AVAYA COMMUNICATION MANAGER

TELEPHONE ADMINISTRATOR TRAINING COURSE
(With Focus on Multi-Line and 96xx IP-Telephone Instruments)

By

JTM Associates, Inc.

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Class of Service/Class of Restrictions
1. **INTRODUCTION**

   A. Course Leader – Introduction
   
   B. Have students introduce themselves

   C. Explain

      1) Importance of Telephone Administrators

         a. Trouble-shooters
         
         b. Perform Station Design - to be reviewed by Telecommunications Department based on their knowledge gained in Training Program. Telephones are a personal thing!
         
         c. Obtain "departmental level" knowledge of new system that is the same as knowledge of old. EXAMPLE: Ordering a phone on old system...(Function of knowing how old system operated)

      2) Give Overview of Course

         a. Review of single line sets (as appropriate)
         
         b. Train on multi-line series sets

         c. Feature interaction

            1. How feature works right

            2. How feature works wrong and how to correct

         d. Station design - applying knowledge of system operation to specify features and type sets for typical calling and call coverage situations.

         e. Voice Mail

         f. Forms Completion

   D. Definitions:

       - PBX (Private Branch Exchange)
       - Avaya
       - MultiVantage
       - Aura
2. **DEMONSTRATION OF FEATURE TONES AND SIGNALS WITH EMPHASIS ON TELEPHONE HABITS AND IMPORTANCE OF KNOWING VOCABULARY**

A. Listen for dial tone (importance)
   1) Say "Hello" if nothing heard
   2) Dial within 10 seconds - (siren)

B. Keep receiver to your ear - (importance)
   Failure results in missed tones (reports from Generic 3 System) and user perception that system does not work.

C. Demonstrate "Confirmation Tone"
   1) Why term "confirmation"?
   2) Demonstration of tone (#22)

D. Distinctive Ringing
   1) 1 - long = inside and transferred outside calls
   2) 2 - short = outside or PBX operator console (seldom used) connected (inside or outside)
   3) 3 - rings = Priority call, automatic callback, trunk queue callback, or consult
   4) Feature is disabled for Data Restricted Lines.

   Use this for FAX Machines
2. DEMONSTRATION OF FEATURE TONES AND SIGNALS WITH EMPHASIS ON TELEPHONE HABITS AND IMPORTANCE OF KNOWING VOCABULARY (continued)

E. Busy Signal - means station is busy.

F. Reorder - Circuits busy (#55)
   1) Most misunderstood signal
   2) Don't know whether or not called number is busy
   3) Do not refer to "reorder" as a "fast busy"

G. Siren Tone (only extensions can receive)
   1) Does not necessarily mean you have done something wrong
   2) Feature not available (already activated or not in the class of service)
   3) Extension not working (on intercept - disconnected and controlled restrictions...)
   4) Misdialed call/invalid code or restriction
   5) Listened to dial tone for more than 10 seconds
2. DEMONSTRATION OF FEATURE TONES AND SIGNALS WITH EMPHASIS ON TELEPHONE HABITS AND IMPORTANCE OF KNOWING VOCABULARY (concluded)

H. Recall Dial Tone - FLASH/TAP/RECALL or switchhook properly depressed and released or an Authorization Code was asked for.

   1)  2500 set – switchhook

   2)  FLASH/TAP/RECALL Series – Recall or Flash Button

   3)  Authorization Code prompt

I. Music on Hold
3. ADDITIONAL TERMS

A. "Star"

B. "Pound Sign" - when we say 'pound,' we do not mean depress or hit; we mean use the "pound sign" button.

C. Receiver

D. Switchhook / Tap / Recall / FLASH

E. "Flash" - firmly depress and immediately release the switchhook when you don't have a Tap/Recall/FLASH button.

F. Class of Restriction (COR) and Class of Service (COS) (COR/COS)

G. Telecommuting Features and Personal Station Access (PSA)

H. **Call Coverage**: A station user can be assigned automatic call redirection to alternate answering stations, for assigned message taking and call screening.

I. **Coverage Call**: A call that is redirected from a principal. When the redirection occurs, and the caller is an extension that is part of the MultiVantage System, Coverage Tone may be given to the caller. The call remains a coverage call until the covering user or principal does something to disassociate the call from one or the other.

J. **Coverage Group**: One to three coverage points in a coverage path assigned to a principal(s).

K. **Coverage Group Criteria**: The administered set of call situations under which calls addressed to a principal(s) are redirected to coverage.

L. **Coverage Path**: The sequential list of coverage answering points selected (in a predefined order) when a call is redirected from a principal(s).

M. **Coverage Answer Point**: The extension, or Hunt Group Pilot, or Vector Directory Number assigned to a coverage group.

N. **Covering User**: The person answering a coverage call redirected from a principal.

O. **Principal**: The extension number that was originally dialed on a coverage call.

P. **Redirected Call**: A call that was intended for the principal station to answer but was redirected to a call coverage path. Redirection can occur when the principal is in a busy, don't answer, or send all call state. The call coverage path consists of a maximum of three coverage points. A coverage point could be a station, a Hunt Group, or a Vector Directory Number. In any case, the person answering the redirected call is called the covering user.
4. USING TELEPHONE TIPS

A. Distribute instructions (Card, QRG, etc.)

B. Cover each feature in the order provided referring to the Administrator Course for supplemental information on features
   - Cover Forms Completion after Features but before IP-Softphone and Voice Mail
5. AUTHORIZATION CODES/CHARGE NUMBERS

A. Authorization Code Uses (Where Applicable)

1) Required on trunk calls when Facilities Restriction Level (FRL) of station is less than that of the trunk to be used.

2) Recall dial tone after dialing number is indication to enter authorization code (which is _____ digits).

3) Authorization code (_____ digits) has an FRL which system tries to match with a trunk FRL:
   a. Some FRLs allow Domestic Long Distance only
   b. Some FRLs allow Domestic and IDDD

4) Do not give out or display your authorization code.

5) You will receive a printout each month of calls made using your authorization code.
   Code will be changed if fraud exists

6) May be eventually required for local calls.

7) Siren tone after entering authorization code means that the code is either:
   a. Invalid or
   b. The code’s FRL is not high enough for trunk which system would use to route call.

8) Authorization Codes may be entered by the PBX operator, may be programmed on an AD button, may be programmed as the last part of a telephone number (except international numbers) or may be a single entry on an abbreviated dialing list.

   When dialing the code, you must wait for the recall dial tone to start (first beep) before dialing.

9) When located in other cities, approved long distance calls should either be charged to your Calling Card (if you have one), your hotel bill, or your home telephone (with voucher submitted when your bill is received). Only approved personnel are issued credit cards.

B. Review Charge Numbers and/or Client/Matter as used on this system except through Authorization Codes.
6. DATA RESTRICTION, DATA PRIVACY/PRIORITY CALLING DENY, and PRIVACY FOR BRIDGED LINES

A. Data Restriction
   1) Through Station Programming
   2) Operator cannot verify
   3) Operates for all calls - including station to station calls
   4) Prohibits distinctive ringing and provides one long ring. This is done to ensure that an answering machine or data device can see the ring.

B. Data Privacy/Priority Calling Deny/Privacy for Bridged Lines
   1) Activated through dial code - all phones have access to the code.
   2) Used on a per call basis - typically by phones who wish to prohibit Priority Calling when on an important call.
   3) Operates for all outgoing calls when activated.
   4) Can be activated for an incoming call by first parking the call and retrieving it.
   5) Denies access to multi-line/digital phones having bridged appearances.
7. LAST NUMBER REDIAL

A. Automatically redials the last number/digits dialed.

B. Operates using a Feature Dial Access Code (DAC) or Feature Button from all telephones not otherwise restricted from originating calls.

C. Will not redial an Authorization Code.

D. Abbreviated Dial buttons load the redial function, i.e., if you make a call using an Abbreviated dial button and then use the redial feature, the feature will dial what was dialed using the abbreviated dial button. The only exception is that the redial feature will not dial an Authorization Code which was part of the number dialed by the Abbreviated Dial button. It will dial the first part of the number up to the point of the Authorization Code.

E. Demonstrate the feature. Point out applicable mnemonics between the code and feature name.

The Feature Access Code is ________________
8. AUTOMATIC CALLBACK/RETURN CALL

A. Demonstrate the feature

B. If activated to your line by someone else and you lift receiver while it is ringing them back, you hear dial tone and they get busy followed by confirmation tone indicating automatic reactivation.

C. You can only activate to one phone at a time and cannot activate to a phone that is Forwarded / WHY?

D. Won't work with call pick-up / WHY?

E. Length of Activation - 30 to 40 minutes.

F. If you activate to an unanswered station, you will be called back the next time they use their phone and hang up. This is called the Return Call feature.

