# B3. CHANNELS

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# B3. CHANNELS

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# B3. CHANNELS

## B3.1 Provision Of Service

### B3.1.1 General

**A.** Channel Services provided under the provisions of this ***Guidebook*** are offered for IntraLATA Services only. Services consisting of Local Channels, Interoffice Channels, and Optional Features and Functions are classified by series. The various series are sub-divided into different types and are described in terms of circuit characteristics and use. (T)

**B.** Customers may order local channels which are designed to meet specific communications requirements. The customer is responsible for determining that his terminal equipment is compatible with the service provided by the Company.

**C.** Where multipoint service is furnished, the local channels are bridged in the wire center.

**D.** Dedicated circuits between the customer's interLATA Electronic Tandem Switching (ETS), Digital Electronic Tandem Switching (DETS) or Tandem Switching Features (TSF) functions and the customer's other location(s) within the same LATA will be provided from this ***Guidebook***. Where this service is provided by the Company as a feature of ESSX service, Digital ESSX Service, MultiServ service, MultiServ PLUS service, or BellSouth Centrex service**,** the transport of traffic between the ETS, DETS, or TSF function and the basic ESSX service, Digital ESSX Service, MultiServ service, MultiServ PLUS service, or BellSouth Centrex service functions may be performed by the Company's network switching facilities. (T)

**E.** Channels requiring placement of new cable or wire facilities between two or more points on a customer's continuous property are no longer available effective January 1, 1987 (see B103.2). However, where spare channels are available in existing Company-Owned facilities on a customer's continuous property, such channels may be available for the customer's use at the sole discretion of the Company, subject to the terms, conditions, and charges specified in Section B103.

### B3.1.2 Application

The rates and charges specified herein apply for all IntraLATA Private Line services provided by the Company.

### B3.1.3 Rate Categories

**A.** Following are the basic rate categories which apply to Private Line service.

1. Local Channels
   a. A local channel provides for a communications path between the demarcation point at a customer premises and the serving wire center of that premises . One local channel charge applies per channel termination.
   b. When service is provided by non-wire center connected channels, a non-wire center connected channel charge applies in lieu of local channel charges.
2. Interoffice Channels
   This rate category provides for the transmission facilities between serving wire centers associated with two customer premises, between serving wire centers associated with a customer premises and a Company hub, or between two Company hubs.
   Interoffice mileage is portrayed in mileage bands. A flat rate and a rate per mile applies to each band. For method of determining mileage, see B3.3.3.A.
3. Non-Wire Center Connected Channels
   Served Direct channels are provided on a direct basis and are limited to one airline mile in length. These channels will be provided only at the option of the Company.
   Obsoleted, See Section B103 for charges for channels.
4. Optional Features and Functions
   This rate category provides for features and functions which may be added to a service to improve its quality or utility to meet specific communications requirements. These are not necessarily identifiable with specific equipment, but rather represent the end result in terms of the performance characteristics which may be obtained. This category includes a. and b: (T)
   a. Hub Functions
      A hub is a Company designated wire center where bridging or multiplexing functions are performed i.e., connecting three or more customer premises in a multipoint arrangement or channelizing analog or digital services requiring a lower capacity or bandwidth.
   b. Provides for such things as signaling, conditioning, transfer arrangements, protection switching, etc.

# B3. CHANNELS

## B3.1 Provision Of Service (Cont'd)

### B3.1.3 Determination Of Mileage (M)

**A.** To determine Interexchange Mileage for purposes of developing the rate distance between any two rate centers proceed as follows: (M)

1. Obtain the "V" and "H" coordinates for each rate center, as listed in the General Exchange Guidebook, Section A18. (M)
2. Obtain the difference between the "V" coordinates of the two rate centers. Obtain the difference between the "H" coordinates. (M)
   The difference is always obtained by subtracting the smaller coordinate from the larger coordinate. (M)
3. Square each difference obtained in 2. (M)
4. Add the squares of the "V" difference and the "H" difference obtained in 3. (M)
5. Divide the sum of the squares obtained in 4, by 10. (M)
6. Obtain the square root of the result obtained in 5. This is the rate distance in miles (fractional miles being considered as full miles.) (M)
   a. EXAMPLE: The rate distance is required between two rate centers in Kentucky, Rate Centers A and B. (M)

| | | V | H | |
|---|---|---|---|---|
| (1) | Rate Center A | 7518 | 2446 | (M) |
| | Rate Center B | 8167 | 2367 | (M) |
| (2) | Difference | 649 | 79 | (M) |
| (3) | 649 squared = 649 x 649 = 421,201 | | | (M) |
| | 79 squared = 79 x 79 = 6,241 | | | |
| (4) | Sum of squares 427,442 | | | (M) |
| (5) | 427,44210 = 42,744.2 | | | (M) |
| (6) | Square root of 42,744.2 = 206.7 or 207 miles | | | (M) |

**B.** To determine Interoffice mileage for purposes of developing rate distance between any two wire centers (intraexchange or interexchange) proceed as follows: (M)

