

DEAF COMMUNITY CENTER



COMPUTER-AIDED TELECOMMUNICATIONS FOR THE DEAF

(A PROTOTYPE FOR THE HEARING)

APRIL 1, 1980

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE

OFFICE OF TELECOMMUNICATIONS POLICY

COMPUTER-AIDED TELECOMMUNICATIONS FOR THE DEAF

(A Prototype for the Hearing)

Deaf Community Center
95 Bethany Road
Framingham, MA 01701

April 1, 1980

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SUMMARY

This is a report of the progress and activities during the second year of the demonstration grant in computer-assisted telecommunications for the deaf.

There were several major accomplishments during the year, including the incorporation of Deaf Communications Institute; submission of a facilities proposal to the Department of Commerce; and submission of a comprehensive state-wide communications system for all Massachusetts Rehabilitation Offices to Rehabilitation Service Administration, Human Development Service.

Also, the DCC staff participated in several outstanding workshops and demonstrations, such as the Health Education and Welfare Telecommunications Workshop Demonstration in Washington and the FCC public demonstration which was followed by the HEW-sponsored workshop in Telecommunications for the Deaf.

An additional milestone was the collaboration with the SRI project funded by HEW/BEH which not only has linked three cities (Boston, Washington, D.C., San Francisco) but has joined knowledge and experiences between staffs and deaf users for a more comprehensive study.

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INTRODUCTION

"DEAFNET" is an innovative application of electronic mail via a computer system to provide the deaf with an easily accessible form of personal communication and to bring a flow of information into their lives. The method can benefit other handicapped groups such as the deaf/blind and wheelchair-bound persons and may very well become a prototype for the non-handicapped hearing world. The deaf population was chosen as the target group for this demonstration due to the very limited communication opportunities and barriers imposed by their world of silence. (1)

*The introductory section
needs to be developed to provide
necessary background for people
who are not intimately familiar
with 3-yr. project*

The awareness of background information readers are already immediately familiar with the existing project.

STATUS OF PROJECT

Institutionalization

One of the major accomplishments during the year included the formation of a non-profit corporation, Deaf Communications Institute (DCI). The goals of this new entity are to further developments in communication for the deaf and institutionalize the successes already achieved. Control will be held by a community-based board of trustees that shall always be 51% deaf. Under the auspices of the new corporation, a study was conducted of computer hardware and software and a proposal for funding a computer facility was submitted to the Department of Commerce, National Telecommunications & Information Administration. (3)

"proposal" implies DCI is still tentative

The proposal outlines plans for the facility to be housed in Framingham at the Deaf Community Center ~~location~~. This ^{location} will provide for a smooth transition of administration as the present DCC staff has agreed to continue development of this deafnet for Deaf Communications Institute. This ^{location} will assure the same high quality fiscal administration that is evident in the successful HEW demonstration.

Plans are also included for building a bridge between 5-level and 8-level (Baudot and ASCII) equipment so that all deaf people can be served by the network. The system offers a great opportunity for the various state agencies to communicate with the deaf community.

The first time an acronym is used, provide the full name.

A second ^(RFP) was received and studied; after discussion with state officials, a proposal for a state-wide comprehensive advanced telecommunications system for the Massachusetts Rehabilitation Commission was submitted to the Office of Human Development Services at Rehabilitation Service Administration. (4)

misplaced phrase

The system will improve rehabilitation services for hearing-impaired clients as well as improve internal communications between the Commissioner, State Coordinator, MRC Offices, and other agencies serving the deaf.

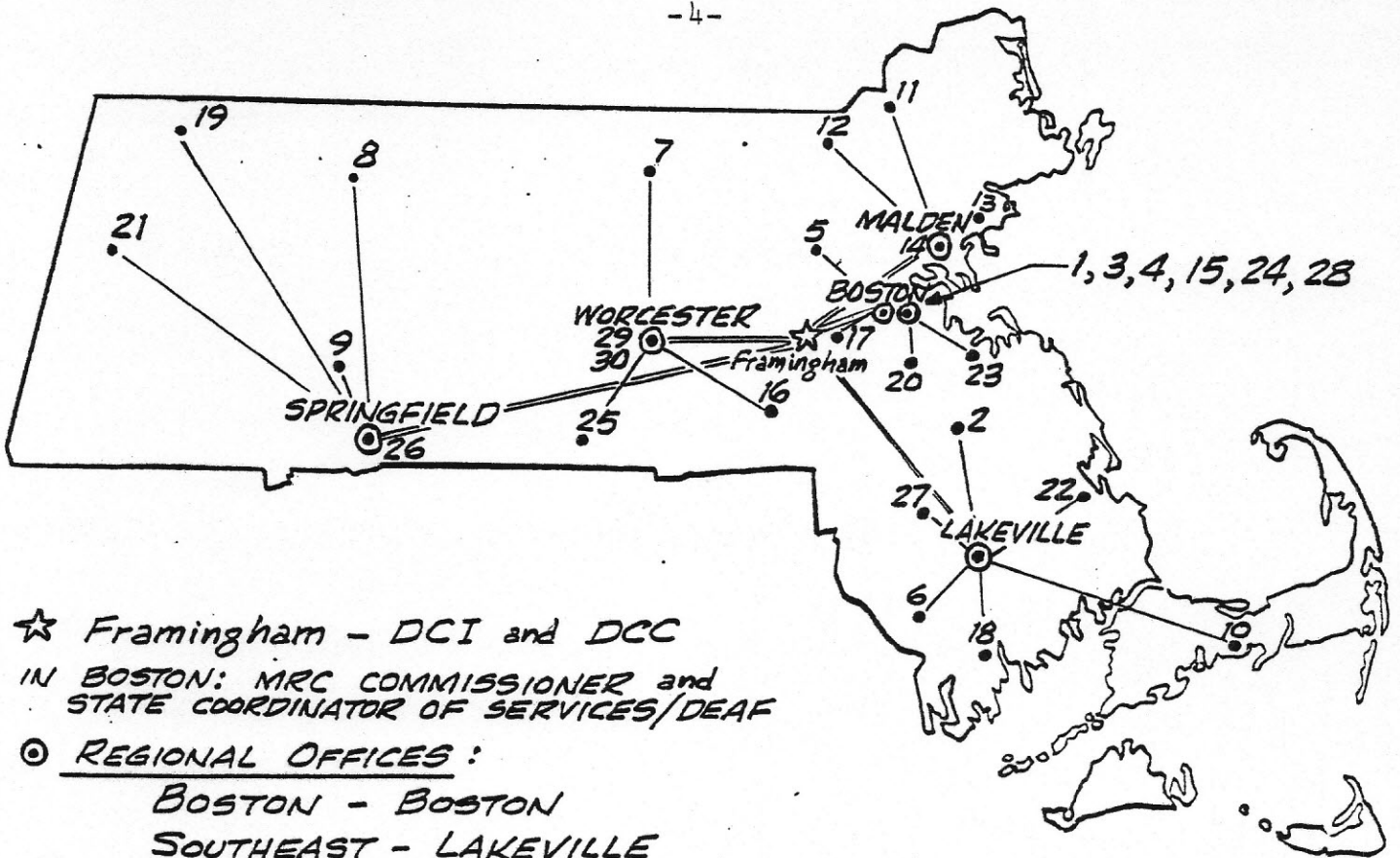
By installing bi-level terminals in each office, counsellors will be able to communicate with clients having 5-level TDDs as well as with the growing number of deaf having 8-level terminals. A look at the map on the following page offers a clear picture of strategic MRC locations throughout the state.

What was the over-all time-line of the original project.

The above two briefly described proposals are evidence of the initiative DCC has taken in striving to reach the fourth and final "Operational" phase of the demonstration. If both proposals are funded, it will be possible to provide continuation of the services to an expanding number of deaf people. In the event that the proposals do not receive favorable review, other alternative measures and plans are being explored. However, it seems likely that government grants will be needed during the early years of this effort as we move from a demonstration to a utility service. It seems evident that the system could be self-supporting by providing communication services and other data processing services to state agencies serving the deaf, and thus bring the off-hour use down to an economic scale that the individual deaf person could afford.

It's hardly a survey if the request was actually a bill.

A major highlight of the year's study was the ⁶⁵survey asking the deaf users to pay a monthly service charge if they valued the system. This resulted in two families out of thirty-four saying "NO" and giving up their terminal to allow other families to participate and evaluate the network. Several hearing users who had their own equipment but wanted access to the system also contributed monthly. In effect, 40 deaf users paid a fee of \$5-15/month with the average amount being \$10. Five hearing people paid fees and several institutions, including a hospital, a museum, Deaf Senior Citizens, and Mass. Office of Deafness.



★ Framingham - DCI and DCC
 IN BOSTON: MRC COMMISSIONER and
 STATE COORDINATOR OF SERVICES/DEAF

◎ REGIONAL OFFICES:

- BOSTON - BOSTON
- SOUTHEAST - LAKEVILLE
- NORTHEAST - MALDEN
- METROPOLITAN - CHESTNUT HILL
- WESTERN - SPRINGFIELD
- CENTRAL - WORCESTER

• AREA OFFICES:

- | | |
|--------------|------------------------|
| 1 BOSTON | 16 MILFORD |
| 2 BROCKTON | 17 NATICK |
| 3 BROOKLINE | 18 NEW BEDFORD |
| 4 CAMBRIDGE | 19 NORTH ADAMS |
| 5 CONCORD | 20 NORWOOD |
| 6 FALL RIVER | 21 PITTSFIELD |
| 7 FITCHBURG | 22 PLYMOUTH |
| 8 GREENFIELD | 23 QUINCY |
| 9 HOLYOKE | 24 ROXBURY |
| 10 HYANNIS | 25 SOUTHBRIDGE |
| 11 LAWRENCE | 26 SPRINGFIELD |
| 12 LOWELL | 27 TAUNTON |
| 13 LYNN | 28 RSD @ TUFTS, BOSTON |
| 14 MALDEN | 29 } WORCESTER |
| 15 MATTAPAN | 30 } |

Figure 1 - Statewide Comprehensive Communications System

By the end of the second year, ~~the sum of~~ \$4,000 has been collected from all users. It is planned to request more money during the third year to reach the goal of \$6,000 for the third year for a total of \$10,000 which will be used for operational expenses during the fourth year when the HEW demonstration ends.

Based on initial market survey tests, therefore, it seems possible that with some additional government funding and some seed money from business and private foundations, it would be possible for the DCI computer network to be self-supporting.

Seed money will also be needed from the private sector, and it is hoped efforts in contacting people during the third year of the demonstration will prove fruitful ~~in this area~~. To further interest ^{from the} in computer industry, ^{the} private sector, and foundations, plans are being made for a telecommunications workshop sponsored by Massachusetts Council of Organizations Serving the Deaf (COSD). A flyer describing the workshop is included ~~in the Appendix I~~. The workshop will be held at DCC, and through displays, demonstrations, and discussions of new ideas in personal communications, it is hoped to make the deaf community in the state aware of the advantages of a computer communications network. Business, commerce, computer, and foundation officers are being invited as we hope to encourage their involvement and make them aware of the communication needs of the deaf community.

DCC/SRI Interconnection

Administration at both OTP and BEH (Bureau of Education for the Handicapped) at HEW agreed there would be value in collaboration between the two projects and thus funds were provided from each department to interconnect the three cities (Boston, Washington, D.C., and San Francisco) in a national

deaf network to share experiences in the research study. Figure 2 on page ⁷10 outlines this tri-city deaf network. Our aim was to share resources such as news and medical information as a cost factor *phrasing* and to study the effects on isolation barriers caused by deafness once a convenient form of communication was provided between deaf leaders, agencies serving the deaf, and deaf and hearing friends and relatives.