G. For Multi-line sets, as long as one of your appearances is idle, the automatic call back feature will call you back.

H. Only one activation at a time can be made to any one number in the system.

I. Multi-line/digital sets may have more than one Auto Call Back button.

J. Priority Ring tones are received if when the system calls you back.

K. The call back will cancel after approximately 15 seconds.

L. The system does not remember if you have talked.
9. ABBREVIATED DIALING/SPEED CALLING

A. Three Lists. By convention, we separate them into two personal lists of up to 100 numbers, and a group list of up to 100 numbers. However a system list may be assigned as one of the three lists. List size is assigned in increments of 5 with a minimum of 15 to create consistent 2 digit Dial Code number formats.

B. One controlling extension per list. The lists are numbered 1, 2, and 3 and these numbers are used in programming the list. However, these numbers are not used to access the lists.

C. Group lists are usually assigned as list 3 to be consistent with the Dialing Instructions Card and may be assigned a controlling extension. When the controlling extension has access to the list, the extension can program the list in the same fashion as personal lists. However, the controlling extension can also program the list even when access to the list is not provided by using a different Dial Access Code and procedure.

D. System lists programmed/controlled by the PBX/ECS System Administrator and may be classed as Privileged to allow calling to any number regardless of FRL.

E. Any number of stations may share the group or system lists.

F. Can program a maximum of 24 digits, including pauses, to dial local, outside numbers, long distance numbers and international numbers on a personal, group, or system list. Authorization Codes may be programmed as the last part of the string for numbers using the North American Dial Plan (9-1-Area Code-Number). Telecommunications can program Authorization Codes as the last part of the string for International Numbers.

G. You can also program pauses and waiting periods within a number on the personal, group or system list (possibly to access an OCC) or pocket paging system. This is usually done by the Telecommunications Department for you.

H. Priority Calling overrides originate only line appearances on electronic sets.

I. A personal or group list may be programmed (by the PBX/ECS System Administrator) to dial extensions using Priority Calling. This would allow access from selected phones to reach various extensions and override their Send All Calls.
9. ABBREVIATED DIALING/SPEED CALLING (concluded)

J. Multi-line/digital sets can have Abbreviated Dialing list codes assigned to buttons on the set. Depressing such a button causes the number programmed on the associated list and list code to be dialed.

K. Multi-line/digital sets can also have Auto Dial/SD buttons which can be used in the same way Abbreviated Dialing list codes buttons are used. However, Auto Dial buttons are limited to 16 digits in the string which limits the programming of Authorization Codes as part of the number.

M. To erase a number from an Auto Dial/SD button re-program the button but enter a (#) as the number to be called.

N. Demonstrate the programming and using the feature. Have each student program and call a local number.

O. Demonstrate the Stored Number feature button and how to erase a number.
10. HOT LINE SERVICE

A. Provides the ability to set up designated extensions to automatically dial any number including the PBX operator when you lift the receiver.

B. Can be used for security applications where a phone can be programmed to call the security department.

D. Can be used for elevator phones, etc.

E. The originating end may be any Single-line Analog or multi-line telephone extension. The called end may be any telephone number that can be called using the PBX system.
11. STATION HUNTING

A. Uses
   1) When busy, a number needs other lines to receive calls in order to handle traffic volume.
   2) Is generally used for functions such as a Fax Machine Group.

B. Types
   1) Station/Terminal - Calls to one extension hunt to another in sequence up to 30 numbers. Hunting may be linear, circular, or branched in any combination.
   2) Hunt Groups - used with a single lead Pilot Number or Vector Directory Number.
      a. Linear/Terminal - Called DDC (Direct Department Calling)
      b. Uniform - Called UCD (Uniform Call Distribution)
      c. Automatic - Called ACD (Automatic Call Distribution) - See #17 below.
      d. Limitation - maximum 600 hunt groups per system. Maximum of 999 stations per group and a maximum of 3,000 hunt stations across all hunt groups.
      e. The hunt pilot number (number dialed) does not appear on an instrument and is used to steer calls to the individual stations in the hunt group. The pilot number is preceded by the Vector Directory Number (VDN) when Vectoring is used.

C. Individual stations may receive individual calls directed to their specific station (non hunt).
12. AUTOMATIC CALL DISTRIBUTION (ACD) & CALL CENTER FEATURES

A. Form of hunting that distributes calls evenly among the stations assigned.

B. Used to increase productivity of answering positions through the use of ZIP tone call forcing.

C. Individual stations may receive individual calls directed to their specific station (non ACD/hunt) while being unavailable for ACD calls.

D. Comes with substantial management statistics regarding call processing.

E. The Auto Available Split feature (AAS on Hunt form) is used for ACDs serving computers where the stations in the split must always remain available even after a PBX processor failure. This feature, blocks the ability to deny calls on an individual extension (ACD agent) basis. Denying calls can be useful if a computer port fails.

F. CMS Supervisor is available with Call Management System (CMS) to provide desktop reporting (real/historical) of ACD activity and agent statistics.

G. Expert Agent, when provided, assigns an extension as the Login ID for each ACD agent. The telephone instrument takes on the personality of the ID when an agent is logged in.
13. CALL VECTORING & CALL PROMPTING

A. Provides the ability to tailor call handling.

B. Is used in conjunction with ACD operation to direct call handling for ACDs but can be used independently of ACD operation.

C. Typical uses
   
   1) To route calls to functions such as multiple announcements (more than two) and ACD splits or to specific telephone numbers.
   
   2) To control call routing based on time of day, number of calls and length of time of calls waiting in ACD queue, number of staffed ACD agents, and number of available ACD agents.
   
   3) To provide busy signal and call disconnection control based on parameters in C-2 above.

D. Each vector has one or more Vector Directory Numbers (VDNs) which point to the vector. When the vector is used to terminate calls to a hunt group, the VDN is dialed by the user and the vector dials the pilot number of the hunt group.

E. Call prompting provides the ability using a vector to play a recorded announcement to the caller asking (prompting) the caller to dial a number. The system is programmed to receive the number and process the call further based on whether or not the number dialed matches the number which has been programmed in the vector as the expected number.
14. **CONTROLLED RESTRICTIONS**

A. Restrict a group of telephones from designated telephones or the PBX Operator's Console

1) Termination = No Call Received

2) Outward = No Outward Trunk Calls (local, Long Distance, Paging, Tie, etc.)

3) Station To Station = No Calls Received From Other Extensions but trunk calls can be received.

4) Outward and Station To Station = Combines the two.

5) Outward and Termination = Combines the two.

6) Termination and Station to Station = Combines the two.

7) Total = No Termination and No Origination (phone is out of service).

B. Restrict an individual telephone from designated telephones or the PBX Operator's Console.

1) If an individual which is a member of a group has an individual restriction applied, and a subsequent group restriction removal is applied, the individual restriction will not be removed in the group removal process or vice versa.

2) Restriction types for individual telephones are the same types as used for Groups.

C. Individual and Group restrictions are mutually exclusive. However, restrictions when activated by one method remain active regardless of activity by the other method.
15. PAGING - PAGE PAC (within Department) and CALL PARK

A. Page Pac

1) Used for loudspeaker paging in selected areas

2) Multi-line Series sets can have an AD button which dials the dial access code, and then the user dials a zone code.

B. Call Park

1) If you receive a busy signal when Parking, someone is currently parking a call. Depress CANCEL and try again.

2.) If you receive a Reorder/Fast Busy when Parking, another call is already parked on the extension to which you are trying to park. Depress CANCEL to return to your party, select another extension to park the call on, and try again.

3) A call remains parked until the Park Time Out Interval expires. After time out, the call will be removed from park and will ring back (with "Inside" one-long ring) to the extension that did the parking.
   - You can use Call Pick Up during the ring back interval to answer the call but you cannot use the retrieve process during the ring back interval.
   - If the Extension doesn’t answer but has Coverage, the call will follow the Coverage Path

The Park Timeout Interval for this system is ____________.
16.  6-PARTY AND MEET-ME CONFERENCE

A. Multi-line sets can set up their own conferences (5 parties plus the conference originator). Instruments with a display indicate the number of currently connected parties in the conference in addition to the originator.

B. Conferees may be extensions or trunk connected parties.

C. Meet-Me Conference provides the ability for an individual or department to have a Telephone Number assigned that supports a Meet-Me conference of a total of 6 parties.

D. Conference No-Hold – When on a call, depression of this button provides the ability to dial another party without placing your call on hold. When the called party answers, they are immediately conferenced with you and your call.
   - Calls requiring an Authorization Code will receive an “Invalid Number Dialed” display.
   - Calls to a busy extension number will receive a “Called party x-xxxx is busy” display.
   - Calls to an outside number that is busy will receive a “Party xxx-xxxx is Not Available” display.

