

VSSI TECHNICAL RESPONSE TO
NUCLEAR REGULATORY COMMISSION

RFP NO. RS-IRM-89-148

SEPTEMBER 25, 1989

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VSSI

VOICE SYSTEMS AND SERVICES, INC.

One Technology Center
P.O. Box 1400
Mannford, OK 74044
(918) 865-1000
FAX No: (918) 865-3195

September 25, 1989

Mr. Mark J. Flynn
Contracting Officer
US Nuclear Regulatory Commission
7920 Norfolk Avenue
Mail Stop P-1020
Bethesda, Maryland 20814

Dear Mr. Flynn,

The inclosed is Voice Systems and Services Inc.'s response to the NRC's request for proposal no. RS-IRM-89-148, Entitled "Acquisition of a Voice Mail System (VMOS).

We appreciate the opportunity to propose VSSI equipment for this project. VSSI is very active in numerous aspects of the Voice Processing Industry. Designing systems for Cellular Radio Networks and developing an emergency notification system utilizing voice processing technology as just two examples.

VSSI looks forward to the possibility of working with the NRC on your voice processing requirements.

Sincerely,

Peter T. Zuyus
President & CEO

PTZ:li

data processing equipment from all static discharge. Several precautions can be implemented to help minimize the possibility of static discharge. These measures should be considered as temporary.

Existing non-static carpeting should be covered by static mats in the area adjacent to the equipment.

Antistatic spray is not recommended as a permanent solution since it must be applied regularly and may stain the carpet. If an application is missed, the static problem will reappear and intermittent system operation, system failure, or data loss may result.

Elimination of the cause of the static problem is the only solution that should be acceptable to the customer.

2.5 AIR QUALITY

Although the hard disk in VSSI equipment is sealed, and the diskette is operable in a normal office environment, a filtered, recirculating, air conditioning system is recommended to assure prevention of dust accumulation in the equipment.

2.6 SYSTEM EXPANSION AND MEDIA STORAGE

Additional space should be allocated for the storage of system media as well as projected system expansion. Media should be stored in the same environmental conditions as the computer system. Master files and critical data should be stored in another area, preferably a fireproof file cabinet.

DOCUMENT: YSTM 1001-101
ISSUE: REV 2
DATE: MARCH 1, 1988

ELECTRICAL

SECTION 3:

The Communicator Series electrical requirements vary with system size and power options desired. After selection of system and options a detailed description of the site(s) electrical requirements will be provided. See System Specifications for general information on system electrical requirements when powered by commercial AC. It is important to note that ALL Communicator systems proposed for commercial AC operation INCLUDE a battery back up transition system to insure orderly system shut down in the event of total power failure. It is recommended that all systems be operated from a source of uninterruptable power, allowing the transition system to be the buffer for power source change.

CAUTION: OPERATION OF YOUR SYSTEM WITHOUT ADEQUATE POWER TRANSITION PROTECTION WILL DAMAGE YOUR SYSTEM AND WILL VOID YOUR WARRANTY.

C. Elimination of the cause of the static problem is the only solution that should be acceptable to the customer.

V. POWER

The Communicator Voice Mail System must have a dedicated electrical circuit and a power surge protection device. An uninterruptable power supply will be supplied by Voice Systems and Services, Inc. in most applications.

The voltage measurement between neutral and safety ground in the 120 volt AC circuit must not exceed 0 volts, +/- .2 volts AC.

The current rating of the power source and the wire used to supply the power to the Communicator must be adequate to maintain a constant voltage when the system is switched on.

The electrical circuit must be properly and effectively grounded.

AC power specification:	120 volts AC +/- 10%
Frequency	60 Hz +/- 1%

VSSI *COMMUNICATOR SERIES
PRE-INSTALLATION CHECK LIST

This check list is designed so that the Dealer or end user can complete the requirements necessary for the installation of their new *Communicator* system. If this check list is followed properly it will insure a problem free installation plus allow the VSSI representative more time to spend on training your people on the exciting benefits of *Voice Mail*.

A. TELEPHONE LINES.

1. Call the local phone company and order the proper lines for your system configuration.

a. Number of (DID) lines ordered. _____

b. Amount of numbers assigned to the (DID) lines.

c. Number of R/T (business lines). _____

d. Number of PBX exten. lines. _____

2. Direct Inward Dialing lines should be ordered as follows:

a. Two-wire loop

b. Wink Start

c. Touch Tone (DTMF) outpulsing. DO NOT CONFUSE DTMF WITH MF (MULTIFREQUENCY). MF WILL NOT WORK WITHOUT EXTRA INTERFACING EQUIPMENT.

d. Outpulse the last five (5) digits of the DID number

NOTE: If touch tone DID is not available in your area notify VSSI immediately.

e. A group of DID telephone numbers must be assigned to the (DID) lines. The quantity of numbers depends on your system size.

3. Business lines (R/T) are standard Touch-Tone lines.

4. PBX extension lines are 2500 type extensions of your PBX telephone system. They should be capable of switch-hook flash and transfer if your application has Automated Attendant.

5. All terminated telephone lines must be terminated within seven (7') feet of the location where your Communicator will be installed. Seven foot line interface cords will be used for the installation. If the lines are terminated more than seven feet from the system, you must notify the VSSI technical services department so that proper arrangements can be made.

B. ENVIRONMENTAL REQUIREMENTS: See attachment

C. ELECTRICAL REQUIREMENTS

2. One dedicated 115 volt ac/ 20 AMP electrical outlet with a true earth ground.
3. Your system (except Jr.) will be provided with a uninterruptable power supply. Even with the UPS we require a dedicated circuit.

D. CHECK LIST.

1. Name of local telephone company: _____
2. Name of local telephone company representative that you placed your telephone line order with _____
3. Phone number where the tele. co. rep. can be reached.
() _____
4. Name of tele. co. technician at the ORIGINATING CENTRAL OFFICE which YSSI can call for IMMEDIATE ACTIVATION of the (DID) lines _____

Phone number at CENTRAL OFFICE _____

- a. The phone company can and will install your (DID) lines prior to the scheduled equipment installation date. The telephone company, because of the type of lines (DID), cannot activate these lines without the equipment being powered up. By getting the name and phone number of a technician at the CENTRAL OFFICE, YSSI can install your equipment and co-ordinate directly with the CENTRAL OFFICE without going through the business office. This will save everyone time and aggravation. Once the telephone company understands that you are trying to work with them and that this procedure will make their job easier they will probably go out of their way to assist you and YSSI.

5. Telephone lines installed on (DATE): _____

6. Dedicated electrical circuit installed.

Date _____

Thank you for your co-operation. If this list is followed it will cut down the possibility of unexpected problems.

FCC REQUIREMENTS

1. The Federal Communications Commission (FCC) has established rules which permit the VSSI Communicator DID Interface to be directly connected to the telephone network. Standardized RJ-11 jacks are used for these connections. This equipment should not be used on party lines or coin lines.
2. If this device is malfunctioning, it may also be causing harm to the telephone network; this device should be disconnected until the source of the problem can be determined and until repair has been made. If this is not done, the telephone company may temporarily disconnect service.
3. The telephone company may make changes in its technical operations and procedures; if such changes affect the compatibility or use of this device, the telephone company is required to give adequate notice of the changes.
4. When ordering DID service, you will need to inform the telephone company of:

The Service Type Required:	DID
The Facility Interface Code:	02RV2-T
The Ringer Equivalence:	0.0 B
The Jack Required:	RJ-11 or RJ21X
The FCC Registration Number:	GL1133X-16734-AD-N

The ringer equivalence (REN) is used to determine how many devices can be connected to your telephone line. In most areas, the sum of the REN's of all devices on any one line should not exceed five (5.0). If too many devices are attached, they may not ring properly.

5. Service Requirements:

In the event of equipment malfunction, all repairs should be performed by VSSI or an authorized agent. It is the responsibility of users requiring service to report the need for service to VSSI or its agents:

Voice Systems and Services, Inc. (VSSI)

One Technology Center

Mannford, OK 74044

(918) 865-1000



CELLULAR MESSAGE SERVICE USER'S GUIDE

TO FORWARD TO CELLULAR MESSAGE SERVICE:
- From your cellular telephone press 738 plus 999, and the last four digits of your cellular telephone number, then press "send." Once you activate your cellular message service it will remain activated until deactivated. To deactivate, enter 738, then press "send."

FIRST TIME USERS:
After forwarding your cellular phone to Cellular Message Service, call your cellular telephone. (Note: when using your cellular or touch-tone telephone, plus the last four digits of your cellular number.) When the system answers press "0." When asked for a security code, enter "0000." To personalize your Cellular Message Service and create your own security code, Press "3" (CHANGE USER OPTIONS) and follow instructions.

YOUR SECURITY CODE IS: _____

TO CALL FOR MESSAGES OR TO CHANGE USER OPTIONS (You may use your cellular phone or any touch tone telephone) (Note: when calling your cellular telephone number, you must call 999, plus any from four digits of your cellular number.)
1) Call your cellular phone you must call 999, plus any from four digits of your cellular number.)
2) When the greeting begins, Press "3."
3) Enter security code.
4) Select option from Main Menu then follow instructions.

MAIN MENU

PRESS "1" TO LISTEN TO YOUR MESSAGES
PRESS "3" TO CHANGE USER OPTIONS
PRESS "9" TO EXIT

If you need assistance, please call
611 (from cellular phone only)
or 665-0101

SECTION C - DESCRIPTION/SPECIFICATION/WORK STATEMENT

C.1 STATEMENT OF WORK

C.1.1 Background

VSSI understands the U.S. Nuclear Regulatory Commission's requirements for services to be provided by the proposed voice mail system.

C.2 Mandatory Specifications

General: The system proposed by VSSI is a freestanding, office environment micro-processor controlled system capable of sending, receiving, redirecting, responding to, recording, editing, erasing and storing voice messages. The system provides high quality voice recordings and user friendly prompts to utilize system features in ordinary English.

The following capabilities, functions, features and service are included in the proposed voice system by VSSI.

- A. Operation with Centrex provided service and adaptable to a PBX system. The system will accommodate a minimum of sixteen (16) Centrex lines which will be programmable assignable. Telephone interfaces do meet FCC standards, telephone company requirements, and operate with touch-tone commands. When rotary dialing is used default functions are utilized. The system supports both loop-start and ground-start Centrex or PBX lines.
- B. The system is configured to support 1,000 users initially and is designed to grow modularity. Sizing is included in this proposal for both the initial configuration and to handle 3,000 users. Bulletin board service is included.
- C. Each user will have a unique password, that can be configured from three to seven digits. Users have the option of changing their password via touch-tone commands.
- D. Users will be able to check messages individually and may scan messages rapidly by pressing the appropriate touch-tone command.
- E. The system allows users to pause while listening to a message and also to backup and replay the message.
- F. The system has a time out feature set by the system administrator to disconnect if no activity is taken by the user.

- G. The system's automated attendant is designed so that if a called party's extension is busy or there is no answer in a prescribed amount of rings the caller may leave messages for that called party.
- H. The system will provide message information to individual users and utilize special notification to users when they have messages in storage (e.g. stutter dial tone message waiting lamp). Users will be told how many messages they have, both new and saved, all messages are time and date stamped. The user has the options to save, edit, redirect, or delete individual messages. Messages are stored chronologically.
- I. The system proposed can store messages of variable length, based on class of service, from 30 seconds to 999 seconds (16.65 minutes) message retention by days can be set from 1 day to 365 days, based on class of service. The system will automatically delete messages based on retention time based on COS.
- J. The system provides for a default number, designated by the system administrator, to provide assistance/information.
- K. Users can add comments to received messages and then reroute to other users.
- L. Users can review created messages before sending with the option of sending or cancelling.
- M. The system proposed allows for extensive distribution lists. Each user, at the system administrator's discretion, can have up to 99 distribution lists.
- N. The system allows for messages to be sent with receipt verification to assure control of time sensitive messages.
- O. System is configured to provide service so that 15% of total traffic volume is received at busy hour. The system is configured to provide a PO. 2 grade of service.
- P. The system proposed has 99 programmable classes of service to grant or restrict various features and options of the system.

- Q. The system proposed provides an automated system message center that gives high quality, recognizable, and concise voice messages to system users and callers. The recorded messages and prompts are digitalized and stored in the system mass media. The voices recorded on the system will be easily recognizable to any one knowing the originator.
- R. The system includes an input/output processor to monitor, control and manage the system. The system will work with user provided equipment, modems and computers, for remote access. Complete statistical reporting is included.
- S. A self diagnostics package is included which will automatically or on request be displayed on the input/output device, without interrupting service. The system also has remote access capability for testing and maintenance.
- T. The system proposed is a free standing unit that will operate in a normal office environment, fully self contained. An external surge protection unit is included in this proposal.
- U. VSSI will train up to five (5) persons on complete system administration. Training aids in the form of pamphlets and video tape presentation showing basic user functions and procedures will be provided to the NRC.
- V. All applicable manuals and documentation will be supplied with the system and become property of the NRC.
- W. VSSI's system is warranted for one (1) year, parts and labor. VSSI will provide maintenance through the first year from acceptance, subject to the government's option to extend.
- X. VSSI will guarantee replacement parts availability for at least five years. Should replacement parts become unavailable, VSSI will provide information to secure substitute parts.
- Y. Cost of the system includes shipping, installation, and training for five individuals. Delivery to be within 90 days of receipt of order. Installation to include initial set up, connection of equipment to Centrex lines, assurance that I/O devices work properly, programming the system, and testing user facilities.
- AA. VSSI will provide operator/user/book/pamphlet/overlay for 3,000 users.

BB. VSSI, within ten days of award, will provide final listing of each telco requirements. Initial requirements are listed in the proposal.

CC. The proposed system is complete with default prompts and custom made professional prompts can be made as required by the NRC.

DD. VSSI will provide a point of contact to resolve, if any, Centrex integration problems.

C.3 EVALUATED OPTIONAL FEATURE

The VSSI system proposed has the capability to provide a directory that utilizes the touch-tone key pad to spell out users name with transfer to the appropriate mailbox.

C.4 HARDWARE/SOFTWARE UPGRADES

VSSI will provide all hardware and software upgrades/modifications to the system during the warranty period.

C.5 INSTALLATION

C.5.1 GENERAL REQUIREMENTS

VSSI will be responsible for complete and satisfactory installation of all equipment at the site. Equipment used in the installation will be modular to facilitate system maintenance and expansion. The installation will, during the life of the contract, conform to the industry standard current at the time of the cut-over. The system will operate within normal business operating environment. VSSI will indicate any variance with this and accept responsibility for any required modifications.

VOICE SYSTEMS AND SERVICES, INC. SELECTED CUSTOMER REFERENCES

Mr. Ed Smith, General Manager, Cross Telephone Company
P.O. Box 9 Warner, OK 74469 (918) 463-2921

A. Cellular Central Office voice mail

- 128 port, 160 hour system
- 48 port, 70 hour system
- 14 port, 15 hour system

2. Mr. Jim Albee, Telecommunications, Kerr/McGee Corp.,
123 Robt. S. Kerr Blvd., Oklahoma City, OK 73102 (405) 270-3000

- Sequoyah Fuels: Nuclear Fuels Processing Plant: 8 port, 4 hour system for emergency warning system to officials and residents
- New Jersey: 4 port, 6 hour system used as fuel price hotline for Royal Petroleum

3. Mr. Mike Trower, Vice President, Cimarron Telephone Co.
Mannford, OK 74044 (918) 865-3311

- Tulsa: 16 port, 20 hour system in revenue producing service bureau application (automated answering service)
- Mannford: 28 port, 6 hour system used for civil emergency notification.

4. Mr. Rene Tousley, General Manager, Cellular One
301 S. 24th St. West, Billings, MT 59102 (406) 656-1000

- 12 port, 10 hour, redundant system installed in cellular Central Office.

5. Ms. Kathy Treggs, Public Records Division Chief, County Records Office
POB 130, Los Angeles, CA 90053 (213) 974-6629

- 24 port system used to handle several thousand calls a day from the public.

