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## DEFENSE COMMUNICATIONS AGENCY

# AUTOVON ASSISTANCE OPERATOR PROCEDURES

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METHODS AND PROCEDURES

AUTOVON Assistance Operator  
Procedures

1. Purpose. This Circular prescribes standard operating procedures to be used by the Defense Communications System AUTOVON Assistance Operators (AAO's).
2. Applicability. This Circular applies to AUTOVON Assistance Operators located at Government-owned and operated AUTOVON switching centers having Dial Service Assistance (DSA) facilities.
3. Scope. This Circular contains the detailed procedures for AUTOVON Assistance Operators to provide the services specified in JANAP 137(A), recognizing the different capabilities and operating characteristics of the switching equipment used overseas.
4. Action. Procedures in this Circular will be observed by all elements of the military departments tasked with the responsibility for the operation of DSA equipment associated with AUTOVON switching centers.
5. Changes. Recommended changes to this Circular should be submitted to the Director, DCA, ATTN: Code 520, Washington, D.C. 20305.

FOR THE DIRECTOR:

OFFICIAL:

  
ARTHUR E. HAYES

Chief, Administrative Division

LAWRENCE LAYMAN  
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## CONTENTS

	<u>Paragraph</u>	<u>Page</u>
BASIC CIRCULAR		
Purpose . . . . .	1	i
Applicability . . . . .	2	i
Scope . . . . .	3	i
Action. . . . .	4	i
Changes . . . . .	5	ii
Glossary . . . . .		vii
<u>Chapter</u>	<u>Paragraph</u>	<u>Page</u>
1. INTRODUCTION		
General . . . . .	1	1-1
Subscribers and Users . . . . .	2	1-1
Multilevel Precedence (MLP) . . . . .	3	1-1
Service Features. . . . .	4	1-1
Numbering Plan. . . . .	5	1-2
Audible and Visual Indicators . . . . .	6	1-2
Terminology . . . . .	7	1-2
2. OPERATING CONCEPTS		
AUTOVON Assistance Services . . . . .	1	2-1
Operator Etiquette. . . . .	2	2-3
Personnel Functions . . . . .	3	2-3
AAO Records . . . . .	4	2-5
Use of Precedence . . . . .	5	2-5
3. OPERATING PROCEDURES		
General . . . . .	1	3-1
Class Conditioning. . . . .	2	3-1
Outward Operator. . . . .	3	3-1
Inward Operator . . . . .	4	3-13
Information Operator. . . . .	5	3-14
Conference Operator . . . . .	6	3-16

<u>Chapter</u>	<u>Paragraph</u>	<u>Page</u>
4.	AUTOVON ASSISTANCE RECORDS AND REPORTING	
	General . . . . .	1 4-1
	Procedures. . . . .	2 4-1
	Completing the AUTOVON Assistance Record. . . . .	3 4-1
	Reporting Requirements. . . . .	4 4-4
	Forms . . . . .	5 4-5
5.	NUMBERING PLAN	
	General . . . . .	1 5-1
	Telephone Address Components. . . . .	2 5-1
	Dialing Sequence and Digit Assignments. . . . .	3 5-2
6.	TONES AND RECORDED ANNOUNCEMENTS	
	General . . . . .	1 6-1
	Information Signals . . . . .	2 6-1
	Wording of Recorded Announcements . . . . .	3 6-2

## ILLUSTRATIONS

<u>Figure</u>		<u>Page</u>
3-1	Direct Connection, Multioffice Planning Guide . . . . .	3-19
3-2	Tandem Connection, Multioffice Planning Guide . . . . .	3-20
4-1	AUTOVON Assistance Record . . . . .	4-2
<u>Table</u>		<u>Page</u>
1-1	Joint Uniform Telephone Communications Precedence System Chart. . . . .	1-3
1-2	International Civil Aviation Organiza- tion Phonetic Alphabet . . . . .	1-9
3-1	Distribution of Class of Calls. . . . .	3-3
4-1	Switch Designation Codes. . . . .	4-7
4-2	Precedence Codes. . . . .	4-8
4-3	Area Codes (AC) . . . . .	4-8
4-4	Assistance Reason Code (ARC). . . . .	4-9
4-5	Type of Service Code (TS) . . . . .	4-9
4-6	Release Code (RC) . . . . .	4-10
4-7	Rank Codes. . . . .	4-10

**GLOSSARY**

Abandoned Call. A call that has been disconnected by the originator, without canceling, before a definite report (such as "busy" or "don't answer") has been received.

Abbreviated Dialing. A method of dialing using a two-digit code followed by an end-of-signaling indicator (A-button) instead of the normal seven-digit telephone address. The AUTOVON Assistance Operator (AAO) cannot extend a call by means of abbreviated dialing.

Access Line. A four-wire circuit connecting a subscriber directly to an AUTOVON switching center.

Address. The destination of a telephone number in a communications system. Another use of this term is to indicate the storage location of information in a data processing system.

Ad Lib Conference Bridge. A non-preprogramed bridge which allows the originator to individually dial up to nine conferees. It may be modified to work in tandem with another ad lib conference bridge allowing the originator to dial up to 17 total conferees.

Answer (Signal), also Answer Supervision. An offhook signal transmitted towards the calling end of a connection when the called party answers.

Answering Time Recorder. A device to monitor and measure speed of answering calls by telephone switchboard operators.

AOB. AUTOVON Operator Bulletin.

Area Code. The area code is composed according to an assignment represented by NYX, where the second digit is always 1 or 0. The three-digit area code directs a call to the proper major geographic area. This code is required only on calls destined to points outside the major geographic area of the call originator.

Attempt. A term used in voice networks indicating a request for service on circuits, trunks, or equipment, irrespective of its disposition.

Attempt per Circuit per Hour (ACH). A unit of traffic measurement in circuit switch networks in which total service demand on a group of circuits is expressed in terms of the average number of call attempts per circuit in 1 hour.

Attempts - Don't Answer or Did Not Wait (DA-DW). A "don't answer (DA)" is an instance where the calling party terminates the attempt after the audible ringing signal has been heard but before the called station or PBX operator answers. A "did not wait (DW)" is an instance where the calling party hangs up following completion of dialing and before receiving a tone, announcement, or an answer.

Attempts - Ineffective. The broad classification applicable to calls not completed due to no circuits, reorders, customer irregularities, equipment or operator irregularities, and other conditions.

Attempts - No Circuit or Reorder (NC-RO). Properly dialed calls which cannot be completed due to unavailability of circuits or common control equipment.

Attendant. An individual whose duties include the operation of a PBX switchboard.

Audible Ringing Tone, also Ringback Tone. An audible signal heard by the calling party during the alerting or ringing interval of the called party.

Automatic Traffic Control (ATC). A routing plan control feature used by the network controller to change, by remote control, the programmed routing plan in any switch in the ACOC area of responsibility. An ATC instrument (standard DTMF telephone) is provided in each overseas ACOC to control AUTOVON in its area.

Automatic Traffic Overload Protection (ATOP). A portion of line-load control which applies the full line-load control when a specified level of register-sender occupancy is exceeded and releases it when the number of busy register-senders is three less than the number at which the control was applied.

AUTOSEVOCOM. The DoD Automatic Secure Voice Communications Network.

AUTOVON Assistance Operator (AAO). The operator of a switchboard at an AUTOVON switching center which provides normal operator services, such as directory information, random conferencing, intercepting, and call assistance to AUTOVON subscribers.

AUTOVON (AUTOMATIC VOICE NETWORK). The principal long-haul, nonsecure, voice communications network within the Defense Communications System (DCS). It provides worldwide automatic end-to-end circuit switched voice connections.

Blocked Calls. Calls or demands that fail to receive immediate service.

BPA. Blocked Precedence Call Announcement. A recorded announcement indicating to the caller that a call of equal or higher precedence has prevented completion of his call.

Busy Hour. In circuit switch systems.

Group Busy Hour. That hour in a given 24-hour period during which the traffic load offered to a given trunk group is greater than that during any other hour within that period.

Network Busy Hour. That hour in a given 24-hour period during which the traffic load offered to the individual network is at a maximum.

Switch Busy Hour. That hour in a given 24-hour period during which the traffic load offered to a switch is at a maximum.

Call. An attempt by a subscriber or user to obtain a telephone connection or other service.

Calling Rate. The average number of calls per unit of time, such as calls per hour. The term may apply to a single line, a group of lines, a switchboard, or a dial office.

Called Station (Subscriber, Party, User). A subscriber, party, or user to whom a call is directed.

Calling Station (Subscriber, Party, User). A subscriber, party or user initiating a call.

Class of Call. Identification of types of calls routed to a specific AAO for disposition. The classes are: one, assistance (0); two, inward; three, information; four, conference; and five, intercept.

Class of Service. The classification of service provided for users. Each class of service implies specific operating procedures by the central office switching equipment or by the operator in processing originating calls.

Common Control Equipment. Those items of equipment used by every call to establish a connection.

Communications Validating Office (CVO). See Telecommunications Certification Office (TCO).

Completed Call. A call on which the service desired has been furnished. In general, a call on which conversation has started.

Conditioning. Equipment modifications or adjustments necessary to match transmission levels and impedances. It also provides equalization between facilities.

Conference Call. A call in which more than two access lines are connected. Specific types of conference calls are:

Meet-Me Conference. An arrangement where each participant is instructed to dial a designated telephone address to reach the conference bridge for a scheduled conference.

Preset Conference. An AUTOVON feature which permits automatic connection of a fixed group of conferees by keying a single directory number.

Progressive Conference. An operator-established conference where the called participants are manually entered into the conference circuit by the operator after each participant is called in turn.

Random Conference. An operator-established conference employing a switchboard feature whereby participants can be connected for collective conversations.

Confirmed Audible. Audible ring returned directly from the subscriber's location. This is used to apprise the calling customer that his call has definitely progressed to the called subscriber's location.

Congestion. A traffic overload condition in an AUTOVON switch during which the average call processing time is increased due to reduced availability of service circuits in that switch or in adjacent switches.

CONUS. CONTinental United States.

CONUS AUTOVON. CONUS AUTOVON includes all of the network within the North American continent, except Panama.

Dial Pulsing (DP). A method of d.c. (direct current) pulsing in which the digits are transmitted by the interruption of the d.c. circuit a number of times, 1 to 10 corresponding to the digits 1 to 0.

#### SWITCHING

Dial Service Assistance (DSA) Switchboard. A switchboard associated with the AUTOVON ~~switched~~ center equipment to provide operator service such as information, intercepting, random conferencing, and calling assistance.

Dial Tone. A tone used in switching systems as a signal that the equipment is ready to accept address information.

Dialing. The use of a prescribed set of signals to establish a circuit path between a calling party and called party(ties). The term "dialing" includes the use of either a rotary dial or pushbutton mechanism (touch tone).

Disconnect (Signal). The signal by which the calling and called ends notify the switching equipment that the established connection is no longer needed and should be released.

DTMF (Dual-Tone Multifrequency). A signaling method employing set combinations of two specific frequencies, of which one frequency is selected from a group of four low frequencies and the other from a group of four high frequencies. It is used by subscribers and PBX attendants, if their switchboard positions are so equipped, to indicate telephone address digits, precedence ranks, and end-of-signaling.

Dual Homing. The connection of an AUTOVON terminal so that it is served by either of two switching centers. This service uses a single directory number.

Dual-Use Access Line. A subscriber access line normally used for voice communications but which has special conditioning for use as a digital transmission circuit. May be referred to as an alternative voice/data or a graphics circuit.

Echo. The effect of a wave which, having been derived (for example, by reflection) from a primary wave, arrives at either end of the same circuit with sufficient magnitude and delay to be distinctly recognized.

End Office. A switching center at which the call is connected to a subscriber or PBX access line.

End of Signaling. A signal used to indicate signaling has been completed.

Gateway Switch. An AUTOVON switching center which provides access to and from other geographical areas where AUTOVON switch centers are located.

High Precedence Call. Those calls having preemption privileges over lower precedence calls. A PRIORITY, IMMEDIATE, FLASH, or FLASH OVERRIDE call.

Holding Time. The elapsed time of a telephone call or call attempt using equipment, measured from the time a demand for service is initiated until restoration of idle line condition.

ICA. Isolated Code Announcement. A recorded announcement indicating to the caller that a service disruption has prevented completion of the call.

Incoming Call. In general, any call received by a switch from another switch. Incoming call is often used to signify calls received from other switches for completion to a subscriber or user served by the switch being considered.