Additionally, DCC will benefit from learning whether the use of 5-level TTYs and a different message system could be effectively utilized in the proposed computer facility for Deaf Communications Institute (DCI). A report of a comparison between equipment message systems and user reaction is included in the Appendix. Also included is an analysis of the results of a questionnaire presented to some Washington, D.C. users during a visit by our staff.

Efforts are shared by both projects to inform the deaf community of the value of computer-assisted communication and to make the business and public sectors aware of the needs of the deaf for inclusion in modern technology.

Public Relations

There were two major public relations efforts this year. The first was DCC's participation in the workshop on the Use of Telecommunications for HEW Services at the University of Maryland. Department heads from different branches of HEW attended and DCC used a 4' x 6' Advent screen to demonstrate ways medical, educational, and other cultural information could be disseminated to the hearing-impaired population.

1. ELECTRONIC MESSAGE EXCHANGE
2. INFORMATION DATA BASE
NEWS - WEATHER - SPORTS
MEDICAL - LEGAL - CONSUMER
3. CAI (COMPUTER-AIDED-INSTRUCTIONS)
4. COMPUTER GAMES

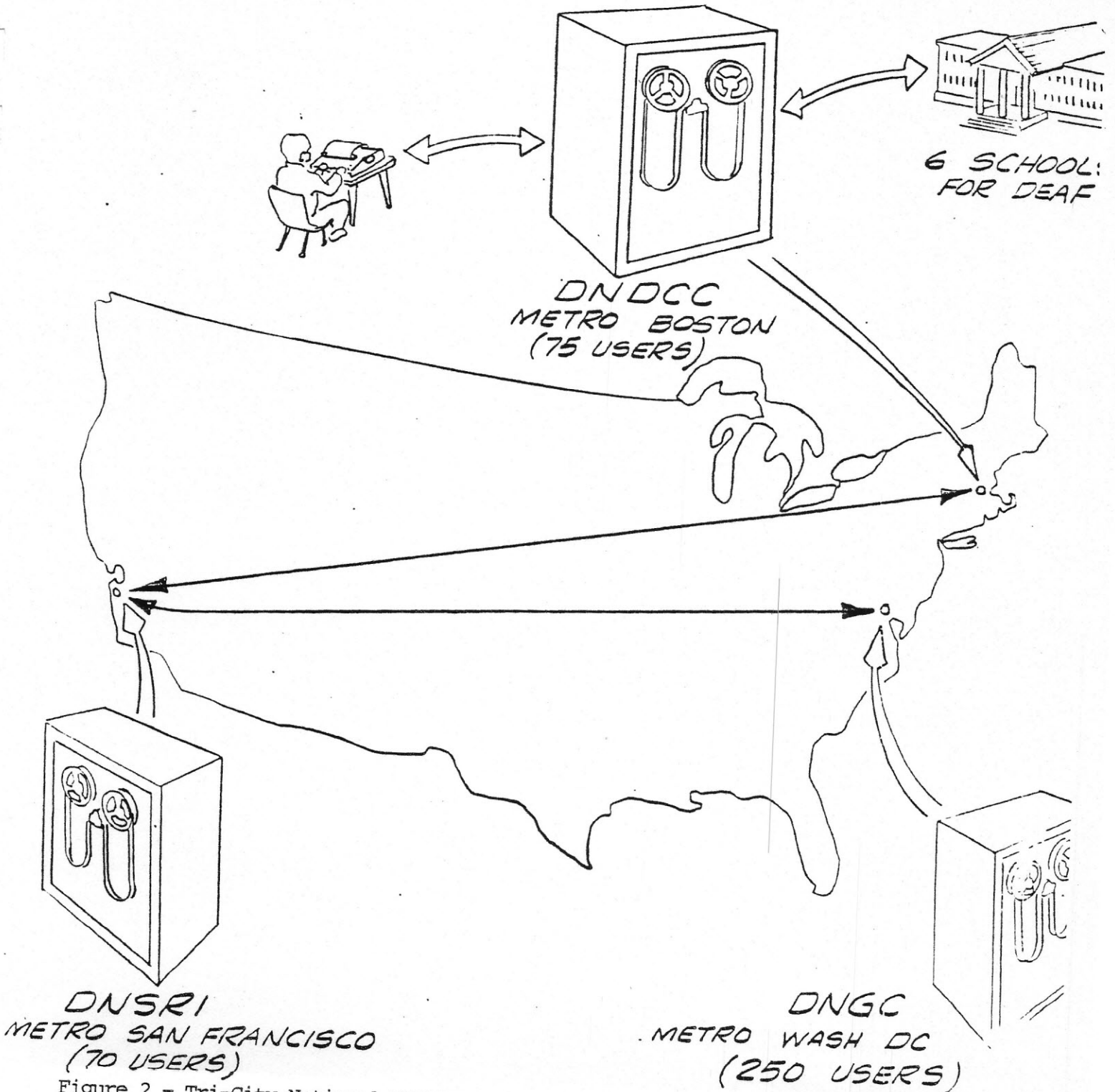


Figure 2 - Tri-City National DEAFNET

The second demonstration was hosted by the FCC Commission and public announcements were sent out. This demonstration was a collaborative effort with the SRI project. Members of the deaf community, TDD manufacturers, professionals serving the deaf, and people interested in telecommunications attended. (2)

(2)

The FCC demonstration was followed by an informal workshop hosted by HEW/OTP. TDD manufacturers, staff members of both DCC and SRI computer demonstration projects, and their HEW sponsoring offices, shared opinions, ideas and future plans in telecommunications for the deaf. Although no conclusive decisions were made or agreed upon, it was felt the meeting was helpful and should be followed up with another.

Use of Equipment

Second year funding provided for acquisition of 6 CRT terminals and a 4' x 6' video screen to be driven by a scope terminal.

Advent Screen

Final selection of a Data Media Elite 1521 scope was made. We have experienced static on local telephone lines which often contributes to poor signal transmission to the computer. The data we are collecting ^{about} of various difficulties concerning terminal to computer connection provides a good study for solving problems during continuation and development of the deafnet.

The Advent screen has been used for monthly users' meetings with groups of approximately 30 people. Group instruction has been most efficient this way. Use of the screen for the two major demonstrations and the COSD workshop to be held on May 2nd has also proved

to be very successful. Both situations will be repeated during the third year.

CRT Evaluation

Two second-hand Hazeltine 1000's were purchased and placed in homes and four ADM-3A models with upper and lower case were also purchased and placed in homes. The same resistance to change and adjustment to something new was experienced by all. A short adjustment period occurred, particularly due to the lack of paper copy. This problem was met by giving them larger directories for storage and providing them with paper copy from the Model 43 located at DCC or from the line printer at BBN whenever a printout was needed. This experience helped us to realize provision must be made in the future to accommodate the need for some paper copy on demand to those individual users who chose a CRT.

better in active voice

One user who had some vision loss which resulted in difficulty reading the upper/lower case print from the Teletype Model 43 was able to read the larger block print on the Hazeltine 1000. It is possible to program the computer to produce larger letters and during the next year we hope to research this area in an effort to make the system useful to deaf and visually impaired people who can use a CRT screen.

The 12-line readout is not as effective as the 24-line readout. Users who enjoyed games lost some of the words so the value of a vocabulary or language game was not as effective. Since this educational aspect is an important feature for a deafnet, we recommend caution in the selection of a CRT to most closely meet the needs of the individual user.

[It is felt the 12-line readout which could be changed to produce large letters would be appropriate for a visually-impaired deaf person.

The 24-line CRT proved very effective for the two users editing information for the deafnet. This suggests the possibility of an area for home employment for the handicapped and will be studied more next year.

Many users have proven very creative in designing graphics for holiday greetings but these designs get clipped off from the 12-line CRT. This is a disappointment for some users but may not be a deterrent for a vision-impaired person who has other necessary requirements for large letters and will pass up the enjoyment of the graphic display.

Terminal Maintenance

We are keeping records of terminal repair to help us plan more effectively in the future. To date we have not experienced repair problems with the two second-hand CRTs or the four brand new ones. This will be an important opportunity to consider cost-effective equipment for the user.

This year the Model 43 terminals have required more repairs which are sometimes costly. Our evaluation of this problem and patterns of breakdown is not complete yet, but as we study it more fully next year, we hope to devise a better plan for maintenance and even teach our users how to do some basic preventative maintenance themselves. This area could be another opportunity for employment for the deaf and other handicapped.

ASSESSMENTS OF BENEFITS OF PROJECT
To the Individual User

During the second year, the most enthusiastic users continued to enjoy exchanging messages with friends, reading the news, weather, and sports, the listings of captioned films, and the deaf news about important meetings and socials. Appendix II has an analytical report of users questioned.

3-10?

Figures 3-7 reflect patterns of use by the DCC Deafnet users. Figure 3 shows the weekly total of number of sessions on Hermes. The highest value recorded was 812 sessions during the 3rd week of the year 1979; the lowest was 265 in the 30th week. The most notable characteristic of this graph is the dip during June, July and August, attributable to summer vacations of deaf schools and many users. Then in the Fall, with schools reopening and vacationers returning, the number of sessions rose to a steady value of about 450 a week, or 65 sessions per day.

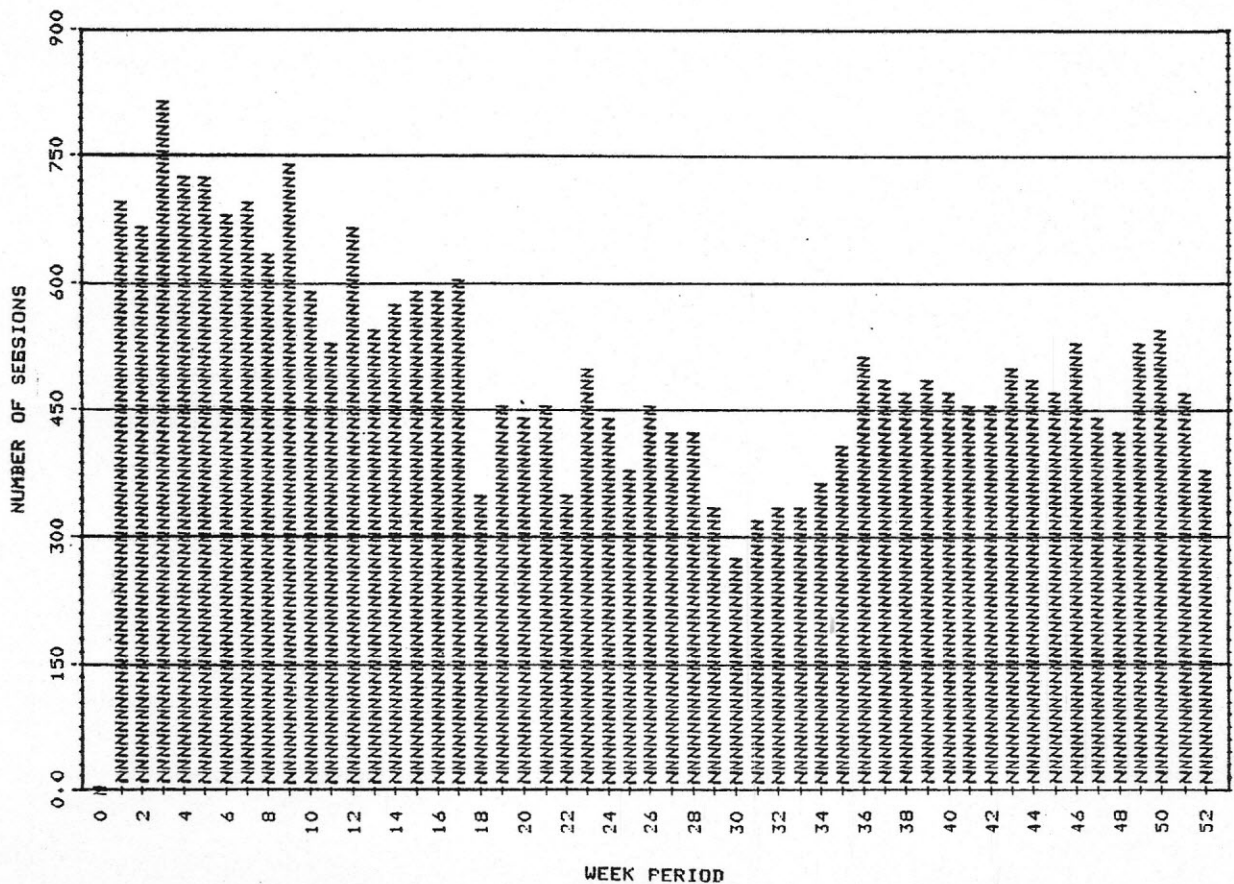


Figure 3 - Number of Sessions Per Week

Figure 4 shows the number of messages sent each week in three different ways, by COMPOSING, REPLYING, or FORWARDING. Also, the graph bears close resemblance to Figure 3 and shows approximately one message sent per session.

