	←F7 F8→	Dial a Service	
Work on Files	←F9 F10	Wait for Terminal Call	

Press a function key or use **↑ ↓ ← →** keys to choose a basket

IN	ADDRESS BOOK	SERVICES	YOUR PC
OUT	SENT	(RESERVED)	WASTE
DDN Mgt Bulln	SAM Feedback	Policy Stmts	TCP/IP
DDN Newslettr	Info-IBM.PC	Ref Staff	
Monthly Rpts	Kermit Info		

Automatic Mail / Login



Alt + More functions		15 May 86 7:46 pm Msgs/Forms: 32/258 C: 7968K chars free
Look at Service Revise Service Print Service Copy Service Add a Network	Return to Desktop Discard Service Add a new Service Dial this Service Select/Clear All Items	
Scroll or type in name (Esc or Back to correct); Enter selects		
SERVICE NAME Milnet/Mail Network: MILNET Network: NIC Direct Network: Tymnet 2400 TACNEWS SERVICE TYMNET 2400 UT100 Interactive, Direct UT100 Interactive, TAC WHOIS Service	USER ID / PHONE # dennett 327-5440 328-8735 361-8701 SRI NETWORK INFORMATION CENTER 361-8701 SRI Network Information Center	
SERVICES basket	9 items, none selected	

Mail Management



Alt → More functions		15 May 86 7:45 pm MsgstForms: 32/250 C: 7968K chars free	
Look at Basket Label Basket Print Basket Summary Print Desktop Summary Work on Files		Exit from SWC Access Send & Receive Mail Dial a Service Wait for Terminal Call	
Press a function key or use keys to choose a basket			
<input type="text" value="IN"/>	<input type="text" value="ADDRESS BOOK"/>	<input type="text" value="SERVICES"/>	<input type="text" value="YOUR PC"/>
<input type="text" value="OUT"/>	<input type="text" value="SENT"/>	<input type="text" value="(RESERVED)"/>	<input type="text" value="WASTE"/>
<input type="text" value="DDN Mgt Bulln"/>	<input type="text" value="SAM Feedback"/>	<input type="text" value="Policy Stmts"/>	<input type="text" value="TCP/IP"/>
<input type="text" value="DDN Newslettr"/>	<input type="text" value="Info-IBM.PC"/>	<input type="text" value="Ref Staff"/>	<input type="text"/>
<input type="text" value="Monthly Rpts"/>	<input type="text" value="Kermit Info"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

DOS File Management



Alt + More functions

F1	F2	Return to Desktop	15 May 86	7:59 pm
F3	F4		Msgs+Forms:	33/250
F5	F6		C:	7960K chars free
F7	F8			
F9	F10			

Scroll or type in name (**←** or **Esc** to correct); **Alt** selects

C:\STEVEN\SAM				
51 files, none selected				
Filename.	Ext	Chars	Date	Time
MACRO	.HLP	8494	13May86	10:03a
SAM	.BAT	3	1Apr86	6:48p
SWC	.EXE	244048	13May86	2:11p
TX108	.DIR	19598	15MAY86	7:55p
TX0	.FRM	350	30Nov85	1:47p
TX1	.FRM	470	14Nov85	11:25a
TX1	.MSG	1417	10Nov85	11:34p
TX10	.FRM	2297	15May86	7:55p
TX108	.MSG	4398	13May86	7:06p
TX11	.FRM	1032	14May86	10:07p

2807-86

Viewgraphs and transparencies used to present SAM
to DCA DCS Beta testers

SRI International, DDN Network Information Center

April 15-18, 1986

REPORTS



SAM

WHAT IS IT?

[Neographs and transparencies

REPORTS

• SIMPLE ACCCESS TO MILNET



A PROGRAM RUN ON AN IBM PC
THAT PROVIDES

- ACCESS TO NIC SERVICES
 - WHOIS
 - TACNEWS
- ELECTRONIC MAIL CAPABILITY
ON A PC
- A COMMUNICATIONS PACKAGE FOR
UPLOADING AND DOWNLOADING
FILES

CAVEATS



- THE PROGRAM IS NOT
YET COMPLETE
- NO PROGRAM CHANGES
WILL BE MADE DURING THE
TEST OR ON THE FLY
- SUGGESTIONS AND FEEDBACK
WILL BE COLLECTED FOR
A NEW RELEASE

PURPOSE OF THIS TEST



- TEST THE CONCEPT AND USEFULNESS OF THIS PROGRAM
- PROVIDE SUGGESTIONS AND FEEDBACK TO THE NIC

THE GOALS



- TO FINALIZE SAM FOR DISTRIBUTION WITHIN THE DDN DCS
- TO AGREE UPON A PRICING STRATEGY
- TO MAKE SAM AVAILABLE TO OTHER DDN USERS



WE NEED

- AN EXPERIENCED USER AT THE PMD, TO ASSIST OTHERS AND ACT AS LIAISON TO THE NIC

WE WILL PROVIDE

- TELEPHONE AND ONLINE ASSISTANCE TO THE TEST GROUP

M.O.



- MEET AS A GROUP TO DISCUSS
 - BASIC GROUNDRULES
 - SAM OVERVIEW
 - SCHEDULING
 - HOW TO PROVIDE FEEDBACK
- MEET ONE-ON-ONE WITH
STEVE DENNETT
FOR SETUP AND TRAINING

SOFTWARE



- SCRIPTS AND USER INTERFACE
DESIGNED AND PROGRAMMED
BY SRI
- BASIC PACKAGE PROPRIETARY
SOFTWARE FROM TRANSEND CORP.