Incoming Line. An access line on which a switch receives calls but does not use to complete calls.

Interoffice Call. Call involving access lines which home on different switch centers requiring the use of a four-wire intermachine trunk(s).

Interswitch Trunks (IST). A four-wire circuit connecting two switching centers. Also called interswitch circuit.

Inward Assistance. The assistance given by an assistance operator to a request from an AAO at another switch.

Julian Date. The day of the year numbered consecutively from 1 January (001) to 31 December (365 or 366).

Key Pulsing, also Keying. A system of pulsing in which the digits are transmitted by operation of pushbutton. Each pushbutton corresponds to a digit and generates a unique pair of tones.

Key Shelf. Usually the horizontal portion of a switchboard. The key shelf contains equipment associated with the cord circuits (lamps, keys, cords) and may also be equipped with other apparatus, as required by the operator's duties.

Key Telephone. A telephone having features such as multiline pickup and hold which are exercised by the operation of keys located on or near the telephone.

Line-Load Control. A feature of some switching systems where the load on the system can be controlled by preventing the placing of calls by some lines. The overseas AUTOVON switch provides automatic and manual line-load control to specified PBX access lines. The automatic line-load control applies the full line-load control when a specified number of register junctors become occupied and releases it when the number of busy register-junctors is two less than the number at which line-load control was applied. Manual line-load control can be applied and released by maintenance personnel in up to three steps.

Link Circuits, The eight operator circuits on a DSA switchboard and the associated circuits which connect them to the DSA matrix. They equate to cord circuits on a cord-type switchboard.

Maintenance Busy (MB). A condition wherein switching equipment or circuits are removed from service by maintenance forces in such a way that an attempt at use encounters a busy condition. Also referred to as "busied out."

Maximum Calling Area (MCA). Geographical calling limits assigned to a particular AUTOVON access line. The maximum calling area indicator (MCAI) is commonly used to identify the maximum calling area.

Multifrequency 2/6 Signaling. A form of signaling where each signal is composed of two tones out of six available. Fifteen pairs of signals are available. Twelve are used with nonconfirmation signaling. Ten are used for digits, one for a KP signal, and one for a start signal. With confirmation signaling, ID, LB, and TB signals are provided.

Multilevel Precedence Preemption (MLPP). A system of preemption whereby selected subscribers and users may exercise preemption capabilities that seize facilities being used for calls assigned a lower precedence. The levels of precedence used on AUTOVON are as follows: FLASH, IMMEDIATE, PRIORITY, and ROUTINE, with a FLASH OVERRIDE capability available to certain subscribers.

Network Control. The continuous assessment of the response of the network to the traffic load impressed on it in order to detect actual or impending traffic congestion and the modification of the network parameters as required to maintain maximum utilization of available facilities under all loading conditions.

Network Dial Service. The phrase associated with an AUTOVON service permitting a PABX user to originate or receive AUTOVON calls without the assistance of the PABX attendant.

Network-Inward-Dialing (NID). The phrase associated with an AUTOVON service permitting a PABX user to receive AUTOVON calls without the assistance of the PABX attendant. The three specific types of NID are:

Routine Network-Inward Dialing (RNID). Permits all calls destined for PABX extensions to be directly in-dialed without the assistance of the PABX attendant. If the called extension is busy, all calls, regardless of precedence, receive a busy signal.

Precedence Network-Inward-Dialing (PNID). Permits all calls destined for PABX extensions to be directly in-dialed without the assistance of the PABX attendant. Priority-and-above precedence calls are automatically routed to the PABX attendant after a specific period of time if the called extension is busy or does not answer.

Network-Inward-Dialing, Precedence Diversion. Permits routine precedence calls destined for PABX extensions to be directly in-dialed without the assistance of the PABX attendant while priority-and-above precedence calls are immediately routed to the attendant for attention. This service is synonymous with Immediate Diversion Network-Inward-Dialing (INID).

NNX Code. The first three numbers of a seven-digit address used for routing a call to the destined switching center or to an in-dial (PNID, RNID, or PNID/NOD) location, often called the office code.

No Circuit (NC). A condition in which all interswitch trunks in a trunk group are busy.

Numbering Plan. The AUTOVON numbering plan has been designed to provide a unique telephone address for each subscriber, special line, or trunk destination in CONUS or overseas.

Offhook. The condition that indicates the active state (loop closed) of a station line or other circuit. When a telephone handset is removed from its switch-hook, the loop is closed, and the line is said to be in the "offhook" condition.

Offhook Signal. Indicates seizure, request for service, or a busy condition.

Originating Attempt (ORA). In voice network, a request for service from a locally terminated subscriber or user.

Originating Office. The switching center that serves the subscriber originating the call.

Originator. The person placing the call.

Outgoing Call. A call originated by a subscriber or user served by the switch being processed to a subscriber or user served by another switch.

Outgoing Trunk Connection (OTC). Call carried out of the switch on an interswitch trunk to a connected switch.

Out-Of-Order (OD). An out-of-order condition of line, trunk, terminal, or switching equipment that results in noncompletion of a call.

Out-Of-Service Busy. A condition in which switching equipment or circuits are placed by maintenance forces when they are removed from service for maintenance.

Outpulsing. The process of transmitting digital address information over a trunk from one switching center or switchboard to another.

Overflow. Call attempts made on busy circuits or trunk groups which result in attempts on other circuits or trunk groups in a sequence or in busy-condition signal.

PABX (Private Automatic Branch Exchange). A dial PBX. Often called a Dial Central Office (DCO).

PBX Access Line Circuit. A circuit that connects a PBX to an exterior network such as AUTOVON. In the case of an access line to AUTOVON, it is normally a four-wire to two-wire terminating circuit at the PBX.

Peg Count. In general, a count made of the number of times a given event or condition occurs. It is also a unit of the common-control group of the overseas AUTOVON switch that expedites the various peg counts kept in the memory as required.

Precedence. A rank assigned to indicate the degree of preference to be given in processing and protection of calls.

Precedence Alerting. The ringing signal applied to an access line to distinguish between a routine and a higher precedence incoming call.

Precedence Designator. A word or combination of letters and numbers designating the precedence level of a call as defined in the Joint Uniform Telephone Communications Precedence System.

Precedence Digit. A digit dialed by subscribers to specify a precedence above routine and transmitted between switches with the telephone number on all calls to indicate the precedence of the call.

Preempt Signal. A specific control signal generated at the preempting switching center and transmitted over the supervisory signaling path of all trunks and access lines to both subscriber stations.

Preempt Tone. A specific tone heard by preempted parties that indicates they should disconnect.

Preemption. The act of automatically disconnecting an established connection for reuse of part of the connection by a higher precedence call when no idle circuit is available.

Private Branch Exchange (PBX). A switching system which provides internal telephone communications between stations located on a customer premise as well as between these stations and exterior networks.

RADAY (RADio DAY). The 24-hour day in Greenwich Mean Time (Z).

Recall. To call an operator back into a connection that has been established by an operator.

Recorded Announcement. A service intercept feature which provides verbal recorded information regarding the progress or disposition of an unsuccessful call.

Recorded Announcer. A device for recording and playing back announcements.

ROA. Reorder Announcement. A recorded announcement indicating the call has not been completed and that the caller should hang up and try again.

Route Digit. A digit used in AUTOVON to control the routing of calls to other networks and to control the grade of trunk to use for a call.

Route Indication. A digit dialed by subscribers and AUTOVON assistance operators to select voice-grade (VG) or special-grade (SG) facilities. This digit is dialed after the precedence digit and before the area code, if required, and the telephone number. The digit "0" is used for voice-grade and "1" for special-grade connectivity. The AAO must dial the desired digit in every case during the process of originating or extending an assistance call. Since the AUTOVON switching machine automatically assigns grade facilities when no route digit is received, it is not necessary for subscribers to dial route digits when voice-grade (VG) connectivity is desired. However, subscribers

must dial the route digits "11" when a special grade (SG) connection is desired.

Routing Plan. A preselected course (including first choice and alternate choices) for establishing paths through circuits or switched networks, with due consideration to economy, survivability, reliability, and service to the user.

Service Observing. A communications management monitoring technique for obtaining analysis data on call progress on a sample of call attempts by system subscribers and determining the quality of service provided in terms of completion rates and reasons for noncompletions.

Special Grade (SG). Specially conditioned interswitch trunks and access line which provide the required transmission capability for secure voice, data, and facsimile.

Subscriber Access Line. A four-wire circuit connecting an AUTOVON subscriber directly to an AUTOVON switch. Subscriber access line is often used to indicate access lines serving individuals as opposed to PBX access lines.

Subscriber (AUTOVON). An individual, installation, or activity having direct access to the AUTOVON through a four-wire AUTOVON subset and terminal equipment connected directly to an AUTOVON switching center. A PBX or PABX connected to an AUTOVON switching center is an AUTOVON subscriber.

Subset. A telephone.

Supervision. A monitoring of the state or condition of any telephone circuit.

Supervisor's Console. A unit of the DSA switchboard of the overseas AUTOVON switch. It provides the supervisor or chief operator with facilities for assigning calls to operators by type of call, monitoring the operators, and determining the operator's workload.

Switchboard. Switching equipment operated manually by attendants to initiate and complete calls.

Switching Center (AUTOVON). An installation in which switching equipment interconnects circuits on a circuit switching basis.

Tandem Call. A call that is processed by three or more switches. Tandem call is also used to designate this type of call at a switch where a connection is established from one trunk to another.

Tandem Connection. A connection from one interswitch trunk to another through a telephone switching center.

Tandem Switch. A switch located on the outer boundaries of the network with little or no alternate routing capability.

Telecommunications Certification Office (TCO). A TCO is the person or activity designated by a Federal department or agency to certify to DCA (an operating agency of the National Communications System) that a specified telecommunications service or facility is a bona fide requirement of the department or agency, and that it is prepared to pay mutually acceptable costs involved in its fulfillment.

Terminating Office. The switching center serving the called party. On an intraoffice call, the terminating and originating offices are the same.

Test Board. A special type of switchboard where test equipment can be connected to the lines and trunks for the purpose of testing them.

Trunk Group. A specified combination of trunks in a switched network that has identical characteristics as to destination, signaling, and traffic route treatment.

UPA. Unauthorized Precedence Announcement. A recorded announcement indicating to the caller that the precedence he is attempting to use is not authorized for his line.

User (AUTOVON). An individual, installation, or activity having indirect access to an AUTOVON switch through a local switchboard (PBX or PABX).

VCA. Vacant Code Announcement. A recorded announcement indicating to the caller that his call cannot be completed as dialed (e.g., a vacant number or restricted route digit was dialed).

Voice Grade (VG). A trunk or line capable of transmitting speech of commercial quality in a frequency range from about 300 to 3400 Hz.

**CHAPTER 1. INTRODUCTION**

1. General. The AUTOVON is the principal long-haul, unsecure voice communications network within the Defense Communications System (DCS). It is a global system which has been developed to accommodate essential command and control, operations, intelligence, logistic, diplomatic, and administrative traffic for DoD activities and those civil agencies directly concerned with national security. To provide assistance to AUTOVON subscribers in establishing calls and furnishing directory information and conference service, certain AUTOVON switches are equipped with Dial Service Assistance (DSA) facilities and have AUTOVON Assistance Operators (AAO) assigned.

2. Subscribers and Users. AUTOVON Assistance Operators provide service only to AUTOVON subscribers. An AUTOVON subscriber terminal may be a dual-tone multifrequency (DTMF) telephone set (four-wire station) or a PBX DSA position equipped with a DTMF keyset. AUTOVON users obtain AUTOVON access through a PBX or PABX.

3. Multilevel Precedence (MLP). To accommodate command and control, operations, logistics, and administrative communications, the AUTOVON processes traffic preferentially by precedence level in accordance with the Voice Precedence System (table 1-1). Based upon the call content, a subscriber, when placing calls, may use his highest authorized precedence or any lower precedence. The use of a precedence higher than that authorized for the access line results in the call being routed to an unauthorized precedence announcement. The use of priority or higher precedence is limited to AUTOVON subscribers. Users must place calls of these precedences through their local PBX or PABX attendant.

4. Service Features. The overseas AUTOVON switches have been designed to provide a variety of features to accommodate many varied requirements. Normally, a subscriber will have voice or voice alternate data service with a designated maximum calling area and precedence. Special features such as abbreviated dialing, preset conferencing, and offhook service require specific validation. Subscribers may initiate a random conference or increase their calling capabilities within defined limits through the AAO.