Figure 5 shows the weekly connect times (real + think times) spent on Hermes by DCC Deafnet consisting of a total of 70 passwords. It also shows a similar variation as that of Figures 3 and 4. Toward the end of 1979, the average connect hours is around 125 per week, or about 18 hours per day.

Figure 6 is a plot of the average number of addressees for each message sent on Hermes. Notice that the average has been steadily increasing during the course of the year, indicating that users are communicating with more people. Two interesting series of activities are seen to take place during Thanksgiving and Christmas and New Year when deaf users were using the computer's mailing list to exchange holiday greetings.

It is interesting to note that the average time spent on Hermes by a typical user has remained remarkably steady throughout the year, between 15 and 20 minutes per session. The average message length (total number of characters) has also remained constant during the year. This fact indicates the unchanging lifestyle of the DCC Deafnet once the users are trained and have developed their habits.

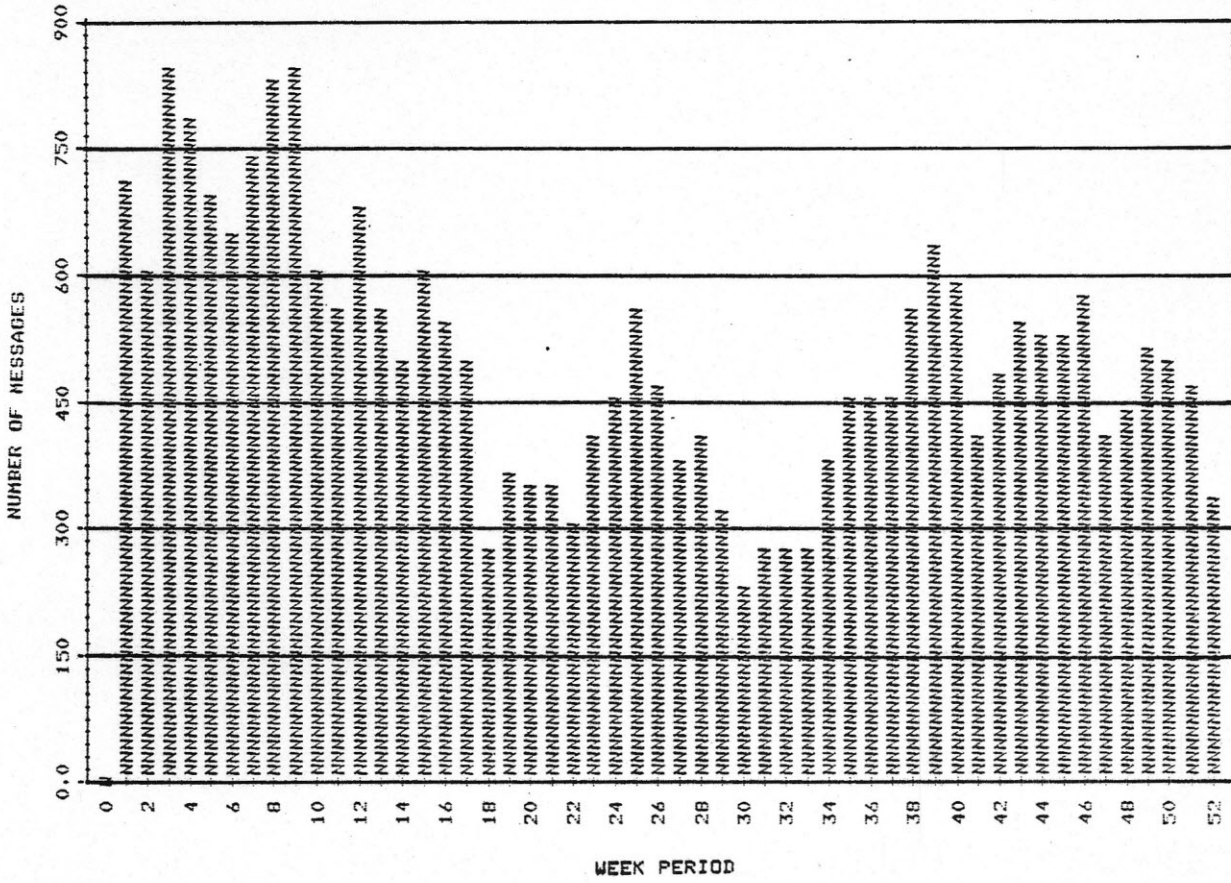


Figure 4 - Number of Messages Sent Per Week

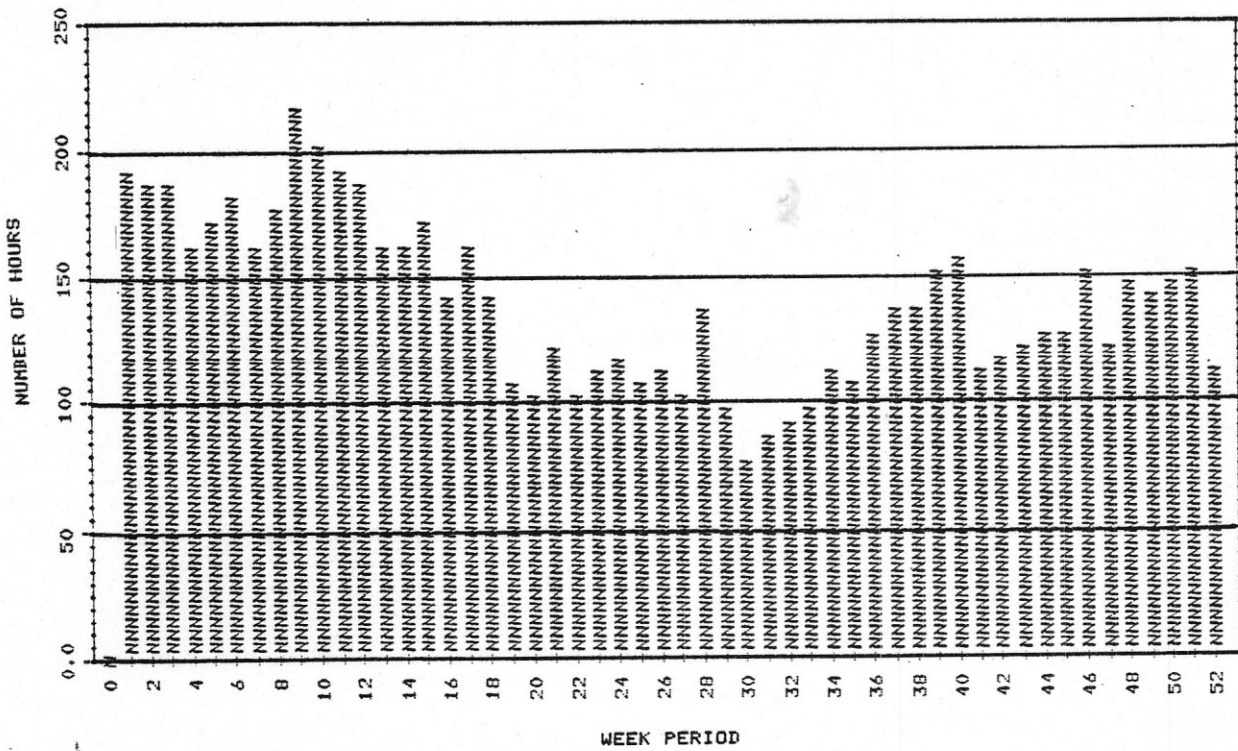


Figure 5 - Weekly Connect Hours on HERMES by DCC Deafnet

Figure 7 - Greeting Card Graphics

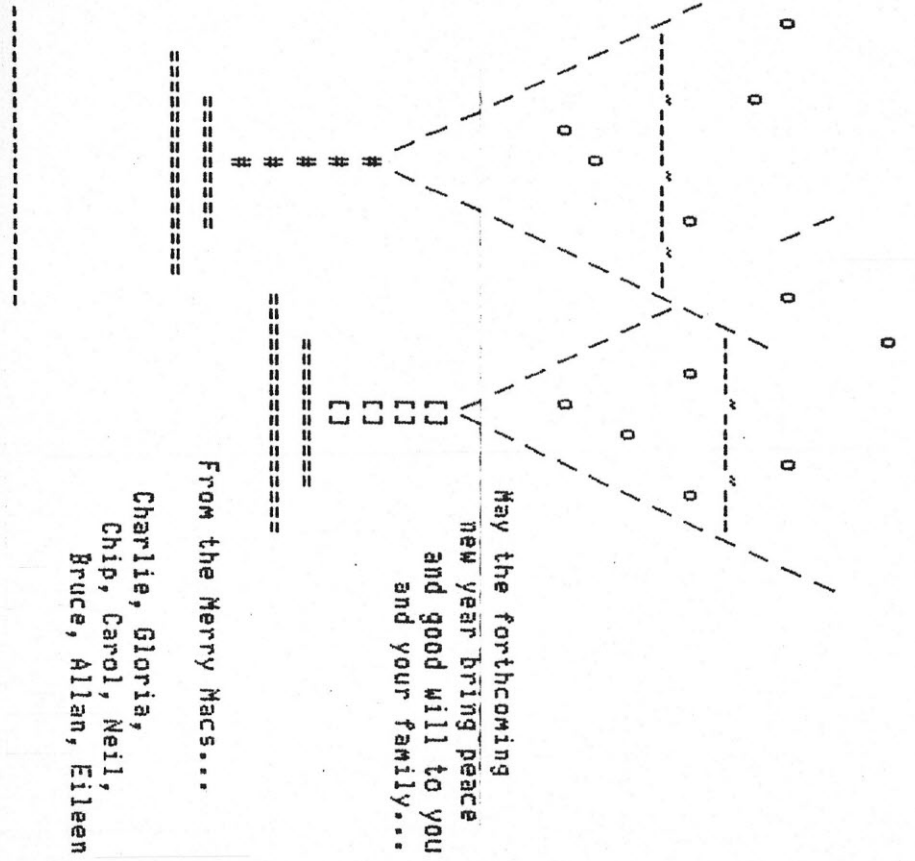
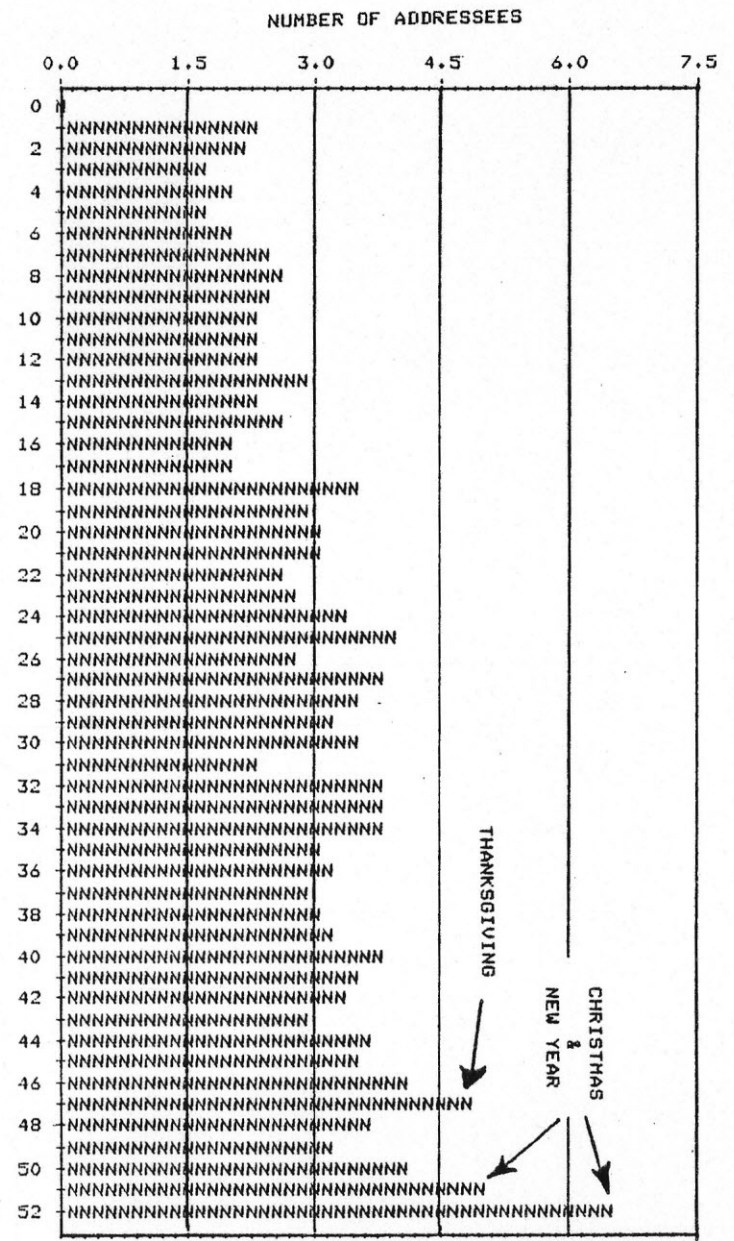


Figure 6 - Weekly Patterns of Use by Individuals



Message Exchange