E. A Conference Feature button may be translated on a Multi-Line Set to:
   - Display the name/number associated with each party in the call
   - Each press of the button scrolls through the list of parties
   - The Drop Button is depressed when the selected party is displayed
   - This Feature Button works for any conference and is not limited to Meet-Me Conferences
     - IP-Telephones summarize the information for you without scrolling

F. The Conference Access Code (CAC) may be changed from:
   - The phone designated as the Conference Controller
   - An EC500 phone of the Conference Controller. EC500 requires that you first call the Telecommuting Extension.
16. **6-PARTY AND MEET-ME CONFERENCE** (continued)

G. To Change the CAC from the Conference Controller phone:

- DIAL (_____/Meet-Me CAC Change Code) ● Receive Dial Tone
- DIAL (Telephone Number (VDN) of Meet-Me Conference)
  - ● DIAL (#)
- DIAL (Existing 6-digit CAC)
  - ● DIAL (#)
  - ● Receive Dial Tone
- DIAL (New 6-digit CAC)
  - ● DIAL (#)
  - ● Receive Dial Tone
- DIAL (New 6-digit CAC Again)
  - ● DIAL (#)
  - ● Receive Confirmation Tone

H. To change From an EC500 Station of the Conference Controller
- DIAL (Telecommuting Extension)
  - ● Receive Dial Tone
- Follow procedure above. Note, instead of receiving Confirmation Tone, you may receive Siren Tone but the code will have been changed.
- Verify the Change by calling the Conference Telephone Number and trying the new CAC.
17. CALL COVERAGE

A. Used when you are away from your phone for either short or long periods.
   1) Coverage Don't Answer - programmable system feature.
   2) Coverage Busy - programmable system feature.
   3) Coverage Active - programmable system feature.
   4) Send All Calls - can activate and deactivate from the instrument only.
   5) Permanent Send All Calls - Programmable system feature. Typically used for extensions that have permanent coverage to voice mail (Bulletin Boards/Auto Attendants).

B. Can have 3 coverage answer points for every principal
   1) A hunt group or Voice Mail can be a coverage point.
   2) One covering user may be a coverage point for many extensions
      a. Won't know who you are answering for unless you have a display set.
      b. Same extension cannot be in one coverage path twice.
   3) Can define number of alerting cycles for Don't Answer coverage for each coverage group/path (1-99 rings).
   4) The attendant console **cannot** activate or cancel Send All Calls.
17. CALL COVERAGE (continued)

C. Priority calls are not redirected to coverage (Automatic Callback, PCO Line, Intercom, and Priority Calling).

D. Call Coverage has precedence over Call Forwarding as follows:

1) If any call forwarding is assigned to an extension that has coverage, calls to that extension are redirected according to call coverage, i.e., Coverage overrides forwarding, if the Principal's coverage criteria are met at the forwarded-to extension.

2) If a coverage point has call forwarding active, the point is removed from the coverage path.

3) If all coverage points in a coverage path are unavailable either because they are forwarded, have Send All Calls active, or are busy, calls to the principal will receive a busy signal if the principal either activates Send All Calls or is also busy. The only way to prevent this situation is to have an ACD or VOICE MAIL as the last coverage point.

4) Call Forwarding will not follow Coverage and vice versa.

E. Call Coverage has precedence over EC500 as follows:

1) If Send Calls is active calls will go to Coverage and will not ring the EC500 Destination.

2) No Answer Coverage at the specified No-Answer-Interval will cause an EC500 call to be dropped and the call will go to Coverage.
17. CALL COVERAGE (continued)

F. A Simulated Bridged Appearance (SBA) is a bridge of the same call between two different multi-line/digital set extensions where as a real bridge is created when a call is bridged between two or more instruments on the same extension.

G. An SBA is created automatically between the principal and a coverage point when a call is directed by Coverage from one multi-line/digital set number to another. When this occurs:

1) Either the principal or covering user may answer a redirected call while covering user’s phone is ringing.

2) If covering user answers first, the principal may pickup on that line and be bridged with covering user and the calling party.

3) If the principal answers first, the SBA is dropped and the covering user cannot join in the call.

4) If covering user answers first and then puts calling party on hold, and the principal goes off hook on his/her line, the SBA remains, the call is not removed from hold on most system configurations.

H. An SBA is not provided when the either the principal or the covering user has a single line set.

I. Multi-Line Telephone sets can have a separate Send All Calls button for differing extensions.

J. Coverage Answer Group provides the ability to have up to eight extensions ring simultaneously for the same coverage call. The Answer Group is created and then the Group is used in the coverage path. The first extension in the group to go off-hook gets the call and the other group extensions are no longer able to answer the call.
17. CALL COVERAGE (concluded)

K. Remote Coverage provides the ability to designate either extensions at DCS locations or outside numbers (local/Toll) as coverage points. When an outside number is designated, no FRL controls apply. Where the coverage point is a Toll Call, the Principal Station is charged for each call answered at an outside coverage point.

L. A Second Coverage Path may be designated to be used in lieu of the Standard or "First" Coverage Path. Activation and alternating between paths is controlled by the user using the Telecommuting Features.

M. Coverage Time Tables are available to automatically change the designated Coverage Path based on time of day. Up to five changes per day over a week can occur.

N. Coverage Holiday Tables work with Time Tables to change Coverage handling on official holidays.
18. CALL FORWARDING (FOLLOW ME) ALL CALLS

A. Is most frequently used when you wish to answer your calls at a different phone but still have Coverage handle the call if the other phone is busy or you don’t answer it.

B. Will not forward twice - if station you are forwarded to forwards, your calls still ring at the station to which you forwarded.
   • Can forward to a station which is already forwarded. However, item B. above remains in effect.

C. Any number of stations may forward to a given station.

D. Can only forward to stations on the system unless special COS is provided. Forwarding off the system should be avoided for security reasons.

E. Can use call pickup to answer a call forwarded to a phone in your pickup group.

F. Person to whom you are forwarded can override forwarding and call you.

G. Send All Calls takes precedence over Forwarding on the principal's extension. Busy and No Answer Call Coverage will occur if the forwarded to station either is busy or doesn't answer and the principal has either or both of these Coverage criteria.
19. **CALL FORWARDING BUSY/DON'T ANSWER**

A. Prior to Coverage, this feature was used when you were in and out many times during the day and/or wanted your calls answered whenever you didn't answer.
   - It is now used to override your Coverage similar to Call Forwarding All Calls but on a no-answer basis.
   - Where Coverage normally sends your calls to a Secretary first and then to Voice Mail but you want your calls to go to Voice Mail to bypass the Coverage on a no-answer basis, this feature can be used.
   - In addition, for the no answer forwarding to operate, the no answer Coverage interval must be more than three rings. Otherwise, Coverage will occur and take precedence.
20. JOINING TWO PARTIES

A. The following procedure is provided for future reference for those parties wishing to perform a Join function.

B. This feature allows you to connect parties on two different buttons together. It is typically used when you hold a party and then page a party to call you, and then need to connect the two parties.

C. To use:

1) Go in on either of the two lines you wish to join. Be sure to note which button you are on and the button of the second party which is on hold.

2) Depress the "Conference" button (button above the Drop button). Line you were on is put on hold.

3) Ignore the dial tone you will receive.

4) Depress the button of the second party you wish to join.

5) Depress the "Conference" button.

6) Both parties and you are together. If you hang up, the two parties can continue to converse as long as one of them called you.
21. PERSONAL STATION ACCESS (PSA) TELECOMMUTING, & EC500

THESE FEATURES ARE NOT AVAILABLE ON ALL SYSTEMS

A. Telecommuting Features:

1) Coverage Path Selection - User selection of Coverage Path choices. This feature allows station users to select one of two previously administered Coverage Paths assigned to them from any on-site or off-site location.

2) Remote Forwarding - Ability to activate, change, or cancel Call Forwarding All and Busy/Don't Answer from any on-site or off-site location.

3) Forwarding Local - Ability to designate a local (non 5 digit) number as the forwarding destination. If Coverage is active, the forwarding destination is dropped and the call goes to the Coverage Path.

4) Forwarding Toll - Ability to designate a Toll number as the forwarding (All or Busy/DA) destination. Requires special permission as it un-restricts the station and allows Toll calls without an Authorization Code from the station. Forwarded station is billed for each call forwarded and answered at the Toll location. If Coverage is active, the forwarding destination is dropped and the call goes to the Coverage Path.