5. Numbering Plan. The AUTOVON numbering plan (chapter 5) provides a unique telephone address for each four-wire subscriber, manual PBX location, PABX location, and special line or trunk destination within the network.

a. Subscriber Service. A subscriber telephone number consists of a three-digit switching center code (NNX) and four-digit line termination code (XXXX). This is the minimum number of digits required to connect a calling and called party through the network. There are five separate numbering plan areas within the AUTOVON, each of which has a unique three-digit code (NYX). To process a call from one numbering plan area to another, the calling party must add this code to the three-digit switching center code and the four-digit line termination code. This results in a dialing sequence of NYX NNX XXXX. Multifrequency tone combinations provide for the precedence level and special route indicators if authorized. If a specific precedence level and a special route are not keyed by the call originator, the call is processed as a routine precedence, voice-grade call.

b. AAO Service. Since the keyset provided at the DSA positions differs from the subscribers DTMF keyset and is connected to the switch differently, the keying sequence is different. The AAO must key the key pulse digit (KP key), precedence, route indication, subscriber's number, and the start pulse (ST key). Only the area code in the keying sequence may be omitted by the AAO in processing calls within his numbering plan area.

6. Audible and Visual Indicators. Various audible and visual indicators are used to provide AUTOVON subscribers, users, and AAO's information on call progress or disposition. The audible signals which consist of tones and recorded announcements are contained in chapter 6. The AAO must become familiar with these signals and their meanings. Visual signals are provided only at AUTOVON DSA positions.

7. Terminology.

a. The glossary in this Circular includes common telephone terminology and terms unique to the electronic switch used in the overseas AUTOVON program. The AAO should exercise care in using terms which are not in common usage or may have a different meaning to a subscriber.

b. When phoneticization is required during a conversation, the International Civil Aviation Organization (ICAO) phonetic alphabet is prescribed for use in the AUTOVON (table 1-2).

TABLE 1-1. JOINT UNIFORM TELEPHONE COMMUNICATIONS  
PRECEDENCE SYSTEM

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MILITARY PRECEDENCE DESIGNATOR: FLASH (01)

APPLICATION	EXAMPLES
FLASH precedence is reserved generally for telephone calls pertaining to:	CALLS PERTAINING TO:
A. Command and control of military forces essential to defense and retaliation.	1. Initial enemy contact.
B. Critical intelligence essential to national survival.	2. Recall or diversion of friendly aircraft about to bomb targets unexpectedly occupied by friendly forces or emergency action to prevent conflict between friendly forces.
C. Conduct of diplomatic negotiations critical to the arresting or limiting of hostilities.	3. Extremely important and perishable intelligence.
D. Dissemination of critical civil alert information essential to national survival.	4. Major strategic decisions of urgency.
E. Continuity of Federal Government functions essential to national survival.	5. Imminent large-scale attacks.
F. Fulfillment of critical United States internal security functions essential to national survival.	6. National security information requiring the immediate attention of the President or the Secretary of State.
G. Catastrophic events of national or international significance.	

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NOTE 1. FLASH calls may be preempted by application of the FLASH OVERRIDE capability available to: (1) The President of the United States, Secretary of Defense, and Joint Chiefs of Staff; (2) Commanders of unified and specified commands when declaring either Defense Condition One or Defense Emergency; (3) CINCNORAD when declaring either Defense Condition One or Air Defense Emergency. FLASH calls will be handled as fast as possible.

NOTE 2. FLASH OVERRIDE is a capability and is not considered a level of precedence within the Joint Uniform Telephone Communications Precedence System. Exercising of the FLASH OVERRIDE capability preempts calls in all levels of precedence.

TABLE 1-1. JOINT UNIFORM TELEPHONE COMMUNICATIONS  
PRECEDENCE SYSTEM (CON.)

MILITARY PRECEDENCE DESIGNATOR: IMMEDIATE	
APPLICATION	EXAMPLES
<p>IMMEDIATE precedence is reserved generally for telephone calls pertaining to:</p> <p>A. Situations which gravely affect the security of national and allied forces.</p> <p>B. Reconstitution of forces in a postattack period.</p> <p>C. Intelligence essential to national security.</p> <p>D. Conduct of diplomatic negotiations to reduce or limit the threat of war.</p> <p>E. Implementation of Federal Government actions essential to national survival.</p> <p>F. Situations which gravely affect the internal security of the United States.</p> <p>G. Civil defense actions concerning direction of our population and their survival.</p> <p>H. Disasters or events of extensive seriousness having an immediate and detrimental effect on the welfare of the population.</p>	<p>CALLS PERTAINING TO:</p> <ol style="list-style-type: none"> <li>1. Amplifying information on initial enemy contact.</li> <li>2. Unusual major movement of foreign military forces in time of peace or strained relations.</li> <li>3. Enemy counterattack, request for or cancellation of additional support.</li> <li>4. Commitment of a reserve force to attack.</li> <li>5. Special weapons logistical support when necessary to sustain operations.</li> <li>6. Widespread civil disturbance.</li> <li>7. Distress assistance.</li> <li>8. Urgent information concerning the launch, operation, or recovery of spacecraft or missiles.</li> <li>9. Aircraft movement information (e.g., calls pertaining to requests for news of aircraft in flight, flight plans, cancellation calls, or calls to prevent unnecessary search and rescue action).</li> </ol>

TABLE 1-1. JOINT UNIFORM TELEPHONE COMMUNICATIONS  
PRECEDENCE SYSTEM (CON.)

MILITARY PRECEDENCE DESIGNATOR: IMMEDIATE (CON.)

APPLICATION	EXAMPLES
<p>IMMEDIATE precedence is reserved generally for telephone calls pertaining to:</p>	<p>CALLS PERTAINING TO:</p> <p>10. Damage assessment and remaining capability.</p> <p>11. Assistance to foreign countries in time of natural disaster.</p> <p>12. Coordination and direction of warnings and reports and implementation of natural disaster programs and related operations.</p> <p>13. Critical alerting information to or from Air Traffic Control Centers necessary to permit recovery and diversion of military and civil aircraft in flight.</p> <p>14. Emergency actions concerning the procurement or delivery of supplies or services urgently needed to sustain operations in support of critical national security requirements.</p>
<p>I. Vital information having an immediate effect on aircraft, spacecraft, or missile operations.</p>	

NOTE. ORDER OF PRECEDENCE AND PREEMPTION: Telephone calls designated IMMEDIATE will take precedence over and will preempt calls designated ROUTINE and PRIORITY. IMMEDIATE calls will be handled as fast as possible.

TABLE 1-1. JOINT UNIFORM TELEPHONE COMMUNICATIONS  
PRECEDENCE SYSTEM (CON.)

MILITARY PRECEDENCE DESIGNATOR: PRIORITY	
APPLICATION	EXAMPLES
<p>PRIORITY precedence is generally reserved for telephone calls requiring expeditious action by called parties and for calls furnishing information essential to the conduct of Government operations.</p>	<p>CALLS PERTAINING TO:</p> <ol style="list-style-type: none"> <li>1. Information on locations where attack is impending or where fire or air support will soon be placed.</li> <li>2. Air-ground integrated operations.</li> <li>3. Important intelligence.</li> <li>4. Important information concerning the launch, operation, or recovery of spacecraft or missiles.</li> <li>5. Movement of naval, air, and ground forces.</li> <li>6. Coordination among governmental agencies concerning the performance of emergency preparedness functions.</li> <li>7. Critical logistic functions, provision of critical public utility services, and administrative military support functions.</li> <li>8. Accomplishment of tasks necessary to ensure critical damage control functions.</li> <li>9. Continuity of critical governmental functions.</li> </ol>

TABLE 1-1. JOINT UNIFORM TELEPHONE COMMUNICATIONS  
PRECEDENCE SYSTEM (CON.)

---

MILITARY PRECEDENCE DESIGNATOR: PRIORITY (CON.)

APPLICATION	EXAMPLES
	<p>CALLS PERTAINING TO:</p> <p>10. Provision for minimum transportation for accomplishing the aforesaid functions.</p> <p>11. The continuation or re-establishment of our more important financial, economic, health, and safety activities, and production, procurement and distribution of food materials and supplies which are considered necessary to the immediate support of a war effort, the national defense, or for expediting the means of meeting the effects of natural disasters.</p>

---

NOTE. ORDER OF PRECEDENCE AND PREEMPTION: Telephone calls designated PRIORITY will take precedence over and will preempt calls designated ROUTINE. PRIORITY calls will be handled in an expeditious manner.

TABLE 1-1. JOINT UNIFORM TELEPHONE COMMUNICATIONS  
PRECEDENCE SYSTEM (CON.)

---

MILITARY PRECEDENCE DESIGNATOR: ROUTINE	
APPLICATION	EXAMPLES
ROUTINE designation applies to those official Government communications which require rapid transmission by telephonic means but do not require preferential handling.	All official calls not described under FLASH, IMMEDIATE, or PRIORITY.

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TABLE 1-2. INTERNATIONAL CIVIL AVIATION  
ORGANIZATION PHONETIC ALPHABET

<u>Letter</u>	<u>Word</u>	<u>Pronunciation*</u>
A.....	ALFA.....	<u>AL</u> -FAH
B.....	BRAVO.....	<u>BRAH</u> -VOH
C.....	CHARLIE.....	<u>CHAR</u> - <u>LEE</u>
D.....	DELTA.....	<u>DELL</u> -TAH
E.....	ECHO.....	<u>ECK</u> -OH
F.....	FOXTROT.....	<u>FOKS</u> -TROT
G.....	GOLF.....	<u>GOLF</u>
H.....	HOTEL.....	<u>HOH</u> -TELL
I.....	INDIA.....	<u>IN</u> - <u>DEE</u> -AH
J.....	JULIETT.....	<u>JEW</u> - <u>LEE</u> - <u>ETT</u>
K.....	KILO.....	<u>KEY</u> -LOH
L.....	LIMA.....	<u>LEE</u> -MAH
M.....	MIKE.....	<u>MIKE</u>
N.....	NOVEMBER.....	<u>NO</u> - <u>VEM</u> -BER
O.....	OSCAR.....	<u>OSS</u> -CAH
P.....	PAPA.....	<u>PAH</u> -PAH
Q.....	QUEBEC.....	<u>KEH</u> - <u>BECK</u>
R.....	ROMEO.....	<u>ROM</u> - <u>ME</u> -OH
S.....	SIERRA.....	<u>SEE</u> - <u>AIRRAH</u>
T.....	TANGO.....	<u>TANG</u> -GO
U.....	UNIFORM.....	<u>YOU</u> - <u>NEE</u> -FORM
V.....	VICTOR.....	<u>VIC</u> -TAH
W.....	WHISKEY.....	<u>WISS</u> -KEY
X.....	X-RAY.....	<u>ECKS</u> -RAY
Y.....	YANKEE.....	<u>YANG</u> -KEE
Z.....	ZULU.....	<u>ZOO</u> -LOO

<u>Numeral</u>	<u>Pronunciation</u>
1.....	WUN
2.....	TOO
3.....	THUH-REE
4.....	FO-WER
5.....	FI-YIV
6.....	SIX
7.....	SEVEN
8.....	ATE
9.....	NINER
Ø.....	ZERO

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\*The accented syllables are underlined.



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DCA CIRCULAR 310-V70-33

Change 1

METHODS AND PROCEDURES

AUTOVON Assistance Operator  
Procedures

1. DCAC 310-V70-33, 15 January 1975, is changed as follows:

a. Page xi, Dial Service Assistance (DSA) Switchboard.  
Delete the word "switched" and substitute "switching".

b. Page 6-1, paragraph 2. Condition column: Delete  
the word "Conference" and substitute "Preset conference".  
Indication column: Delete the words "Low-pitched steady"  
and substitute "warble".

c. Remove pages 4-5 and 4-6, and insert enclosed new  
pages 4-5 and 4-6. The changed portions are indicated by  
number signs (#) in the left margin of the new pages.