Although the immediate appeal to the user is exchanging messages with friends, one of the most useful accomplishments is the speed of sending emergency announcements. Consider the fact that many deaf people have gone through 12 years of school together and remain a close-knit group. Marriage, birth and death announcements are a vital part of their lives -- but until the advent of electronic mail, several days could pass before important events were known.

examples from the project?

Flow of Information

Listings of captioned movies in local theatres, notices of interpreted lectures, tours, meetings, church and social activities are not listed in public newspapers, and are so desperately needed in the lives of deaf people. Emergency announcements of weather changes, such as hurricane warnings, snow storms, dangerous driving conditions, school and meeting cancellations, are other bits of vital information unavailable to deaf people with present broadcast media. We hope to further develop these areas in the third year.

Alternative forms of information like many of the popular auditory dial-up tape services for medical, legal, and consumer information are inaccessible to the hearing-impaired and are a high priority.

The plot in Figure 8 concerns the GET command which is used primarily to access information stored in other directories - such as PUBLIC for news, weather, and sports, or DEAF for Deaf Messenger (weekly newsletter for the deaf community). This pattern of use is similar to Figures 3 and 4.

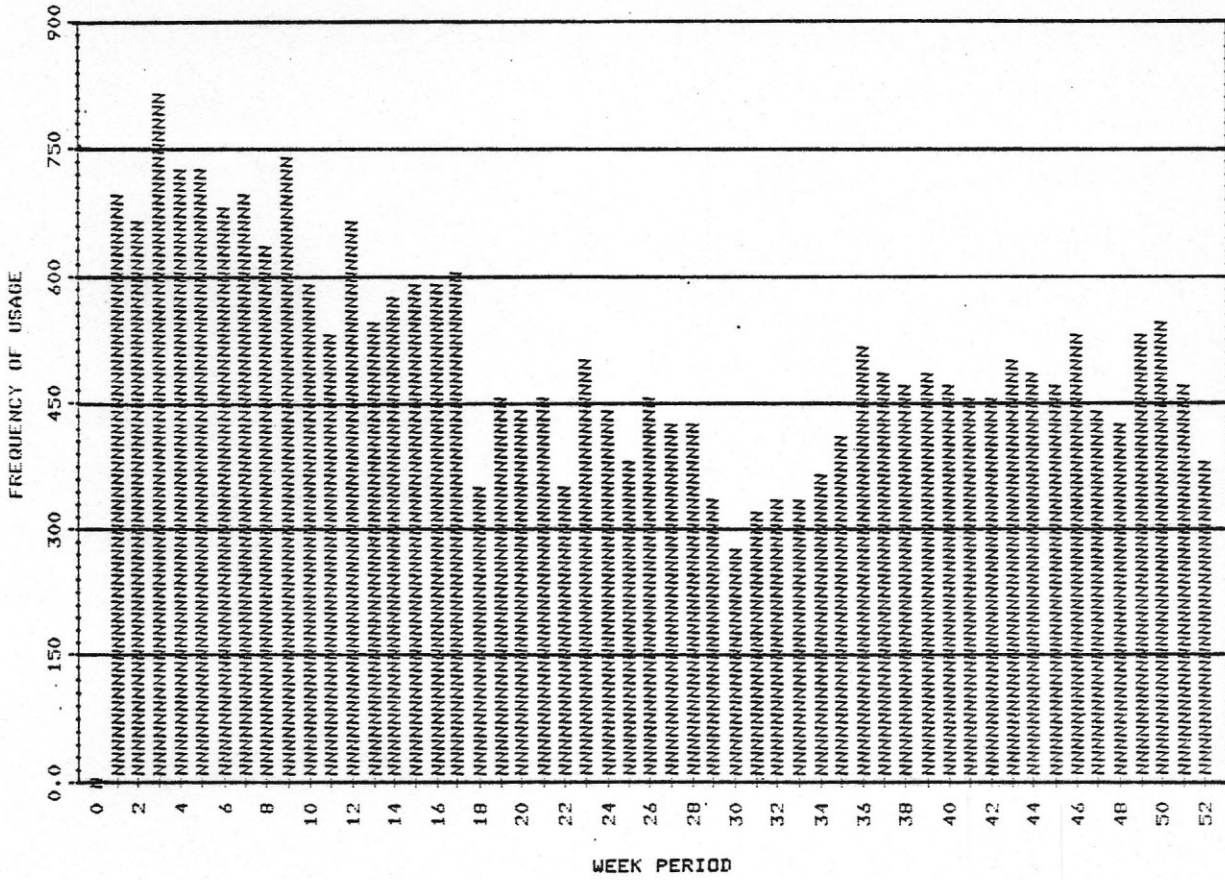


Figure 8 - Frequency of GET Command Used Per Week

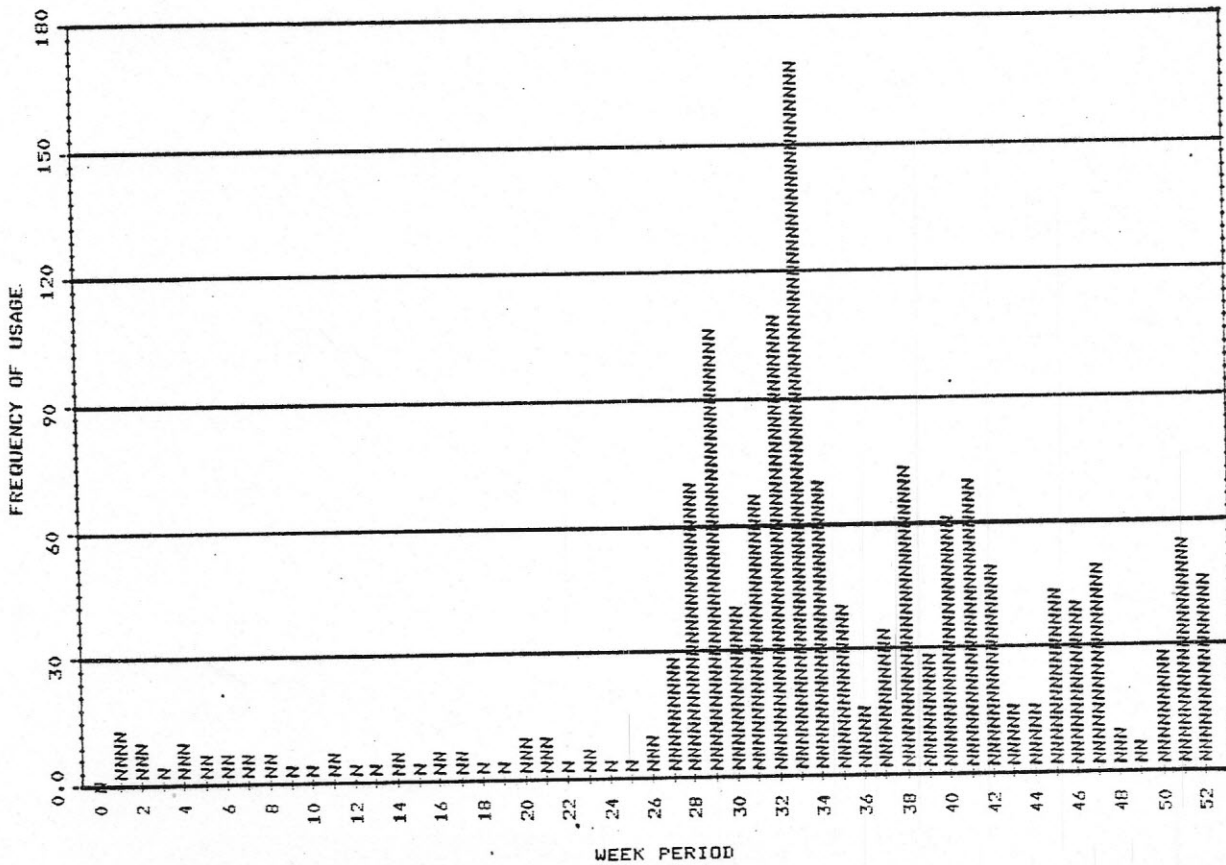


Figure 9 - Frequency of RUN Command Used Per Week

What about discussion of figure 9?