TRAFFIC CALCULATIONS FOR
/SSI COMMUNICATOR SERIES

CUSTOMER: NRC

NUMBER OF TELEPHONE USERS :	1,000	LISTEN/RERECORD PERCENT :	5%
PERCENT VOICE MAIL USERS :	100%	USER REPLAY PERCENT :	5%
ACTIVE VOICE MAIL USERS :	1,000	INFORMATION CENTRE (Y/N) :	Y
OUTDIAL REQUIRED (Y/N) :	Y	I.C. MESSAGE LENGTH :	60 SECS
% OUTDIAL PENETRATION :	20%	# OF INFO CENTER MESSAGES :	30
AVG OUTDIAL HOLDING TIME :	10	INFO CENTER CALLS/DAY :	100
		MESSAGES/DAY/USER :	6
AVERAGE MESSAGE LENGTH :	30 SECS.	RETRIEVALS/DAY/USER :	2
AVERAGE GREETING LENGTH :	15 SECS.		
AVERAGE NAME LENGTH :	5 SECS.	BUSY PERIODS/DAY :	2
MESSAGE ARCHIVE FACTOR :	10%	HOURS/BUSY PERIOD :	1 HRS
		MESSAGE RETENTION TIME :	336 HRS
		% TRAFFIC PER BUSY PERIOD :	15%
		GRADE OF SVC REQ'D - P.O :	2

TOTAL MESSAGES PER DAY	6,000	
TOTAL MESSAGE SECONDS PER DAY	360,000	SECS.
TOTAL USER RETRIEVALS PER DAY	2,000	
TOTAL RETRIEVAL SECONDS PER DAY	120,000	SECS.
TOTAL INFO CENTRE CALLS/DAY	100	
TOTAL INFO CENTRE SECONDS/DAY	6000	SECS.

TRUNK HOLDING TIME PER I.C. CALL	64	SECS.
TRUNK HOLDING TIME PER MESSAGE	51	SECS.
TRUNK HOLDING TIME PER RETRIEVAL	99	SECS.
TOT. TRUNK HOLDING TIME/DAY FOR MSGS.	308,700	SECS.
TOT. TRUNK HOLDING TIME/DAY FOR RET.	197,000	SECS.
TOT. TRUNK HOLDING TIME/DAY FOR I.C.	6,400	SECS.

TOTAL TRUNK HOLDING TIME PER DAY	512,100	SECS.
TOTAL BUSY PERIOD TRUNK HOLDING TIME	76,015	SECS.
TRAFFIC DEMAND /BUSY HOUR (MSGG/RET)	76,015	SECS.

BUSY HOUR CCS REQUIREMENT (MSGG/RET)	760.2	CCS
BUSY HOUR CCS REQUIREMENT (INFO CTR)	4.8	CCS
BUSY HOUR CCS REQUIREMENT (OUTDIAL)	10.0	CCS

TRKS REQUIRED FOR MESSAGING/RETRIEVAL	32	
TRUNKS REQUIRED FOR INFORMATION CENTER	2	
TRUNKS REQUIRED FOR OUTDIAL	3	

TOTAL TRUNKS REQUIRED 37

STORAGE REQUIRED FOR GREETING/NAME	6	HRS.
STORAGE REQUIRED FOR MESSAGING	60	HRS.
STORAGE REQUIRED FOR INFO CENTER	1	HRS.

TOTAL STORAGE REQUIRED 66.1 HRS.

RECOMMENDED SYSTEM SIZE : PORTS 40 HOURS 80

Approved

AFFIC CALCULATIONS FOR
SI COMMUNICATOR SERIES

CUSTOMER:	NRC		
NUMBER OF TELEPHONE USERS:	3,000	LISTEN/RERECORD PERCENT :	5%
PERCENT VOICE MAIL USERS :	100%	USER REPLAY PERCENT :	5%
ACTIVE VOICE MAIL USERS :	3,000	INFORMATION CENTRE (Y/N) :	Y
OUTDIAL REQUIRED (Y/N) :	Y	I.C. MESSAGE LENGTH :	60 SECS
% OUTDIAL PENETRATION :	20%	# OF INFO CENTER MESSAGES:	30
OUTDIAL HOLDING TIME :	10	INFO CENTER CALLS/DAY :	100
		MESSAGES/DAY/USER :	6
AVERAGE MESSAGE LENGTH :	30 SECS.	RETRIEVALS/DAY/USER :	2
AVERAGE GREETING LENGTH :	15 SECS.		
AVERAGE NAME LENGTH :	5 SECS.	BUSY PERIODS/DAY :	2
MESSAGE ARCHIVE FACTOR :	10%	HOURS/BUSY PERIOD :	1 HRS
		MESSAGE RETENTION TIME :	336 HRS
		% TRAFFIC PER BUSY PERIOD:	15%
		GRADE OF SVC REQ'D - P.O. :	2

TOTAL MESSAGES PER DAY	18,000	
TOTAL MESSAGE SECONDS PER DAY	1,080,000	SECS.
TOTAL USER RETRIEVALS PER DAY	6,000	
TOTAL RETRIEVAL SECONDS PER DAY	360,000	SECS.
TOTAL INFO CENTRE CALLS/DAY	100	
TOTAL INFO CENTRE SECONDS/DAY	6000	SECS.
TRUNK HOLDING TIME PER I.C. CALL	64	SECS.
TRUNK HOLDING TIME PER MESSAGE	51	SECS.
TRUNK HOLDING TIME PER RETRIEVAL	99	SECS.
OT. TRUNK HOLDING TIME/DAY FOR MSGS.	926,100	SECS.
OT. TRUNK HOLDING TIME/DAY FOR RET.	591,000	SECS.
OT. TRUNK HOLDING TIME/DAY FOR I.C.	6,400	SECS.
TOTAL TRUNK HOLDING TIME PER DAY	1,523,500	SECS.
TOTAL BUSY PERIOD TRUNK HOLDING TIME	220,525	SECS.
TRAFFIC DEMAND /BUSY HOUR (MSGS/RET)	220,525	SECS.
BUSY HOUR CCS REQUIREMENT (MSGS/RET)	220.5	CCS
BUSY HOUR CCS REQUIREMENT (INFO CTR)	4.0	CCS
BUSY HOUR CCS REQUIREMENT (OUTDIAL)	54.0	CCS
TRUNKS REQUIRED FOR MESSAGING/RETRIEVAL	82	
TRUNKS REQUIRED FOR INFORMATION CENTER	2	
TRUNKS REQUIRED FOR OUTDIAL	5	
TOTAL TRUNKS REQUIRED	89	
STORAGE REQUIRED FOR GREETING/NAME	17	HRS.
STORAGE REQUIRED FOR MESSAGING	180	HRS.
STORAGE REQUIRED FOR INFO CENTER	1	HRS.
TOTAL STORAGE REQUIRED	197.2	HRS.

RECOMMENDED SYSTEM SIZE PORTS HOURS
 92 240

Agarwal

COMMUNICATOR SERIES SYSTEM MAINTENANCE

SECTION 1: GENERAL INFORMATION

This section is composed of a variety of maintenance documents related to the servicing of the components which make up your Communicator Series voice messaging system. Care should be taken to insure that ANY jumper or switch settings conform to VSSI stated settings prior to installing a board or unit. Incorrect settings can cause unforeseen complications and maintenance. VSSI incorporates the highest quality componentry into its product line and with that a maintenance philosophy of unit/board level replacement. Included with VSSI documentation is any related documentation from the source manufacturer. This provides you with an in-depth knowledge of both your voice messaging system and its components.

VSSI welcomes any comments regarding maintenance and/or technical documentation. All comments will be reviewed and included with future releases if possible.

Please address comments to: VOICE SYSTEMS AND SERVICES, INC.
ONE TECHNOLOGY CENTER
MANNFORD, OK 74044
ATTN: TECH SERVICES

VIII. MAINTENANCE VSSI COMMUNICATOR SERIES MAINTENANCE AGREEMENT

1.00 INTRODUCTION

This section describes the maintenance and warranty agreement you purchased from VSSI on the Communicator Voice Mail System.

1.01 WARRANTY

All hardware and software are covered under a limited warranty to be free of manufacturing and workmanship defects for the period of one (1) year starting upon the installation date. The limited warranty also covers the actual installation labor for a period of thirty (30) days.

1.02 MAINTENANCE

The maintenance program covers all labor and expenses for a period of one year, from installation date. The goal of VSSI is to keep your system trouble free and respond in a quick and efficient manner.

1.03 AGREEMENT

These are the terms in which VSSI will respond to system problems:

1. Minor failures will be responded to within eight hours. These failures are classified as not affecting the ability of the entire system to function.
2. Major failures will be responded to with the utmost expediency. VSSI has technicians on call 24 hrs a day. As soon as the service request is received the technician will be notified and will respond to the request. This response time should not be longer than four (4) hours. A major failure is classified as a complete systems shut down, software failure, or any other problem which affects the entire system.
3. In cases of major failures the on site appearance of a technician will be within twenty-four (24) hours. The intent of VSSI is to have a technician respond as quickly as possible. Because of different site locations the arrival of the technician will depend upon the availability of air line flights. It is VSSI's intent to have a technician on the first available flight.
4. Monthly hard copy reports showing the system status will be generated by VSSI and mailed to the system site.

VSSI "Communicator"
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6. To offer a second year hardware and software component maintenance program.

7. For problems other than system failures a charge will be billed to the buyer by VSSI, on a portal to portal basis. The charge of \$450.00 per day, minimum of one day, or \$80.00 per hour, minimum four hours, whichever is less. Travel and expenses will also be added to the daily rates.

B. ON-SITE MONTHLY

1. Same as on-site maintenance only billed monthly.

C. REMOTE (MODEM SUPPORT)

1. In the first year the purchaser will be provided VSSI technical support via a modem link connection to the "Communicator" system when required. It is the responsibility of the purchaser to provide a standard telephone line for the VSSI modem link.

2. If on-site visit is required, purchaser will be billed at VSSI standard service rates in effect at the time service is provided.

D. REMOTE (MODEM SUPPORT) MONTHLY

1. Same as Remote (Modem Support) only billed monthly.

E. TELEPHONE SUPPORT

1. This is a support program for Dealers or end users that have an in-house technical staff. This program covers, by warranty, the hardware and software components the first year. A labor maintenance package does not have to be utilized to receive telephone support of VSSI equipment.

VSSI "Communicator"
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MAINTENANCE

SERVICE INFORMATION

If service or repair is required, contact VSSI's Technical Services department for a return Material authorization (RMA) number and shipment instruction. If MPU is out of warranty or is physically damaged, a purchase order will be required for the repair.

The MPU should be returned in its original shipping materials, if available. Otherwise, the board should be placed in a conductive anti-static material, wrapped in a cushioning material, and enclosed in a corrugated carton suitable for shipping. Seal the carton securely and ship prepaid to the following address with the RMA number on the label.

VOICE SYSTEMS AND SERVICES, INC.
ONE TECHNOLOGY CENTER
MANNFORD, OK 74044

ATTN: TECH SERVICES

RMA NO. _____

4.0 HELLO NEW VOICE MAIL USER!:

1. As the owner of a User Box you can:

- a. Receive messages from anyone who calls your box number, including other box holders.
- b. Retrieve, delete, replay, save or transfer to another box any messages after entering your personal security code.
- c. Find out when (exact time and date) a message was left.
- d. Record your name to identify your box to other users who may send you messages.
- e. Send mail to 1) another box holder, or 2) to a distribution list which automatically sends the same message to a pre-defined group list of box Users.
- f. Receive confirmation that a message that you sent to another user box has been retrieved.
- g. Record or change a personal greeting which is then played when someone calls to leave you a message.
- h. Instruct your mailbox to call you at another phone number immediately after a message has been left.
- i. Have your mailbox activate your personal pager (tone, digital, or voice) when a message is left for you.
- j. Have your mailbox automatically call you and deliver your messages to another phone number at a specified time of the day.
- k. While listening to a message, you can pause, fast forward or rewind.

2. Things You Should Know About Voice Mail on the "Communicator":

- a. You can operate your User Box from any Touch-Tone (R) telephone keypad, anywhere in the world.
- b. Recorded message "prompts" will instruct you at each step.
- c. You don't have to listen to the whole message prompts once you know the commands to do what you want to do... just immediately press the appropriate keys and interrupt the recorded message prompts.
- d. If you're not sure what to do, try pressing [9] on your keypad. This key will usually take you back to the previous menu.
- e. If you forget your security code or have difficulty using your User Box, call your System Administrator for help.

4.01 SETTING UP YOUR NEW MAILBOX:

Here are the steps:

1. Before calling the voice mail system, you should know two things:
 - a. Your mailbox number
 - b. Your temporary security code
2. Dial the phone number or extension number to access the system.
3. When the system answers, enter you mailbox number using a touch tone phone. If your box is a DID box, you will bypass this step.
4. A tutorial will instruct you on pressing 0 and entering the temporary security code. This tutorial will play until replaced by your own personal greeting.
5. After entering your temporary security code, the system will tell you if you have any messages and then will instruct you to press certain keys. Press [4] to "change your security code, greeting and other options"
6. You should enter your own personal security code to keep your messages private and record your personal greeting which will replace the tutorial. You can also record your name to I.D. your box. Follow the prompts for each function. If you get stuck, try pressing [9] to escape or go back to the previous function.
7. Once your greeting is recorded, callers who enter your box number or who dial your DID number will hear your greeting and can leave messages.
8. To retrieve your messages, call your box and press 0 before the recording tone, anytime during your greeting. Enter your personal security code and follow the prompts to retrieve you messages.

4.1 RECORDING A MESSAGE:

Chart 1 illustrates the prompt flow for leaving a message for a voicemail user. The following steps are illustrated:

1. Call the system and enter the mailbox number (not necessary for DID boxes)
2. The personal greeting for the box User will play. You can press 9 to skip the greeting if you want to begin recording immediately.
3. After the greeting plays the system will instruct the caller to begin recording at the tone followed by the recording tone. If the "record" prompt is disabled in the Class Code definition by the System Administrator the recording tone will sound immediately after the greeting.
4. After recording the caller can press any digit or stop speaking for 3 seconds and will hear the "message edit" menu where he can listen to his recording, erase and rerecord, delete, or continue recording where he left off. If the message is acceptable, pressing 9 will play a "thank you for calling" message and the system will hang up.

4.11 RETRIEVE MESSAGES:

1. To retrieve messages from a User Box you must first access the box by entering the box number after dialing the system (or dial the box number directly if DID).

2. DURING the greeting, press zero (0) before the recording tone, and enter your Security Code when prompted. If you wait until after the tone to press zero, you will be in the message recording mode and will not be able to do anything else but leave a message.

3. As soon as you press zero anytime during the Greeting, you will hear:

"You have (number or "no") new/saved messages.
To listen to your new messages, Press 1
To listen to your saved messages, Press 2
To send a message to another user, Press 3
To change Security Code, Greeting or Other options, Press 4
To quit, Press 9 or hang-up."

4. If you have new messages, press "1" to hear the first message. While the message is playing you can do the following:

Rewind or skip back several seconds	Press 4
Pause/restart	Press 5
Fast Forward or skip ahead	Press 6

5. After the message plays, you can choose from the following options:

Can

To save this message	Press 1
To Transfer this message to another box	Press 2
To erase this message	Press 3
To hear this message again	Press 7
For the time message was received	Press 8
To quit (or skip to next message)	Press 9

6. When you save or erase a message, the system confirms your choice with "message saved" or "message erased". Pressing 7 will replay the previous message and pressing 8 will give you the exact time and date of the message. To transfer the message to another User's box, you can press 2 and follow the instructions.

If you save any messages, they will remain available until their retention period has expired. This retention period can be defined with "System Administration".

Immediately after saving or deleting a message, the next message will play until all messages have been retrieved. You can then push 9 to exit the system. Note: pressing 9 while a message is playing will skip the current message and begin playing the next message in line.

Sometimes a caller will hang up and leave a "dead air" message. These should be deleted by pushing * 3 * like any other unwanted message. The system will not recognize messages that are less than 2 second* long.

4.12 TRANSFER A MESSAGE TO ANOTHER USER

1. Refer to Chart 3 for an illustrated flow chart. After listening to a message you can transfer the message to another User's box if you wish. You can also record a comment which will precede the transferred message when retrieved by the other User. You can also send the message with "confirmation" and receive a message in your box as to the time and date of the message retrieved.
2. Press [2] after listening to a message. Enter the destination box number when prompted. The system will confirm by repeating the box number or name of the User.
3. To record a comment, Press 1. The comment will be attached to the front of the transferred message when retrieved by the destination User.
4. There are two ways to transfer or send the message. To send, Press 4. To send with confirmation, Press 5. Confirmation instructs the system to leave a message in the sender's box indicating the time and date the message was retrieved by the destination box User.
5. After sending the message the system gives you the option of saving or erasing the original message.

4.13 CHANGE SECURITY CODE

1. Refer to Chart 4 which illustrates the prompt flow. Select option 4, "To change Security code, Greeting, or Other Options, Press 4" from the top level menu.
2. Press 1 to Change Security code. The system will play the current security code and will give you the opportunity to change or leave it as is.
3. To change the Security Code, press 9 and enter the new code. The number of digits required is a system-wide parameter and must be the same for all boxes.

4.14 RECORD NAME

1. Refer to Chart 4 for prompt flow illustration. The "name" is usually the name of the owner or box User. The purpose is to identify the box by name rather than by number. When a box is referenced by the system during message notification, transferring messages, etc., the recorded name is played rather than the box number.
2. Select option 4 from the top menu, "other options", and then press 2 to record your name as prompted.
3. The system will play the currently recorded name or will tell you if no name has been recorded. You can then Press 2 to record, Press 3 to erase, or Press 4 to listen.
4. When finished, press 9 to exit. If no name is recorded, the system will reference the box by playing the box number itself.