2. When the above action has been completed, this change  
may be filed with the basic publication.

FOR THE DIRECTOR:

OFFICIAL:

*L. I. Finke*  
L. I. FINKE  
Captain, USN  
Chief of Staff

ARTHUR E. HAYES  
Chief, Administrative Division

1 Enclosure a/s

CPR: 520

DISTRIBUTION: A, B, D, J, M, Special



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WASHINGTON, D. C. 20305

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DCA CIRCULAR 310-V70-33  
Change 2

METHODS AND PROCEDURES

AUTOVON Assistance Operator  
Procedures

1. DCAC 310-V70-33, 15 January 1975, is changed as follows:
  - a. Remove pages 2-1, 2-2, 3-5, and 3-6, and insert enclosed new pages 2-1, 2-2, 3-5, 3-6, and 3-24. The changed portions are indicated by number signs (#) in the left margin of the new pages.
  - b. Page 4-7. Switch column: delete "Taipei". Announcement column: delete "931". Switch designator column: delete "TAI".
2. When the above action has been completed, this change may be filed with the basic publication.

FOR THE DIRECTOR:

OFFICIAL:

A handwritten signature in black ink, appearing to read "J. M. Wheeler", written over a circular stamp or seal.

J. M. WHEELER  
Lieutenant Colonel, USAF  
Deputy Assistant to the Director  
for Administration

P. R. BYRD  
Captain, USN  
Chief of Staff

1 Enclosure a/s

OPR: 520  
DISTRIBUTION: A, B, D, J, M, Special

## CHAPTER 2. OPERATING CONCEPTS

1. AUTOVON Assistance Services. There are five classes of service provided by AUTOVON Assistance Operators. They are outward service, inward service, information service, intercept service, and conference service. Each DSA console must be conditioned to receive one or more of these classes of service when the position is manned. This conditioning is normally accomplished from the supervisors position; however, it can be accomplished at the AAO position when authorized by the supervisor. The classes of service and class numbers are:

<u>Class Number</u>	<u>Class Designator</u>	<u>Access Code</u>
1	Outward	0
2	Inward	NNX-1211*
3	Information	550-1311
4	Conference	550-1411
5	Intercept	N/A

a. Outward Operator. The outward operator assists subscribers in completing calls which they are unable to complete themselves.

(1) The outward operator will:

(a) Extend official calls within the Numbering Plan Area (NPA) if the callers maximum calling area (MCA) is exceeded.

(b) Extend official calls at a higher precedence level than class marked for use on the callers access line.

(c) Accept AUTOVON trouble reports when a subscriber is unable to contact the trouble desk.

(2) The outward operator is not authorized to:

(a) Book calls.

(b) Transfer a call.

(c) Originate or extend unofficial calls.

---

\*The NNX is the switching center NNX at which the DSA facility is located.

(d) Extend a call beyond the NPA when it exceeds the subscriber authorized MCA except:

1. When the call is identified as a central locator call or a central test call.

2. When the call is identified as a CRITIC report.

3. When the caller is identified as a cabinet member or equivalent or a general (flag) officer or a DoD civilian equivalent on TDY within the overseas area.

# 4. When the call is identified as a White Rocket or a Red Rocket.

# 5. When the call is identified as a secure voice (AUTOSEVOCOM) or operational necessity call or a FLASH precedence call.

b. Inward Operator. The information operator provides call assistance to other AAO's.

c. Information and Intercept Operator. The information operator is normally class conditioned to provide AUTOVON directory information to subscribers and to function as an Intercept Operator to dispose of calls to numbers which have been placed on intercept. Information operators will not provide directory service for AUTOVON users.

d. Conference Operator. The conference operator establishes random conferences as requested by the originating subscriber.

(1) The conference operator will:

(a) Assist subscribers in planning meet-me conferences and provide the conference originator the number to be used by each conferee to access the conference bridge(s) at a specific time.

(b) Activate the conference bridge(s) and ports to receive the conferences 5 minutes prior to the time a meet-me conference is scheduled.

(c) Establish progressive conferences as requested by the conference originator.

(2) The conference operator will not notify individual conferees of the time of a meet-me conference and the numbers to be dialed to access the conference bridge; this is the responsibility of the conference originator.

2. Operator Etiquette. The AAO is the only person at an AUTOVON switch who has continuing direct contacts with AUTOVON subscribers; therefore, it is important that calls be disposed of in a courteous, efficient manner. Supervisors and operators will:

a. Answer calls promptly. The normal answer time should not exceed 10 seconds and at no time should the answer time exceed 20 seconds for any call. During busy hours, the DSA positions should be manned to ensure that no more than 10 percent of the calls in any class of service exceed the 10-second answering time.

b. Utilize the standard phraseology contained in chapter 3. Superfluous verbiage is neither required nor desired; however, the AAO should provide the caller reasons or explanations for delays when known.

c. Complete the AUTOVON Assistance Record with minimum requests for repetition of information. The AAO should be tactful in requesting necessary information which is not freely provided by the caller.

d. Speak directly into the mouthpiece in a clear concise manner. Eating, drinking, reading, chewing gum, etc., while working a position should not be permitted.

3. Personnel Functions. An AUTOVON DSA facility will normally be manned by a supervisor and one or more assistance operators. The number of assistance operators will be determined by the configuration of the DSA facility and the anticipated volume of calls to be handled. During nonbusy hours, an AAO may perform functions of the supervisor if warranted by a low-call volume. While the exact duties of an AAO and supervisor may vary from military service and location to location, the following functions are normally performed as indicated:

a. The DSA Facility Supervisor.

(1) Determines the number of positions to be manned during a given shift based upon the anticipated call volume.

(2) Assigns the two-digit operator (position) identification numbers for use in completing the AUTOVON Assistance Record.

(3) Ensures that traffic register readings are recorded at the end of each shift.

(4) Ensures that the AUTOVON Assistance Operators are properly trained in operator etiquette, operational procedures, and console operation.

(5) Reviews completed AUTOVON Assistance Records for accuracy and special interest items as identified by the DCA area.

(6) Disposes of completed AUTOVON Assistance Records as prescribed in appropriate directives.

(7) Promptly and courteously disposes of all calls referred to the supervisors position by an AAO. These include calls the AAO cannot or is not authorized to process and calls where the caller requests connection with the supervisor.

(8) Performs monthly testing of the switching center conference bridges by originating both meet-me and progressive conferences with the four-wire instrument in the switch (OIC, trouble desk, traffic desk, and technical control).

b. The AUTOVON Assistance Operator.

(1) Promptly and courteously disposes of calls which are directed to his position.

(2) Enters call details on the AUTOVON Assistance Record (figure 4-1).

(3) Knows the proper procedures for operating the DSA position and disposing of the various types of calls.

(4) Forwards to the AUTOVON trouble desk all troubles encountered in advancing a call and any troubles reported by subscribers who are unable to directly report the trouble to the trouble desk.

(5) Updates reference material as directed by the supervisor.

**CHAPTER 3. OPERATING PROCEDURES**

1. General. The procedures for the activation and operation of the supervisor and operator consoles are contained in the Overseas AUTOVON Switching System, DSA Position Group, Technical Manual. This chapter will provide supplemental operational procedures for the DSA facility.

2. Class Conditioning.

a. The AAO consoles are normally class conditioned from the supervisors console. The class conditioning is dependent upon the number of positions activated and the layout of the DSA facility. Table 3-1 is a guide which should be used in conjunction with the number of calls awaiting service or the expected number of calls in each class. When conditioning or reconditioning AAO consoles at DSA facilities configured with back-to-back consoles, care is necessary to preclude the later necessity for an "around-the-corner" transfer since the end positions are not mutually visible to each of their operators.

b. The supervisor should not recondition operator positions when a first-degree overload condition is indicated. Instead, the number of calls waiting for service in the specific class and the number of positions already conditioned should be checked. If the call backlog is decreasing, the appropriate overload recycle key should be depressed and the answer time of calls in the class observed by turning the answer-time-record group select switch to the class in overload. (NOTE: The answer-time record-time select switch should always be set at 10 seconds.)

c. If a second-degree overload condition is observed, an additional position should be conditioned to dispose of the backlog of calls in that class.

3. Outward Operator.

a. Answering Calls. The outward operator will answer all calls with the phrase "AUTOVON Operator."

b. Acknowledging Calls. All calls will be acknowledged as soon as the request or order is fully understood. The acknowledgment should be short but in keeping with the order given. It should always be a simple statement such as:

"Thank you."

"I will try it for you."

"I'm sorry, sir, but I am not authorized to process that type of call."

c. Extending or Advancing a Call. Procedures for call advancement are dictated by the precedence of the call and any specific directions supplied by the calling party.

(1) Requests for assistance on placing ROUTINE precedence calls within the Numbering Plan Area (NPA):

(a) If a call is filed by name address because the number is not known, and the outward operator is not class conditioned for information, the AAO will say, "You can secure Directory Assistance by dialing 550-1311."

(b) If the call is filed by number, the AAO will say, "Have you tried to dial the number yourself, sir?" If the caller has tried but was unsuccessful, the AAO will advance the call for the calling party. If unsuccessful, the appropriate procedure for disposing of an unsuccessful attempt will be used.

(c) During normal traffic conditions, the call will be released from supervision when the called party answers. During heavy traffic conditions, the call will be released from supervision immediately following receipt of ringback from the called party.

(d) The AUTOVON Assistance Record will be completed as specified.

(2) Requests for precedence upgrades of PRIORITY or higher within the NPA:

(a) When a precedence upgrade is requested by the caller, the AAO will say, "Does the content of the call comply with criteria contained in the Joint Uniform Telephone Precedence System?"

TABLE 3-1. DISTRIBUTION OF CLASS OF CALLS

POSITIONS IN USE	POSITION NUMBER	CLASS OF CALL
1	1	1, 2, 3, 4, 5
2	1	1, 2, 3
	2	3, 4, 5
3	1	1, 2
	2	3, 5
	3	3, 4
4	1	1, 2
	2	2, 3
	3	3, 5
	4	3, 4
More Than 4	Determined by traffic volume in each class	

1. Ensure that the calling number, called number, input precedence, output precedence, and the name and rank of the caller are correct and enter them on the AUTOVON Assistance Record.

2. Request the caller to hang up by saying: "Sir, will you please hang up. I will call you back to ensure that your precedence is protected."

3. Establish the call as requested ensuring that the caller is called back at the same precedence used in advancing the call.

4. If the caller requests a precedence upgrade to the FLASH level, the AAO will say "Sir, does the content of your call conform with the following criteria? FLASH precedence is reserved for alerts, warnings, or other emergency actions having immediate bearing on national, command, or area security." If the caller verifies that it does, lamp supervision will be maintained to obtain the disconnect time. This information will be extracted from the completed AUTOVON Assistance Record and forwarded by mail to the appropriate DCS area for review.

(b) When a caller places a PRIORITY or higher precedence call to the outward operator and can only provide a name address, the AAO will say: "Sir, the number must be secured from the Information Operator. Please stand by." The AAO will obtain the correct number from the Global AUTOVON Operator Bulletin and provide it to the calling party by saying "Sir, the correct number is NNX-XXXX. I will try it for you now." The call should then be advanced in the normal manner.

(c) When the AUTOVON switching equipment is in a traffic overload condition, the AAO will limit to one attempt efforts to process calls below FLASH precedence.

(d) PRIORITY precedence calls will be released from supervision in the same manner specified for ROUTINE calls. IMMEDIATE and FLASH precedence calls will be kept under lamp supervision until an onhook indication is received from both parties. At that time, the connection will be promptly released. If the link occupancy exceeds 75 percent (6 links), the IMMEDIATE or FLASH precedence call will be released when the called party answers.

(3) Requests for assistance to exceed the numbering plan area (NPA):

(a) The outward operator will normally not advance calls for subscribers not authorized calling privileges outside of the NPA where the DSA facility is located. Exceptions are those types of calls authorized by this Circular or the DCA area. Such calls will be advanced as requested and the caller's name, rank, and organization will be entered on the AUTOVON Assistance Record. When receiving a request to extend a general purpose AUTOVON call into another NPA, the AAO will say: "I'm sorry, sir, but I am not authorized to place calls outside of this theater. Please contact your local military switchboard for assistance." If the calling party will not accept this statement, the AAO will say: "Sir, I will connect you with my supervisor." The supervisor will take the call and advise the calling party that trunking limitations prevent the AAO from extending AUTOVON calls into other geographical areas, but that the caller's local switchboard probably has access to communications facilities with the desired capability. If the caller demands that the call be processed, the supervisor will authorize the call and return it to the outward operator for processing. The caller's name, rank, and organization will be entered on the AUTOVON Assistance Record before the call is extended.