The following figure illustrates the use of the TALK command. This is used to link and talk with another user for a "real-time" conversation. The graph shows a wide fluctuation in frequency of usage and is attributed to the necessity of two people being on the system at the same time.

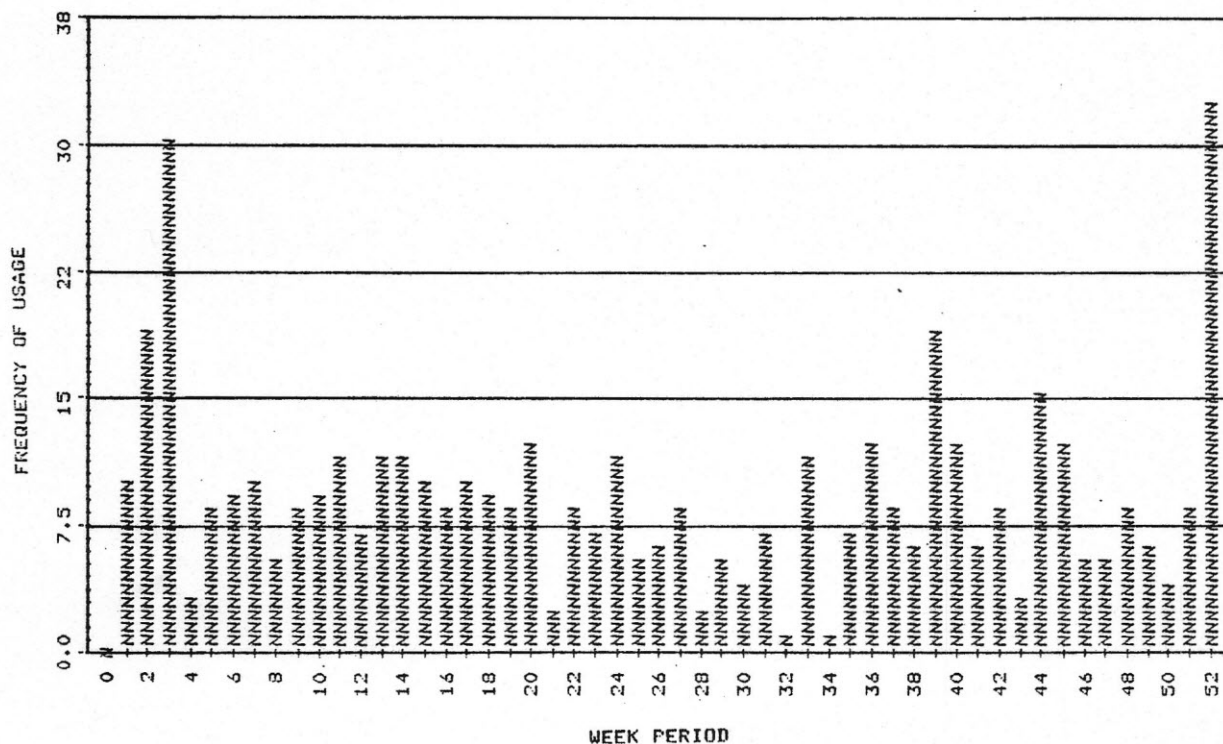


Figure 10 - Frequency of TALK Command Used Per Week

We are beginning to receive feedback that hearing people are enjoying the bridge between the deaf and hearing world. Several enjoy museum tours with their deaf friends or deaf children. They also enjoy the listing of captioned films and the message files describing the progress of the DCI. Their positive and negative comments on using the Hermes message system will certainly have value in the final selection of a message system for continuation of the DCI Deafnet.

To the Agencies Serving the Deaf

Massachusetts Office of Deafness (MOD) increased its staff and requested separate directories for them. This action provided a better flow of communication between this agency and individuals on the Deafnet. Even though the interpreter-coordinator at MOD was required to attend many meetings out of the office, she was able to get her computer messages regularly and complete arrangements for interpreting services for those on the network. Other members of the staff were not tied up taking phone calls from the small group of Deafnet users who requested interpreters. It is hoped that this example of efficient use of a telecommunications network will increase and be duplicated by other agencies serving the deaf.

Did MOD provide you with an evaluation about other information of the system?

MOD staff members were able to cut down the number of meetings attended because a great deal of communication was done via computer messages. Use of Hermes between deaf committee members and MOD staff members to exchange messages and other information needed for the newspaper, "Deaf Independent," has saved much travel and meeting time, and use of Hermes editing capability has made it possible to revise text for publication. This example continues to be one of the best uses of the system.

develop

Efficient communication situations have occurred between staff members at DCC and Deaf Senior Citizens. Time has proven that familiarity with the new technology works in favor of breaking down barriers to implementation and utilization.

Summarizing, it has been possible for offices directly serving the deaf community to retain better liaison with each other and the deaf community by using electronic mail. When these offices have important notices of information, they are able to quickly disseminate it on the network.

agr

Barriers to Implementation

A combination of willing and/or enthusiastic user and working equipment is necessary to have successful participation in the system. Rehabilitation Services for the DEAF (RSD) is an example of this situation. The staff first used Model 33 and were very willing to learn the new message system, but they were frustrated with mechanical problems from the beginning. DCC finally agreed to replace the Model 33 with a Model 43, but the office moved and as of this date, we have not been able to receive administrative approval for the telephone connection necessary for implementation. It is hoped this will shortly be resolved so that this agency can enjoy the same efficient flow of communication that the others do.

Barriers to implementation and utilization have been similar in school settings as with individuals and agencies serving the deaf. These problems include proper telephone connection, good working terminal equipment, willing staff, adequate instruction, and sufficient follow-up for meeting and solving unexpected problems. Once these are overcome, better utilization of the telecommunications system can proceed.

Educational Benefits to Users

Computer-Aided Instruction for the Handicapped

There is a special need for English language instruction for deaf children and adults. School instruction is important but other forms of language tutorials should be available to make the deaf person a fluent writer and capable reader. Plans are underway to present through Deafnet a specially designed tutorial for both the production and comprehension of written

English. The project, entitled ILIAD (Interactive Language Instruction Assistance for the Deaf), which is being developed under a special HEW/BEH (Bureau of Education for the Handicapped) grant to the Boston University School of Education will be tested and evaluated by present Deafnet users with an eventual goal for final implementation in a desk top micro-computer with a TV terminal. Most of the system components would be directly usable by any students (deaf or hearing) who wish to test or exercise their command of English.

There are many Computer-Aided Instruction (CAI) programs available, but none written with such a significant impact for the deaf community as the two described here. Both the ILIAD program and the LAN (Language-Adjusted News) are available in the demonstration Deafnet.

Language-Adjusted News

The news service is another educational resource for adults and young people. For each regular news story that is entered into the system by the staff at the Caption Center at WGBH (Boston), a linguistically controlled version is prepared with careful attention given to control of vocabulary, syntax and inferential content of original materials. Deaf people, whose reading level hinders and often prevents them from understanding newspapers and other print materials, have had no easily understood source of news until this experiment with Language-Adjusted News (LAN). They have been able to gather only bits of information or misinformation, depending on friends or relatives for explanations, or else have lived unaware of world events. Some deaf people do not have sufficient language needed to peruse daily news in newspapers

and over the years have lost the motivation and desire to read. LAN may be a tool to increase reading skills and at the same time to provide daily news and information. A sample of Language-Adjusted News is included in Appendix VI. One deaf person brought the LAN to his deaf club one week end and members were so enthusiastic they asked him to bring copies every week end.

Teachers of the deaf at all six of the schools have used the LAN in different ways, depending on the abilities and needs of their students. Some use it for independent reading material, or as lessons for Social Studies, English, or reading classes. One teacher makes special arrangements to transcribe the LAN into Braille for her deaf/blind students and informs us that this is the first time these students have ever had national or international news available to them. One teacher has his student take the LAN into the mainstreamed classroom where both hearing and deaf students can discuss current events on an equal basis. Another teacher supplements the LAN with pictures from newspapers and magazines, thereby creating a more concrete frame of reference for a low-verbal, limited learning-level student.

This service demonstrates the Deafnet's capability of providing useful information to this population.

Medical Information

Included in Appendix VII is a detailed report of the different kinds of medical information available on the Deafnet. Interaction between a medical professional who has an understanding of deafness and an awareness of the void of health and medical information presently existing has initiated the beginning of a good flow of information.

As other sources become aware of the needs of the deaf and ^{the medical community's} their responsibility in meeting those needs, the data base of medical information will grow.

School programs for deaf students can take advantage of the medical data base and interactive medical staff by providing health classes for students and improving the base of information the young deaf student has before leaving the school environment into the adult world.

Cultural Information

During the two years that the Museum of Fine Arts has been part of the DCC demonstration, one of their staff members has developed a program for the deaf community to enjoy regular and special Museum exhibits. This has included broadening the Museum's audience by making its collections as accessible as possible to all potential visitors. Developing audience interest and attendance go hand-in-hand with providing written materials and sign language tours and, consequently, outreach efforts to deaf audiences has taken the form of visiting deaf groups in the community and distributing flyers at meetings, through the mail, and via the Deafnet.

The DCC Deafnet has been highly successful in disseminating Museum information. Access to people on the system has meant that users have comfortable and quick avenues for asking questions and initiating dialogue about interpreted events at the Museum.

To date, Museum staff feels that information sent via the Deafnet has been directly responsible for at least 75% of deaf audience attendance at the Museum.

Other cultural institutions, such as the Museum of Transportation and the Aquarium, have sent notices of their interpreted tours to the deaf community on the Deafnet through the Museum of Fine Arts contact. This is also true of the Loon and Heron Theater which produces plays for children and has started hiring interpreters for performances as well as integrating sign language into their plays. These institutions are interested and anxious to send out announcements of their programs. This is an interesting implementation of Federal Law 504.

Several deaf schools visit the Museum of Fine Arts for gallery and art activities. One school visits regularly because of its close proximity and teacher and student enthusiasm.

Part of the goal for a cultural information center is to have a clearinghouse for signed cultural events in the Boston area. Evidence that this is possible occurs from different theater groups and museums that are presently including interpreters in their programs.

document

ECONOMIC VIABILITY

The present Deafnet is small (the demonstration has less than 100 people) but the potential is unlimited. In the state of Massachusetts alone, the deaf population is 39,000 and the hearing-impaired (the person who has difficulty using hearing alone for getting information) number 297,000 -- a substantial figure to warrant exploring the future potential and economic viability of electronic mail.

document

During the third and final year of the demonstration, DCC staff and consultants will be studying future trends in technology, and looking at questions to help make decisions for implementation of a computer center to provide communication services to the deaf population for the state of Massachusetts.

If some of the following questions were affirmative, would it then be possible to provide computer communication services at a rate which the deaf population could afford?

"What are the costs of electronics equipment?"

"What costs are involved in maintenance of the equipment?"

"Can a service such as Deafnet stand on its own feet economically?"

"Is it possible to obtain some government funding for educational purposes?"

"Is it possible to sell communication services to government agencies serving the deaf population?"

"Is it possible to provide other computer services to agencies serving the deaf?"

Can't be answered w/ "yes" or "no."

The more people that the Deafnet can serve, the less the monthly service charge would be for the individual. Is it possible to achieve this economy of scale?

"Is it possible to convince the deaf community of the advantages a computer communication system can offer?"

"Is it possible to convince educators and other professionals serving the deaf of the educational value to the community?"

"Is it possible to persuade business, commerce and philanthropic groups of the need for their financial support and the long-range value that would be returned to them?"