4.15 RECORD GREETING:

1. Chart 5 illustrates how to record a Greeting. The Greeting is the message callers hear after entering a box number or when the system answers using DID service.
2. Select option 4 from the top menu, "To change Security Code, Greeting and other options, press 4". Then select option 3 to change the greeting.
3. The system will play the current greeting or indicate that no greeting currently exists. If no greeting exists, the callers will hear the tutorial until it is replaced by a new greeting.
4. Press 2 to record the greeting and then press any key when finished. You can press 4 to listen to what you recorded. To rerecord, just press 2 again and then press 9 to exit when satisfied. If you erase the greeting, the tutorial will reappear as the greeting.

4.16 SEND A MESSAGE TO ANOTHER USER:

1. Refer to Chart 9 for illustrated prompt flow. Option 3 on the first level Voice Mail menu allows you to send a message to another User box. You will be asked to enter the box number to which the message will be delivered and then you will be able to record and edit a message.
2. To send the message, simply push * 4 *. To send with confirmation, Press 5. Confirmation instructs the system to leave a message in the sender's box indicating the time and date the message was retrieved by the destination box User.
3. After sending the message, you can send a copy of the same message to another box or press 9 to exit.

4.17 MESSAGE NOTIFICATION

1. Refer to Chart 6 for illustrated prompt flow. When activated in the Class Code, the system will call you at a phone number or activate a personal pager to notify you of new messages. To enter your phone number and activate the feature, select option 4 from the main menu, for "other options".
2. Select Option 4 for Message Notification. The system will indicate whether the feature is active or turned off. If active, the system will call the phone numbers entered whenever a new message is deposited.
3. You should press 1 to enter new numbers then select one of four numbers in the "cascade". You can enter up to four phone or pager numbers. The system will call the first number and then call the next number if no one enters the security code to retrieve messages within the interval time defined in the Class Code.

4. Only one number can be defined as a National Pager. Otherwise, any combination of pagers or telephone numbers can be entered. There are four types of phone number definitions:

Digital Pager:	Dials the paging terminal and sends the box number preceded by the extension defined in the Class Code.
Voice Pager:	Dials the paging terminal and sends a voice message indicating that a new message has been received. If using a tone pager, this is the best option to select.
National Pager:	Dials a terminal access number (local or (800)) and then sends the access code (pager i.d.) followed by the box number using DTMF signalling.
Telephone:	Dials a telephone number and delivers a voice activated message that new messages exist. Provides the opportunity for entering the security code and retrieving the messages immediately without having to call back.

5. The phone number digit length is defined by the Class Code assigned to a box. If only local 7 digit number are authorized, the system will not dial a long distance number.

6. Sometimes different paging terminals have different timing "windows" to receive DTMF digits or a voice message. There is a paging delay timing parameter in the Class Code definition. It may be necessary to set up a different Class Code and vary the paging delay for a particular paging company if the "window" does not match the other terminals being called.

4.18 SCHEDULED DELIVERY

1. Refer to Chart 7 for illustrated prompt flow. Scheduled Delivery will call a phone number daily at an assigned time of day to deliver messages. It is often used as a "wake up call" feature. A modified version can be ordered that calls only if there are new messages.
2. Select option 4 ("other options") from the top menu, then select option 5 for Scheduled Delivery. The system will indicate if the feature is active or turned off.
3. Enter a phone number by pressing 1. If a number has been previously entered, it will be repeated. To enter a new number, press 1 followed by the * key which terminates the dialing string. The system will repeat the number for confirmation. Press 9 to exit and return to the previous menu.
4. Next enter the time you want the system to call you. The time must be entered as four digits. For example, to enter 7:30 am, enter *0730*. The system will ask you whether it is a.m. or p.m.
5. You will need to toggle the active/turned off switch by pressing 2 to the active position before the feature will work.

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VI. BULLETIN BOARD

6.0 INTRODUCTION:

A Bulletin Board box allows a caller to access multiple categories of information by stepping through organized "trees" or categories of bulletins. At any point within the structure a caller can be given the option of leaving a message.

6.1 ADDING A BULLETIN BOARD BOX:

From the console or terminal, create a Class Code that defines the characteristics of a Bulletin Board box. At the top of the screen, choose for whatever number class code you define select Box Type "2" ("Bulletin Board System" or BBS) as the type of box definition. Once selected, all of the normal voice mail default values will be automatically filled in. The only field that has any effect on a BBS box is the "Greeting Length" parameter. To limit the length of the bulletins (in seconds) for a particular class code you can set the greeting length. The other regular Voice Mailbox parameters will have no effect on a Bulletin Board box even if you change them. Save the Class Code definition and exit.

The System Administrator is the only one who can change the passcode for a BBS box, and so must set the passcode at the time the box is added if it is to be different than the system default security code (strongly recommended).

From the terminal or from the telephone, using the Supervisor's Box code, you can now Add a Box and assign the Class Code number previously defined as a Bulletin Board. All boxes assigned to this class code will have the characteristics of a Bulletin Board box.

6.2 CREATING THE BULLETINS:

After adding a box with the class code defined as a Bulletin Board, simply call the box and listen to an introductory tutorial. Callers will hear the tutorial until it is replaced by a new introductory bulletin. When instructed, press zero and enter the assigned security code. The Main Introductory Bulletin is the first thing callers hear when calling the box and usually the caller is instructed to press particular keys to receive different categories of information (or "bulletins").

Before recording the bulletins, it is important that you plan in advance the structure of your bulletin "tree". The Introductory Bulletin might begin with instructions such as "Welcome to C & A Clothiers. For information about our store hours, press 1. For information about this week's specials, press 2."

According to the options specified in the introductory bulletin, further information bulletins should be created with the proper categories of information. For the example above, bulletin 1 should have information regarding store hours. Bulletin 2 would inform callers about the sales for the week.

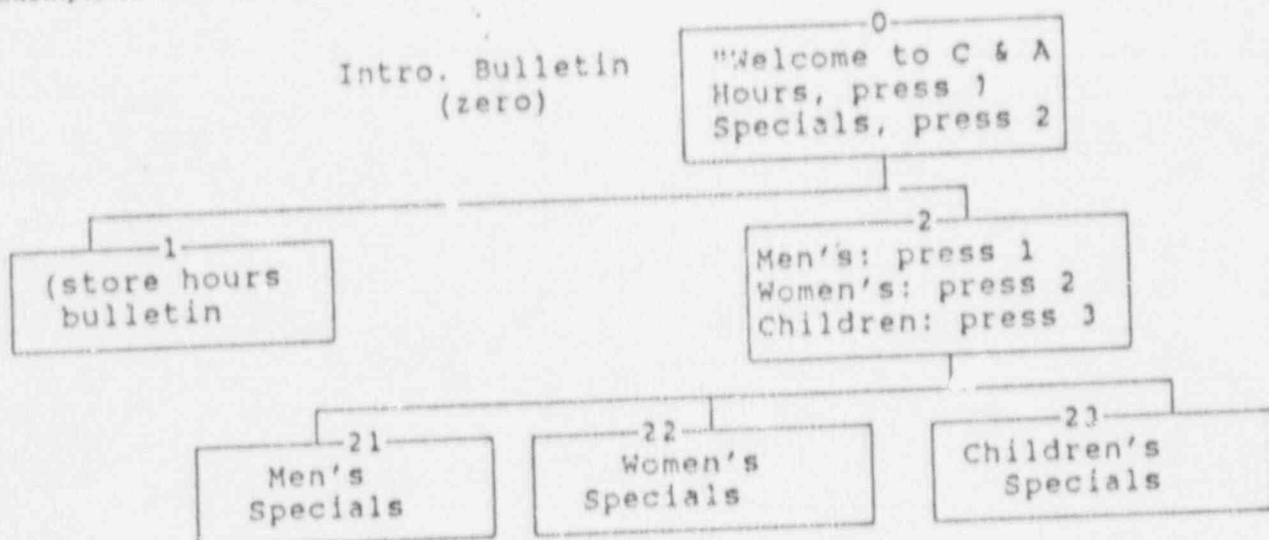
VSSI "Communicator"
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Any of these bulletins may instruct callers to press another key for more detailed information. For example, bulletin 2 ("Week's Specials") may prompt, "For special's on Men's clothing, press 1. For women's clothing, press 2. For children's clothing, press 3." This leads to bulletins 21, 22, and 23, where the first digit of the bulletin number is the first tone button pressed, and the second digit is the second tone button pressed.

Bulletins may be created in this manner for up to eight (8) levels, so that the bulletin numbers may range from 1, 2, 3, 4, 5, 6, 7, and 8 through 11111111, 11111112, ..., 88888888. The nine (9) key is reserved for an escape or exit key. Callers can be instructed to press 9 to return to the previous level in the tree. Zero (0) is reserved to enter a security code and perform the recording functions.

This can be illustrated as a "tree" structure, with the introductory bulletin at the top. For the example given above, the structure would be:

Example of Tree Structure:



6.0

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6.3 LEAVING A MESSAGE OPTION:

From any bulletin within the tree (except the main introductory bulletin), you can allow the caller to leave a message in your or anyone else's regular voice mail box. The system uses the "send a message to another user" routine to deposit messages wherever you wish. Before recording each bulletin, you will be asked if the caller should be able to leave a message, and if so, into what mailbox should the message be deposited. When you press 1, you will be instructed to enter the regular voice mail box number to which messages left by those calling the bulletin board will be sent or deposited. When you choose this option, you cannot add any more levels or branches beyond a bulletin that terminates with the caller having the option of leaving a voice message. This function terminates a branch within the tree. You can, however, set up multiple bulletins within the tree that each terminate with the caller having the option of leaving a message and programming the bulletin to deposit the message in any regular voice mail box you wish.

For example, if you want to allow emergency messages to be left for you in a voice mail box that is programmed to call you at home or call your pager (Message Notification is activated), then the preceding menu bulletin might say, "To leave an emergency message, press 3". The recording for bulletin 3 would say something like, "At the tone indicate the nature of your problem and I will be electronically notified as soon as you hang up." After the caller has completed his message, he will be returned to the top of the tree (the main introductory bulletin) where he can access other bulletins or hang up.

6.4 RECORDING BULLETINS:

To record the bulletins, call the bulletin box and press the zero (0) key when instructed. The security code must then be entered. Once verified, you will be asked to:

"Enter the number of the bulletin you wish to record. To record the main introductory bulletin, press zero".

Enter the number of the bulletin you wish to edit or record. You should enter all digits that define the bulletin level. For example, to change the "Men's Specials" as illustrated in 8.3 above, you would enter "21".

After entering the bulletin number, you will hear:

"To deposit a caller's message in a mailbox, press 1. Otherwise, press 9."

If you want a particular bulletin to be linked to a regular voice mail box so that callers can deposit messages, you would press 1 and follow the instructions for entering the mailbox number to which messages will be forwarded. To record a bulletin and allow for continued branching within your tree, you should press 9. After pressing nine you will hear:

"To listen to selected bulletin, press 1
 To record selected bulletin, press 2
 To erase selected bulletin, press 3
 To exit, press 9"

Press 2 to begin recording the introductory bulletin and press any key when finished. Be careful not to leave any "dead air" before or after your bulletin. After completing the recording, you will be able to edit the recording and when finished, press 9 to exit to the previous level of the tree. You can then select the next bulletin to be recorded.

Begin by recording the bulletins for level one of your tree (single digit bulletins). When all bulletins on level one of the tree are recorded (one up to eight maximum), you can then record level two for each of the bulletins. When asked to select a bulletin to record press the two digits corresponding to the desired bulletin. In the clothing example above, to record the "Men's Specials", you would enter "21".

If you haven't already done so, you should sketch your "tree" and number each bulletin within the structure. It is not necessary to link the bulletins if you don't want to. For example, if callers are referring to a printed directory (i.e. a "Talking Yellow Pages") when they call, you may wish the introductory prompt to simply say "Please enter a four digit advertisers code or press 8888 for more information." Bulletin can be defined ranging from 1111 to 8888. In this case all of the bulletins in your tree would exist only on level four.

After recording your bulletin board, you may change or re-record any of the bulletins by calling the box and pressing zero during the main introductory bulletin. If you press zero during any of the bulletins within your tree, you will be prompted to enter the passcode and the program will ask you to enter the bulletin number. After entering the security code, you can then enter the number of the appropriate bulletin number anywhere within the tree. Obviously the only way to keep track of the bulletin numbers is to identify your bulletins within your tree diagram, like those illustrated, or categorize and list the bulletin numbers so that you can easily reference them.

When a caller selects a bulletin board mailbox (or enters one directly from a DID trunk), he will hear the introductory bulletin. If he fails to select another bulletin, the introduction will repeat. If the 9 key is pressed during the introductory bulletin, the system will thank him for calling and hang up. If the 9 key is pressed anywhere else in the tree, the previous bulletin within that branch will play. The 9 key functions as a "backup one bulletin" or escape key. If a caller enters an incorrect or undefined bulletin, they will be told that "That is an invalid key."

UPS Requirement

The system proposed utilizes an Uninterruptible power supply (UPS battery backup) to protect the system from electrical failure. The UPS is 450 watt capacity.

Hardware and Software upgrade

The VSSI Communicator is modular in design allowing for ease in system expansion. Port growth is simply a function of plug in cards per 4 ports with appropriate software loaded either via modem from VSSI or off floppy diskette. VSSI will provide the NRC with current software releases as they are made available.

VSSI will further notify the NRC of any system enhancements that the NRC may wish to incorporate into the system at a nominal charge.

BEST AND FINAL OFFER RESPONSE FOR
PROPOSAL NO. RS-TRM-89-148
"ACQUISITION OF A VOICE MAIL SYSTEM"
TO THE NRC FROM VSSI

1990 APR -3 PM 3:19

PART ONE "ANSWERS TO QUESTIONS" -JANUARY 30, 1990.

BUSINESS/COST

1. SECTION F.2: GOVERNMENT'S DELIVERY IS PROPOSED DELIVERY SCHEDULE.
2. VSSI PROVIDES A 2 YEAR WARRANTY- ACTUAL WARRANTY CHARGE PERIOD BEGINS AT THE BEGINNING OF THE THIRD YEAR.
3. N/C MEANS "NO COST".
4. ANNUAL MAINTENANCE FIGURE IS \$ 8,068. ALL MAINTENANCE RATES SHOULD BE ANNUAL.
5. THERE IS NO HOURLY/MONTHLY MAINTENANCE CHARGE- THE ANNUAL CHARGE IS INCLUSIVE.

TECHNICAL:

1. ALL NECESSARY ANCILLARY EQUIPMENT IS PROVIDED. MEMORY BACK-UP IS PROVIDED IN THE FORM OF HARD DISK REDUNDANCY.
2. THIS IS AN OPTION OF SYSTEM OPERATION AND WILL BE CONFIGURED AT THE DIRECTION OF NRC MANASEMENT. IT IS ALTERABLE BY THE SYSTEM ADMINISTRATOR.
3. THE NUMBER OF MESSAGES IS A FUNCTION OF MESSAGE LENGTH AND THE TOTAL NUMBER OF HOURS OF STORAGE. OUR CLASS OF SERVICE FUNCTION WAS DESIGNED TO PROVIDE A NUMBER OF PRE-DEFINED USER TEMPLATES. EACH OF THESE USER TEMPLATES MAY CONTAIN A DIFFERENT FEATURE MIX AND TIME VARIABLES.
4. VSSI WILL PROVIDE TRAINING TO TWO (2) PERSONS PRIOR TO INSTALLATION AND ALLOW FOR TRAINING DURING/POST INSTALLATION INCLUDING ADMINISTRATION AND USER PERSONNEL.
5. THERE IS NO DIAGRAM REFERENCED IN THE VSSI COMMUNICATOR SERIES ENVIRONMENTAL SPECIFICATIONS.

PART TWO RESPONSE TO REQUEST OF MARCH 21, 1990.