(b) A Central Locator Call is a special type of call which requires expeditious handling. When an AAO receives a call identified as a Central Locator or Central Locator test, the incoming precedence of the call should be noted and if not FLASH, the calling party is recalled at a FLASH precedence. The AAO will not request any additional information from the caller. All Central Locator or Central Locator test calls will be advanced at a FLASH precedence to AUTOVON number 312-231-1574 (primary) or 312-231-1467 (alternate) if the primary number is ineffective. The AAO will continue to attempt the call until it is completed. These calls will be kept under lamp supervision regardless of the link occupancy. The AUTOVON Assistance Record will be marked "Central Locator" in lieu of calling party identification.

(c) AUTOVON may be used for passing critical intelligence reports. These calls will be identified as CRITIC reports and the caller will provide the AAO with the precedence of the call and the destination AUTOVON number. If the number provided has an Oxford (OX) prefix, NYX NNY 312-22X will be keyed rather than the prefix OX. The AAO should ensure that the precedence of the call is protected by calling the party back if the incoming precedence is lower than that requested. The AUTOVON Assistance Record will be marked CRITIC in lieu of calling and called party identification.

# (d) AUTOVON may be used to reply to time-sensitive White Rocket or Red Rocket messages. These calls will be identified as "White Rocket" or "Red Rocket" and the caller will provide the AAO with the destination AUTOVON number. All White Rocket and Red Rocket calls will be extended at a FLASH precedence. The AAO should ensure that the precedence of the call is protected by calling the party back if the incoming precedence is lower than that requested. The AUTOVON Assistance Record will be marked "White Rocket" or "Red Rocket" in lieu of calling and called party identification.

(e) Because of access line limitations, an AAO may be requested to extend calls beyond the NPA for cabinet members, high-ranking governmental officials, and general (flag) officers or their DoD civilian equivalents who are on TDY within the overseas area. Full information including the disconnect time will be entered on the AUTOVON Assistance Record.

(4) Requests for assistance to exceed the maximum calling area within the NPA area: Calls within the NPA will be processed at the same precedence indicated for the incoming calls.

d. Requests for Information. The AAO will dispose of these calls by saying: "I'm sorry, sir, that information is available from the Information Operator. Please dial NNX-1311. Thank you." The link should be immediately released and the next call answered.

e. Trouble Reports from Subscribers. Trouble reports will normally be reported directly to the AUTOVON trouble desk at the switch serving the subscriber (NNX-1611). However, at times a subscriber will be unable to reach the trouble desk, for various reasons, and will call the outward operator to report a trouble. These reports will conform to two situations as follows:

(1) A Connection Retained. When receiving a trouble report, the AAO should first ask the subscriber: "Sir, have you retained the connection on which the trouble was encountered?" If the subscriber advises that he has, the AAO should immediately attempt to extend the call to the trouble desk so that the subscriber can explain the problem directly to a maintenance man. If the call cannot be successfully extended, the AAO will obtain the following information:

- (a) The subscribers AUTOVON number (i.e., number on which the problem was encountered).
- (b) The AUTOVON number called and the location.
- (c) The trouble encountered.

After obtaining answers to these questions, the AAO should say: "I will notify the maintenance section. Please return to your AUTOVON phone and wait until the maintenance man comes on the line." The AAO will then call maintenance over the AUTOVON technical control board trunk. Maintenance should be advised of the information obtained from the subscriber and the fact that the party is offhook and standing by.

(2) Connection Not Retained. If the subscriber advises the AAO that the connection has not been maintained, the AAO will obtain:

- (a) The subscribers AUTOVON number and location.
- (b) The AUTOVON number called and its location.
- (c) The precedence used on the call.
- (d) A complete description of the trouble encountered. After this information is obtained, the AAO should say: "Thank you, sir, maintenance will attempt to isolate the problem. If you encounter any further AUTOVON troubles, please maintain the connection and notify the trouble desk as outlined in your AUTOVON directory." The trouble report should then be passed to the trouble desk by the AAO.

f. Busy Condition Encountered.

(1) Request to try a number that has been busy: The request should be acknowledged and one attempt made to advance the call. If a busy signal is received (60 IPM), release the

tandem trunk and advise the calling party: "Sir, the number is still busy. Please try again later." The release code will be entered on the AUTOVON Assistance Record.

(2) Request to verify a busy report: The AAO should say: "I'm sorry, sir, but we are unable to verify busy lines. I'll be glad to try the number for you."

(3) Request to try a number that has been busy for a precedence call: When a subscriber places a call to the CONUS, it is possible to receive a busy signal rather than the blocked precedence announcement if the called party is a PBX user at an in-dial location not equipped for incoming preemption. The AAO should advance the call as requested. If a busy signal is again received, release the tandem trunk and advise the caller: "Sir, that line is busy. I'll connect you with the (called location) switchboard attendant. He may be able to help you."

g. Don't Answer (DA) Condition Encountered.

(1) Request to try a ROUTINE or PRIORITY precedence call to a number that has not answered: Advance the call as requested. If the called station has not answered after 1 minute of ringing, release the tandem trunk and advise the caller: "Sir, there is no answer. Please try your call again later." The link will then be released.

(2) Request to try an IMMEDIATE or FLASH precedence call to a number that has not answered:

(a) Check the AUTOVON number in the AUTOVON Operators Bulletin.

(b) If the number is not an in-dialing line, advance the call as requested. After 1 minute of ringing, release the called line and place a call to the inward operator serving the subscriber. Advise the inward operator of:

1. The calling DSA facility.
2. The precedence of the call.
3. Called number.
4. DA.

5. Add "special grade" if special-grade conditioning is required.

(c) The distant inward operator will provide local information concerning the subscriber or attempt to extend the call. If after 1 minute of ringing there is still a DA, advise the calling party: "I'm sorry, sir, but there is no answer. Please try an alternate number if you have one."

(d) If the number is a PBX station served by an in-dialing line, advance the call as requested. If after 1 minute of ringing there is no answer, release the called line and say, "I'm sorry, sir, there is no answer. I'll connect you with the (called location) switchboard attendant. He may be able to assist you."

h. No Outgoing Trunk Available. It is possible when conferences are being conducted for the DSA facility to have more inward capability than outward capability. If this has occurred, the outward operator would be unable to obtain access to a trunk in the outward trunk group from the DSA matrix.

(1) ROUTINE Precedence Call. If no DSA outward trunk is available, continue trying to seize a trunk for 1 minute. If no trunk is available, advise the calling party as follows: "Sir, all circuits are busy now. Please place your call again in 30 minutes." The number "6" will be entered in the release code column of the AUTOVON Assistance Record and "No OT" entered in the remarks column.

(2) PRIORITY or Higher Precedence Call. If no outward trunk is available for a precedence call, advise the caller: "All the circuits are busy now. Please hold the line and I will try to secure one."

(a) Determine if a call of lower precedence is in process of completion or is being timed. If such a call is located, cut into the connection and say: "This is the AUTOVON operator. I have a (precedence) precedence call for this trunk. Please terminate your conversation and hang up." NOTE: The lowest precedence connection will always be interrupted. If there are several connections which could be interrupted, always choose a talking connection in preference to one on which data is being transmitted.

(b) If it is necessary to interrupt a data transmission, a data tone will be heard on the connection. Interrupt by saying: "This is the AUTOVON operator. I have a (precedence) call for this trunk." It will probably require a few minutes for the attendant at the data terminal to notice the data interruption and come on the line. When an attendant answers, say: "I have a precedence call for this trunk. Please wait on the line until the other party on your connection answers." When both parties are on the line, again explain that you have a (precedence) call and ask that both hang up. The precedence call can then be advanced in a normal manner.

(c) When the called number is reached enter "No OT" (minutes) "OT preempted" (minutes) in the remarks column of the AUTOVON Assistance Record.

i. All Trunks Busy Condition Encountered after Advancing the Call on a Tandem Trunk.

(1) ROUTINE Precedence Call. If a 120 IPM tone is encountered when advancing the call, release the tandem trunk and make two more attempts at 30-second intervals to complete the call under normal conditions. If the switching equipment is in a traffic overload condition, only one attempt will be made. If the trunks are still busy after the specified number of attempts, advise the caller that: "The circuits are busy now, please try your call later." Enter the release code "3" in column 40 of the AUTOVON Assistance Record and "NC" (minutes) in the remarks column.

(2) PRIORITY or Higher Precedence Call. If the Blocked Precedence Announcement (BPA) is received, either the trunks or the access lines may be busy. Release the tandem trunks and make two more attempts at 30-second intervals to complete the call. If the switching equipment is in a traffic overload condition, only one attempt will be made for calls of IMMEDIATE and PRIORITY precedence. At the end of 1 minute if the recorded announcement is still being received, advise the caller that: "Sir, all trunks are busy. If you wish to hold the line, I'll keep trying to get through for you." If the caller so desires, make additional attempts at 30-second intervals until the call is completed. If after 2 minutes the outward operator is still receiving the BPA, a call will be made to the inward operator serving the destination to verify the status of the called access line. If the number is working, the distant inward operator will attempt to extend the call. If the inward operator advises

that the number is a working number, but that a BPA is received, the caller should be advised: "The access line is busy with an equal or higher precedence call. Please place your call in 15 minutes." Enter code "3" in column 40 of the AUTOVON Assistance Record and "NC" (minutes) in the remarks column.

J. Reports of Dialing Difficulty. If the caller reports difficulty in dialing the called number, the number does not ring, or any other reason which may indicate a trouble on the called line, the information concerning the call should be entered on the AUTOVON Assistance Record and an appropriate entry in the remarks column to explain the type service code "4" which was entered in column 39. The code "WN" will be used to indicate wrong number reached (correct number dialed), "NR" for no ring, and "OT" for any other reason. The outward operator will consult the current AUTOVON Operators Bulletin to determine if the number called is a valid working number. If it is, the outward operator will advance the call in the normal manner.

(1) No Ring (NR). If an NR condition is encountered or trouble is experienced in dialing the called number, release the tandem trunk and proceed as follows:

(a) The called number is not an in-dialing number: Call the inward operator at the DSA facility serving the called switch and say: "(Precedence) call for (called location & number), verify please." Add "special grade," if special-grade facilities are required. If the inward operator reports (NNX-XXXX) is out of order, release the tandem trunk. Tell the caller: "Sir, (NNX-XXXX) is out of order. Please make your call again later." If the inward operator reports that an alternate number is accepting calls, he will extend the call to this number and establish the call in the normal manner.

(b) The called number is an in-dialing number: The calling party will be advised: "I'm sorry, sir, but we are unable to verify an out-of-order condition for that number. If you care to dial the (called location) switchboard attendant, he may be able to help you. The number is (NNX-XXXX)."

(2) Wrong Number (WN) Reached, Correct Number Dialed. If an incorrect number is reached, proceed as explained in the preceding paragraphs for no-ring condition. If the check of the AOB shows that the number given is invalid, ask the calling party whom he is calling. Research the alphabetical

list in the AOB for the correct number and advise the caller: "Sir, the correct number is NNX-XXXX. Please try this number. Thank you."

k. Report of Cutoff. If the caller reports that he was disconnected while talking or transmitting data on an established connection and now finds the called line busy, acknowledge the request for service by saying: "I'm sorry you have had trouble. Did you notice a steady mixed tone just prior to being disconnected?"

(1) If the caller did, the call was preempted and the caller should be advised, "Your call was preempted. Please try again later."

(2) If the caller did not hear the preempt tone, the caller will be advised: "I will try to get them for you." The AAO will advance the call in the normal manner. If a busy signal is received, the procedures for a busy condition encountered will be used.

l. Report of Unsatisfactory Transmission. If the caller reports an inability to communicate because of a poor transmission path, enter "TRANS" in the remarks column of the AUTOVON Assistance Record and advance the call in the normal manner. When the called number is reached, monitor the conversation for a few seconds to ensure that the connection is unsatisfactory, make one additional attempt, and if still unsatisfactory, then advise the caller: "I'm sorry, sir, the circuits appear to be unsatisfactory, I'll notify maintenance. Please try your call again later." The AAO will then report the trouble to maintenance over the test board trunk circuit.

m. Request to Call an Abbreviated Dial Number. If the caller reports difficulty in reaching a two-digit number, the AAO will advise the caller: "I'm sorry, sir, we are unable to dial a two-digit number. What is the AUTOVON number please?" When this, or the alphabetical identification is provided, advance the call in the normal manner. If a problem is encountered, use the appropriate procedure for the condition.

n. Calls Resulting from a Caller Obtaining a Recorded Announcement.