5) Remote Coverage - Ability to designate either extensions at DCS locations or outside numbers (local/Toll) as coverage points. When an outside number is designated, no FRL controls apply. Where the coverage point is a Toll Call, the Principal Station is charged for each call answered at an outside coverage point.

If call is not answered at remote location and a subsequent coverage point is provided in the Coverage Path, the outside call is dropped and the call continues to the next point.

6) Remote Send All Calls – Ability to activate or cancel Send All Calls from any on-site or off-site location.

7) Remote EC500 – Ability to activate or cancel EC500 from any on-site or off-site location.

8) Personal Station Access (PSA) – Ability to take your telephone configuration with you when visiting other MultiVantage locations.
21. PERSONAL STATION ACCESS (PSA) TELECOMMUTING & EC500 (continued)

THESE FEATURES ARE NOT AVAILABLE ON ALL SYSTEMS

A. Telecommuting Features: (concluded)

9) Features are activated/cancelled remotely by dialing the Telecommuting Access Telephone Number followed by:

- The Feature Activate/Cancel Code +
- Extension of the applicable phone station + (#) +
- Station Security Code of the phone station + (#) +
  - For Forwarding Activation the forwarded-to destination is dialed. If number is not an extension, 9 is dialed followed by the normal number format, e.g. 9-1-Area Code-Number if a Toll destination.
  - For Coverage Path Change, a (1 or 2) is dialed

10) Entering a (#) after the Feature Activate/Cancel code indicates that the current extension is to be used and therefore, the extension number is not entered. This is used when calling from the Extension to which the Feature Activation/Canceling applies.

B. Extension to Cellular 500 (EC500) Feature:

1) Extends calls made to a Telephone Station to a telephone outside the PBX/ECS such as a Cell Phone or Home Phone.

2) When activated, calls ring simultaneously at the called station and the Cell Phone. If the called station answers first, the connection to the Cell Phone is dropped. If the Cell Phone answers first, the call remains bridged to the called station until the call is completed.

3) When calling from the Cell Phone to another ECS station, and the called station has a display set, the called party sees the ECS Station Name and extension number of the caller rather than the Cell Phone number.

4) When the Telephone Station with EC500 is a Multi-Line instrument and the Cell Phone supports Call Waiting, two simultaneous calls can be sent to the Cell Phone.

5) The EC500 Feature can be activated/cancelled on-site or remotely from the Cell Phone by dialing the Telecommuter Access Telephone followed by the procedures detailed above.
21. PERSONAL STATION ACCESS (PSA) TELECOMMUTING & EC500 (concluded)

THESE FEATURES ARE NOT AVAILABLE ON ALL SYSTEMS

B. Extension to Cellular 500 (EC500) Feature: (concluded)

6) A feature button can be administered on a Multi-line telephone to activate/cancel the feature without using the Feature Access Codes.

   a. When a button is administered, an option is provided for a fixed 1-hour activation timer. After activating the EC500 feature, either by depressing the button, or using the Feature Access Code, the timer is activated by a subsequent depression of the feature button.

   b. If the timer option is selected, the feature automatically activated after 1-hour when activating the feature and re-activated after 1-hour when deactivating the feature.

      • When Activating the feature, the first depression of the feature button activates the feature immediately.
      • A second depression of the button, deactivates the feature and turns on the 1-hour timer. The feature becomes active at the end of 1-hour.
      • When Deactivating the feature, the first depression of the feature button deactivates the feature and starts the 1-hour timer. The feature re-activates at the end of the 1-hour timer.
      • A second depression of the button, deactivates the feature immediately.

7) Use of the ECS500 feature results in an increase in Cell Phone usage charges.

8) Demonstrate EC500 Button and Feature
21. PERSONAL STATION ACCESS (PSA) TELECOMMUTING & EC500 (concluded)

THESE FEATURES ARE NOT AVAILABLE ON ALL SYSTEMS

C. Personal Station Access:

1) Provides the ability to move your phone with you from city-to-city.

2) To Disassociate/Separate – your extension from the instrument – Must be done at the time you leave before going to the other city:
   • Get Dial Tone and Dial the Disassociate/Separate Code
   • Receive a 3-beep Confirmation Tone
   • EC500 does not operate but Busy Coverage does operate

3) To Associate/Merge – your extension to the instrument in the new city:
   • Get Dial Tone at the new instrument and Dial the
     Associate/Merge Code
   • Dial your extension followed by a (#)
   • Dial your Station Security Code followed by a (#)
   • Receive a 3-beep Confirmation Tone
   • Button Labels do not move to the new phone as they are stored in the instrument.
22. NAMES DATA BASE RULES AND CONVENTIONS

A. Each extension will have either a person's name or function's name assigned to it.

B. Personal names will be entered as follows:
   1) Last name (first letter is upper case, others lower case)
   2) Comma
   3) First name or first initial (first letter/initial is upper case, other letters of first name are lower case)
   4) Space (if first name was used instead of initial)
   5) Second name or second initial (first letter/initial is upper case, other letters of second name are lower case)

C. Personal name conventions are as follows:
   1) There is no space following the comma after the first name
   2) Initials will be followed by periods
   3) Two initials together will be separated with only a period
   4) Names with hyphens, apostrophes, and lower case first letters shall be entered as used by the individual using the following formats as examples:
      a. d’Anconia, Franco
      b. Jones-Martin, W.T.
      c. McDonald, John
      d. MacDonald, John
   5) Honorifics will not be used and degrees will only be indicated in the case of physicians or PHDs, using the following format as an example:
      Jones, Peter PHD
      Honorifics are always placed at the end of the name field.
22. NAMES DATABASE RULES AND CONVENTIONS (continued)

C. Personal name conventions are as follows: (concluded)

6. Suffixes will only be used when required to differentiate between individuals with the same name who are both/all associated with the institution:

   Wilson, D. Jr. MD

Suffixes are always placed after the first name or initial.

7. Names cannot exceed 27 total characters. First names should be abbreviated or only initials used when necessary.

8. When an extension may be used by a variety of people due to staffing situations, the principal's last name should be used followed by a suffix composed of a hyphen followed by upper case letters describing the function. However, this methodology shall not be used as an easy way to avoid proper names database operations.

   The function should be abbreviated when necessary to insure that the total characters do not exceed 27. Abbreviations will be subject to telecommunications approval. The format will be as follows:

   Weisenthal-SECT

D. Departments and other functions main numbers shall be entered using all upper case letters for a maximum of 27 characters. The word department shall not be used in the name. Abbreviations required to be in compliance with the 27 character rule will be subject to telecommunications approval. The format will be as follows:

   INFORMATION TECH SERVICES - Note why abbreviated in this fashion.

E. Hot Line extensions shall be entered using the location and nature of the originating line entered in upper case letters followed by a hyphen and a suffix of all upper case letters. The suffix will be assigned by the telecommunications department. Some typical examples are:

   LOBBY-HOTLN
   ELEV 1234-HOTLN
22. NAMES DATA BASE RULES AND CONVENTIONS (concluded)

F. When telephone service is to be provided to an unoccupied desk or instrument, the name shall be entered with a functional description followed by the letters “TBA” (To Be Announced). The format will be as follows:

INFORMATION SERVICES-TBA

G. When a number is used for Voice Mail purposes only for such things as bulletin boards or automated attendants, the name shall be entered following the conventions given above with a final suffix - Voice Mail. The format will be as follows:

Massey,J-VM

CAFETERIA-VM

H. When a number is used as an additional number to the primary mail box number for Voice Mail FAX, the name shall be entered following the conventions given above with a final suffix - FAX. The format will be as follows:

Massey,J-FAX

CAFETERIA-FAX

I. When a number is used exclusively for answering coverage calls and is not a Departmental Number, enter the name of the department followed by a hyphen and a suffix of “CVRG.”

COMPTROLLER-CVRG

J. When a number is used as a Personal Meet-Me bridge, enter Meet-Me followed by a hyphen and a suffix of the Individual’s Name.

MEET-ME-Massey

K. The Directory feature of the PBX requires the above conventions because it searches based on last name followed by first name. If there is no comma in the name, it searches on the last word of the alphabetic string.

When spelling a name using the Directory feature, a one (1) is used for a comma, period, or space. Hyphens (-) in the name are ignored during lookup.

L. Two Tildes (~~) at the beginning of the Name field is used to suppress name look-up using the Directory Feature.

M. System Failure phones are entered as “System Fail” followed by the department, e.g. “System Fail Telecom”
23. VOICE MAIL REVIEW

A. Review Access Telephone Number
B. Review Telephone User Interface (TUI)
C. Review Message Storage
D. Review Integration with Email, if any
24. FORMS COMPLETION

COMPLETE ALL FORMS IN PENCIL ONLY

FOR TRAINING, DRAW SAMPLE DEPARTMENT FLOOR PLAN WITH SOME EXISTING NUMBERS AND SOME NEW NUMBERS AND USE PROCEDURES BELOW TO COMPLETE SAMPLE FORMS. PROVIDE COMPLETED SET AFTER EXERCISE.