BUSINESS/COST

1. 1,000 USER SYSTEM PRICING:

ONE(1) COMMUNICATOR SERIES 2000 VOICE PROCESSING SYSTEM
EQUIPPED AS FOLLOWS:

QUANTITY	DESCRIPTION
40	VOICE LINE PORTS
100	HOURS OF MESSAGE STORAGE
100	HOURS OF REDUNDANT MESSAGE STORAGE
1	SYSTEM MONITOR
1	SYSTEM KEYBOARD
2	VOICE PROCESSING NODES
1	SYSTEM ADMINISTRATION NODE
1	9600 BAUD MODEM
1	SYSTEM PRINTER
1	GENERIC 4.6 VSSI VOICE PROCESSING SOFTWARE (INCLUDES DIRECTORY, VOICE MESSAGING AND AUTO-ATTEND SOFTWARE)
1	PRE INSTALLATION TRAINING PACKAGE
1	INSTALLATION AND SITE TRAINING PACKAGE
1	LOT CABLES AND WIRING
1	LOT DOCUMENTATION AND MANUALS

TOTAL SYSTEM PRICE TO NRC \$

INSTALLATION

ANNUAL MAINTENANCE CONTRACT

Please note: The system proposed above for 1,000 users is based on the specifications set forth in item C.2.I set forth in the RFP. The configuration of the system proposed above contains the minimum number of ports and storage required to meet the specifications. However, these specifications are not representative of the average voice mail user. Long message lengths and retention times have a significant impact on trunks and storage required. Therefore, we have also provided an alternative configuration and proposal based on the typical needs of 1,000 users. VSSI's goal is to serve the NRC regardless of which configuration is chosen.

1B. 1,000 USER SYSTEM (ALTERNATE PROPOSAL)

ONE(1) COMMUNICATOR SERIES 2000 VOICE PROCESSING SYSTEM EQUIPPED AS FOLLOWS:

QUANTITY	DESCRIPTION
24	VOICE LINE PORTS
40	HOURS OF MESSAGE STORAGE
40	HOURS OF REDUNDANT MESSAGE STORAGE
1	SYSTEM MONITOR
1	SYSTEM KEYBOARD
2	VOICE PROCESSING NODES
1	SYSTEM ADMINISTRATION NODE
1	9600 BAUD MODEM
1	SYSTEM PRINTER
1	GENERIC 4.6 VSSI VOICE PROCESSING SOFTWARE (INCLUDES DIRECTORY, VOICE MESSAGING AND AUTO-ATTEND SOFTWARE)
1	PRE INSTALLATION TRAINING PACKAGE
1	INSTALLATION AND SITE TRAINING PACKAGE
1	LOT CABLES AND WIRING
1	LOT DOCUMENTATION AND MANUALS

TOTAL SYSTEM PRICE TO NRC \$

INSTALLATION

ANNUAL MAINTENANCE CONTRACT

1C. 3,000 USER SYSTEM PRICING:

CNE(L) COMMUNICATOR SERIES 2000 VOICE PROCESSING SYSTEM
 EQUIPPED AS FOL'OWS:

- 92 VOICE LINE PORTS
- 240 HOURS OF MESSAGE STORAGE
- 240 HOURS OF REDUNDANT MESSAGE STORAGE
- 1 SYSTEM MONITOR
- 1 SYSTEM KEYBOARD
- 4 VOICE PROCESSING NODES
- 1 SYSTEM ADMINISTRATION NODE
- 1 9600 BAUD MODEM
- 1 SYSTEM PRINTER
- 1 GENERIC 4.6 VSSI VOICE PROCESSING
 SOFTWARE
 (INCLUDES DIRECTORY, VOICE MESSAGING AND
 AUTO-ATTEND SOFTWARE)
- 1 PRE-INSTALLATION TRAINING PACKAGE
- 1 INSTALLATION AND SITE TRAINING PACKAGE
- 1 LOT CABLES AND WIRING
- 1 LOT DOCUMENTATION AND MANUALS

TOTAL SYSTEM PRICE TO NRC \$

INSTALLATION

ANNUAL MAINTENANCE CONTRACT

Please note: The system proposed above for 3,000 users is based on the specifications set forth in item C.2.1 set forth in the RFP. The configuration of the system proposed above contains the minimum number of ports and storage required to meet the specifications. However, these specifications are not representative of the average voice mail user. Long message lengths and retention times have a significant impact on trunks and storage required. Therefore, we have also provided an alternative configuration and proposal based on the typical needs of 3,000 users. VSSI's goal is to serve the NRC regardless of which configuration is chosen.

1D. 3,000 USER SYSTEM PRICING (ALTERNATE PROPOSAL):
 =====

ONE(1) COMMUNICATOR SERIES 2000 VOICE PROCESSING SYSTEM
 EQUIPPED AS FOLLOWS:

- 48 VOICE LINE PORTS
- 100 HOURS OF MESSAGE STORAGE
- 100 HOURS OF REDUNDANT MESSAGE STORAGE
- 1 SYSTEM MONITOR
- 1 SYSTEM KEYBOARD
- 4 VOICE PROCESSING NODES
- 1 SYSTEM ADMINISTRATION NODE
- 1 9600 BAUD MODEM
- 1 SYSTEM PRINTER
- 1 GENERIC 4.6 VSSI VOICE PROCESSING SOFTWARE
 (INCLUDES DIRECTORY, VOICE MESSAGING AND AUTO-ATTEND SOFTWARE)
- 1 PRE-INSTALLATION TRAINING PACKAGE
- 1 INSTALLATION AND SITE TRAINING PACKAGE
- 1 LOT CABLES AND WIRING
- 1 LOT DOCUMENTATION AND MANUALS

INSTALLATION

ANNUAL MAINTENANCE CONTRACT

- 2. NOTED AND UNDERSTOOD. THE VSSI INCLUDED NO CHARGE WARRANTY PERIOD IS FOR TWO (2) YEARS FROM DATE OF INSTALLATION.
- 3. NOTED AND AGREED.
- 4. NOTED AND UNDERSTOOD.
- 5. PAGE 67 AND 68 PROPOSAL MATERIALS:

L.17.A Implementation schedule -

- 10 days from award VSSI will provide all final listing of each telco requirement. Initial requirements are listed in the proposal.
- 87 days from award VSSI technical personnel will arrive and install cabling for the system.
- 90 days from award VSSI will install system.
- 120 days from award System acceptance

L.17.B. Marketing and User information. - SEE ATTACHMENT "A"

L.17.C. Service Agreement Information. - SEE ATTACHMENT "B"

L.17.D. Discussion in the event of a major outage. The "Communicator Series" proposed includes a UPS which will protect the system from power fluctuations or short outages caused by thunderstorms. The UPS will power the system for 15 minutes in the event of a long power outage. A larger UPS may be utilized to lengthen this period of time, if so desired.

L.17.L. Management Organization Information.

VSSI's manufacturing structure is as follows:

Director of
Sales Administration - receives sales orders,
generates and issues work
orders which are forwarded to
the Manufacturing Manager for
distribution.

Manufacturing Manager - Receives the initial work
order from the Sales
Department coordinates the
activity of the various
departments within the company
to manufacture components of
the system required.

Director of
Technical Services - This individual is responsible
for the coordination of
installation activities,
maintenance and repair.

All of these are positions within the corporation, and were
created to provide a consistently efficient means of processing
sales orders, shipping equipment, and maintaining it effectively.

Technical

1. Please explain how the date and time of message is accessed
and reported. (C.2.H.)

response: The date and time of a message is available on an "on-
demand" basis by the "8" button on the user's touch-
tone telephone at any time during or after message
playback.

2. Noted and accepted.

3. Noted and accepted.

a. What is your proposed basic hours of storage for the
1,000 user configuration and how many hours do you plan to
add to support 3,000 users?

The proposed basic number of hours of storage is 100
hours and an increase of 140 hours of storage is planned to
support 3,000 users with usage characteristics set forth in

b. What is your proposed basic number of ports for the 1,000 user configuration and how many ports are you proposing to meet the 3,000 user requirement?

The proposed basic number of ports for the 1,000 user configuration is 40 and an addition of 52 ports is proposed support 3,000 users with usage characteristics set forth in the original RFP.

4. Noted and accepted.

5. VSSI will provide training to two (2) persons prior to installation and allow for training during/post installation including administration and user personnel.

6. VSSI will provide training to NRC personnel according to the requirements set forth in item C.2.U. in the original RFP. This training shall consist of training on the system and its equipment and software programs to enable NRC personnel to maintain and trouble shoot the system, i.e., those minor changes that are required to edit messages, add and delete users, reset the system or perform other minor changes that can be done without maintenance assistance. Training aids in the form of printed users' guides and a video tape presentation showing basic user functions and procedures will be provided and become the property of the NRC.

7. 4.16.C. The maintenance procedure of shipping the failed part back for repair and return within 30 days has been modified for this proposal. VSSI will ship a replacement part counter to counter on the next available flight leaving Tulsa International Airport following notification by the NRC. The replacement part will be hand carried by a VSSI Technician if on-site Technical Support is required.

ATTACHMENT "A"
MARKETING AND USER INFORMATION

CORPORATE INTRODUCTION

Voice Systems and Services, Inc. (VSSI) is a telecommunications company which develops and markets a variety of products for the voice messaging industry. VSSI's sales, technical services, and manufacturing departments are quartered in an 28,000-square-foot company-owned facility in Cleveland, Oklahoma, a suburb of Tulsa.

Departments:

Sales: The sales departments' main objective is to assist it's distributors and dealers effectively market our products. We provide full sales support including: sales training, disk storage and port calculations, proposal assistance, and sales incentive programs.

Technical Services: VSSI is known for providing extensive technical support to its clients. We offer warranty and maintenance agreements with all of our products. We assist in the installation, and for larger systems, provide scheduled six and twelve month on-site visits by a technician. Additionally, our technical staff is always on call for advice and consultation.

Manufacturing: Our voice mail systems are manufactured and assembled in-house. Thus, we are able to assure our customers product quality as well as competitive pricing.

Voice Messaging Products:

VSSI has developed a reputation for designing and manufacturing large specialized systems for custom applications. Some of the largest voice mail systems in the world have been produced by VSSI. In addition to custom projects, VSSI offers customized systems for the corporate environment, trucking and service dispatch companies, the lodging and healthcare industry, as well as banking and financial institutions. Our company provides voicemail to cellular (car phone) customers in many of the nation's largest cities. At the request of a Fortune 500 company, we developed a specialized voice mail system that is used as an emergency warning device at a nuclear fuels facility. This same technology is being used for emergency notification in civil defense and many other applications. In-house and many other custom Voice Mail application packages are available to VSSI customers. VSSI has offices in several states and two foreign countries.

VSSI
VOICE MAIL SYSTEMS

One Technology Center
P.O. Box 1700

INTRODUCTION TO VOICE MAIL

The telephone is the primary communication tool in our society today. Telephone communications is an essential ingredient in our personal and business objectives. In recent years, we have all noticed improvements in the quality, speed, and efficiency of the telephone network. However, the telephone is far from being a perfect tool. In our telephone usage, we constantly experience telephone tag, undelivered or lost messages, and incorrect transactions. Only 50% of all business telephone calls are completed on the first attempt. The 70% of phone calls that do not reach the intended party slow the completion of our business and add to our long distance charges.

VSSI has created a tool that solves these problems, in fact, it almost makes the telephone perfect! We call it The "Communicator Series" voice mail system. Voice mail increases productivity by creating more efficient and accurate telephone communications. It also reduces long distance charges. Let us tell you more.

Voice mail combines the best features of both direct and indirect channels of communication. It forms an alternative channel which improves efficiency and productivity while eliminating telephone tag and other barriers to information flow. Voice mail processes both inbound and outbound telephone calls. Here is how it works:

Voice messages are recorded by digitizing the human voice onto a computer disk. The disk is divided into separate electronic mailboxes. Once a message is recorded it can be stored, retrieved or forwarded at the discretion of the boxholder. Voice mail is also known as "Voice Messaging, Voice Storage and Retrieval and Voice Store and Forwarding".

Voice mail has the ability to facilitate telephone communications between system users and outside callers as well as providing a secure and flexible information distribution network.

Is Voice mail the same as electronic mail? Not Really. It provides many of the same features, but voice messaging is considerably less expensive to initiate than electronic mail. As opposed to electronic mail, voice mail can be used anywhere. The only terminal required for Voice mail is a touch-tone telephone.

Can people do the same thing with telephone answering machines? Messages can be left on an answering machine and retrieved by the owner, but that's where the similarity ends. Voice mail systems are a shared resource. Instead of a single tape they use "hard disks" which can provide message services for hundreds or thousands of users from a centralized location. Another difference between voice mail and answering machines is that voice mail is interactive. Mailbox holders can use their telephone set to control a variety of functions such as: leaving, reviewing or editing a message; retrieving, adding to and transferring messages; sending messages to a predetermined group of people via a distribution list; or changing their personal greetings.

Productive
Sustained
Success



One Technology Center
P.O. Box 100

VOICE MAIL SOFTWARE RELEASE 4.42

STANDARD FEATURES:

- Up to 8 digit mailbox numbers
- Variable length security codes (up to 7 digits)
- Append or add to a previously recorded message
- Transfer a message with comments
- Message delivery with receipt
- Boxholder and system administrator assignable group messaging
- Multiple classes of service (providing numerous combinations of available features on a per subscriber basis)
- Message length variable by class code
- Greeting length variable by class code
- Name length variable by class code
- Up to six (6) default system greetings
- Remote terminal administration
- On-line system maintenance
- On-line system administration
- Enhanced phone administration: Add/delete boxes, assign/change class service codes, record default greetings, record/activate system broadcast messages, determine user passcodes, etc. from any touch tone phone
- Pause, Fast-forward, and Rewind on message replay
- Sequential out-dial of up to 4 telephone or pager numbers per user
- Built-in Bulletin Board with message and out-dial capability

OPTIONAL: (extra charge for hardware modifications)

- Full redundancy options, including: Messages, system, greetings, and names.
- Multilingual prompts on a per subscriber basis
- Direct DS-1 digital interface
- Large system configurations with remote administration -- up to 512 ports

VSSI

One Technology Center

PO Box 1000

Columbus, OH 43260

(614) 487-1000

AUTOMATED ATTENDANT

VSSI Automated Attendant handles incoming calls that normally require an operator to complete. When integrated with VSSI Voice Mail, callers can leave a message for an unanswered or busy extension. Callers with rotary phones are automatically transferred to the operator, who can then transfer them to voice mail. The system is usually installed behind a PBX that allows calls to be rerouted to the desired extension.

Friendly voice prompts guide the caller through the various options. Usually the caller is instructed to enter the extension number of the desired party or to dial *0* or wait for the Operator. When transferred to the extension, call progress is used to monitor the success of the connection. If the extension is busy or does not answer, the caller hears:

"Extension xxx is busy (does not answer). To leave a message, press one. Press 2 to enter another extension or press zero for the operator."

Features:

- Voice Prompts for each function. No training required.
- User may override prompts for quick response
- Personal greeting in users voice
- Message time and date stamping
- Automatic housekeeping to purge old messages
- Automatic outdialing provides notification of waiting messages
- Can be integrated with most PBX's and any Key system that has switch/hook flash and transfer function.
- Can light the message waiting lamp on most phone systems using DTMF or RS-232 Signaling

The VSSI Automated Attendant is available as a subsystem to the Info Center software, or integrated with Voice Mail.



One Technology Center
 P.O. Box 700
 Cleveland, OH 44120

INFORMATION CENTER/BULLETIN BOARD

The VSSI Communicator "Information Center" allows callers to access a large body of pre-recorded information. The caller starts by placing a phone call to the information center system. Then, by pressing buttons on any touch-tone phone, the caller accesses information categories by entering the appropriate digits. There are a variety of uses for an information center.

Community residents can access multiple categories of information by calling one central "hot-line" number. The system may answer with "Welcome to ABC Information Center. For community events, press 1. For school and sports activities, press 2," ...etc. Literally hundreds of categories of detailed information can be easily stored, updated and retrieved. Police departments and other government agencies can provide answers to the most common public inquiries without tying up the switchboard. Recorded messages can easily be changed from any touch tone phone after entering a security passcode. Caller input can be as simple as one digit categories (nine categories per level) or as complex as 4 or more digits (10,000 categories).

The bulletin board can be configured as an integral part of voice mail and callers can deposit messages from anywhere in the "tree" to any voice mail box in the system. Callers can also transfer to a live operator or be routed and connected to an outside phone number. The system is useful for any application where people desire quick access to different categories of information. Phone directories now include "talking ads" and other users are discovering that the telephone can serve as a viable advertising medium for couponing and linking buyers with sellers.

When integrated with the VSSI "QuickCall" system, the information center provides a natural source of information for updates and status reports regarding emergency conditions, power outages, etc. When integrated with voice mail, callers can leave messages to report power outages or any other problems. The system can then automatically notify the appropriate utility dispatcher when messages are deposited.

The most important fact about the VSSI Information Center is that people can tap specific categories of information quickly and efficiently 24 hours a day, seven days a week, without management incurring extra personnel costs normally associated with providing such a service.

Optional Special features include:

- Messages can be linked together and configured to play sequentially, or on a rotational schedule
- Callers can leave a message, or automatically complete a call to another number using VSSI's "Direct Connect" feature
- Flexible "tree" structure allows callers to access messages with single or multiple digit entries



AOS MESSAGE DELIVERY SYSTEM

VSSI Message Delivery System for AOS services is designed to increase call completion ratios which are the heart of AOS revenues. Many business callers do not have the time to redial a number that was busy or not completed because no one answered. Time zones often make it difficult to reach people who have not arrived yet at the office. This technology combines the concept of auto-redial with the capability of also automatically delivering a message to the called party in the callers own voice.