(1) If a subscriber dials an incorrect, changed, vacant, or temporarily disconnected number not on intercept, he will be routed to an announcement which states: "Your call cannot be completed as dialed. Please consult your

directory and call again or ask your operator for assistance. This is a recording." If a caller has obtained this announcement and calls for assistance, obtain the called number and the organizational location and identification and say: "One moment please." Refer to the AOB and local bulletin additions for information on the called number. Then proceed as follows:

(a) If the number has been changed, provide the new number to the caller and request him to dial the number himself.

(b) If the number has been disconnected or is unassigned, provide this information to the caller.

(c) If the number is a working number, advise the caller: "That is a working number. I'll try it for you." The number should then be attempted.

(2) If a subscriber dials a precedence level which is not authorized, a recording will be reached which says: "The precedence used is not authorized on your line. Please use an authorized precedence or ask your operator for assistance. This is a recording." If a caller requests assistance, briefly explain that each access line is class marked for the authorized precedence approved by its Telecommunications Certification Office. If the caller advises of a requirement for the call to be placed at a precedence higher than that authorized for his access line, the procedure for a precedence upgrade should be followed.

#### 4. Inward Operator.

a. Answering Calls. The inward operator will answer all calls with the phrase "AUTOVON Operator."

b. Request to Verify Don't Answer Conditions. When an outward operator cannot complete an IMMEDIATE or FLASH precedence call to an AUTOVON subscriber, assistance will be requested from the inward operator at the DSA facility serving the called subscriber. When a request of this type is received, consult the AOB and local bulletin additions to determine if special directions about the called number have been posted. For example, a local subscriber may provide an alternate number accepting calls temporarily or the fact that the number will not be answered after a specified time. If special directions are found, advise the calling operator of the directions and proceed accordingly.

(1) If an alternate number is provided, advise the calling outward operator that you will ring. Advance the call at the precedence identified by the outward operator. The link may be released when a ring is obtained.

(2) If no information is posted, advance the call in the normal manner after advising the outward operator that you will ring the number. If no answer has been received after 1 minute, cut into the connection and report "DA." If no acknowledgement is received, say "DA" a second time and release the trunk.

c. Requests to Verify Access-Line Condition. It is possible that high precedence calls may receive a BPA or busy signal if there are equipment problems associated with the access line or the number is being utilized for a call of equal or higher precedence. The outward operator will request assistance if a FLASH precedence call cannot be completed within 2 minutes. When receiving a request to verify the status of an access line, the inward operator will consult the AOB to ensure that the number is not out of order. If it is a working number, attempt to advance the call to the called number. If unsuccessful, call the trouble desk at the switch serving the called number and request verification of the status of the number. If the trouble desk advises that the number is working, pass the information to the calling outward operator.

d. Special Call Routing. Because of the flexibility of the DSA facilities, the inward operator can provide special routing for FLASH precedence calls in the event of system degradation resulting from switch failures. Procedures for utilization of this capability will be issued by the DCA areas when such utilization is feasible.

## 5. Information Operator.

a. Answering Calls. The information operator will answer all calls by saying: "AUTOVON Directory Assistance."

b. Directory Information. When providing a subscriber directory information, the AAO should provide the requested information but at the same time acquaint the caller with the fact that the number is listed in his AUTOVON Directory. This can be done by saying: "The number is listed in your AUTOVON Directory. It is (number)."

c. Advancing a Call.

(1) After receiving the directory information, the caller is responsible for attempting to complete the call himself. If the caller requests assistance in completing the call, he should be advised: "I am sorry but we cannot complete calls over this line. Will you please hang up and dial the number yourself."

(2) If the caller will not accept this report or states an emergency, he should be instructed to obtain assistance in placing the call by dialing "0."

d. Use of the AUTOVON Operators Bulletin (AOB).

(1) When separate listings are provided for voice and data in section I of the AOB, always provide the voice number unless the caller specifically requests the data number.

(2) When the listing indicates in-dialing service, advise the caller by saying: "(Called location name) has in-dialing service. You can reach your party by dialing (NNX) plus the extension number. If you need operator assistance for the extension number, dial (number listed for operator assistance)."

(3) The first number listed for an activity will be provided a caller when there are two or more listings. If the caller asks if there is more than one number listed, the available information will be provided.

(4) There are many unlisted numbers used in the AUTOVON so it is possible that the organizational listing provided by the caller is not identified in section I of the AOB. When a caller requests the number of an organization or location not listed in the AOB, he should be advised: "I'm sorry, sir, I do not have a listing for (called location or organization)." If the organization is not listed but the caller identifies a location which is listed, the caller should be advised of the number for the location.

(5) When a caller requests a number in another geographical area, the entire 10-digit NYX NNX XXXX should be provided. In selecting the proper NYX code, the AAO should follow the guidance provided by the caller. If the caller does not furnish the type of call, select the NYX code for a voice call.

6. Conference Operator.

a. Answering Calls. The conference operator will answer all calls by saying: "AUTOVON Conference Operator."

b. Conference Arrangements. The conference equipment provided in DSA facilities includes conference bridges and associated control and supervisory circuitry. The conference bridges are common to all DSA positions in the facility and may be used from any position as determined by the supervisor. Interconnection of conference bridges with those at other DSA facilities provides a means of connecting subscribers, remotely located from the originating DSA facility, into the conference while utilizing a minimum number of interswitch trunks. The procedure used in establishing a conference is dependent upon the type of conference requested and the total number and location of conferees.

(1) The types of conferences are:

(a) Meet-me Conference. A meet-me conference is one that is scheduled in advance by the originator who notifies the conferees to access a conference bridge at a specified time. To obtain this service, the originator calls the conference operator giving the time of conference and the AUTOVON numbers of all conferees. The conference operator plans the conference (if required) and gives the conference originator the number each conferee must dial to access the conference bridge. Notification to the conferees of the time of the conference and the telephone numbers to be dialed to access the bridge is the responsibility of the conference originator. Five minutes prior to the time the conference is scheduled, the operator(s) will activate the conference bridge(s) and appropriate ports to receive the conferees.

(b) Progressive Conference. A progressive conference is requested when the conference originator has a need to call specific persons into conference on short notice. He will give the conference operator the name and telephone number of each conferee. The operator calls each conferee

notifying him to stand by for the conference and giving him the name of the conference originator. As individual notification is completed, each conferee is connected into a port on the assigned bridge.

(2) The DSA facilities required are:

(a) Single Office, Single or Multibrige.

This arrangement is used when all conferees are terminated on the same AUTOVON switch. If the number of conferees exceeds six, bridge interconnection must be accomplished through use of the appropriate keys to connect port #6 of the first bridge with port #1 of the second bridge thereby preventing assignment of conferees to these ports. Conference planning by the conference operator will not normally be required in this arrangement.

(b) Multioffice, Single or Multibrige. The conference operator must plan the conference for this arrangement using figure 3-1 or 3-2 to make use of a minimum number of interswitch trunks. This arrangement is used when two or more conferees are served by a remote office with DSA facilities. Dependent upon the number of conferees at remote offices it is necessary to connect and the availability of interswitch trunking facilities, multiple office conferences will be established as follows:

1. One Remote Office. Each operator will assign bridge ports to his local conferees, and the originating operator will assign a port for the remote operator to access. When a single bridge is used in the remote office, the remote operator will establish the interconnect by accessing the assigned port of the originating bridge, using the OT key of his bridge. If, due to the number of conferees, multiple bridges are required in the remote office, the interoffice connection will be made using the OT key of the last bridge used.

2. Two or More Remote Offices. The conference operator must review the trunking network and use either a direct or tandem method of establishing the conference. Where direct trunks are available between the originating office and each remote office, the remote operator will interconnect with the originating bridge by accessing the ports assigned by the originating operator. When direct trunking is not available, a tandem arrangement will be employed by having one or more remote offices access a bridge at a DSA facility having direct trunks available to the originating office. The remote operator will use the OT key of his bridge to access

the tandem bridge(s). The operator at the facility functioning as a tandem point will use the OT key of his bridge to access the originating bridge.

(3) In planning a multioffice conference, the originating operator will:

(a) Select either direct or tandem interconnection of DSA facilities.

(b) Determine the time that conferencing actions should begin (start time). In a progressive conference, at the start time, originating and assisting operators will commence alerting their conferees and connecting them into their assigned bridges. In a meet-me conference, it is the time all operators prepare their bridges to receive conferees. Interconnection of offices will be done after the connection of conferees into the appropriate bridges or after completion of actions to prepare assigned bridges for conferee access.

(c) Compute the setup time allowing 2 minutes per conferee and 1 minute per interoffice connection. For example, a progressive conference with two assisting offices using a direct connection arrangement, with three conferees at office A, three at B, and four at C with a start time of 0900, the setup time would be as follows:

<u>OFFICE</u>	<u>TIME TO CONNECT CONFEREES</u>	<u>INTERCONNECTION TIME</u>
A	6 Minutes	-
B	6 Minutes	1 Minute
C	8 Minutes	1 Minute

If all operators commence setup at 0900, the originating operator should receive visual indication (steady port lamps on assigned interconnection bridge ports) of completion of arrangements from office B at 0907 and office C at 0909 at which time he will call the conference originator and connect him into the conference. If the interconnection has not been established by the allotted time, the originating operator will follow up to determine the cause for delay. It may be necessary to connect the originator into the conference and advise him that certain conferees are not available.