A. Either obtain from telecommunications or draw by hand, a floor plan. Note the room number for each room as "ROOM" and the number. Make several copies. Next note on one copy, the Jack Label number) of each telephone jack (for existing) on the drawing. This includes existing but unused jacks. If the jack is not labeled, note "UNLABELED" on the drawing. In addition, note all jacks located for wall phones as "WALL" and jacks located over counter surfaces as "COUNTER." With the Jack Label also note the Port and Set ID of existing instruments. In addition, note only the jacks (not telephones) to be removed (if any) as "REMOVE JACK." Jacks are generally not removed unless a wall is being reconfigured. Jacks are not moved. They are added, removed, or left in place. Label this drawing copy as "EXISTING CONFIGURATION."

B. On another floor plan provide the new configuration with new/reconfigured walls (as applicable) using the procedures provided in "A" above. This includes showing all jack locations (both used and unused) which will remain, along with their appropriate existing/unchanged or new Port/Set ID for relocated sets. For sets with new Set IDs but existing Ports use the Port and note the new prime line as "NN#1," "NN#2," etc. For completely new sets/jacks, note the jack with "NEW," leave the Port blank, and note the new prime line as previously described. Label this drawing copy as "NEW CONFIGURATION."

C. The process described in "A" and "B" above should provide Telecommunications with the necessary information to easily figure out what is being changed. Arrows and notes showing "move this" etc. are not desired. Telecommunications will make any additional notes that are needed when they meet with you.
24. FORMS COMPLETION (continued)

D. Complete Form 1-A (abbreviated/short telephone order form) for individual extension/telephone changes up to and including five extensions/telephones using the procedures described for the completion of Form 1 below to aid you in completing Form 1-A.

For more than five, please provide Form 1 as well as Form 1-A. In addition, please maintain Form 1 as a summary of your department’s telephone configuration.

1) Put the name or function description in the NAME/FUNCT column as you wish it to appear. This also is to help you remember the assignments of the extensions when reviewing later.

2) Fill in the ACT (Activity Column) using:

A = Add new equipment/jack
R = Remove existing equipment (do not note jack removals as they will be on drawing),
M = Move existing equipment to new location without changes,
C = Change programming of existing equipment,
M&C = Move and change programming of existing equipment,
Blank = no activity.

When converting from old equipment to new, see instructions below for listing all existing extensions.

3) Fill in the EQUIP TYPE (Equipment Type) column using:

(XXXX) Model Number, e.g. AD2500, AW2500, AID9316, AWID9316, M9620, M9630, M9650, MW9620, MW9630, MW9650

ADXXXX for single line Analog Desk set without Caller ID
AWXXXX for single line Analog Wall set without Caller ID
AIDXXXX for single line Analog Desk set with Caller ID
AWIDXXXX for single line Analog Wall set with Caller ID
MXXXXX for Digital/IP Multi-line desk sets
MWXXXX for Digital/IP Multi-line wall sets
BEM for Button Expansion Modules for a Multi-line set
EB for External Bell (inside buildings)
EG for External Gong/Horn (outside buildings)
SPK for Analog Set with Speaker Phone
J for jack only
BRI for ISDN BRI Stations and Video Ports
CCA for Analog Credit Card Authorization machine
Fax for Analog routine Fax machine
SG3FAX for Super G3 Fax machine
MODEM for Analog Lines connected to a Modem
24. FORMS COMPLETION (continued)

D. Complete Form 1 (continued)

4) Fill in the EXT TERM (Extension Termination) column using:

PN       Ported Number (Telecom Entry)
Blank   for extensions which terminate on single line or digital sets as the prime line.
EC500    for extensions that have EC500
EC500+   for additional extensions used for EC500 on analog
       Or traditional telephones
C        for extensions that are used strictly for Coverage
D        for extensions which are department/function extensions
H        for Hotline extensions
IP       IP-Softphone
IPAGNT   IP-Agent
MM       for Meet-Me-Conference extensions where xxxxxx is
 xxxxxx   the 6-digit Conference Access Code (CAC) – Place the extension
       number of the phone that can change the CAC in the associate
       Equipment Port Column
P        for Hunt Group Pilot numbers
VDN      Vector Directory Number (Telecom Entry)
VM       for extensions which have a Voice Mail box. This is always a suffix to
       one of the above choices, e.g., VM, DVM
X        for Voice Mail Bulletin Board, Auto Attendants, and extensions
       permanently forwarded to Voice Mail. NOTE TO TELECOM: this entry
       requires permanent Send All Calls Coverage
24. FORMS COMPLETION (continued)

D. Complete Form 1 (continued)

5) Fill in the extension number. For new extensions, use the bottom half of the field and number them NN#1, NN#2, etc. for New Number 1, New Number 2. Use the same numbering format for these numbers maintaining consistency throughout all the forms and the room drawing. In other words, if you use NN#1 in one place or form, it is assumed and required that you are referring to the same new extension if you use NN#1 in another place or form. Use the top half of the field for existing extension numbers. Telecom will also use the top half to assign the extensions you have designated with NN#1, etc.

When the extension is remaining but is relocating to a new Port (see 6 below), enter M&C in the ACT column, the old Port on the first line and the changed-to Port (if known) on the line immediately below. If the changed-to Port is not known, leave a blank line below the first line.

When converting from old equipment, list all extensions which are to be removed with the Activity column = R. Be sure to note hunting (see 8 below).

6) Fill in the Equipment Port for those extensions where the Port is known. For Meet-Me Conference Numbers, enter the Conference Controlling Extension (the extension which can change the Conference Access Code). Otherwise, leave the field blank.

The Port is always blank for X, VDN, and Hunt Group Pilots.

7) Fill in the COR/COS (Class Of Restriction/Service) column using the Class Of Restriction/Service Sheet for your selection. When in doubt, ask Communications.

8) If using Station Hunt, enter the extension "hunted to" in the HUNT TO GROUP NO. field. For Group Hunt, see item E. below and then fill in the HUNT TO GROUP NO. with the group number for which the number entered in the EXTENSION NUMBER column is the Pilot number (if any).
24. FORMS COMPLETION (continued)

D. Complete Form 1 (continued)

9) Fill in Form 5 (Call Pick Up) if you need to in order to organize your Pick Up Groups using 9a - 9d below. Otherwise, go to 9e below.

a. Label each new Call Pick Up group using alphabetic characters A-Z entering the group designation in the Administrator column.

b. Enter the extensions to be assigned to the associated group in the EXTENSIONS ASSIGNED column. Use NN#1, NN#2, etc. for new numbers and maintain correlation of these designations with the entries on other forms and drawings.

c. When removing or changing group assignments for existing extensions, mark through the assignment on the old group and enter the assignment in the new group.

d. Telecom will fill in the actual Pick Up Group number in the TELECOM field. This number will be used as future reference for the associated group.

e. Enter the Pick Up alphabetic designations you used for new groups on Form 1 for the appropriate extensions. Use the lower half of the PICK GRP field for new groups. Use the upper half for existing (if any) groups assigned by Telcom. If an extension with a Pick Up Group is to remain but is to have the group removed or changed, enter C in the ACT column and R or C (R=Remove, C=Change) in the PICK GRP column. When removing, show the existing group number in the PICK GRP column. When changing, show the new Pick Up Group number in the PICK GRP column.
24. FORMS COMPLETION (continued)

D. Complete Form 1 (continued)

10) Fill in Form 6A (Call Coverage) if you are using coverage which does not go directly to Voice Mail. If you are using coverage directly to Voice Mail see 10a - 10d below and go to 10h.

a. **BUSY AND DON'T ANSWER:** Coverage Paths 7962-966 are reserved for coverage directly to Voice Mail on a Busy and Don't Answer basis where 7962 = 2 rings to Voice Mail, 7963 = 3 rings to Voice Mail, etc.

b. **SEND ALL CALLS ONLY:** Coverage Paths 7969 is reserved for coverage directly to Voice Mail only when Send All Calls is active.

c. **PERMANENT SEND-ALL-CALLS:** Coverage Path 7960 is reserved for permanent Send All Calls coverage directly to Voice Mail and is used for telephone numbers which always go to Voice Mail such as Bulletin Boards and Automated Attendants.

d. Paths 7960, 962-966, 7969 do not need to be defined and may be assigned without definition to extensions needing them.

e. Define each new (non direct Voice Mail) Coverage Path using alphabetic characters A-Z entering the Path designation on the Administrator line and in the COVER PATH/GRP column.