DISSEMINATION

At present, intensive plans are being made for a workshop in telecommunications entitled, "New Ideas in Personal Communications." The workshop is sponsored by the Massachusetts Council of Organizations Serving the Deaf (COSD) and will be held at DCC. This will be an opportunity to inform the deaf community, including professionals serving the deaf, and business, commerce, and foundation people of the communication needs of the deaf and how a computer network can meet these needs.

Plans are also being made to determine ways of publicizing the newly incorporated Deaf Communications Institute and publicize to the national deaf community via its national publications such as Deaf American, Silent News, and the Broadcaster which have a general readership.

An article will be published in the book Teleconferencing & Interactive Media in conjunction with an international conference to be held at the University of Wisconsin-Extension in May, 1980, and will be given to all conferees. It will also be available as part of a resource book to people who want to learn more about using interactive systems. (5)

Additionally, plans are being made for a short presentation at the NAD Convention (National Association for the Deaf) in Cincinnati on June 30. This convention will attract members of the deaf community throughout the country.

FUTURE PLANS

Based on this report, the following plans are being made to continue research and study during the third and final year of the demonstration.

1. Explore home employment opportunities for the handicapped
2. Study usefulness to blind/deaf, for example, implementing large letters on screen
3. Study terminal repair problems
4. Continue use of Advent screen for demonstration and teaching purposes
5. Develop more efforts in publicity
6. Improve communications between agencies
7. Study monthly service charges, based on owned or rented terminal equipment and what constitutes basic service and/or additional charges for use of games, CAI, or BASIC program
8. Continue the LAN. Develop liaison of WGBH staff person with school staff and work toward goal of preparing a proposal for funding continuation of computer educational material
9. Continue ILIAD evaluation through Deafnet and investigate other computer-aided instruction
10. Inform deaf community, business, commerce, and foundations of Deaf Communications Institute goals
11. Continue DCC/SRI Collaboration
12. Improve school participation in cultural activities
13. Continue development of communication between deaf and hearing people and institutions



massCOSD

council of organizations serving the deaf

WHAT? - A WORKSHOP, "New Ideas In Personal Communications"

WHERE? - AT DEAF COMMUNITY CENTER, FRAMINGHAM
(SEE MAP ON OTHER SIDE)

WHEN? - FRIDAY, MAY 2, 1980, 1-5:30 PM

WHO? - ALL DEAF INDIVIDUALS, PROFESSIONALS SERVING
THE DEAF, ALL THOSE INTERESTED IN:
TELECOMMUNICATIONS

WHY? - displays, demonstrations, discussions of
communication needs of the deaf.

HOW? - Possible applications of Computer-Communications:

COMMUNICATION - Among deaf people
Between deaf and hearing people
Selective broadcasting

INFORMATION SERVICES - Current news, weather, sports
Archival - general fact finder
Special - information for deaf

EDUCATION & TRAINING - Basic language, reading, writing
Other conventional subject matter
Vocational skills

EMPLOYMENT - Information handling jobs
Programming jobs

RECREATION - Person vs. Computer Games
Person vs. Person Games

PERSONAL DATA MANAGEMENT - Mailing Lists
Personal and Family Files

ALSO = COMPUTER-ASSISTED INSTRUCTION, COMMERCIAL SERVICES,
MEDICAL INFORMATION, LANGUAGE-ADJUSTED NEWS,
COMMUNITY BULLETIN BOARD, TRANSPORTATION SERVICES

COME TO DCC!

1 - 5:30 PM

FRIDAY, MAY 2, 1980

APPENDIX II

DCC Deafnet Questionnaire

1. WHICH COMMANDS DO YOU USE THE MOST?

<u>COMMANDS</u>	<u>OFTEN</u>	<u>SOMETIMES</u>	<u>NEVER</u>	<u>DON'T UNDERSTAND</u>
a. COMPOSE	33	4		
b. REPLY	27	8	2	
c. DELETE/RUBOUT	27	6	1	2
d. LINE FEED	29	5	2	
e. PRINT	23	7	1	1
f. DELETE/EXPUNGE	30	7		
g. GET	31	5		
h. FORMAT/JUSTIFY	30	2	3	1
i. CC:	11	22	4	
j. SAVE/FIELD	7	10	1	5
k. SPELL	8	1	12	2
l. BASIC	3	6	13	10
m. GAMES	2	11	15	3
n. LINK/TALK	3	15	13	6

2. WHAT TIME OF THE DAY DO YOU FREQUENTLY GET ON HERMES?

Morning: 10
 Afternoon: 9
 Evening: 24
 All: 7

3. HOW OFTEN DO YOU LOG ON PER WEEK?

Less than 7 times a week: 12
 Daily: 11
 Between 7 and 14 times a week: 5
 Twice a day or more: 10

4. DO YOU KNOW HOW TO FIND OUT WHAT IS IN <PUBLIC> AND <DEAF>?

YES: 30 NO: 3

5. WHAT DO YOU THINK OF <PUBLIC> NEWS?

Satisfactory: 22
 Should be more: 6
 Should be briefer: 3

Users' Comments:

- a. Don't use
- b. I am involved in the public news project so I must disqualify myself on this question.
- c. Language adjusted should be in various levels.
- d. Should have news about deaf world instead of local/regional news. Same as shown on Captioned ABC News.
- e. Prefer cable TV news.

6. WHAT DO YOU THINK OF THE <PUBLIC> WEATHER?

Satisfactory: 18
Should be more: 12

Users' comments:

- a. Should be more detailed
- b. Not up to date
- c. More often during warnings
- e. Dont use
- f. Dont care
- g. Never read it

7. WHAT DO YOU THINK OF THE <PUBLIC> SPORTS?

Satisfactory: 17
Should be more: 8

Users' comments:

- a. Don't use
- b. Never read
- c. Don't care about it
- d. For me, no interest
- e. Not sports fan
- f. Not interested in sports

8. DO YOU LIKE LANGUAGE ADJUSTED NEWS?

YES: 18
NO: 14

Users' comments:

- a. Don't use it
- b. Good for our young boys
- c. Good for students
- d. Yes for students at Newton North (EDCO)
- e. Yes, however I am hearing and believe that this should be judged by the deaf or by people aware of their needs.
- f. No, should be written in various levels and differently. Now it is written a bit of offensively.

9a. DO YOU LIKE?

<PUBLIC> -----	YES ---	NO --
a. DCC INC	29	1
b. DEAF MESSENGER	37	
c. DICTIONARY	12	3
d. HERMES MEETING	34	
e. INCORPORATORS	23	3
f. JOB MARKET	19	5
g. LANGUAGE ADJ.	16	11
h. MINI DCC INC	24	2
i. MOVIES	26	6
j. NEWS	30	1
k. OLD NEWS	11	10
l. USERS LISTING	31	
m. WANT ADS	23	4
n. WOOD BURNERS	23	5

Users' comments:

1. Unchecked are those files that I do not find particularly valuable
2. DICTIONARY - what's that?
3. JOB MARKET - good idea, but I dont use it

9b. DO YOU LIKE?

<DEAF> -----	YES ---	NO --
a. BPUZZLE	9	9
b. COMPUTER INFO	25	1
c. CONFERENCE	18	2
d. DCI MESSAGE	27	
e. DNGC	21	3
f. DNSRI	22	3
g. HUMORSHE	9	5
h. JOKE	16	6
i. MAIL	25	1
j. MICRONET	12	5
k. PUZZLE	10	9
l. SWITCHES	13	3
m. THE ROVING EYE	23	7
n. USERS	25	

Users comments:

1. DNGC, DNSRI - I don't know any of thes people
2. MICRONET - 6 users said "?"
3. SWITCHES - 5 users said "?"
4. HUMORSHE, JOKE - one user said "couldn't get them, no messages there"
5. CONFERENCE - three users said "?"
6. I do not use them in <DEAF> very often. Rarely because of my tight schedule and some are senseless to me.

10. WHAT OTHER INFORMATION WOULD YOU LIKE TO HAVE IN
<PUBLIC> AND <DEAF>?

- a. There are many captioned films shown in private homes, I would like to see a list weekly - where and which picture will be shown and what time. But I presume those films are opened to the public. Let's try it. A system can be worked out! That's up to the homeowners!?
- b. In my case it appears that I need more information about what is offered on Hermes and how to get it. As a deaf professional involved in delivering information to deaf people, I am most interested in using a system such as Hermes (DEAFNET) to exchange information with other deaf professionals and to keep informed about the status of a project such as Hermes.
- c. News and information from RSD, MOD, DCC, MSAD, etc.
- d. 24 hours answering service on TTY in computerized method?
- e. 1) I often use the Deafnet and am really hooked to it.
2) One question - why didn't you send this questionnaire via Hermes?
- f. An explanation of the purpose of the contents of each of the files, i.e., simplified help!
- g. Transportation network (rides offered, rides needed)
Transportation conditions (roads blocked, MBTA lines,
traffic conditions, etc.)
- h. Gourmet
- i. Must learn how to use before commenting
- j. We tried financial, tax, etc. but didn't seem to reach the users. Perhaps the topics were on too high a level?
- k. National Deaf News and DM - national from different states
via GET < >.
- l. List of new books, articles published on Deafness
- m. Any news relevant to times of today

----- End of DCC DEAFNET Questionnaire -----

>

APPENDIX III

Survey of SRI Network, Washington, DC (DNCG)

1. What city do you live in?
 - Alexandra, VA (1)
 - Arlington, VA (2)
 - Bethesda, MD (2)
 - Bladensburg, MD (1)
 - College Park, MD (1)
 - Greenbelt, MD (1)
 - W. Hyattsville, MD (2)
 - New Carrollton, MD (1)
 - Rockville, MD (5)
 - Silver Springs, MD (1)
 - Washington, D.C. (4)

2. Can you call the computer free?
 - 15 Yes, 2 no, 4 unanswered

3. What ^{TTY} model do you have? (Note: Some users have more than one TTY)
 - 13 Model 15
 - 6 Model 28
 - 2 Porta-Tel
 - 5 MCM
 - 4 C-Phone
 - 1 Teletym
 - 1 H19 (Heathkit 8-level)

4. How long have you had your TTY?
 - 4 between 0 and 5 years
 - 9 between 5 and 10 years
 - 6 between 10 and 15 years
 - 1 Many years
 - 1 Unanswered

5. When did you join the DEAFNET in Washington?
 - 2 users started in Jul 79
 - 1 user in Aug 79
 - 1 user in Sept 79
 - 5 users in Oct 79
 - 5 users in Nov 79
 - 3 users in Dec 79
 - 3 users said 1979 but did not say what month
 - 1 user said since DN opened

7. How many times do you use Deafnet a day? ----- a week? -----
 - Answers are varied.
 - One said 3 or 4 a week (lowest)
 - Another said 10 times daily (highest)
 - Average seems to be 1 to 2 times a day

8. How many minutes are you on Deafnet each day usually?
 - Answers are varied
 - Lowest was 5 - 10 min a day
 - Highest was 2 hours
 - Average - 20 min a day