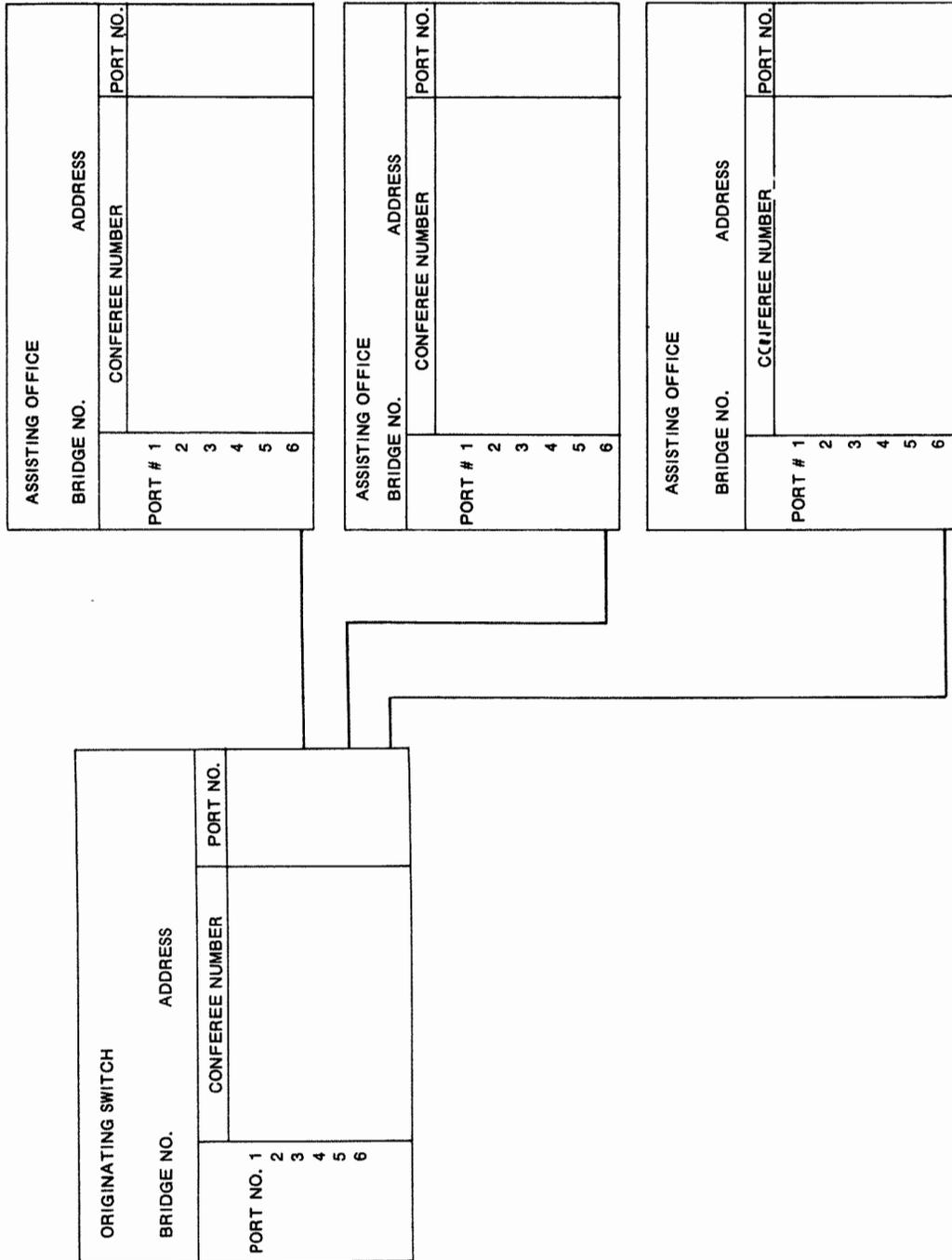


FIGURE 3-1. DIRECT CONNECTION, MULTIOFFICE PLANNING GUIDE

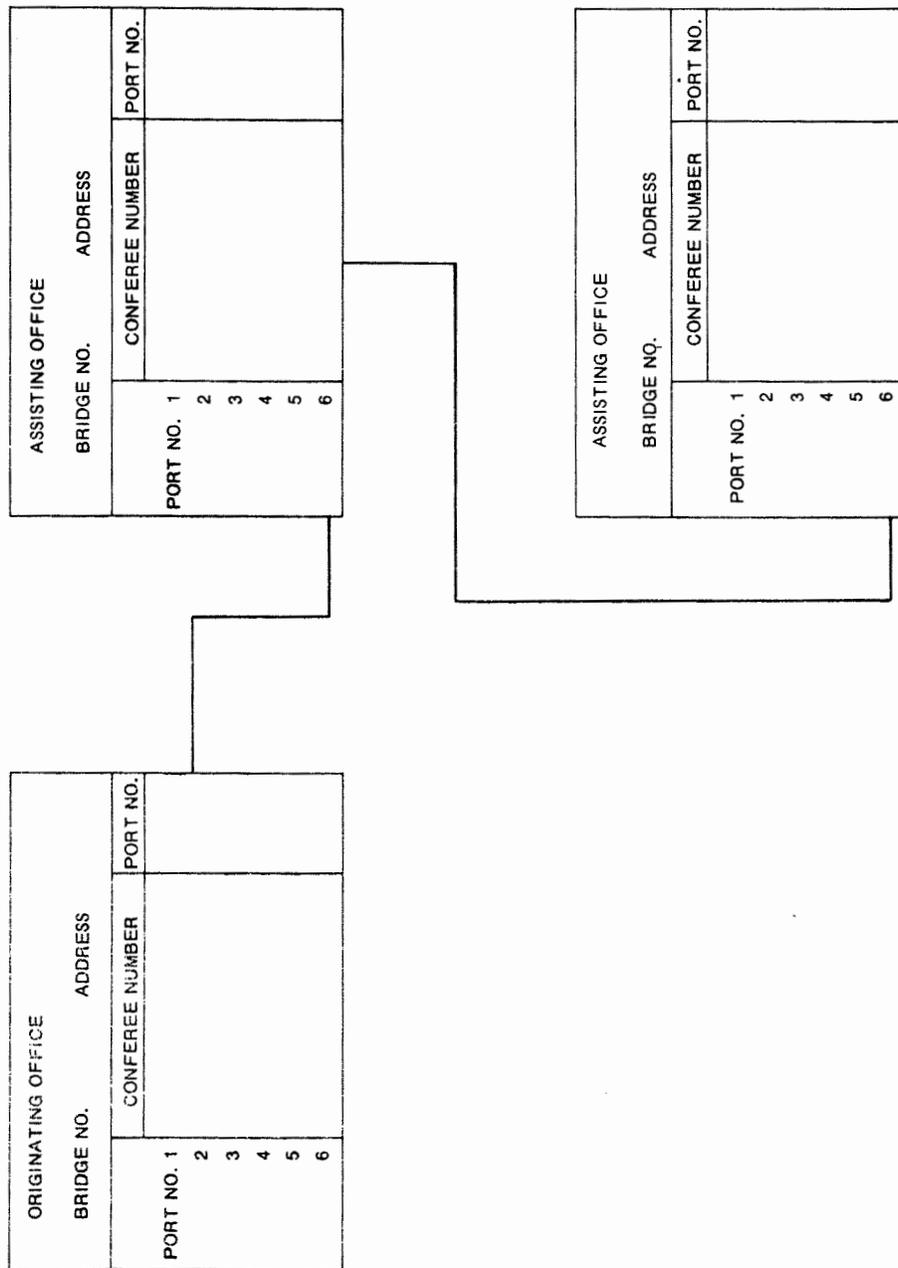


FIGURE 3-2. TANDEM CONNECTION, MULTIOFFICE PLANNING GUIDE

(d) Determine which DSA facility will serve a conferee connected to a switch not having DSA facilities. The facility selected will be the one nearest his geographical location.

c. Conference Procedures. The procedures used in establishing conferences are dependent upon the type of conference requested and the conference arrangement required to establish the connectivity. The operating procedures contained in the DSA Position Group, Technical Manual should be reviewed to ensure a complete understanding of the proper steps in establishing the various types of conferences. The following procedures are supplemental.

(1) Single-Bridge, Progressive Conference. When establishing a single-bridge, progressive conference having one conferee located in another NPA, follow this sequence: Connect local conferees; connect the conferee in the other NPA; and, finally, the conference originator.

(2) Direct Connection, Progressive Conference.

(a) Originating operator will call assisting operators using the inward operator number (NNX-1211) and give them the names and telephone numbers of conferees at their switching centers, the seven-digit port address in the originating office for office interconnection, and the start time for connecting their conferees and making the office interconnections.

(b) All operators will, at the start time, connect their conferees into the assigned bridges and interconnect bridges, if required.

(c) When assigned interconnecting port lamps light "steady," the originating operator will connect the conference originator into the conference.

(d) The conference originator holds roll call of conferees.

(e) Should an assisting operator be unable to contact a conferee, he will dial the inward operator (NNX-1211) at the originating DSA facility and advise the operator accordingly. The originating operator will call the conference originator, advising him of the problem and requesting instructions. The originator may decide to abandon the conference, nominate an alternate conferee, or proceed without the conferee.

(f) Should the assisting operator fail to connect into the originating office bridge by the end of the estimated setup time (indicated by failure of opened port lamp to glow with a steady light, the originating operator will call the inward operator at that location (NNX-1211) and request that operator to provide the reason for delay.

(g) Should the conference originator designate an alternate conferee when the initial conferee is unavailable, the originating operator will call the appropriate inward operator (NNX-1211) and pass instructions for connecting the alternate into the conference.

(3) Direct Connection, Meet-Me Conference.

(a) Notification of assisting operators will be accomplished in the same manner as for a progressive conference.

(b) Five minutes before the scheduled conference time, each operator will prepare his bridge(s) for conferee access.

(4) Tandem Connection, Progressive Conference.

(a) The originating conference operator will call the tandem inward operator (NNX-1211) giving him the names and telephone numbers of the conferees served by that location, the bridge address he must dial to interconnect with the originating office, and the start time for the conference. He then will request the port address(es) to be used by other remote offices interconnecting with the tandem office.

(b) The originating operator will call the assisting operators and provide them the names and AUTOVON numbers of their conferees, the bridge address they must dial to interconnect with the tandem office, and the conference start time.

(c) At the start time, all operators will call and connect their local conferees.

(d) Following the connection of local conferees, the assisting operator(s), other than the tandem operator, will interconnect with the tandem conference bridge.

(e) When interconnect indications are received at the tandem bridge (port lamps steady), the tandem facility operator will then access the port assigned to him in the originating office thereby establishing the final interconnect.

(f) When the originating conference operator receives the indication of the final interconnection (port lamp steady), he will call the conference originator, report arrangements completed, and connect him into the conference.

(5) Tandem Connection, Meet-Me Conference.

(a) The originating operator will call the assisting operators (NNX-1211) and give them the names and telephone numbers of their conferees and the time and date the conference is to be established. He will advise the tandem conference operator which port will be used for interconnection with the originating office and receive from the tandem conference operator port assignments which remote office(s) will use to interconnect with the tandem bridge. Tandem bridge port assignments will be passed, by the originating operator, to each operator interconnecting with the tandem bridge.

(b) Five minutes before the time of the conference, all operators will open assigned ports in their respective bridges providing access for their conferees.

(c) Interconnect of offices will be accomplished in the following sequence:

1. Assisting operators, other than the tandem operator, will access the appropriate ports of the tandem bridge.

2. Following the indication (assigned port lamp light steady) that office interconnect is made, the tandem conference operator will then access his assigned port of the originating bridge.

3. Completion of conference arrangement will be indicated to the originating operator when his interconnect port lamp lights "steady."

# (6) Procedures to Reenter a Random or Meet-Me Conference.

(a) When establishing a random or meet-me conference, the conference operator should set up the conference so as to have one unassigned port available for dialing back into the conference when necessary.

(b) The operator will accomplish entering or reentering an established conference in the following sequence:

1. Activation of the position conference link.
2. Opening of the reserved bridge port.
3. Deactivation of the position conference link.
4. Dialing of the AUTOVON telephone number associated with the opened port.

(c) When the assistance operator releases the link from the conference, the spare port will close.

# (7) Procedures to Drop a Conferee Who is Dialed at FLASH OVERRIDE. If a conferee who has been dialed at a FLASH OVERRIDE precedence must be dropped, the operator will contact the AUTOVON maintenance technician on duty and have him execute a "drop path" on the particular bridge port trunk from the marker test panel. Each conference bridge port should display the associated trunk group and trunk number to permit rapid identification.

CHAPTER 4. AUTOVON ASSISTANCE  
RECORDS AND REPORTING

1. General. This chapter describes the procedures to be used in recording and reporting AUTOVON Assistance Operator (AAO) call handling data at overseas AUTOVON switching centers. These procedures apply to all calls for assistance received by AAO personnel on duty at DSA positions.

2. Procedures.

a. Call Recording and Disposition.

(1) The details of each call handled daily by the outward operator, the information and intercept operator, the inward operator, and the conference operator will be entered on the AUTOVON Assistance Record, figure 4-1, as detailed in paragraph 3. The AUTOVON Assistance Record form may contain a number of different entries. A separate entry will be made for each call handled. Care must be used in making the entries to ensure that they are clearly legible for review and use by the keypunch operators.

(2) An entry on the AUTOVON Assistance Record will be closed when the assistance requested is provided or canceled. All entries will normally be completed on the same date they are filed. If the call cannot be completed before the end of RADAY, it will be carried over to the next day. When all entries on the AUTOVON Assistance Record are closed, the completed form will be maintained for at least 10 days at the DSA facility. Following this period, the forms may be disposed of as specified by service policy or as directed by the DCA area. All AUTOVON Assistance Records completed during designated study periods will be forwarded to the cognizant DCA area as specified in paragraph 4.

3. Completing the AUTOVON Assistance Record (Figure 4-1).

a. Call Handling Data.

(1) Switch (Cols. 1-3). Enter the proper three-letter switch designator (table 4-1).



- (2) Position Number (Cols. 4-5). Enter the two-digit designated position number.
- (3) RADAY (Cols. 6-8). Enter the appropriate date.
- (4) Operator Number (Cols. 9-10). Enter the assigned two-digit operator number.
- (5) Link (Col. 11). Enter the link number on which the incoming call appears.
- (6) Connect Time (Cols. 12-15). Enter the time at which the incoming call is answered (TALK key operated).
- (7) Input Precedence (IP) (Col. 16). Enter the one-digit code for the precedence of the incoming call as indicated by the precedence lamp (table 4-2).
- (8) Area Code (AC) (Col. 17). Enter the letter code for the area in which the call originated (table 4-3).
- (9) Calling Number (Cols. 18-24). Enter the seven-digit telephone number of the calling party. For a PBX user the last four digits will be his extension number.
- (10) AC (Col. 25). Enter the letter code for the area in which the called number is located (table 4-3).
- (11) Called Number (Cols. 26-32). Enter the seven-digit called telephone number.
- (12) Output Precedence (OP) (Col. 33). Enter the one-digit code for the precedence used to complete the call (table 4-2).
- (13) Release Time (Cols. 34-37). If the call is not extended, or is extended but not held on the link, enter the time that the link is released (RLS key operated). If the call is extended and held on the link, enter the time the TALK key is restored to the NEUTRAL position.
- (14) Assistance Reason Code (ARC) (Col. 38). Enter the one-digit code indicating the assistance reason for the call (table 4-4).
- (15) Types of Service (TS) (Col. 39). Enter the one-digit code indicating the type of service requested (table 4-5).