1. Enter the appropriate coverage criteria for the associated path on the Administrator line and in the CRITERIA column.

   a. A = Active (in use) [Send calls to coverage whenever any appearance of the principal extension (typically Multi-line sets) is in use.]

   b. B = Busy [Send calls to coverage whenever the principal extension is busy. Requires all incoming (non originating-only appearances) on Multi-line sets to be in use. Typically used with single line sets and not Multi-line sets.]
24. FORMS COMPLETION (continued)

D. Complete Form 1 (continued)

10) Fill in Form 6A (Call Coverage), as applicable...(continued)

e. Define each new (non direct Voice Mail) Coverage Path... (continued)

1. Enter the appropriate coverage criteria...(concluded)

c. $D =$ Don't Answer [Send calls to coverage whenever the principal extension rings and does not answer. Requires completion of the DON'T ANSWER INTERVAL column.]

Enter 1-99 alerting cycles in the DON'T ANSWER INTERVAL column indicating the number of ring cycles at the principal extension before calls will go to coverage on a Don't Answer basis.

An alerting cycle is one long ring per cycle for inside calls and two short rings per cycle for outside calls.

d. $AD$ and $BD$ combine the designations above.

e. $P =$ Permanent Send All Calls [Send all calls to coverage at all times.] Used for extensions with an $X$ in Form 1 EXT TRM column. Has other occasional uses.
24. FORMS COMPLETION (continued)

D. Complete Form 1 (continued)

10) Fill in Form 6A (Call Coverage), as applicable...(continued)

   e. Define each new (non direct Voice Mail) Coverage Path... (concluded)

2. Enter the Coverage Point extensions in sequential order on the Administrator line in the ANSWER POINT columns. Use NN#1, NN#2, etc. for new numbers and maintain correlation of these designations with the entries on other forms and drawings.

   Use VM for coverage to Voice Mail. Voice Mail must be either the only or last point in the coverage path.

   Use CXXX (if applicable) for Coverage Answer Groups making sure to complete Form 7 first.

   Use AX-XXXX for coverage to an Announcement.

   Use RX-XXXX or R9XXX-XXX-XXXX or R91XXX-XXX-XXXX for Remote Coverage where X is the telephone number.

   f. Fill in Form 7 (Coverage Answer Group), as applicable, for each Coverage Answer Group.

   g. Fill in Form 6B (Call Coverage Time Table), as applicable, for each Time Table.
24. FORMS COMPLETION (continued)

D. Complete Form 1 (continued)

10) Fill in Form 6A (Call Coverage), as applicable...(concluded)

h. Assign the paths/groups/tables to the appropriate extensions using Form 1, once the Coverage Paths, Coverage Time Tables, and Coverage Answer Groups have been defined on one or more sheets.

Enter the Call Coverage alphabetic designations you used for the appropriate extensions using "G" as a prefix for Answer Groups (e.g. GA) and "T" as a prefix for Time Tables (e.g. TA). Use the lower half of the COVER PATH field for new groups. If an extension with a Coverage Group/Path is to remain but is to have the group removed or changed, enter C in the ACT column and R or C (R=Remove, C=Change) in the COVER PATH column. When removing, show the existing group number in the COVER PATH column. When changing, show the new Coverage Group/Path number in the COVER PATH column.

For Secondary Coverage Paths used with Telecommuting, enter the coverage path within parenthesis below the first path.

h. Coverage paths 7960, 962-966, and 7969 are standard and do not need definitions and may be entered directly on Form 1.
24. FORMS COMPLETION (continued)

D. Complete Form 1 (continued)

11) Fill in Form 3 (Abbreviated Dialing and Hot Line Assignment) for Group List or Hot Line. Otherwise, for Personal Lists see 11c below.

a. For new groups, use alphabetic characters A-Z as the group number. Group lists sizes are 5-90 in increments of 5.

For Group Lists, enter the "controlling Extension" (extension which can program the list) number in the designated field (as applicable).

For Group Lists, enter all extensions allowed to access the Group List in the Extensions Which Can Access The Group List Field.

When a Group list requires Priority Dialing, enter PAD and the extension in the NUMBER DIALED field.

On Form 1 in the ABBRV DIAL column, enter G followed by a dash and the list number (alphabetic character) beside each extension having access to the list e.g. G-A. For the Controlling Extension enter C followed by a dash and the list number as well, but add a dash and the list size, e.g., C-A-5.

b. For Hotlines fill in the extension in the HOT LINE EXTENSION field and the digits to be dialed in the NUMBER DIALED field.

c. If a routine Personal List is desired, enter P followed by the list number followed by a dash and the list size on Form 1 in the ABBRV DIAL column. Personal list sizes are 5, 10, 20...100 in increments of 5. Personal list two should not be used unless list one is exhausted. Auto Dial buttons should be used in lieu of personal lists on multi-line/digital instruments wherever possible.

P1-5  (Personal list 1 of 5 numbers)
P2-5  (Personal list 2 of 5 numbers)

When a Personal list requires Priority Dialing, provide a typed list detailing the List Number and Dial Code and enter PAD and the extension for each Dial Code.
24. FORMS COMPLETION (continued)

D. Complete Form 1 (concluded)

12) Fill in the BUILDING and ROOM designation columns.

13) Enter the account number to which the extension is to be charged in the ACCOUNT NUMBER column.

14) Leave alone columns, if any, marked with an "X," they are for telecom use.

E. See your Telecom Coordinator for completion of Forms 2A and 2B.

F. See your Telecom Coordinator for Page Pacs and completion of Form 4.
G. Complete Form 8A/8B (Voice Mail) as applicable, if you are using an Voice Mail Custom Mail Box (not standard Type) or Auto Attendant. If you are using a standard Type, complete Form 1's "VV TYPE/0 OUT TO" column entering the Type number with the Voice Mail Covering Extension (Zero option) below. For FAX boxes, enter an "F" suffix after the COS number.

For Custom and Auto Attendant Mail Boxes:

1) Fill in the name in the NAME location using the same format as used in the Names Database.

2) Fill in the Extension which will have the mail box in the EXTENSION/MAILBOX location. Use NN#1, NN#2, etc. for new numbers and maintain correlation of these designations with the entries on other forms and drawings.

3) Enter the appropriate Voice Mail Type in the Voice Mail Type location.

4) For mail boxes that are not Bulletin or Auto Attend, provide a covering extension in the COVERING EXTENSION location. This must be an extension that is staffed during normal business hours.

H. See Telecom for completion of Form 8B when Automated Attendant is selected on Form 8A.

I. Complete Form 9 (Authorization Codes) as applicable and as locally instructed.

1) Enter the appropriate activity in the ACTIVITY column.

   A = Add new Authorization Code
   D = Delete/Remove code
   C = Change information on an existing code

2) Enter the individual's name in the USER OR FUNCTION NAME column. When entering special functions or grant designations (as applicable) enter the individual's name who will be using the code below the function/grant designation.
24. FORMS COMPLETION (continued)

I. Complete Form 9 (Authorization Codes) as applicable and as locally instructed. (concluded)
   3) Enter the individual's telephone number.
   4) Enter the account number to which the code is charged in the ACCOUNT/ BUDGET/ CHARGE NUMBER column.
   5) Enter the FRL in the FRL column. Blank is the default and obtains an FRL of 5. See the form for FRL designations.

J. Complete Multi-line set forms for each Multi-line set using the designations found in section 22 below. Use NN#1, NN#2, etc. for new numbers and maintain correlation of these designations with the entries on other forms and drawings.
   1) Decide which extensions and feature buttons are to be assigned to each set.
   2) Fill out the forms by assigning the buttons in the order they are found in section 37 below, e.g., assign prime lines first, department lines next, etc.

K. Make a copy of all completed forms and send the original to Telecom. DO NOT SEND FORMS WITHOUT FIRST MAKING A COPY FOR YOURSELF. The originals will be kept in the Telecom office. After the appropriate assignments have been made, Telecom will send you a revised copy.
24. FORMS COMPLETION (continued)

L. Steps to follow in completing forms and things to remember in station design, moving, and installation.

1) You must have fully attended the Administrator Course, be involved in the day-to-day operation of an area, and be intimately aware of the socio-political structure, personalities of individuals, and operations needs of the area in order to effectively perform station design. Failure to meet any of these requirements will result in poor design and user dissatisfaction.

Administrators are the designated person for requesting telephone moves, additions, and changes.

Administrators are like fire wardens, they must be physically located near the area they support to be effective. They must be prepared to take the leadership role in training new personnel on the system. This new responsibility comes about as each area's telecommunications operation is tailored by the Administrator to meet the needs of that area. Only the Administrator will know how the system is designed to operate and which features are to be used for an area.