More and more business people are using voice mail and have become familiar with its benefits. Your offering of these enhanced services will no doubt contribute to your revenue and profits.

SCENARIO

A Businessman at the airport attempts to call home to let his wife know about a major change in his plane's arrival time. The home number is "busy" (or no one answers). Meanwhile, the final gate call has just been announced for his flight. Upon detecting a busy (or ring-no-answer after 5 rings), the call will be transferred to the Message Delivery System. The system receives the called number and credit card billing number then prompts caller to leave a message for delivery.

"I'll be helping you record a message which will be delivered to the number you just dialed. This automated service will continue to redial the number until someone answers and receives your message. Begin recording at the tone. When finished, press any key."

The business traveler can then record and edit a detailed personal message. After hanging up the system will continue to redial his home number every 15 minutes until someone answers. When someone answers, the system plays, "Please hold for an important message," and will then deliver the message previously recorded. The announcement and message will play two times or until the called party disconnects, whichever comes first. The caller can board the plane knowing that the message will be delivered while in the air and for only the cost of his/her AOS call.

The result... the message was delivered... our Businessman was picked up at the airport and you, the AOS provider billed a call that would have been lost.

Imagine a similar scenario, and put the callers in a hotel, at a payphone, at a convention or wherever and you have a caller that wants to have a message delivered to a party that can't be reached at the time the call was placed.

FEATURES

- Increases the number of completed long distance calls from pay telephones
- Caller enjoys auto-redial and auto-delivery of a personal message
- System parameters provide for adjustable redial frequency and interval time
- Increases revenues for AOS providers
- Increased customer satisfaction

VSSI
Voice Mail System

One Technology Center
P.O. Box 100
Cleveland, OH 44102
978-355-5511

LODGING AND HEALTH INDUSTRY

Hotels, hospitals and other lodging providers have discovered the benefits of timely and accurate message processing provided by VSSI voice mail. Messages are private and easy to retrieve by guests from a touchtone phone. Guests appreciate the extra personalized service while operators are relieved from the time consuming chore of trying to pass written messages to guests.

When integrated with a typical PBX, the attendant rings the guest's room and if no one answers after several rings, the call can be automatically transferred to the voice mailbox assigned to that room. The caller is then prompted to leave a message. When a guest returns, a message waiting light signals them to pick up their messages. By pressing the indicated key, they are prompted on how to retrieve their messages and are given the option of saving, deleting or replaying them. Messages are date and time stamped and can be automatically archived and saved for thirty days. As guests check-out, messages can be individually cleared or erased system-wide after a day or two.

A separate trunk can be configured so that guests can retrieve prerecorded information from VSSI's "Information Center Bulletin Board". Menu's, show times, promotional events, TV and Movie information... and any number of categories of information can be easily accessed when guests dial the appropriate extension. Messages can even be recorded in different languages if desired.

The benefits of voice mail can also be enjoyed internally by management and staff. Information can easily be exchanged and messages retrieved while minimizing "phone tag" and wasted calls. Outside suppliers and other businesses can be given access to the system to facilitate routine order taking and improve the transferring of business requests for information. Businesses often will pay to have announcements regarding their products or services recorded on the system, thus generating additional revenue. Management can also rent personal pagers to guests who can then be automatically notified by the system whenever a message is deposited into their voice mailbox. The cost of voice mail per occupied room per day is typically less than \$.04. The benefits far outweigh the costs and most systems pay for themselves in a matter of months.

In a hospital environment, patients can leave a confidential message for physicians without having to worry about a message being misinterpreted or lost. Each patient can be assigned a mailbox to which calls from friends and loved ones can be routed when they are not able to take the call personally. Voice mail provides a focal point for physicians and staff to leave and retrieve all of their messages. It helps busy people maximize their time by allowing them to respond to messages and requests when they are prepared to do so. The system can also be accessible from any touchtone phone, both inside or outside the hospital.

VSSI
Systems

One Technology Center
P.O. Box 712

SERVICE DISPATCH

The Service Dispatch software package offered by VSSI for service oriented companies provides a unique combination of customized prompts and visual display of message status. Dispatchers and field personnel communicate by exchanging instructions and reports that have been deposited in separate voice mailboxes. The two parties do not have to be on the line at the same time, thus eliminating waiting on hold. Peak traffic loads can be smoothed and harried dispatchers relieved. Until recently, standard voice mail, which offered service companies substantial telephone cost savings and improved dispatcher communications, had two serious drawbacks:

1. Dispatchers had to "call" the voice mail system frequently to check for new messages.
2. Dispatchers had no way of knowing whether or not field personnel had received their messages.

VSSI Service Dispatch voice mail systems solve both of these problems. Dispatch centers are provided video monitors which display the New Message status of ALL mailbox users. The dispatcher need only look up at a monitor to see a new message is waiting or to see if someone in the field has picked up their messages.

This feature has several other benefits:

- It reduces the number of calls to the system thereby increasing the system availability for voice messaging.
- It eliminates dispatcher time spent on unnecessary telephone calls.
- And it decreases response time for dispatchers to respond to field information requests.

VSSI software is ideal for trucking company dispatch and service company dispatch operations, and any similar application where people in the field need to communicate with dispatchers. Increases in productivity from 15% to 25% are not uncommon. Voice prompts can be customized to your firm's particular terminology which minimizes training time. Work orders and completion reports are easily transferred and visibly tracked. The system can also automatically activate personal pagers for field personnel, including the nationwide satellite pagers. VSSI can custom tailor a system to meet most requirements. Field personnel love it, dispatchers and supervisors find it indispensable.

"QUICKCALL"

IE NOTIFICATION SYSTEM

notification system can simultaneously and automatically dial (distance) and deliver a voice activated recorded message of any

10 seconds for someone to answer the phone and another 10 seconds for the system to dial the next number. The system has the capability of notifying approximately 1,000 to 4,000 people per hour.

designed to call faster or call much larger groups of people by using multiple phone lines (ports) used for outdialing. The only limitation is the telephone lines to handle the volume of calls.

Messages may be created immediately prior to broadcasting as they can be created, edited or changed from any mobile or touch-tone

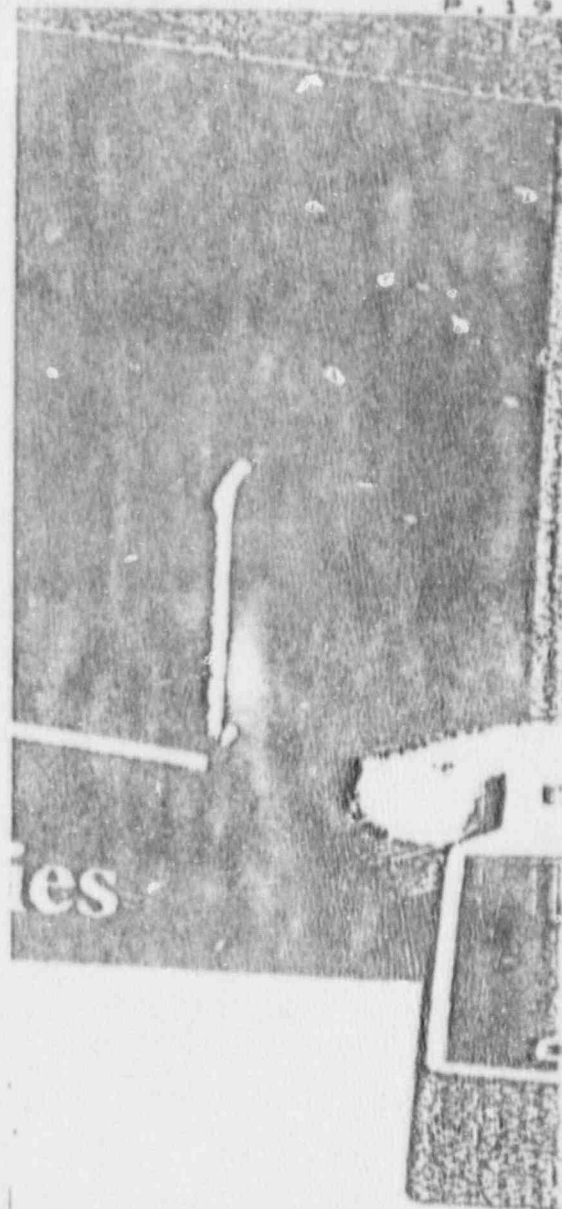
Messages can be sent to separately defined groups. For example, particular members of a Fire Dept. members, before a general alert is broadcast to all members. This requires two decisions: 1) what to say and 2) who to call. Up to 100 phone numbers can be specified. Within each list of numbers, 99 levels of priority can be selected to select a specific list of phone numbers to call and choose the order.

When called, callers are instructed to press a touch tone key indicating the appropriate response (i.e., yes or no) is printed as soon as the caller presses the key. Callers can leave a voice message which can then be retrieved by

Using other personnel warning devices such as personal pagers, fax machines or a remote printer.

A log of the status of each call is created for the system operator. The log includes: 1) the time the call was placed, 2) the name of the person called, 3) the phone number called, 4) the time the call was answered. If the line was busy or no one answered, the system will wait for a set time and then redial the number until someone answers.

For emergency calls (which is most of the time), "QuickCall", can also be used. People can call a central "hot line" number and can choose from a list of pre-recorded messages for emergencies, school closings, or community events, etc.



QUALITY:

Proven performance on some of the busiest Central and South American companies around the world prove our system has passed some of the most intensive trials in the industry. Many of our customers have ordered voice programs designed for revenue applications. When you are involved, you can bet they demand high reliability.

24 HOUR SERVICE:

If you need help with training or have a question about installation, our 24 hour emergency hot-line is available. We offer direct manufacturer support when you need it.

1. START SMALL:

Start with a smaller, less expensive system that can handle up to 100 users... plenty of capacity for most applications. The system is easily expandable to 18 ports. Get your attention.

One Technology Center

P.O. Box 700

Cleveland, OK 74020

(918) 358-5801

One Technology Center

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Cleveland, OK 74020

Communicator Series

Voice Processing THAT GROWS WITH YOU!

Protect your original investment with a voice processing system that is designed to grow in both size and features... as you grow. This full-featured platform can start small and grow to hundreds of ports, without compromising your original investment.

FULL FEATURED PLATFORM:

VSSI's software products include some of the most sophisticated, yet simple to use, applications in the industry. Our standard voice mail package includes fully integrated auto attendant and sophisticated information processing enhancements. With an unlimited number of classes of service, features can be customized to meet individual user specifications.

Other applications include Call Routing, Polling, AudioTax, Interactive Voice Processing, Voice Recognition, FAX Integration, and more. We also have a solid reputation for providing reliable Emergency Calling Systems for municipalities and retailers. And don't forget, DS-1 signaling and networking are an integral part of our architecture... not an after-thought.

PROVEN QUALITY:

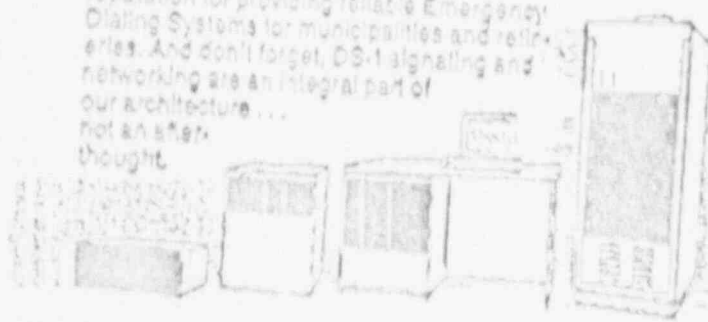
Years of reliable performance on some of the busiest Central Offices and companies around the world prove our point. We've passed some of the most intensive trials in the country. Most of our customers have ordered voice processing systems designed for revenue applications. When there's money involved, you can bet they demand high performance/reliability.

UNMATCHED SERVICE:

Whether you need help with training or have a question about installation, our 24 hour emergency hot-line gives you direct manufacturer support when you need assistance.

THINK BIG, START SMALL:

We also offer a smaller, less expensive system that can serve up to a thousand users... plenty of capacity for most applications. The system is easily expandable to 16 ports, and is priced to get your attention.



(918) 359-5001
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P.O. Box 700
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COMMUNICATOR

Communicator Series

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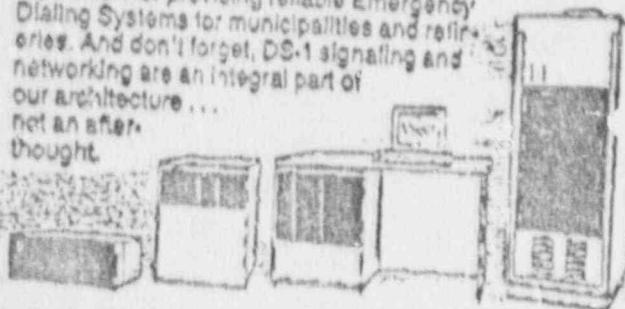
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(918) 358-5801
One Technology Center
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VSSI Offers Flexible Voice Applications

On Jan. 4, 1986, a 14-ton container filled with uranium hexafluoride ruptured, killing one worker at the Gore, Okla., Sequoyah Fuels Corp.'s nuclear fuels plant and forcing evacuation of residents near the facility.

Responding to this tragedy, Kerr-McGee Corp., Sequoyah Fuels' parent company, enlisted the help of Oklahoma-based Voice Systems & Services, Inc., to develop a telephone outdialing system to warn officials and residents of impending emergencies. VSSI met the challenge by creating a telephone notification system that would overcome the difficulty of multiple telcos serving the rural plant. The system, QuickCall, is capable of making nearly 1,000 calls in 10 to 15 minutes and delivering a recorded message.

While QuickCall is an important service, it is only one application of VSSI's Communicator Series of voice products, which have evolved from expensive custom applications of 96 to 128 ports to smaller turn-key systems, while retaining the functionality of the multipurpose platform.

Formed in 1983 by its president, Felar Zuyus, VSSI began as a consulting service for voice messaging and soon after became a distributor of voice products. During this time Zuyus saw the need for customization of voice services, and VSSI began to manufacture systems using proprietary designs and software in 1986. By late 1987, the company added full-time programmers to its staff and increased its capability to develop software products in an effort to meet the needs of this rapidly changing market.

As a custom designer of voice mail equipment, VSSI has designed and installed some of the larger systems currently in operation, and have become recognized for providing large central office-based systems.

Last year was a period of development and transition for VSSI. Additional staff members were hired to create custom software for voice mail and special-

ized applications under VSSI copyright.

To date, the company's Communicator Series voice processing package features several copyrighted software applications—Voice Mail 4.0, QuickCall, Info Center and Message Delivery—for implementation simultaneously or in any combination. Facsimile store and forward and electronic mail integration are some of the most recent enhancements.

Emphasis on an integrated platform voice processing system is by design, Zuyus notes. "Voice processing is an evolving market. To cast yourself into one concrete pillar might allow you to survive well for a year or two, but it is better to have the ability to grow with the industry," he said. To ensure its growth, in 1988, the company invested approximately 15 percent of its earnings into research and development. Its efforts have been rewarded as the company's systems have gained a notable reception by such companies as SNET Cellular.

"Purchasers of voice processing equipment are increasingly demanding larger, more flexible hardware platforms that allow them to encase from all the possible applications that are now available with this technology," Zuyus notes.

In the second half of 1989, VSSI strengthened its commitment to the market through an aggressive expansion program, which is projected to double the company's size and returns, Zuyus says. As part of the expansion, the company has moved into a new, larger facility, which will accommodate growing needs in all departments. In addition, the company recently has completed distribution agreements with firms in Canada and Australia.

VSSI's expansion domestically and internationally mirrors growth in the market as a whole—service trials and offerings by the Regional Bell Operating Companies and Independent telcos abound—and indicate the company's commitment to furthering the acceptance and applications of voice technology.

ADVERTISEMENT

April 3, 1990

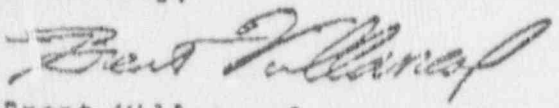
Mr. Elois J. Wiggins
Contracting Officer
U.S. Nuclear Regulatory Commission
Division of Contracts and
Property Management
Contract Negotiation Branch No. 1
Washington, D.C. 20555

Dear Mr. Wiggins,

VSSI is pleased to submit our response to your invitation for our Best and Final Offer for Proposal No. RS-TRM-89-148 titled "Acquisition of a Voice Mail System". Thank you for the opportunity to serve the United States Nuclear Regulatory Commission.