9. What time of day do you logon? --- AM --- Noon ----PM --- ALL
9 All times of day
5 AM, PM
The rest varied
10. Do you understand all --- some --- few --- of the computer
commands?
14 All
5 Some
2 unanswered
11. Have you read the manual?
19 yes, 1 no, 1 unanswered
12. See separate sheet
13. Do you need more instruction?
15 no, 6 yes
14. Would group instruction help you?
9 yes, 10 no, 1 maybe , 1 unanswered
15. Does your TTY break down more often using DEAFNET?
19 no, 1 not too many, 1 unanswered
16. How many times has it needed service?
10 users said none, 3 users said once, 3 users said twice,
and there were 5 unanswered
17. Have you started to pay a monthly service fee?
1 yes, 20 no
18. How much do you think it is worth per month? --\$5 --\$10 --\$15 --\$20
7 users said \$5, 7 said \$10, one said \$15, 6 unanswered
19. How often does the computer break down?
User 1: no
User 2: no
User 3: once a month
User 4: weekly
User 5: rarely
User 6: twice
User 8: occasionally
User 10: once a while
User 11: once
User 12: twice
User 13: once in two weeks
User 14: once a week
User 15: very seldom
User 17: very little
User 18: daily
User 20: bi-monthly
User 21: daily
20. Does the computer breakdown upset you much?
6 yes, 6 no, 7 sometimes, 2 unanswered

21. Do you think you might buy a new computer terminal some day?
12 yes, 4 no, 1 have one, 1 maybe, 3 unanswered
22. Would you like to get the news, weather, sports on computer?
20 yes, 1 answered
23. Have you sent messages to friends in Boston on the computer?
8 yes, 12 no, 1 unanswered
24. Have you received messages from friends in Boston on computer?
11 yes, 9 no, 1 unanswered
25. Do you like the idea of sending messages to friends in Boston?
19 yes, 1 no, 1 unanswered
26. Do you like the idea of sending messages to friends in San Fran.?
19 yes, 2 unanswered
27. Do you have hearing friends on Deafnet in Boston or Washington?
8 yes, 11 no, 2 unanswered
28. Do you get information on the bulletin board? --- What? ---
3 yes, 13 no, 5 unanswered
29. See separate sheet.
30. Have you visited the Computer Center at Gallaudet
to see your computer?
6 yes, 14 no, 1 unanswered
31. Would you like to?
13 yes, 8 unanswered
32. Are there many of your deaf friends waiting to get on Deafnet?
19 yes, 1 no, 1 don't know
33. What other information would you like to get?
(1) Medical (2) Consumer tips
(3) Legal Info (4) Mental Health

(1) 13, (2) 14, (3) 13, (4) 10
7 users did not answer this question
34. Have you heard about the Hermes message system in Boston?
7 yes, 11 no, 2 vaguely, 1 unanswered
35. See separate sheet
36. Have you ever used an 8-level (ASCII) terminal?
9 yes, 9 no, 3 unanswered

If yes, do you like the speed?
11 yes, 10 unanswered
37. Are you interested in knowing more about a mini-computer?
16 yes, 1 have one, 4 unanswered
38. Do you wish you had a mini-computer? Or a home-computer?
16 yes, 1 don't know, 4 unanswered
-

SEPARATE SHEET

12. What computer commands do you use most? List them.

User 1: WRITE, REPLY
User 2: ALL
User 3: ---
User 4: WRITE, PICKUP, READ, SCAN, DELETE
User 5: REPLY, WRITE, OPEN NEWS
User 6: I don't know
User 7: PICKUP, READ, WRITE, REPLY, FORWARD, SCAN, OPEN
User 8: WRITE, PICKUP, READ, DELETE, PURGE
User 9: MESSAGES, OPEN NEWS, TALK
User 10: OPEN NEWS, SCAN, READ, FORWARD, REPLY
User 11: ALL
User 12: PICKUP, READ, WRITE, SCAN, DELETE, PURGE, REPLY, FORWARD
User 13: WRITE, READ, WHO, WHOIS
User 14: WRITE, TIME, WHOIS
User 15: WRITE, PICKUP, READ
User 16: WRITE, FORWARD, REPLY, PICKUP, SCAN, DELETE, UNDELETE,
PURGE
User 17: ---
User 18: ---
User 19: WRITE, PICKUP, READ, OPEN NEWS
User 20: PICKUP, SCAN, READ, WRITE, OPEN, TALK, HELP
User 21: WRITE, READ, PICKUP, SCAN, DELETE, PURGE, REPLY

.29. Do you like computer-aided communications better than old TTY?
Why?

User 1: yes - To save time.
User 2: yes - More flexible and more convenient
User 3: yes - To save time by sending messages rather to talk.
User 4: ... - Same because there is people difference and
not all I know are on Deafnet
User 5: yes - Deafnet user will pick up the message than
trying to call him on TTY several times.
User 6: yes - Can use most things as computer gives.
User 7: yes -
User 8: yes - It's a time factor.
User 9: yes - ...
User 10:
User 11: ... - No detail
User 12: yes - Faster, more options
User 13:
User 14: yes - For mailing purpose and meeting as a conference
User 15: no - ...
User 16, 17, 18, 19:
User 20: yes - Faster, reach more people, it's fun.
User 21: ... - No comment, no experience yet.

35. What can you say about the Hermes project in Boston?

- User 2: Have used it, found it very powerful but will not be good for average deaf.
User 4: What I gathered is similar to Deafnet.
User 6: Dont' know what it is.
User 8: Have used this project several times and thought that it works well as our Deafnet here.
User 12: Good software, hypersensitive hardware.
User 15: I do not know enough.
User 20: ?

The remaining users had no comments.

39. Do you have any opinion you wish to share with us about computer-assisted telecommunications for the deaf?

- User 1: I did not have time to read a manual but that is a poor excuse.
User 3: Want to have up to date news. Must change twice a day.
User 4: Less breakdown and less sensitivity to "Login incorrect" even though the login is correct.
User 5: Ginny and Mini have their notes that we discussed.
User 6: No
User 8: Just keep up researching and letting us know.
User 12: Too much preliminary "garbage" preceding each message from BBN/DCC, i.e. 7 lines too many.
No local bulletin board.
User 13: Promote more "OPEN" such as OPEN NEWS. I like to see "OPEN SPORTS", "OPEN CAPTIONED MOVIES", etc.
User 14: No.
User 15: I just want you all to know that I hope DCC can sooner or later get a system similar to the one used in Washington. How? I do not know.
User 19: Try to find ways to standardize the characters for mechanical and electronic machies so that messages involving punctuation, etc shall be uniform to all.
User: 20 An electronic mail service as good as it is, cannot replace the telephone for the deaf. However it does serve a valuable purpose for the deaf and may some day replace conventional letter writing for everyone.

----- End of Deafnet Questionnaire -----

APPENDIX IV

Report of Comparison of DCC/SRI Deafnets
Virginia R. Hartling
Miriam E. LaPlante

TRIP REPORT

22-24 March 1980

Our time spent in Washington, D.C. was to meet the DNGC users and gather their feelings about their deafnet. We met about 25 users between March 22nd through the 24th. Not all of them filled out questionnaires prepared by DCC as some chose to fill them out for both themselves and their husband/wife.

The enthusiasm among DNGC for their system was great and really impressed us!!

Steve and Dorothy Brenner are to be commended for going beyond the call of duty to escort us around and for entertaining the DNGC users in their home on the 2 weekend days so that we could meet them. Latham Breunig did his share by driving us back to our motel on the final day.

Monday, the 24th, was spent touring the Computer Center at Gaulladet College and meeting with Jim Pope and Allan Matthews. Allen took us over to MSSD where we were able to observe their TICCIT system. We flew home on Monday afternoon.

It was nice meeting the DNGC users and sharing our hopes with them that someday such a system like DNDCC, DNGC and DNSRI can be spread nationwide.

Al Marotta has done an analysis of the questionnaires that we distributed while down there.

Here are our observations during this time:

DNDCC

Various kinds of enthusiasm here.

Novelty here has gone by.

Many meetings.

Manual more complicated.

Much individual instruction.

DNGC

Great enthusiasm. Not one bad word among users we met.

Novelty still high here. Some started in October 1979, others in November 1979 and more added in December.

One meeting so far. No need felt for many meetings.

Manual easy to read and follow.

Some individual instruction.

Hartling/LaPlante Trip Report

22-24 March 1980

Page Two

DNDCC

Monthly payments made since start of 2nd year.

Ditto here.

Sure same feeling is here.

50 + users

6 - 8 simultaneous users depending on pie slice.

Hermes down many, many times.

Terminals seem to be o.k. not requiring much maintenance.

Ours is up to date with changes twice daily.

If one forgets to turn terminal off, it is considered "on" at BBN.

Has LINK, TALK, etc. Users do not like to be interrupted.

<DEAF> and <PUBLIC> do not take up space in our mailboxes.

Deaf Messenger.

Save-fields or draft-fields save time here.

Password does not show up on paper.

Format and Justify.

DNGC

No monthly payments as yet. Users actually on system since October 1979.

Likes convenience of leaving messages in computer especially when no one answers a TTD call.

"Deafnet is very nice but it does not replace the telephone."

180 - 250 active users
100 - 200 on waiting list

10 simultaneous users now. Hopes for another telephone line to have 20 simultaneous users.

Down about 2 times since start of system.

TTD has to be in good working order such as clean contacts, range finder adjustments, etc. Otherwise computer will not understand sender's commands.

WGBH news and weather 1 - 2 - 3 days late. Would like this not to be so late. Some get weather information from Centex.

When not in use for 3 minutes, shuts itself off. This is a good feature.

Has TALK capability. Users do not like to be interrupted.

Advertising sent to users filling up their mailboxes. Plans are in works to set up various mailboxes.

No such bulletin as yet.

When in TO: field, have to spell out all names of recipients. However, most messages go to 2 - 3 people.

Password shows up on paper. Can use 2 words.

No format and justify.

DNDCC

This feeling similar to reading a long list of names in our TO: field.

Can correct mistakes in various ways on Hermes such as SHOW, CHANGE, EXPLODE or go into Tecu, etc.

Can use REFUSE when wanting no interruption from TALK.

Can ask to repeat message just typed by SHOW.

Move and file

If name is misspelled, computer lets us know right away.

<CTRL> O

DNGC

When receiving news and weather, there are 7 lines that come automatically before the actual news. Users would like to have these 7 lines eliminated.

Not able to correct mistakes in middle of text. Only way is to correct mistakes just made.

Can use PRIVATE for same purpose.

Not able to do this.

No move and file.

Sometimes after a long message is typed and finished, computer says "What is his name?" Thus time spent typing is wasted.

No <CTRL> O. Have to wait until end of message.

If those of you reading this do not agree with our observations, do feel free to say so.

VIRGINIA R. HARTLING
MIRIAM E. LaPLANTE

APPENDIX V

Deafnet Menu and sample

```
>  
>get <public>?  
DCC-INC  
DCI-MEETING  
DEAF-MESSENGER  
DICTIONARY  
HERMES-MEETING  
INCORPORATORS  
JOB-MARKET  
JOKE  
LANGUAGE-ADJUSTED-NEWS  
MINI-DCC-INC  
MOVIES  
NEWS  
OLDNEWS  
RETREAT  
SHORT-STORY  
USERS-LISTING  
WANT-ADS  
WOODBURNERS
```

```
>GET <<DEAF>(=DEAF)>?  
COMPUTER-INFORMATION  
CONFERENCE  
DCIMESSAGE  
DNGC  
DNSRI  
JOKE  
MAIL  
PUZZLE  
SWITCHES  
THE-ROVING-EYE  
USERS  
<terminator> or <separator>: CR LF ESC < > ; . : SPACE , !  
>GET <DEAF>
```


APPENDIX VI

Sample of LAN (Language-Adjusted News)

11: UNSEEN RECENT
Date: 14 Apr 1980 1140-EST
From: WGBH Caption Center

Subject: Language-Adjusted News

In the world...