2) Plan strategically when renovating and place jacks where there is any possibility of needing a phone or computer terminal. You will often not know exactly where the phone/terminal needs to be placed until the furniture arrives. It then becomes expensive to place additional jacks, and delays your installation. If architects are involved in your renovation, you must give them jack locations very early in the design stages, before bids are let for construction.

You will find it necessary to check their drawings to insure that they did what you requested. Jacks are not very high on their list of importance.

Be sure to designate floor jacks when desks/work surfaces are to be located in open areas away from walls and columns. You will probably need to specify floor power outlets as well, in these situations.

New jacks require conduits in most situations. Floor jacks require holes to be cored. You must request the conduit/hole coring installation from the plant department and it must be in place before wire pulling by telecom can begin. You are responsible for this.
24. FORMS COMPLETION (continued)

L. Steps to follow in completing forms and things to remember in station design, moving, and installation. (continued)

3) Telecommunications functions are frequently the last thing thought about in operating an office. This is partially due to the fact that the design can not be done until decisions are made on where people will be located and partially due to unpleasant or painful management decisions which must be made and are put off until the last minute. In addition, there is the frequent misconception that the design and provisioning process is not complicated and can be done on short notice.

You must plan early and submit your request with sufficient lead time. Every physical relocation and most personnel changes affect telecommunications and require action from the telecommunications department. Do not assume that telecommunications can meet your schedule and deadlines.

With less than two weeks notice, the chances are unlikely that telecommunications will be able to meet your schedule. Emergency requests are so routinely received that they lose significance. Requests involving more than ten (10) telephones need at least three weeks notice. To save money, telecommunications does not stockpile large quantities of instruments. Orders involving ten (10) or more new instruments can take six (6) to eight (8) weeks to obtain the instruments from the manufacturer.

It is your responsibility to notify your management when their expectations of performance by telecommunications exceed the limits of telecommunication's abilities as described above. They deserve the information and warning so that they can manage and plan effectively.

4) Phone jacks are wired to specific equipment hardware at the distant end. Instruments plugged into the wrong jack can destroy central equipment that is worth thousands of dollars. Unplugging Mult-Line sets turns in PBX equipment alarms which result in costly dispatching of maintenance personnel to your location. Don't unplug instruments without notifying telecommunications.
24. FORMS COMPLETION (continued)

L. Steps to follow in completing forms and things to remember in station design, moving, and installation. (continued)

5) Complete forms in pencil using dark lead (2B best).

6) Design call coverage and handling based on the worst case scenario, e.g., what happens to calls at night when the department is a 24 hour operation but staffing is low during those hours.

   a. Should someone else or a group be able to answer when a phone rings and is not answered? Should the person normally responsible for answering a phone be able to pick up the calls for others? Should the department’s main number or other main function be answered by several people?

      If yes, consider Call Pick Up. Remember you must be able to hear the ring for Call Pick Up to be effective. Numbers can be terminated on an external bell. This is typically used for main numbers and functions.

   b. Should calls be answered by a particular person or Voice Mail when a phone rings and is not answered? Do calls to one person need to be screened by someone else?

      If yes, consider Call Coverage.

7) If a Multi-Line set is anticipated at a central answering point, consider and note the sets that will need Busy Autodial Indications (BADs) on the Multi-line set.

8) When assigning Voice Mail, you must provide a covering extension for each mailbox. That covering extension should be staffed during normal business hours. If for any reason it is not staffed, the greeting of the principal extensions should instruct callers as to what to do in an emergency in order to reach an available person for help.
24. FORMS COMPLETION (concluded)

L. Steps to follow in completing forms and things to remember in station design, moving, and installation. (concluded)

9) Most Fax machines and modems will operate perfectly with the PBX dial tone. However, Credit Card Authorization machines and Super G3 Fax Machines may have problems and need to be identified to Telecom. All Fax and modem lines do need a data restricted class of service. If you plan to use an existing single line telephone for one of these functions, you must request a class of service change.

10) Some areas may have direct outside (non PBX) telephone numbers and data circuits. These should be noted to telecom so that they can be protected from disconnection and or considered for replacement with alternate services.

11) Some areas may have System Failure lines. These should be noted to telecom.

12) Consider restrictions and other designations and select the appropriate Class Of Restriction/Service (COR/COS) using the COR/COS sheet for the definitions. Most extensions are; Department Main Numbers, Prime lines on single or Multi-line sets, or Data Restricted. If an extension is in a public or semi-public area it should have the appropriate class of service to prevent inadvertent feature activation. If the department has Page Pack, the COR will be a parallel COR to the standard CORs but with Page Pack access allowed.

13) Hunting is seldomly used on new configurations. It should be noted where it exists and removed whenever possible. It is generally used today to provide multiple line access to computers which receive and process telephone calls. It is not used when Coverage is used on the extensions.

14) Abbreviated Dialing should be considered for Group lists for providing Priority Dialing access to single line sets. However, many areas either do not need or do not desire the Priority capability. It also takes administrative time to keep the list maintained. Therefore, Abbreviated Dialing Group lists should not be routinely assigned for Priority Calling functions unless there is a real need.
## 25. OPTIONAL FEATURES (All Multi-line Sets) AND BUTTON ASSIGNMENTS

<table>
<thead>
<tr>
<th>Feature</th>
<th>Abbreviation</th>
<th>Button</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prime Line Appearances (Required)</td>
<td>x-xxxx</td>
<td>1-3</td>
</tr>
<tr>
<td>Directory</td>
<td>DIRECTORY</td>
<td>See Set Forms</td>
</tr>
<tr>
<td>Directory Next</td>
<td>NEXT</td>
<td>See Set Forms</td>
</tr>
<tr>
<td>Call Displayed Name</td>
<td>CALL DSPLY</td>
<td>See Set Forms</td>
</tr>
<tr>
<td>Send Calls (Prime Line) (Required)</td>
<td>SEND CALLS x-xxxx</td>
<td>7-8</td>
</tr>
<tr>
<td>Department/Bridged (Bridge as many appearances as appear on Primary)</td>
<td>x-xxxx</td>
<td>8-10 (typical)</td>
</tr>
<tr>
<td>Send Calls (Bridged Line)</td>
<td>SEND CALLS x-xxxx</td>
<td>11-12</td>
</tr>
<tr>
<td>EC500</td>
<td>EC500</td>
<td>12-13</td>
</tr>
<tr>
<td>Extend Call</td>
<td>EXTEND CALL</td>
<td>13-14</td>
</tr>
<tr>
<td>Auto Intercom (x-xxxx = extension called)</td>
<td>AI-x-xxxx</td>
<td>12-16</td>
</tr>
<tr>
<td>Call Forward - All</td>
<td>CALL FWD ALL x-xxxx</td>
<td>12-17</td>
</tr>
<tr>
<td>Call Forward – Busy &amp; No Answer</td>
<td>CFWD BSY/DA</td>
<td>12-17</td>
</tr>
<tr>
<td>Call Park</td>
<td>PARK</td>
<td>12-18</td>
</tr>
<tr>
<td>Call Pickup</td>
<td>PICKUP</td>
<td>12-19</td>
</tr>
<tr>
<td>Conference – No Hold</td>
<td>CONF NO HOLD</td>
<td>12-19</td>
</tr>
</tbody>
</table>
### 25. OPTIONAL FEATURES AND BUTTON ASSIGNMENTS (continued)