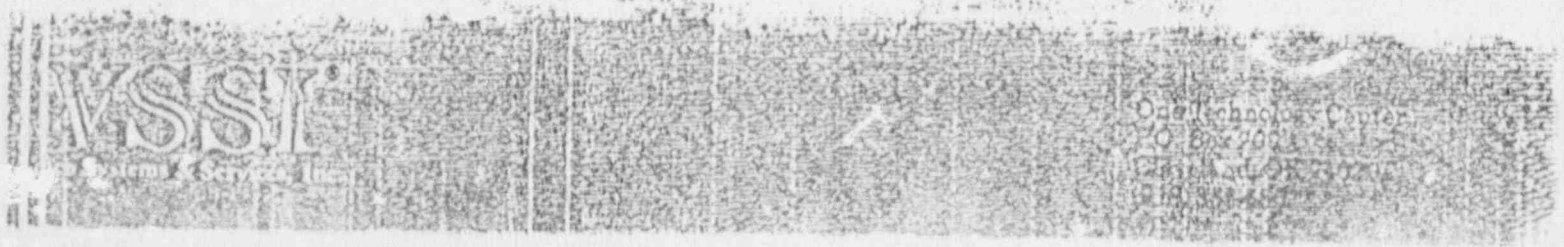
Please don't hesitate to call me at (918) 358-5901, ext. 105 if you have any questions or require additional information.

Sincerely,



Brent Villarreal
Director of Sales Administration

BV/cr



VSSI "Communicator"
(c) Copyright 1989

USER TRAINING

Things You Should Know:

- a. You can operate your Voice Mail Box from any Touch-Tone (R) telephone keypad, anywhere in the world.
- b. Recorded message "prompts" will instruct you at each step.
- c. You don't have to listen to the whole message prompts once you know the commands to do what you want to do... just immediately press the appropriate keys and interrupt the recorded message prompts.
- d. If you're not sure what to do, try pressing [9] on your keypad. This key will usually take you back to the previous menu.
- e. If you forget your security code or have difficulty using your User Box, call your System Administrator for help.

5.2 MASTERING YOUR MAILBOX

Here are the steps:

1. First, your mailbox must have been activated and assigned a class of service by the system administrator. Before calling the voice mail system, you should know two things:
 - a. Your mailbox number
 - b. Your temporary security code
2. Dial the phone number or extension number to access the system.
3. When the system answers, enter you mailbox number using a touch tone phone. If you box is accessed using DID lines, you will bypass this step and will hear the tutorial or greeting assigned to your box.
4. A tutorial will instruct you on pressing 0 and entering the temporary security code. This tutorial will play until replaced by your own personal greeting.
5. After entering your temporary security code, the system will tell you if you have any messages and then will instruct you to press certain keys. Press (4) to "change personal options".
6. You should create your own personal security code to keep your messages private and record your personal greeting which will replace the tutorial. You should also record your name to I.D. your box. Follow the prompts for each function. If you get stuck, try pressing (9) to escape or go back to the previous function. The security code must contain the same number of digits at the temporary code assigned.
7. Once your greeting is recorded, callers who enter your box-number or who dial your DID number will hear your greeting and can leave messages.
8. To retrieve your messages, call your box and press 0 before the recording tone, anytime during your greeting. Enter your personal security code and follow the prompts to retrieve your messages.
9. Depending on the class of service assigned to your box, there are many other features and possibilities for improving your communication skills. To deposit messages in another user's box, you don't have to call each box. It is best to send a message to another user from within your box. Once the message is recorded, you can send a copy to another user, or send with confirmation of receipt.

VSSI "Comunicator"
(c) Copyright 1989

USER TRAINING

10. When messages are sent from one box to another, the recipient can choose to reply to the message without having to know the box number of the sender.

5.21 RECORDING A MESSAGE:

Chart 1 illustrates the prompt flow for leaving a message for a voicemail user. The following steps are illustrated:

1. Call the system and enter the mailbox number (not necessary for DID boxes)
2. The personal greeting for the box User will play. You can press 9 to skip the greeting if you want to begin recording immediately.
3. After the greeting plays the system will instruct the caller to begin recording at the tone followed by the recording tone. If the "record" prompt is disabled in the Class Code definition by the System Administrator the recording tone will sound immediately after the greeting.
4. After recording the caller can press any digit or stop speaking for a few seconds and will hear the "message edit" menu where he can listen to his recording, erase and rerecord, delete, or continue recording where he left off. If the message is acceptable, pressing 9 will play a "thank you for calling" message and the system will hang up.
5. If activated, a caller can choose to mark a message "urgent". When marked urgent, the system will call the phone number or pager number so designated by the box owner to notify of a message waiting.

USER TRAINING

USER TRAINING

... a message for a voicemail user. The

... number (not necessary for DID boxes)

... will play. You can press 9 to skip the
... immediately.

I instruct the caller to begin recording
one. If the "record" prompt is disabled
Item Administrator the recording tone
ing.

any digit or stop speaking for a few
dit" menu where he can listen to his
r continue recording where he left off.
9 will play a "thank you for calling"

ark a message "urgent". When marked
number or pager number so designated
ge waiting.

AGES:

ges from a User Box you must first access the box by
number after dialing the system (or dial the box number

ting, press zero (0) before the recording tone, and enter
when prompted. If you wait until after the tone to press
n the message recording mode and will not be able to do
save a message.

ss zero anytime during the Greeting, you will hear:

r or "no") new/saved/urgent messages.

ew messages, Press 1

aved messages, Press 2

to another user, Press 3

l options, Press 4

rgent messages, Press 6

hang-up."

essages, press "1" to hear the first message. While the
you can do the following:

ck 5 seconds Press 4

Press 5

sp ahead 5 seconds Press 6

5. After the message plays, or anytime while the message is playing, you can choose from the following options:

- To save this message Press 1
- To Transfer this message to another box Press 2
- To erase this message Press 3
- To reply to this message Press 4
- To hear this message again Press 7
- For the time message was received Press 8
- To quit (or skip to next message) Press 9

6. When you save or erase a message, the system confirms your choice with "message saved" or "message erased". Pressing 7 will replay the previous message and pressing 8 will give you the exact time and date of the message. To transfer the message to another User's box, you can press 2 and follow the instructions.

If you save any messages, they will remain available until their retention period has expired. This retention period can be defined with "System Administration".

Immediately after saving or deleting a message, the next message will play until all messages have been retrieved. You can then push 9 to exit the system. Note: pressing 9 while a message is playing will skip the current message and begin playing the next message in line.

Sometimes a caller will hang up and leave a "dead air" message. These should be deleted by pushing "3" like any other unwanted message. The system will not recognize messages that are less than 3 seconds long (or whatever is defined in the System Parameters).

5.25 RECORD NAME

1. Refer to Chart 4 for prompt flow illustration. The "name" is usually the name of the owner or Fax User. The purpose is to identify the box by name rather than by number. When a box is referenced by the system during message notification, transferring messages, etc., the recorded name is played rather than the box number.
2. Select option 4 from the top menu, "other options", and then press 2 to record your name as prompted.
3. The system will play the currently recorded name or will tell you if no name has been recorded. You can then Press 2 to record, Press 3 to erase, or Press 4 to listen.
4. When finished, press 9 to exit. If no name is recorded, the system will reference the box by playing the box number itself.

5.26 RECORD GREETING:

1. Chart 5 illustrates how to record a Greeting. The Greeting is the message callers hear after entering a box number or when the system answers using DID service.
2. Select option 4 from the top menu, "To change personal options, press 4". Then select option 3 to change the greeting.
3. The system will play the current greeting or indicate that no greeting currently exists. If no greeting exists, the callers will hear the tutorial or one of the default greetings assigned by the class code, until it is replaced by a new greeting.
4. Press 2 to record the greeting and then press any key when finished. You can press 4 to listen to what you recorded. To rerecord, just press 2 again and then press 9 to exit when satisfied. If you erase the greeting, the tutorial or default greeting will reappear as the greeting.

recording just made.

3) While listening to the recording, the individual may use the 8 key to pause the recording, the * key may be used to "rewind" the recording by five seconds and play from there, or the = key may be used to "fast forward" the recording by five seconds and play from there.

4) While paused, the 7 key may be used to continue recording at the point where the recording is paused. Also while paused, the * key may be used to "rewind" the recording by five seconds and play from there, the = key may be used to "fast forward" the recording by five seconds and play from there, and the 8 key will continue playing the message where it paused.

The ability to pause, rewind, and fast-forward the recording is not prompted. Once the recording is paused, a prompt will be played stating "Message Paused. To continue, press 8. To continue recording where you left off, press 7." If the recording remains paused for a period greater than the system defined parameter, another prompt will play.

5. The phone number digit length is defined by the Class Code assigned to a box. If only local 7 digit numbers are authorized, the system will not dial a long distance number.
6. Sometimes different paging terminals have different timing "windows" to receive DTMF digits or a voice message. There is a paging delay timing parameter in the Class code definition. It may be necessary to set up a different Class Code and vary the timing delay for a particular paging company if the "window" does not match the other terminals being called.

5.29 SCHEDULED DELIVERY

1. Refer to Chart 7 for illustrated prompt flow. Scheduled Delivery will call a phone number daily at an assigned time of day to deliver messages. It is often used as a "wake up call" feature.
2. Select option 4 ("other options") from the top menu, then select option 5 for Scheduled Delivery. The system will indicate if the feature is active or turned off.
3. Enter a phone number by pressing 1. If a number has been previously entered, it will be repeated. To enter a new number, press 1 followed by the * key which terminates the dialing string. The system will repeat the number for confirmation. Press 9 to exit and return to the previous menu.
4. Next enter the time you want the system to call you. The time must be entered as four digits. For example, to enter 7:30 (a.m. or p.m.), enter "0730". The system will ask you whether it is a.m. or p.m.
5. You will need to toggle the active/turned off switch by pressing 2 to the active position before the feature will work.

5. The phone number digit length is defined by the Class Code assigned to a box. If only local 7 digit numbers are authorized, the system will not dial a long distance number.
6. Sometimes different paging terminals have different timing "windows" to receive DTMF digits or a voice message. There is a paging delay timing parameter in the Class code definition. It may be necessary to set up a different Class Code and vary the timing delay for a particular paging company if the "window" does not match the other terminals being called.

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USER TRAINING

5.29 SCHEDULED DELIVERY

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5. You will need to toggle the active/turned off switch by pressing 2 to the active position before the feature will work.

5.30 GROUP MESSAGE DISTRIBUTION †

1. Refer to Chart 8 for illustrated prompt flow. Group Message Distribution allows a message to be distributed to a Group or list of boxes. There are two types of Group Message distribution lists that can be created. The User has a choice of selecting a "Personal List" or a "System Wide List". A Personal List is created by each User. The System Wide List can be created once by the System Administrator and can then be used by individual Users.
2. Using the Supervisor's Box, the System Administrator can create a list that is system-wide and by communicating the list number to each User, each can send a group message to boxes listed without having to recreate the list again.
3. Select option (6) from the "Other Option" prompt menu and Press (2) to create a group list. Enter a number that will identify the list (i.e. list # 1, etc.) You'll want to keep a record of the list number and write down who is on the list (i.e., List 1, Western Division Sales Reps).
4. Begin entering the box numbers one at a time. The system will confirm when added correctly. If you try to add the same box more than once to a list, it will tell you that the box already exists. You can however, add the same box to different lists.
5. After you have created a list, you can later edit (add or delete) boxes on the list or listen to all the boxes entered on the list.
6. After creating your lists, you can send a message to the boxes on a group list by pressing 1 when prompted "To send a Message to a Group List, Press 1". For a personal list (one that the User created), press 1 or for a System-wide list (one created by the System Administrator for all Users to use), press 2.
7. Enter the list number. The system will confirm the list number entered. Begin recording by pressing 2. After recording you can listen, re-record, or exit (not send). To send, press 4 after recording. For long group lists, it may take several seconds or longer for the system to complete this function. The prompt "Please stay on the line" plays as the boxes are being updated. Actually, the system updates a separate list of boxes that have group messages, rather than copying the actual message in each box, thus conserving space.

CHART 1

"RECORDING A MESSAGE"

EXPLANATIONS: If the call enters on a DID circuit, the caller will bypass the first "Enter Box Number" prompt and will hear immediately the personal greeting or tutorial. Note: The number in the lower part of the boxes represents the system prompt number that corresponds to that function.