SETUP / ORIENTATION



- CONFIGURE SAM TO YOUR PC
- CONFIGURE SAM TO YOU.
- GIVE YOU A SHORT ORIENTATION
ON HOW TO USE SAM

Function Keys Window

Status Window

Alt - More functions		19 Nov 85 1:28 pm
Look at Basket	F1 F2 Exit from SWC Access	Msgs+Forms: 13/250
Label Basket	F3 F4	B: 271K chars free
Print Basket Summary	F5 F6 Send & Receive Mail	
Print Desktop Summary	F7 F8 Dial a Service	
Work on Files	F9 F10 Wait for Terminal Call	
Press a function key or use F A C D keys to choose a basket		

IN	ADDRESS BOOK	SERVICES	YOUR PC
OUT	SENT	(RESERVED)	WASTE

Instruction Window

Baskets Window

SAM "DESKTOP"

FEEDBACK



- ONLINE

- SAM-SUG@SRI-NIC

- TELEPHONE

- (800) 235-3155

- ASK FOR STEVE DENNETT

2801-85

[Viewgraphs of Network Information Center service
and Internet name service]

Presented by: Feinler, Elizabeth J.
SRI International, Network Information Center

Presented to: Defense Communications Agency, Communications
Operations Group (COG)

Washington, DC

August 1985

R8/EE 1/85/2801

REPORTS



SAM

WHAT IS IT ?

SIMPLE ACCESS TO MILNET



A PROGRAM RUN ON AN IBM PC
THAT PROVIDES

- ACCESS TO NIC SERVICES
 - WHOIS
 - TACNEWS
- ELECTRONIC MAIL CAPABILITY
ON A PC
- A COMMUNICATIONS PACKAGE FOR
UPLOADING AND DOWNLOADING
FILES

CAVEATS



- THE PROGRAM IS NOT
YET COMPLETE
- NO PROGRAM CHANGES
WILL BE MADE DURING THE
TEST OR ON THE FLY
- SUGGESTIONS AND FEEDBACK
WILL BE COLLECTED FOR
A NEW RELEASE

PURPOSE OF THIS TEST



- TEST THE CONCEPT
AND USEFULNESS
OF THIS PROGRAM
- PROVIDE SUGGESTIONS
AND FEEDBACK
TO THE NIC

THE GOALS



- TO FINALIZE SAM FOR DISTRIBUTION WITHIN THE DDN DCS
- TO AGREE UPON A PRICING STRATEGY
- TO MAKE SAM AVAILABLE TO OTHER DDN USERS



WE NEED

- AN EXPERIENCED USER AT THE PMO, TO ASSIST OTHERS AND ACT AS LIAISON TO THE NIC

WE WILL PROVIDE

- TELEPHONE AND ONLINE ASSISTANCE TO THE TEST GROUP

M.O.



- MEET AS A GROUP TO DISCUSS
 - BASIC GROUNDRULES
 - SAM OVERVIEW
 - SCHEDULING
 - HOW TO PROVIDE FEEDBACK

- MEET ONE-ON-ONE WITH
STEVE DENNETT
FOR SETUP AND TRAINING

SOFTWARE



- SCRIPTS AND USER INTERFACE
DESIGNED AND PROGRAMMED
BY SRI
- BASIC PACKAGE PROPRIETARY
SOFTWARE FROM TRANSEND CORP.

SETUP / ORIENTATION



- CONFIGURE SAM TO YOUR PC
- CONFIGURE SAM TO YOU.
- GIVE YOU A SHORT ORIENTATION
ON HOW TO USE SAM

Function Keys Window

Status Window

Alt + More functions		19 Nov 85 1:28 pm
Look at Basket	F1 F2 Exit from SWC Access	Msgs+Forms: 13/258
Label Basket	F3 F4	B: 271K chars free
Print Basket Summary	F5 F6 Send & Receive Mail	
Print Desktop Summary	F7 F8 Dial a Service	
Work on Files	F9 F10 Wait for Terminal Call	
Press a function key or use F1 F2 F3 F4 keys to choose a basket		

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ASK FOR STEVE DENNETT

WHAT IS A "PRIVATE FILES" INDEX?

- o The Lockheed DIALOG bibliographic searching system applied to a private collection of information

FLOW OF PROTOCOL INFORMATION

- Where can background information be obtained
- Where are the current specifications for any given protocol
- How are the specifications updated and validated
- How can the network environment be used for protocol configuration management
- Concept of a 'reference host' or testbed for testing specific protocol implementations
- What is the orderly flow of information needed to lead to standard protocol implementations throughout the network
- How can we keep the public sector informed of new developments

WHY DIALOG RATHER THAN A SYSTEM ON ARPANET?

- The DIALOG system already exists; therefore, minimal start-up time and software development
- Software is maintained and widely used
- Data is accessible from either TYMNET or TELENET
- Cost effective to use
- Has good indexing capabilities
- Friendly user interface
- Training readily available for under \$100
- Accounting and security built into system
- Has controlled access capabilities
- Already in use by many government agencies

DoD NETWORK INFORMATION CENTER - 1981

Major Tasks

- Cutover to new SRI-NIC machine
- Publish expanded DoD Protocol Handbook
- Publish ARPANET Directory and Resource Handbook
- Expand WHOIS coverage
- Implement a DoD Host Name Server (NICNAM)
- Design and build a Protocol Repository Private Files System and Online Protocol Locator
- Investigate the flow of information needed for efficient protocol configuration management
- TIF Quarterly Reports
- ARPANET news

SUMMARY

In 1981 the NIC will be expanding its services from

ARPANET to DoD