RUSSIAN OFFICIALS ARE ANGRY ABOUT OLYMPIC BOYCOTT...The Olympic Games will be in Moscow this summer. President Carter does not want American athletes to go to Moscow. He talked to officials from the United States Olympic Committee (USOC). He told the officials not to send athletes to Moscow. Carter said he would make problems for the USOC if they send athletes to Moscow. Then USOC officials voted about sending athletes to Moscow. They voted no. American athletes will not play in the Olympic Games this summer. Russian officials do not like the USOC decision. Russian officials are angry at President Carter. They said Carter was not fair. Many athletes and officials are also angry about the decision.

+++

RED CROSS OFFICIALS GO TO IRAN...50 American hostages are still in Iran. They have been in Iran for 163 days. The Red Cross is a group of people. They help people who are sick or hurt. They work in many countries. Today 2 Red Cross officials went to Iran. They met with 3 Iranian officials. The Red Cross officials want to see the American hostages. They will see if the hostages are healthy or sick. Then the Red Cross officials will tell Iranian and American officials about the hostages' health.

+++

CARTER TALKS WITH MIDDLE EAST LEADERS...There are problems in the Middle East. President Carter is worried about the problems. He is trying to help with the problems. Carter is talking with leaders from Israel and Egypt. Israel and Egypt are in the Middle East. President Sadat is the leader of Egypt. Last week he came to Washington, D.C. He talked with President Carter. Prime Minister Begin is the leader of Israel. Today he came to Washington, D.C. He will talk with President Carter.

+++

In the nation...

THUNDERSTORM AND TORNADOES IN LOUISIANA...Yesterday a very bad rain storm happened in New Orleans, Louisiana. The storm caused many floods. The streets had 3 feet of water. In 12 hours, 8 inches of rain fell. Also near New Orleans, there were 2 tornadoes. A tornado is a very dangerous windstorm. The tornadoes destroyed buildings and injured people.



APPENDIX VII

Medical Information report and samples

Leonard Morse Hospital - Natick

E D U C A T I O N D E P A R T M E N T

April 7, 1980

FINAL PROGRESS REPORT: HEALTH INFORMATION VIA HERMES

Enclosed is a survey of the information and user responses during the seven week period - February 15 to March 31, 1980. During this time period, the one year plan discussed with Mary Robinson was implemented.

1. Weekly Health Information Via Computer.

A variety of topics on health information were presented and new formats tried. The greatest number of response seems to be for quizzes - challenge appears to be the important factor. The attempt to establish a recipe directory for special diets met with a small response. As an alternative, a book list was given to help users on special diets find new recipes.

The overall participation of the users has been favorable during this period. All user responses are available at your request.

2. Medical Terms Defined.

Medical terms have been defined and also used in the texts when possible. Learning and reinforcement of these words was done by initiating a quiz and a puzzle. A prize given by the hospital was used as a further incentive. A disadvantage to the puzzle used was that it had to be submitted via regular mail. This was possibly responsible for the limited return, however, those who participated said they enjoyed doing it.

Anecdote: The Learning Center for Deaf Children has the nutritional information and the puzzle posted on the refrigerator door at the school. There seems to be a need to explore ways to foster student participation. Attempts have been initiated, see Number 5.

3. Tel-Med Information.

This is still a viable part of the one year plan. It will be pursued if the health information is to continue.

4. Physician's Directory for Hospitals in the West Suburban Hospital Association.

A personal individual search has been started for physicians who are accepting new patients and are willing to work with deaf patients.

Plan: To write to West Suburban Hospital Association (includes 15 hospitals) asking the individual hospitals to submit names of doctors to add to the list.

5. Live Programs Publicized Via Computer.

Diabetic Lecture Series - Leonard Morse Hospital
Heart Attack Lecture Series - Leonard Morse Hospital
Speaker for the Learning Center to speak about drugs - Leonard Morse Hospital
Women and Health Program - Framingham Union Hospital

6. Community Health.

The new series conducting a hospital tour via computer is aimed at familiarizing the deaf community with the services that a hospital provides. Future plans are to expand this format to include visiting nurse, clinics, public health, mental health and other health care agencies in a community.

7. Involvement of Users.

Several ways to involve users have been explored during this period: Puzzle, quiz, recipes, and contests. This will continue to be a concern in the future.

Future Plans:

1. Ways to include the West Suburban Hospital in the DCC Telecommunications Project need to be explored. I have previously suggested their involvement in a physician's list. Another way would be to invite them to advertise their community health programs via hermes with the understanding that interpreters must be provided. Separate bulletin boards could be set up for this and the Physician's Directory. The potential here is to involve more communities. I suggest that a live presentation be made to this organization explaining the project and assessing needs from the deaf community. A possible forum for this is the C.O.S.D. meeting on be held on May 2, 1980.

2. It has been a disappointment that contact with the Gallaudet infirmary has not been reestablished due to technical difficulties. I feel that this is a necessary link for hermes and that the problem can be remedied in the future.

3. Radio information will become available for presentation on hermes during the next funding period.

4. Schools - Some progress has been made with the Learning Center. Contact was also made with Linda Carlson from the Beverly School. A follow-up contact was made by telephone. She stated that they felt the information the hospital sent was well presented and she will speak to the teachers about a possible program for the school.

5. The proposal to coordinate health services for the deaf for the West Suburban Hospital Association are still being actively pursued with deafnet playing an important role.

6. A total of 81 messages were exchanged, 25 messages were sent and 56 received. I feel that this is a significant increase and shows the potential for presenting medical information and education via hermes.

A number of unsolicited favorable comments have been received and no negative comments have been brought to my attention.

Brenda Moene R.N.

Brenda Moene

DEFINITIONS:

anesthetist: A DOCTOR THAT IS TRAINED TO GIVE ANESTHETICS.

electrocardiogram(ekg) : A CURVE TRACED ON A GRAPH THAT IS USED TO DIAGNOSE (FIND) HEART DISEASE. THE PATIENT IS ASKED TO LIE DOWN AND THEN ELECTRODES ARE PLACED ON THE CHEST, LEGS ARMS AND LEGS. THE ELECTRODES ARE ATTACHED TO AN ELECTROCARDIOGRAPH MACHINE. IT TAKES APPROXIMATELY 10 MINUTES TO HAVE AN EKG AND THERE IS NO PAIN INVOLVED.

CERTIFIED NURSE ANESTHETIST: A NURSE THAT HELPS THE ANESTHETIST DURING SURGERY. THE NURSE MUST HAVE 2 EXTRA YEARS OF SPECIAL TRAINING AT A HOSPITAL ASSOCIATED WITH A UNIVERSITY AND MUST PASS STATE BOARD EXAMINATIONS. THE NURSE ANESTHETIST CAN GIVE ANESTHESIA UNDER THE SUPERVISION OF AN ANESTHETIST.

THE NEXT AREA OF A HOSPITAL TO BE DISCUSSED WILL BE THE EMERGENCY ROOM.

BRENDA
>

Sender: , BBN-TENEXA
Mail-From: BBN-TENEXA
Received-Date: 25-Mar-80 2042-EST

Hi Brenda, Thank you for helping us. Most of deaf people do not know what they could enter the hospital....

HI BRENDA,

HERE ARE THE ANSWERS TO THE QUESTIONS AND AM NOT DOING WELL ON THE SEARCH PUZZLE.

ANSWERS:

1. DIABETES
2. CALCIUM
3. FAT
4. IODINE
5. OILS
6. D
7. ?
8. IRON
9. C
- 10 B
11. A
12. A

I REALY ENJOY TO LEARN THOSE THINGS AND MANY THANKS FOR YOUR SPARE TIME GIVING ALL THE INFORMATIONS TO THE HERMES. ALSO LEARN THE DEFINITIONS AND MEANINGS.....

WE WILL TALK ABOUT 3 POSSIBLE WAYS THAT A PERSON CAN BE ADMITTED TO A HOSPITAL:

1. AN ADMISSION THAT IS SCHEDULED FOR YOU IN ADVANCE BY YOUR DOCTOR. THIS CAN BE FOR SURGERY OR FOR TESTS AND OBSERVATIONS.
2. AN EIGHT HOUR OR OUTPATIENT SURGERY ADMISSION
3. EMERGENCY ADMISSIONS.

PRE-SCHEDULED ADMISSIONS:

THE HOSPITAL WILL SEND YOU FORMS TO FILL OUT. THE FORMS WILL DIFFER FROM HOSPITAL TO HOSPITAL, BUT BASICALLY, THEY ARE LOOKING FOR THE SAME INFORMATION. THE QUESTIONS ASKED, CONCERN:

INSURANCE NUMBERS AND FORMS

PERSONAL INFORMATION SUCH AS AGE, OCCUPATION,WHO TO NOTIFY IN AN EMERGENCY,ETC.

THESE QUESTIONS ARE NECESSARY SO THAT THE HOSPITALS CAN KEEP ACCURATE RECORDS AND CAN MEET YOUR NEEDS. THIS IS A GOOD TIME TO LET THE HOSPITAL KNOW THAT YOU ARE DEAF AND THE WAY THAT YOU PREFER TO COMMUNICATE. ALSO LET THEM KNOW IF YOU WILL NEED THE SERVICES OF AN INTERPRETER. ASK FOR THE USE OF A TTY FOR THE TIME THAT YOU ARE A PATIENT IN THE HOSPITAL. ALL HOSPITALS HAVE A RESPONSIBILITY TO PROVIDE THESE SERVICES FOR YOU UNDER SECTION 504 OF THE REHABILITATION ACT OF 1973.

WHEN YOU ARRIVE AT THE HOSPITAL:

YOU WILL BE INTERVIEWED BY A PERSON IN THE ADMITTING OFFICE. AT THIS TIME THE INFORMATION THAT YOU HAVE SENT TO THE HOSPITAL WILL BE REVIEWED WITH YOU AND MAY BE PLACED INTO A COMPUTER FOR THE HOSPITAL RECORDS.

YOU WILL BE ASKED TO SIGN PERMISSION FOR SURGERY OR TREATMENT FORMS. DO NOT SIGN ANYTHING WITHOUT READING IT FIRST AND UNDERSTANDING WHAT IT REALLY MEANS. ASK QUESTIONS!! THE HOSPITAL PEOPLE AND THE DOCTORS DO NOT WANT YOU TO SIGN ANYTHING THAT YOU DO NOT UNDERSTAND. THE HOSPITAL WILL WAIT UNTIL YOU CAN TALK WITH YOUR DOCTOR AGAIN SO THAT HE CAN EXPLAIN AND ANSWER ALL YOUR QUESTIONS. THE HOSPITAL WILL PROVIDE AN INTERPRETER IF YOU NEED ONE.

IDENTIFICATION:

THE ADMITTING PERSON WILL PLACE AN IDENTIFICATION BRACELET ON YOUR WRIST. THE PATIENT KEEPS THIS BRACELET FOR THE ENTIRE STAY IN THE HOSPITAL. IT IS ALWAYS CHECKED WHEN MEDICATIONS AND TREATMENTS ARE GIVEN. A CHART WILL BE PREPARED FOR YOU THAT WILL CONTAIN DOCTOR'S ORDERS, MEDICAL HISTORY, AND RECORDS OF TREATMENTS AND TESTS DONE WHILE IN THE HOSPITAL.

WE WILL CONTINUE WITH PART 2 OF THE ADMISSION PROCEDURE ON TUESDAY.

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