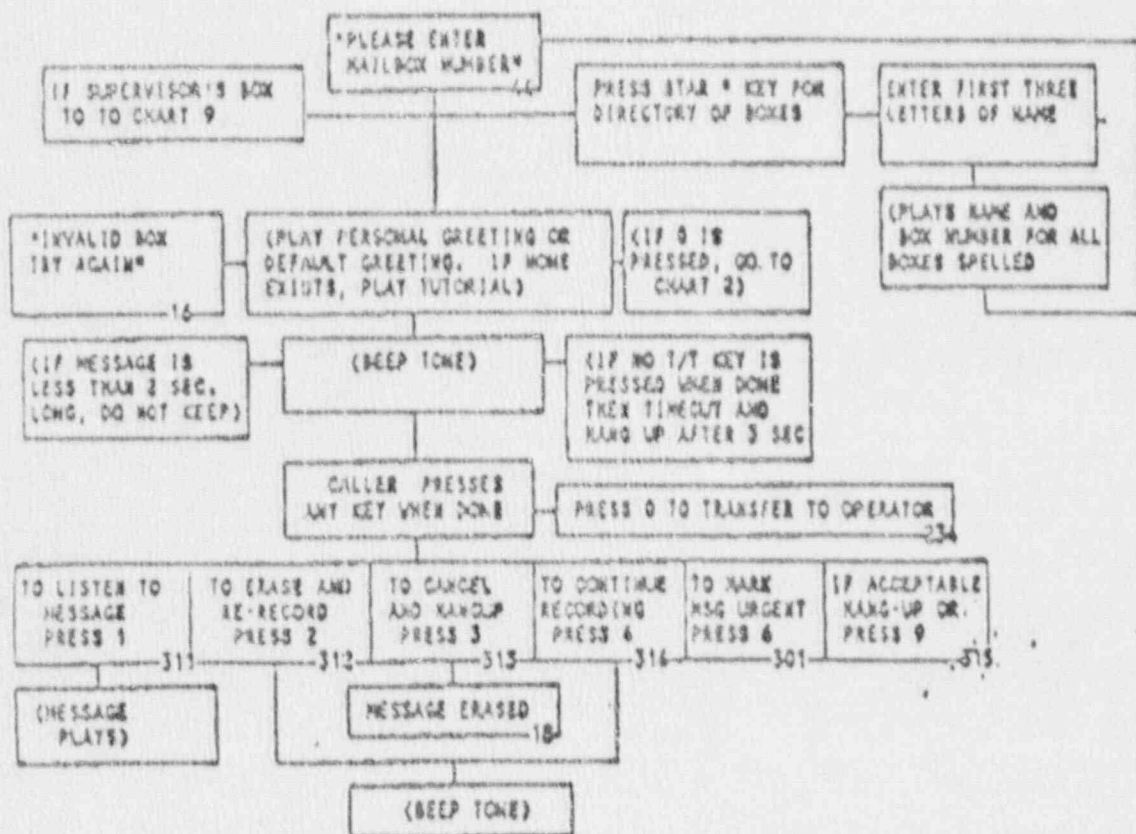


CHART 2

RETRIEVING MESSAGE AND MESSAGE FORWARDING

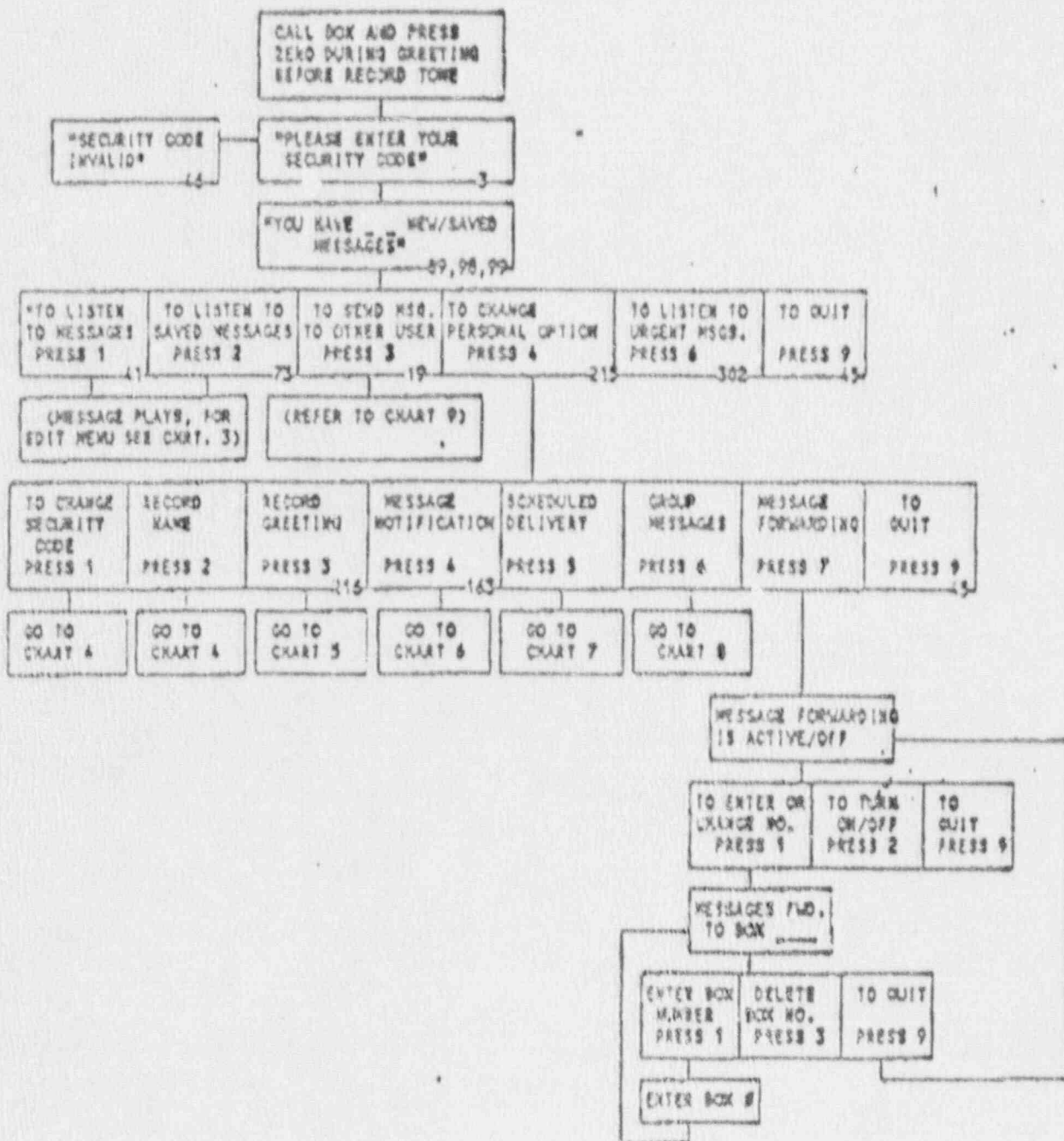


CHART 3

TRANSFERRING A MESSAGE TO ANOTHER USER (CON'T FROM CHART 2)

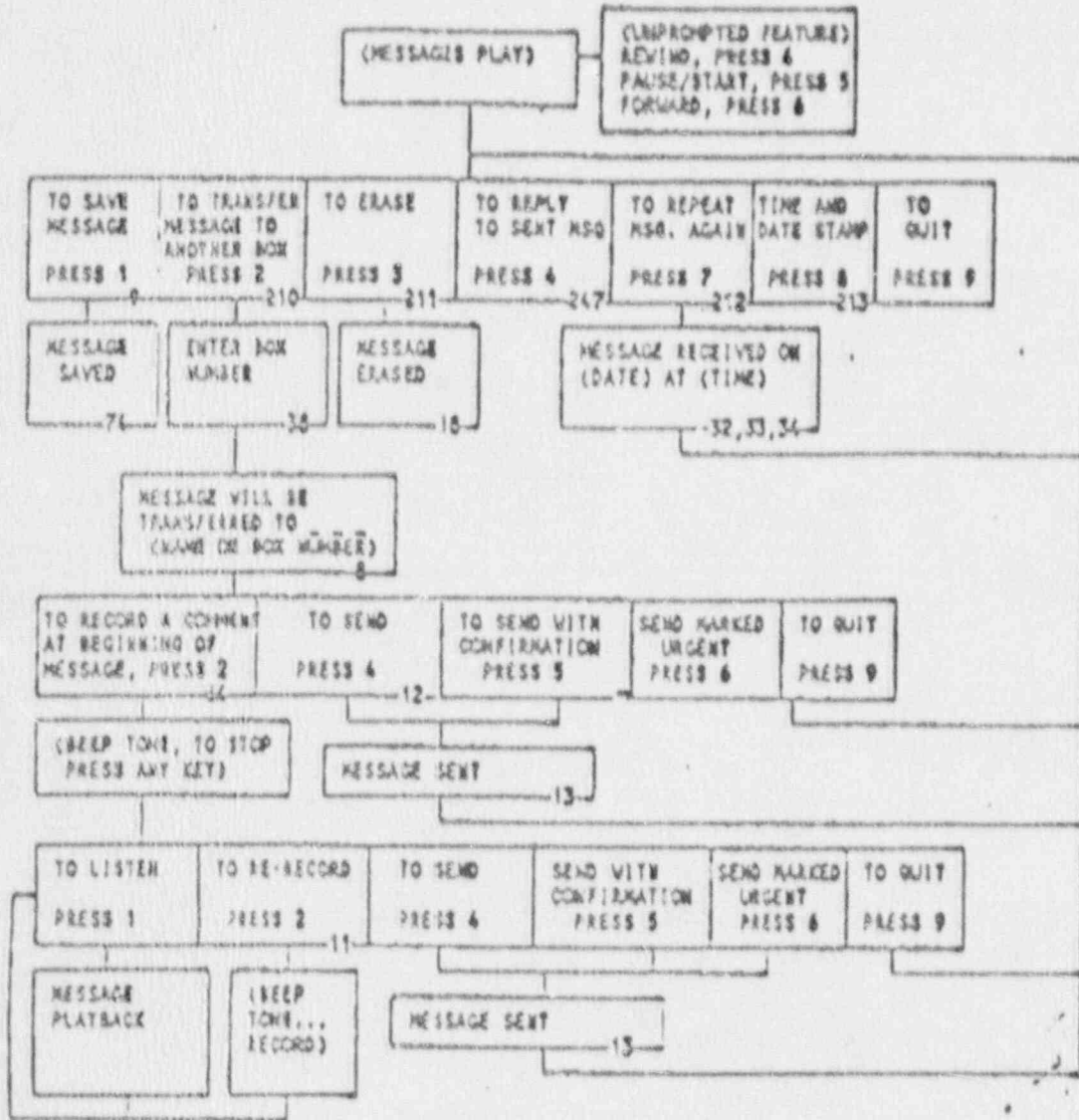


CHART 4

CHANGING SECURITY CODE AND RECORDING NAME

(CON'T FROM CHART 2)

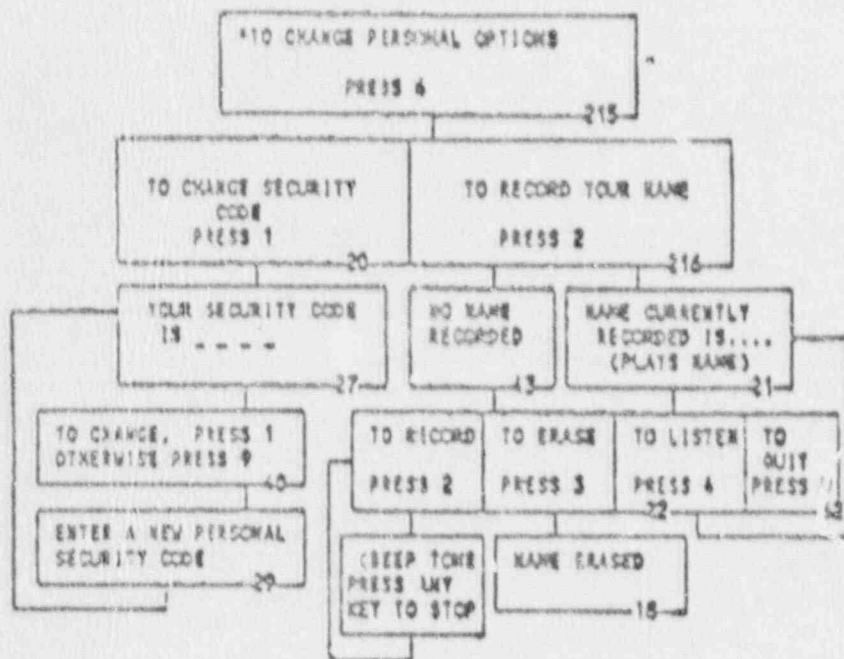


CHART 5

RECORDING A GREETING

(CON'T FROM CHART 2)

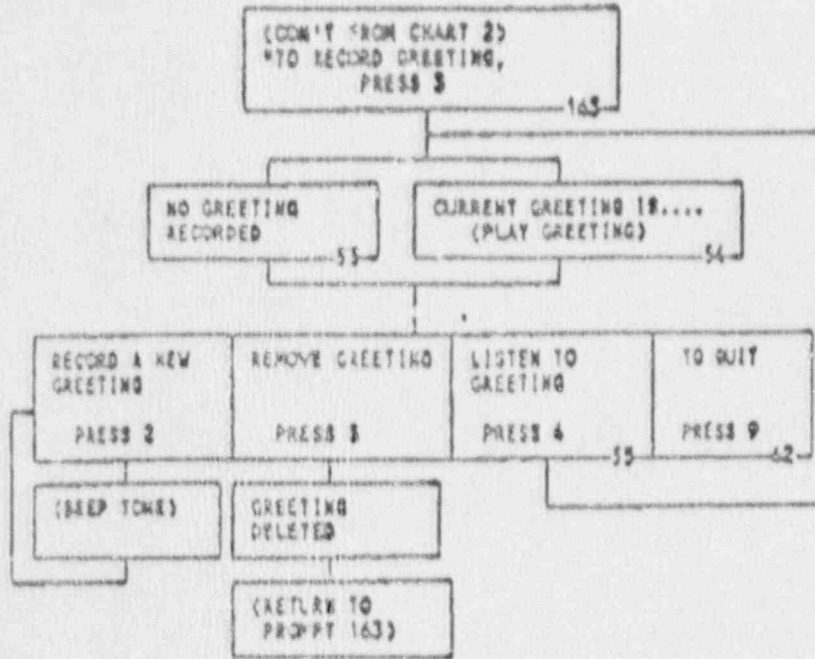


CHART 6

MESSAGE NOTIFICATION

(CON'T FROM CHART 2)

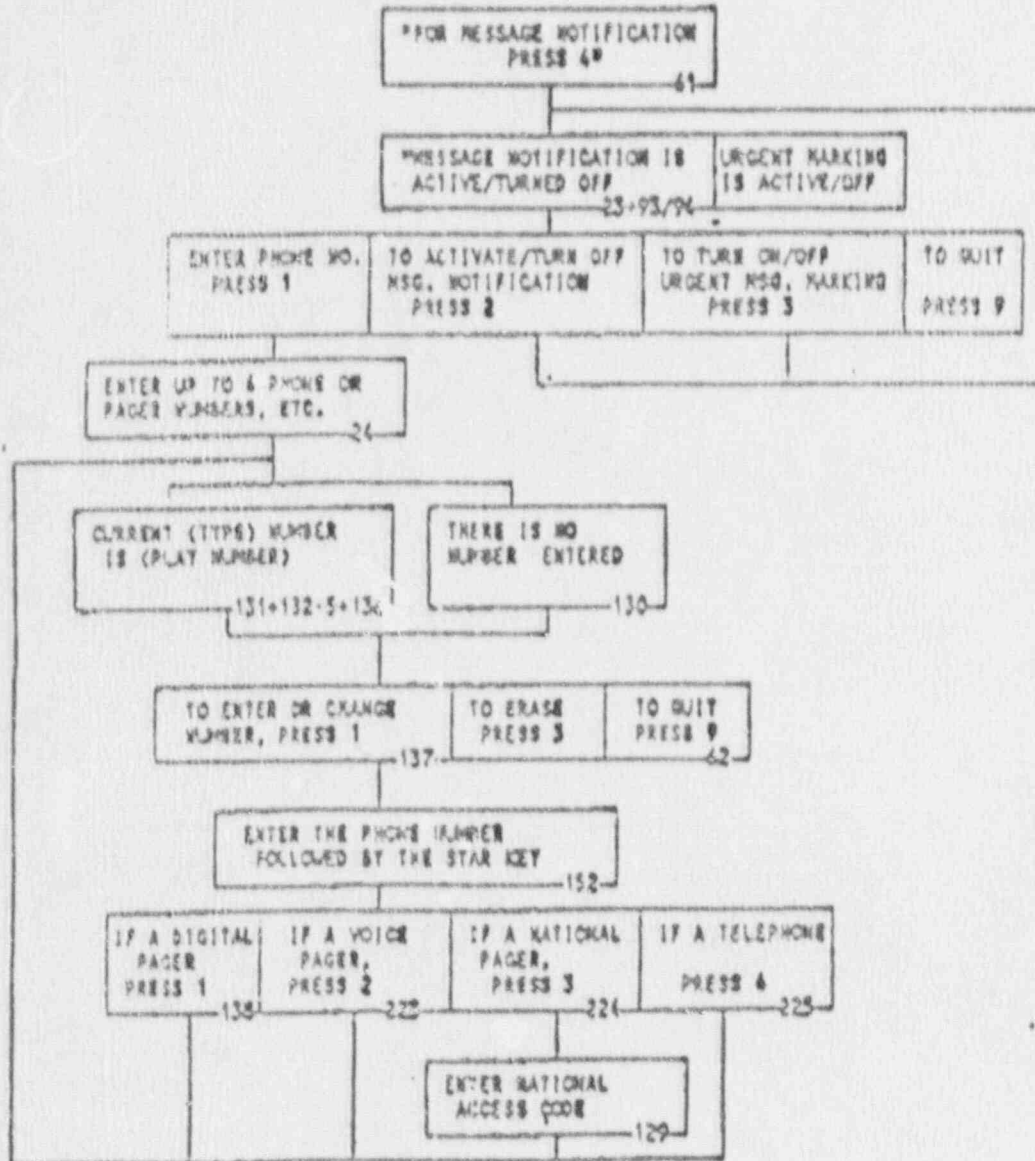


CHART 7

SCHEDULED DELIVERY OF MESSAGES

(CON'T FROM CHART 2)

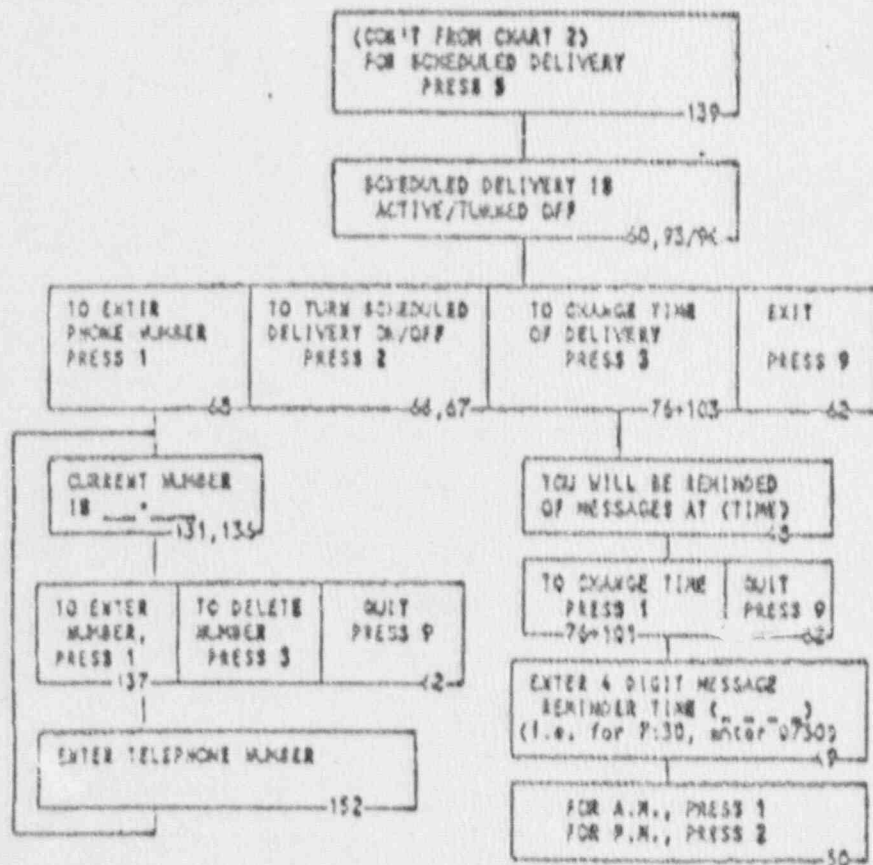


CHART 8

GROUP MESSAGE DISTRIBUTION

(CON'T FROM CHART 2)