(16) Release Code (RC) (Col. 40). Enter the one-digit code indicating the condition resulting in release of the call from the link (table 4-6).

(17) Disconnect Time (Cols. 41-44). Enter the time of disconnect (steady light on supervisory lamp) and link release (RLS key operated) for completed call held on the link.

(18) Remarks (Cols. 45-60). Enter name and rank (table 4-7) of calling party requesting precedence upgrade, names of conferees on conference calls, and other information as appropriate or specified in chapter 3. These data are not required on information requests.

b. Recording Notes.

(1) Any blocks not applicable to the handling of a call will be left blank.

(2) All blocks used will be filled, using left zeros where necessary (e.g., 0912).

(3) Slash all zeros in numeric fields (Ø).

(4) Assistance reason codes 1, 2, and 3 are used for requests for calls to be placed beyond levels authorized for a subscriber's access line. Code 5 is used for directory service or other information pertaining to telephone numbers. Conference requests are coded 6, calls received on intercept numbers are coded 7, and all other requests for assistance are coded 4.

(5) Release code 1 is used when a call is completed to a called number and code 2 for completion of a call terminating at the AAO positions. Codes 3, 4, and 5 cover certain unsuccessful attempts. Code 6 covers any other non-completions and cases where the AAO operator cannot provide the requested assistance, including turnback of requests for extension beyond subscriber's authorized levels.

4. Reporting Requirements.

a. Trouble Reporting. Operators will note repeated instances of equipment irregularities and will report these problems to the switch maintenance supervisor for initiation of corrective action. Repeated directory number and subscriber

error will be noted, and followup action taken as appropriate. If noncompletion of any flash or flash override call attempt occurs, a detailed description of the circumstances will be forwarded with the overseas AUTOVON Assistance Operator Report for each study period.

b. Overseas AUTOVON Assistance Operator Reports (RCS: DCA(Q) 520-35).

(1) Feeder Reports. These reports will be submitted quarterly by each Overseas AUTOVON Switching Center to the appropriate DCA area. They will cover all calls processed by the AUTOVON Assistance Operator during a quarterly study period. The reports are required to determine the future configuration of overseas AUTOVON Assistance Operator locations and to monitor the demand on these positions.

(a) Schedules for regular quarterly study periods will be established by DCA area headquarters. Normally, a 5-day weekday period during each calendar quarter will be designated as the study period for overseas AUTOVON assistance records. Special study periods may be designated by the area headquarters.

(b) Reports will be prepared from data entered on DD forms 1810 submitted during the 5-day study period. After the supervisor reviews the forms for accuracy and validity, the data will be keypunched on standard 80-column cards, if keypunch support is available. The DD forms 1810 may be submitted in lieu of punched cards if keypunch support is not available. The remarks field will not be entered on the cards.

Reports will be forwarded to the appropriate DCA area for processing. DD forms 1810, if submitted in lieu of cards, # will be forwarded by mail within 2 working days after # the end of the study period. Punched cards will be for- # warded either by mail or transmitted via AUTODIN using a card-to-card LMF within 5 working days after the end of the study period.

# (2) Summary Reports.

(a) These reports will be submitted semiannually by the DCA areas to Headquarters, DCA. The reports are required to provide Headquarters, DCA management visibility of the status of the overseas AAO's. Each summary report will cover two quarterly feeder reports.

# (b) The summary report will be forwarded to Headquarters, DCA within 20 days after the end of alternate study periods. Summary reports will be in a narrative format and will be summarized as to the number of calls by assistance reason code. Major system abuse noted during the study with corrective actions to be taken should be included. These reports will be forwarded either by mail or via AUTODIN.

5. Forms. DD Form 1810: AUTOVON Assistance Record, will be available through normal supply channels. This form may be reproduced locally.

TABLE 4-1. SWITCH DESIGNATION CODES

<u>Switch</u>	<u>Announcement</u>	<u>Switch Designator</u>
PANAMA	901	CZL
FELDBERG	911	FEL
HILLINGDON	912	HIN
MOUNT VERGINE	913	MTV
LANGERKOPF	914	LKF
MOUNT PATERAS	915	MTP
COLTANO	916	CTO
DONNERSBERG	917	DON
HUMOSA	918	HUM
MARTLESHAM HEATH	910	MAM
SCHOENFELD	919	SCH
WAHIAWA	930	WHW
<del>TAIPEI</del>	<del>931</del>	<del>TAI</del>
FORT BUCKNER	932	FTB
FUCHU	933	FUU
FINEGAYAN	934	FGB
CLARK	935	CLK

TABLE 4-2. PRECEDENCE CODES

(1P and OP)

FO - 0

F - 1

I - 2

P - 3

R - 4

TABLE 4-3. AREA CODES (AC)

	Voice	Secure voice	Data	Secure voice (HY11)
CONUS	A.312	F.412	K.712	Q.812
CARIB	B.313	G.413	L.713	R.813
EUROPE	C.314	H.414	M.714	S.814
PACIFIC	D.315	I.415	N.715	T.815
ALASKA	E.317	J.412	P.712	U.817

TABLE 4-4. ASSISTANCE REASON CODE (ARC)

1	-	Precedence upgrade
2	-	MCA upgrade
3	-	Precedence & MCA upgrade
4	-	Operator assistance
5	-	Information
6	-	Conference
7	-	Intercept

TABLE 4-5. TYPE OF SERVICE CODES (TS)

1	-	Voice
2	-	Data
3	-	Conference

TABLE 4-6. RELEASE CODES (RC)

- 1 - Call completed
- 2 - Incoming call to AAO completed
- 3 - Busy
- 4 - No answer
- 5 - Canceled
- 6 - Other

TABLE 4-7. RANK CODES

Civilian - CIV

<u>USAF/USA/USMC</u>		<u>USN/USCG</u>
GEN	CMS	ADM
COL	SMS	CAP
LTC	MSG	CDR
MAJ	TSG	LCD
CPT	SSG	LT
LT	SGT	LJG
WO	AMN	ENS
	CPL	WO
	PVT	PO
		SN

## CHAPTER 5. NUMBERING PLAN

1. General. An all-numeric numbering plan is used in AUTOVON wherein each access line is uniquely identified by a seven-digit number. Additional digits, all of which are dialed only when required, are assigned for precedence rank (above ROUTINE), route indicator, and area codes. Dialing is accomplished through the use of both pushbutton (keyset) and rotary dial mechanisms as follows:

- a. DTMF Keysets. Subscribers (four-wire stations and PBX's when equipped).
- b. MF 2/6 Keysets. AUTOVON assistance operators.
- c. Rotary Dial Pulse (DP) Mechanisms. Users accessing AUTOVON via network-out-dialing (NOD).

2. Telephone Address Components. The components of a telephone address, dialed in this sequence, are as follows:

- a. Precedence Indication. This digit, when dialed, indicates the precedence level of the call and, in accordance with the multilevel precedence feature, results in preemption of lower precedence calls in progress when busy interswitch trunks or access lines are encountered; in addition, the precedence level of a call in progress is marked throughout its route to indicate its degree of protection from preemption by other calls.
- b. Route Indication. This digit, when dialed, indicates the choice of transmission facilities (voice grade or special grade) required to establish a circuit path for the call.
- c. Area Code. A three-digit number assigned to identify AUTOVON numbering plan areas, which when dialed, route the call from one numbering plan area to another; i.e., Europe to CONUS, CONUS to Pacific, etc.
- d. Switching Center Code. A three-digit number assigned to each switching center.
- e. Termination Number. A four-digit number indicating the line termination identification of that access line in the switching center.

### 3. Dialing Sequence and Digit Assignments.

a. Subscribers Using DTMF Keysets. Telephone address will be dialed in the following sequence:

<u>Precedence Indication</u>	<u>Route Indication</u>	<u>Area Code</u>	<u>Switch Code</u>	<u>Termination Number</u>
P	1R	(NYX)	NNX	XXXX

in which:

P is the call precedence and may be any of the following pushbuttons on the keyset: FO, F, I, or P.

R is either of the following route digits: 0 for voice-grade or 1 for special-grade facilities.

N is any digit 2 to 9.

Y is either 0 or 1.

X is any digit 0 to 9.

Precedence is omitted for ROUTINE calls.

Route indicator is dialed only when special-grade facilities are required.

Area code is used only when dialing from one AUTOVON numbering plan area to another.

b. Assistance Operator Using MF 2/6 Keysets. The MF 2/6 keyset provided in the DSA switchboard contains 10-digit keys (1 to 0), a KEY PULSE (KP) key, and a START key (ST). The latter two are required to signal the switching equipment at the beginning and end of the dialing sequence. The components of a telephone address are dialed in the following order:

<u>Key Pulse Digit</u>	<u>Precedence Indication</u>	<u>Route Indication</u>	<u>Area Code</u>	<u>Switch Code</u>	<u>Termination No.</u>	<u>Start Key</u>
KP	P	R	(NYX)	NNX	XXXX	ST

in which:

KP is the digit used to alert the switching equipment of dialing.

P is the precedence of the call visually displayed on the DSA switchboard as follows:

<u>Precedence Displayed</u>	<u>Precedence Level</u>
0	FLASH OVERRIDE*
1	FLASH
2	IMMEDIATE
3	PRIORITY
4	ROUTINE

R is the route indication digit as follows: 0 for voice-grade and 1 for special-grade facilities.

N is any digit 2 to 9.

Y is either 0 or 1.

X is any digit 0 to 9.

The dialing of all digits is mandatory in extending an assistance call or initiating a call from the DSA switchboard, except the area code which is dialed only when extending a call from one AUTOVON numbering plan area to another.

c. Users Using NOD lines with DP Mechanisms. A user accessing AUTOVON via a NOD line using DP mechanisms will dial the following sequence:

<u>AUTOVON Access</u>	<u>Switch Code</u>	<u>Termination Number</u>
one or more digits	NNX	XXXX

as prescribed in the AUTOVON Directory or by local instructions.

N is any digit 2 to 9.

X is any digit 0 to 9.

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\*FLASH OVERRIDE is a capability and is not considered a level of precedence within the Joint Uniform Telephone Communications Precedence System.

Only ROUTINE precedence calls are authorized over NOD lines. For high precedence calls, the user must place his call with the local PBX attendant. A user may not place a special-grade call.

## CHAPTER 6. TONES AND RECORDED ANNOUNCEMENTS

1. General. The AUTOVON switching equipment provides various information tones and recorded announcements to advise subscribers and users of the progress or disposition of their attempts.

2. Information Signals. Conditions encountered in call processing with a description of the tones or announcements are as follows:

<u>Condition</u>	<u>Indication</u>
Switch ready for call	Continuous dial tone
Connected to called line	Audible ringback tone
Called line busy (ROUTINE call)	Interrupted dial tone 60 IPM
All trunks busy (ROUTINE call)	Interrupted dial tone 120 IPM
Called line or all trunks busy (high precedence call)	Blocked precedence announcement (BPA)
ROUTINE ringing tone	10 IPM tone
Precedence ringing tone	30 IPM tone
Permanent signal tone	120 IPM tone
Preempt tone	Steady mixed tone
Equipment irregularities	CONUS: 120 IPM Overseas: Reorder Announcement: (ROA)
Vacant number or restricted route digit dialed	Vacant Code Announcement (VCA)
Unauthorized precedence level attempted	Unauthorized Precedence Announcement (UPA)
<del>PRESET-</del> Conference alert notification	<del>WARBLE</del> <del>Low pitched steady tone</del>
Switching center isolated due to failure of transmission system of switching equipment	Isolated Code Announcement (ICA)

3. Wording of Recorded Announcements. Five recorded announcements are provided for the following conditions encountered:

a. Blocked Precedence Call Announcement (BPA). "Equal or higher precedence calls have prevented completion of your call or the number you have dialed is not equipped for preemption. Please hang up and try again. This is a recording."

b. Vacant Code Announcement (VCA). "Your call cannot be completed as dialed. Please consult your directory and call again or ask your operator for assistance. This is a recording. 000\*."

c. Unauthorized Precedence Announcement (UPA). "The precedence used is not authorized your line. Please use an authorized precedence or ask your operator for assistance. This is a recording. 000\*."

d. Reorder Announcement (ROA). "Your call has not been completed. Please hang up and call again. This is a recording. 000\*."

e. Isolated Code Announcement (ICA). "AUTOVON service disruption has prevented the completion of your call. Please wait 30 minutes and try again. In case of emergency, call your operator. This is a recording. 000\*."

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\*Applicable switch identification code.