<table>
<thead>
<tr>
<th>Feature</th>
<th>Abbreviation</th>
<th>Button</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message Waiting Other Station</td>
<td>MW x-xxxx</td>
<td>12-22</td>
</tr>
<tr>
<td>Whisper Auto Dial - Buttons</td>
<td>WAD x-xxxx</td>
<td>12-22</td>
</tr>
<tr>
<td>Busy Auto Dial (BAD)</td>
<td>BAD x-xxxx</td>
<td>12-22</td>
</tr>
<tr>
<td>Auto/Speed Dial - Buttons</td>
<td>SD x-xxxx</td>
<td>12-22</td>
</tr>
<tr>
<td>Abbreviated Dial - List</td>
<td>Personal PA-x</td>
<td>12-22</td>
</tr>
<tr>
<td></td>
<td>A=list 1,2,3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>X=Code 01-99,00</td>
<td></td>
</tr>
<tr>
<td>Abbreviated Dial - List Group</td>
<td>GA-x</td>
<td>12-22</td>
</tr>
<tr>
<td></td>
<td>A=list number</td>
<td></td>
</tr>
<tr>
<td></td>
<td>x=Code 01-99,00</td>
<td></td>
</tr>
<tr>
<td>Automatic In</td>
<td>AUTO IN</td>
<td>12-22</td>
</tr>
<tr>
<td>(Required if ACD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manual In</td>
<td>MAN IN</td>
<td>12-22</td>
</tr>
<tr>
<td>(Optional ACD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Release</td>
<td>RELEASE</td>
<td>12-22</td>
</tr>
<tr>
<td>(Optional ACD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke (Manual Peg) Counts</td>
<td>PEG-x</td>
<td>12-22</td>
</tr>
<tr>
<td>(Optional ACD - Requires AP/MIS)</td>
<td>(x= 0-9)</td>
<td></td>
</tr>
<tr>
<td>Service Observe</td>
<td>SVC OBSV</td>
<td>12-22</td>
</tr>
<tr>
<td>(Optional ACD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency</td>
<td>EMERGNCY</td>
<td>12-22</td>
</tr>
<tr>
<td>(Optional ACD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log In</td>
<td>LOGIN</td>
<td>12-22</td>
</tr>
<tr>
<td>(Optional ACD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Log Out</td>
<td>LOG OUT</td>
<td>12-22</td>
</tr>
<tr>
<td>(Optional ACD)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
25. **OPTIONAL FEATURES AND BUTTON ASSIGNMENTS (concluded)**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Abbreviation</th>
<th>Button</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auxiliary Work</td>
<td>AUX WK</td>
<td>12-22</td>
</tr>
<tr>
<td>(Required if ACD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timer</td>
<td>TIMER</td>
<td>12-22</td>
</tr>
<tr>
<td>Stored Number/View</td>
<td>STORED No</td>
<td>12-22</td>
</tr>
<tr>
<td>Voice Mail Record</td>
<td>VM-REC</td>
<td>12-22</td>
</tr>
<tr>
<td>Conference Display</td>
<td>CONF-DSP</td>
<td>23</td>
</tr>
<tr>
<td>Conference Far End Mute</td>
<td>FE-Mute</td>
<td>24</td>
</tr>
</tbody>
</table>
26. VOICE MAIL USER INSTRUCTIONS FORMAT FOR RECORDING PERSONAL GREETING

- Experience has shown that there are five easy to follow rules which, if followed, will result in user satisfaction, and public acceptance and enthusiasm about a voice mail system. These rules are:

  o Always record your personal greeting using your voice and change the greeting to be relevant to your situation.
    - Experience has shown that the public dislikes receiving the standard, machine generated greeting, when calling an individual's telephone.

  o Always point out in your personal greeting that callers may reach someone in the office by dialing zero.
    - Experience has shown that being "stuck" in voice mail land and having no way to reach a human being is about the worst thing that can happen. It also can present a very dangerous situation if someone is trying to reach you for a personal emergency, doesn't know anything about how to reach you other than your number, and can't get out of voice mail by dialing zero.

  o Always point out in your personal greeting what callers should do to review, edit, or erase a message.
    - Experience has shown that the public feels very insecure about leaving a message unless they are told how to review it.

  o Always retrieve your own messages yourself.
    - If you must have someone else retrieve your messages, be sure to notify callers that another person retrieves your messages for you. Experience has shown that the public assumes that your mailbox is private. Potentially embarrassing situations can be avoided if you notify the public that someone else can retrieve your messages.

  o Always set up a password of at least four (4) digits.
27. SAMPLE FORMS

The following sample forms have been completed as a "Job Aid" for you in completing your own forms. Given the following information, the forms were completed as shown:

A. The Department is “Training” and it is located at 1762 Clifton Road, Floor G, Room A. The Department is being converted to the Avaya System. All existing analog phones remain analog and all Multi-Line phones become IP-Phones when converted

B. The Account Number for Training is 2-62321

C. Dudley Dooright has extension 6-6501 and an analog desk phone without caller ID
   • He can use a Personal Abbreviated Dialing List
   • He will need 4-ring busy and no-answer coverage to voice mail
     o His Personal Operator (Zero-out) destination is the Departmental Main Number listed as “Navel of the Universe”
   • He should be able to use Call Pickup to Answer other people’s phones in the department

D. Mary Poppins has extension 6-6502 and is the Departmental Receptionist and Executive Assistant, has a multi-line set, and answers the Department’s Main number
   • She will need an Abbreviated Dialing List but can use the IP-Phone Contacts
   • She will need 4-ring busy and no-answer coverage to voice mail
     o Her Personal Operator (Zero-out) destination would be the Departmental Main number but since at the times where she could not answer her own number, she could not answer the Main number, she does not have a Personal Operator (Zero-Out) destination
       ▪ She will provide a greeting that instruct callers on how to reach her in an emergency
   • She will need the Departmental Main Number (6-6531) on her phone
   • She wants to be able to Send the Main Number to Voice Mail when she is working after hours and still receive her own calls
   • She will need Dial Intercom to the other IP-Telephones in the department so that she can reach them when they have Send All Calls active
   • She will need an Auto-Intercom to her supervisor, Prince Charming
   • She would like to use the Routine Park Feature and have a Call Pickup Button
   • She needs:
     o A Message Waiting Lamp for the Departmental Main Number
     o To know when the following are on the phone
       ▪ Prince Charming
       ▪ Snidley Whiplash
       ▪ Droopey Dog
       ▪ Dudley Dooright
     o All of her remaining buttons plus a Button Expansion Module to have Speed Dial buttons

E. The Navel of the Universe is extension 6-6531 and is the
Departmental Main Number
  • This line needs 4-ring busy and no-answer coverage to voice mail
    o It has no logical Personal Operation (Zero-out) destination
27. SAMPLE FORMS (continued)

F. Droopey Dog has extension 6-6503, and Analog phone with Caller ID
   • He can use a Personal Abbreviated Dialing List
   • He will need 4-ring busy and no-answer coverage to voice mail
     o His Personal Operator (Zero-out) destination is the Departmental Main
       Number listed as “Navel of the Universe”
   • He should be able to use Call Pickup to Answer other people’s phones in the
     department

G. Prince Charming has extension 6-6504 and is the Executive over the Training Department.
   • He will need an Abbreviated Dialing List but can use the IP-Phone Contacts
   • He will need 4-ring busy and no-answer coverage to Mary Poppins before going to
     voice mail
     o His Personal Operator (Zero-out) destination is the Departmental Main
       number
     o He wants Mary to screen all of his calls during business hours
   • He needs EC500 and his cell phone number is 404-555-3221
     o This cell phone is reached from the PBX by dialing (9) and the 10-digit
       number
   • He wants IP-Softphone so that when he is at his desk, he can Right-Click on an
     Outlook Contact and have the phone dial the party. He also wants it so that he can
     answer office calls at home
   • He needs an Auto Intercom to Mary Poppins and a Dial Intercom to the other IP-
     Phones in the office
   • He needs to be able to use Call Pickup to answer other phones in the office
   • He would like to know when Doopey Dog and Snidley Whiplash are on the phone
   • He has a Guest Phone that he want’s to look like his desk phone but he doesn’t
     need the EC500 controls on it
   • He needs a Dial Intercom to the other IP-Phones in the office
   • He would like to know when Prince Charming and Mary Poppins are on the phone

H. Snidley Whiplash is a new employee and is the Departmental Manager. He needs to be
   able to place calls on hold and easily conference people. He also needs to be able to be
   called on the Intercom by Mary Poppins.
   • He will need an Abbreviated Dialing list
   • He will need 3-ring busy and no-answer coverage to Dudley Dooright, Mary Poppins,
     or Droopey Dog before going to voice mail
     o However, he doesn’t care which of those people actually answers his calls
       first
     o He wants his calls to reach Voice Mail by the 7th ring
     o His Personal Operator (Zero-out) destination is the Departmental Main
       number
   • He needs a Dial Intercom to the other IP-Phones in the office
   • He would like to know when Prince Charming and Mary Poppins are on the phone

I. The Navel of the Universe function will have a new Fax
machine
27. SAMPLE FORMS (concluded)

J. The office has a Loading Dock that needs a wall phone that can be used by delivery personnel to reach the Main Number of the office to request being let into the building. This phone should not be able to call anywhere else.

K. The Navel of the Universe function needs a number that people can call and be directed to the proper person in the office using a menu. The Menu would be as follows:
   • Thank you for calling the Nave of the Universe. Please select from the following choices:
     o Press 1 for Dudley Dooright
     o Press 2 for Mary Poppins
     o Press 3 to Leave a message in the departmental mall box to be called back
     o Press 4 for Droopy Dog
     o Press 5 for Prince Charming
     o And press 6 for Snidley Whiplash
     o Press pound to repeat this menu or remain on the line for assistance