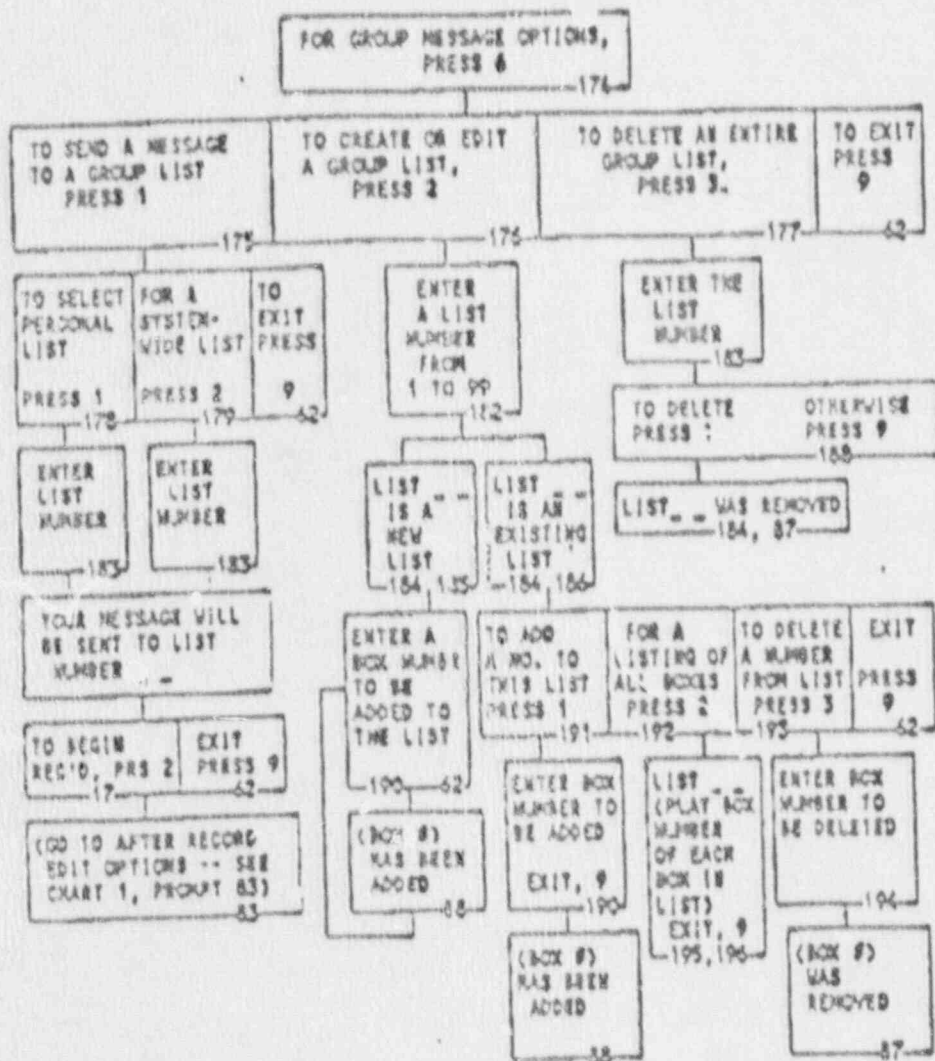
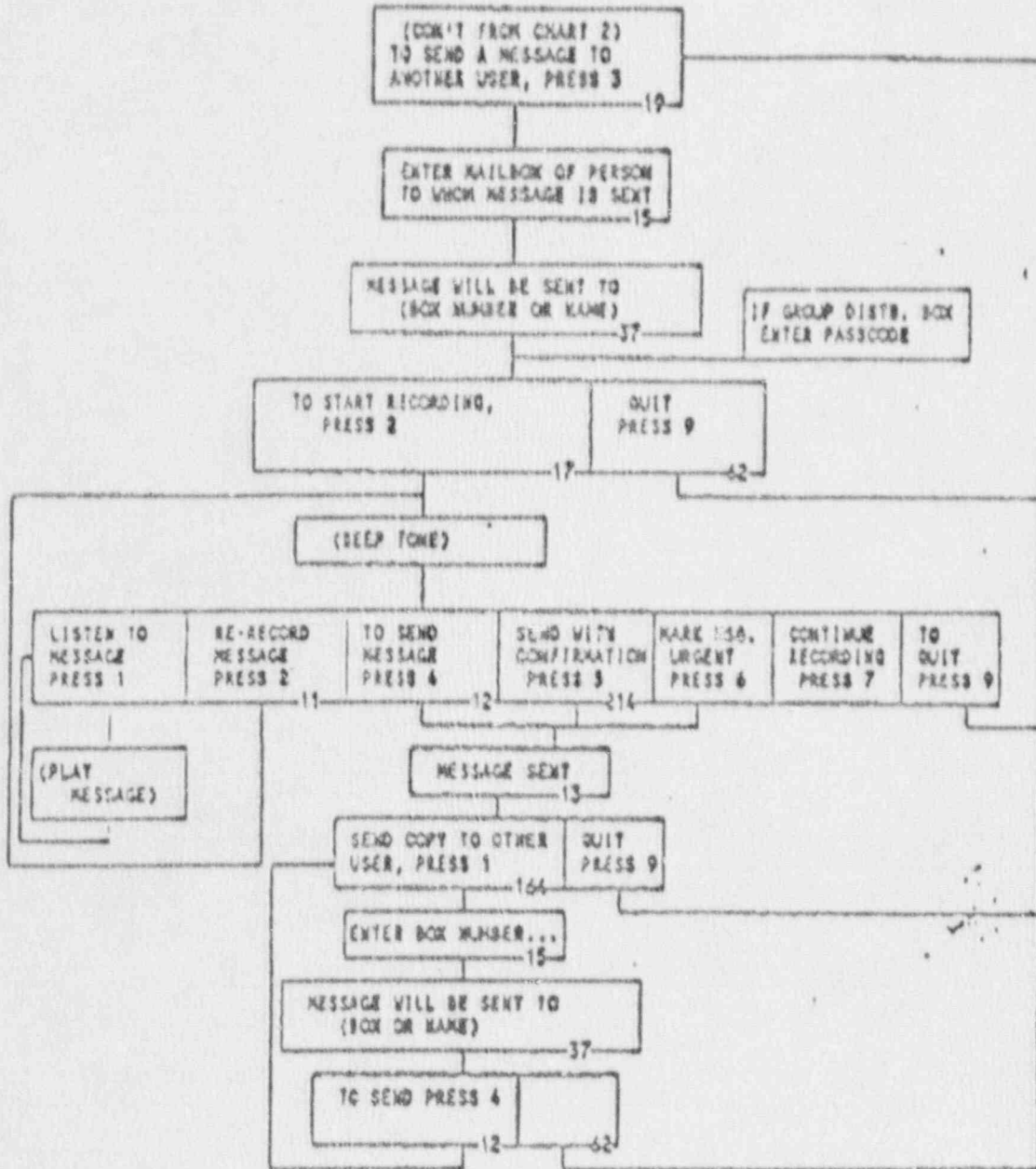


CHART 9

SEND A MESSAGE TO ANOTHER USER

(CON'T FROM CHART 2)



ATTACHMENT "B"
SERVICE AGREEMENT INFORMATION

8.12 EXTENDED MAINTENANCE AGREEMENT

The extended maintenance program covers all labor and expenses for quick response maintenance during the warranty period and after the warranty has expired. The objective is to keep your system trouble free and respond in a quick and efficient manner without interrupting phone service or having to remove the system and send it to the factory.

These are the terms in which VSSI will respond to system problems should they occur:

1. Minor failures will be responded to within eight hours. These failures are classified as not affecting the ability of the entire system to function.
2. Major failures will be responded to with the utmost expediency. VSSI has technicians on call 24 hrs a day. As soon as the service request is received the technician will be notified and will respond to the request. This response time should not be longer than four (4) hours. A major failure is classified as a complete systems shut down, software failure, or any other problem which affects the entire system.
3. In cases of major failures the on site appearance of a technician will be within twenty-four (24) hours. The intent of VSSI is to have a technician respond as quickly as possible. Because of different site locations the arrival of the technician will depend upon the availability of air line flights. It is VSSI's intent to have a technician on the first available flight.
4. Monthly hard copy reports showing the system status will be generated by VSSI and mailed to the system site.

VSSI has the ability to remotely, through the use of the system modem, to monitor and diagnose the system prior to the arrival of the technician. This will speed up the repair time considerably. Because of our remote capabilities VSSI can repair, replace, and restructure everything in the system except hardware. With this in mind we at VSSI feel that your purchase will be a trouble free investment.

5.0 HELLO NEW VOICE MAIL USER!

The purpose of this section is to provide detailed information about the various functions and features of a voice mail box. The section is designed to assist in the instruction and training of box owners.

5.1 FEATURE SUMMARY

As the owner of a Voice Mail Box you can:

- a. Receive messages from anyone who calls your box number, including other box holders.
- b. Retrieve, delete, replay, save or transfer to another box any messages after entering your personal security code.
- c. Find out when (exact time and date) a message was left.
- d. Record your name to identify your box to other users who may send you messages.
- e. Send voice mail to 1) another box holder, or 2) to a distribution list which automatically sends the same message to a pre-defined group list of box Users.
- f. Receive confirmation that a message that you sent to another user box has been retrieved.
- g. Record or change a personal greeting which is then played when someone calls to leave you a message.
- h. Instruct your mailbox to call you at another phone number immediately after a message has been left or when marked urgent.
- i. Have your mailbox activate your personal pager (tone, digital, or voice) when a message is left for you or when marked urgent.
- j. Have your mailbox automatically call you and deliver your messages to another phone number at a specified time of the day.
- k. While listening to a message, you can pause, fast forward or rewind.

5.23 TRANSFER A MESSAGE TO ANOTHER USER

1. Refer to Chart 3 for an illustrated flow chart. After listening to a message you can transfer the message to another User's box if you wish. You can also record a comment which will precede the transferred message when retrieved by the other User. You can also send the message with "confirmation" and receive a message in your box as to the time and date of the message retrieved.
2. Press (2) after listening to a message. Enter the destination box number when prompted. The system will confirm by repeating the box number or name of the User.
3. To record a comment, Press 1. The comment will be attached to the front of the transferred message when retrieved by the destination User.
4. There are three ways to transfer or send the message. To "send", Press 4; To "send with confirmation", Press 5; to send "marked urgent", press 6. Confirmation instructs the system to leave a message in the sender's box indicating the time and date the message was retrieved by the destination box User. If marked urgent, and the recipient has urgent messages turned on, he will be immediately notified.
5. After sending the message the system gives you the option of saving, erasing or performing any other actions with the original message.

5.26 RECORD GREETING:

1. Chart 5 illustrates how to record a Greeting. The Greeting is the message callers hear after entering a box number or when the system answers using DID service.
2. Select option 4 from the top menu, "To change personal options, press 4". Then select option 3 to change the greeting.
3. The system will play the current greeting or indicate that no greeting currently exists. If no greeting exists, the callers will hear the tutorial or one of the default greetings assigned by the class code, until it is replaced by a new greeting.
4. Press 2 to record the greeting and then press any key when finished. You can press 4 to listen to what you recorded. To rerecord, just press 2 again and then press 9 to exit when satisfied. If you erase the greeting, the tutorial or default greeting will reappear as the greeting.

5.261 EDIT RECORDING FEATURE

Effective with 4.42 versions dated January 11, 1990 and later, the option to edit a recording will be available.

This feature will allow an individual who has recorded a message to, while listening to that message, pause at any given location and continue recording at that point. Previously, recordings could only be appended to (continue recording at the end of the current recording) or rerecorded (delete the original and record again).

Edit a recording will be available after recording on a message left in a box, on messages sent to another user, on comments recorded at the beginning of transferred messages, on messages sent to a group list, on bulletin board bulletins, and on greetings.

The process of editing a message will be as follows:

- 1) the individual will record the message, comment, bulletin or greeting, following instructions.
- 2) After terminating the recording, he will edit his recording by selecting option 1

5. The phone number digit length is defined by the Class Code assigned to a box. If only local 7 digit numbers are authorized, the system will not dial a long distance number.

6. Sometimes different paging terminals have different timing "windows" to receive DTMF digits or a voice message. There is a paging delay timing parameter in the Class code definition. It may be necessary to set up a different Class Code and vary the timing delay for a particular paging company if the "window" does not match the other terminals being called.

5.30 GROUP MESSAGE DISTRIBUTION :

1. Refer to Chart 8 for illustrated prompt flow. Group Message Distribution allows a message to be distributed to a Group or list of boxes. There are two types of Group Message distribution lists that can be created. The User has a choice of selecting a "Personal List" or a "System Wide List". A Personal List is created by each User. The System Wide List can be created once by the System Administrator and can then be used by individual Users.
2. Using the Supervisor's Box, the System Administrator can create a list that is system-wide and by communicating the list number to each User, each can send a group message to boxes listed without having to recreate the list again.
3. Select option (ti) from the "Other Option" prompt menu and Press (2) to create a group list. Enter a number that will identify the list (i.e. list # 1, etc.) You'll want to keep a record of the list number and write down who is on the list (i.e., List 1, Western Division Sales Reps).
4. Begin entering the box numbers one at a time. The system will confirm when added correctly. If you try to add the same box more than once to a list, it will tell you that the box already exists. You can however, add the same box to different lists.
5. After you have created a list, you can later edit (add or delete) boxes on the list or listen to all the boxes entered on the list.
6. After creating your lists, you can send a message to the boxes on a group list by pressing 1 when prompted "To send a Message to a Group List, Press 1". For a personal list (one that the User created), press 1 or for a System-wide list (one created by the System Administrator for all Users to use), press 2.
7. Enter the List number. The system will confirm the list number entered. Begin recording by pressing 2. After recording you can listen, re-record, or exit (not send). To send, press 4 after recording. For long group lists, it may take several seconds or longer for the system to complete this function. The prompt "Pl so stay on the line" plays as the boxes are being updated. Actually, the system updates a separate list of boxes that have group messages, rather than copying the actual message to each box, thus conserving space.

Identity, Ranking, and Prices by all offers

VOICE MAIL SYSTEM

RS-IRM-89-148 Best and Final - Life Cycle Costs

60 Month adjusted by 10% present value

Purchase Plans
 w/h/b (b)(4) w/h/d (b)(4) w/h/d
 INITIAL (b)(4) BAFO BAFO II

OFFEROR

VSS, Inc.

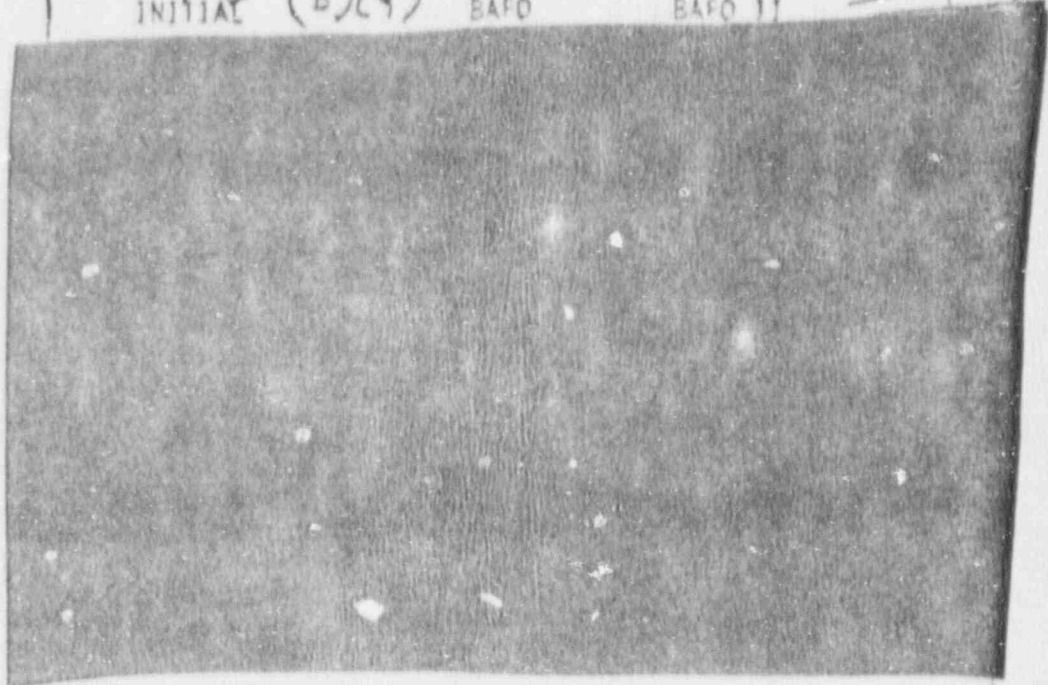
Microlog

Wang

Bell South

Bell Atlantic

Tel Plus



Information in this record was deleted
 in accordance with the Freedom of Information
 Act, 5 U.S.C. 552
 FOIA- 90-312

B11