1. Obtain the "V" and "H" coordinates for each wire center, as listed in the National Exchange Carrier Association (NECA) Tariff, FCC #4. (M)
2. Obtain the difference between the "V" coordinates of the two wire centers. Obtain the difference between the "H" coordinates. (M)
   The difference is always obtained by subtracting the smaller coordinate from the larger coordinate. (M)
3. Square each difference obtained in 2. (M)
4. Add the squares of the "V" difference and the "H" difference obtained in 3. (M)
5. Divide the sum of the squares obtained in 4, by 10. (M)
6. Obtain the square root of the result obtained in 5. This fractional number is the rate distance in miles. Round up to the desired quarter, half or whole mile as specified by each service. (M)

### B3.1.4 Service Configurations

**A.** There are two types of service configurations which can be provided. These are described as follows:

1. Two-Point Service
   A two-point service connects two customer premises either directly through a serving wire center(s) or through a Company hub where additional functions are performed.
2. Multipoint Service
   a. Multipoint service connects three or more customer premises through a Company hub.
   b. There is no limitation on the number of mid-links available with multipoint service. However, when more than three mid-links are provided in tandem, the quality of the service may be degraded. A mid-link is a channel between hubs (i.e., bridging locations).
   c. Voice Grade (Series 2000) Multipoint Channel services for data use have a limit of six two-wire facility type local channels or 20 four-wire facility type local channels when used with customer-provided station equipment.
   d. Only certain types of service are available for multipoint applications. These are so designated in the service descriptions set forth in B3.2.

### B3.1.5 Special Routing Of IntraLATA Channels

**A.** The private line services furnished in this Guidebook are provided over such routes as the Company may elect.

**B.** Special routing is involved where, in order to comply with requirements specified by the customer, the Company furnishes the private line service in a manner which includes one or both of the following conditions:

1. Where two or more private lines must be furnished over different physical routes.
2. Where a private line must be furnished on a route which avoids specified geographical locations.

C. When special routing of services is furnished a customer, the rates will be determined on an individual case basis.

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# B3. CHANNELS

## B3.2 Service Descriptions

### B3.2.1 Sub Voice Grade Services - Series 1000 Channels

**A.** These channels are furnished for operation on a two point or multipoint basis subject to the number of point limitations indicated for each type and are provided for use with customer-provided power and signaling equipment. It is expressly declared that metallic facilities are in continually decreasing supply and that the Company does not hold itself in a position to make such facilities available. In addition, if modernization programs dictate the replacement of existing metallic facilities with non-metallic facilities such as fiber optics, the Company will not be required to continue this service. In consideration of the decreasing supply of metallic facilities, the Company will convert a customer's service requiring ***direct current continuity*** to a Voice Grade Service and waive the nonrecurring charges associated with the change. This applies to customers where metallic facilities are being replaced with non-metallic facilities, or a customer may elect to make this change at any time prior to a modernization program that would eliminate the availability of metallic facilities**.** The various types of services furnished within this Series are as follows: (C)

1. Type 1204 - a two-wire interface with two-wire facilities suitable for use with direct current continuity type of equipment. Signaling must be within the criteria as described in Technical Reference, "Transmission Specifications for Private Line Metallic Circuits" and limited to three station locations. This type channel may also be used to furnish auxiliary features (such as lights, hold, signaling, etc.)

| | |
|---|---|
| Current applied by CPE | - ac & dc components per conductor, not to exceed 0.150 amperes rms |
| Magnitude of the peak of the voltage between any conductor and ground | - not to exceed 70.7 volts (50 volts rms) except continuous dc voltage not to exceed 135 volts. |

2. Type 1205 - A two-wire interface with two-wire facilities suitable for low speed, uni-directional series-operated signaling. Transmission specifications as described in Technical Reference, "Transmission Specification for Low Speed Signaling System Channels". Service is limited to three serving wire centers and 26 stations.

# B3. CHANNELS

## B3.2 Service Descriptions (Cont'd)

### B3.2.2 Voice Grade Service - Series 2000

**A.** Series 2000 voice grade service provides for voice and/or data communications on a two-point or multipoint basis for service 7 days per week, 24 hours per day, for a minimum period of one month. These channels may also be furnished on a link (partial channel) basis when connected to services such as FlexServ service, PulseLink service, LightGate service or MegaLink channel service. Channels which provide tie line service will not be furnished to connect a flat rate system with a message rate system. The transmission characteristics and various types of services furnished within this Series are described in B and C. (T)

**B.** Basic parameters and specifications for Series 2000 voice grade service are described for the end to end operation as follows:

| **Basic Parameters** | **For Speech Application** | **For Data Application** |
|---|---|---|
| Net Loss | Local Channels used with terminal equipment: Limit as specified in the following Local Channel descriptions. Losses or gains present in CPE have not been included. | |
| DC Resistance | Local Channel limit as specified in the following Local Channel descriptions. Does not imply or guarantee end to end DC continuity. | |
| Frequency Error | Plus or Minus 5 Hz | Plus or Minus 5 Hz |
| Frequency Response | (Referenced to 1000 Hz Loss) | |
| 300 - 3000 Hz | -3dB to + 12dB | -3dB to +12dB |
| 500 - 2500 Hz | -2dB to + 8dB | -2dB to + 8dB |
| Envelope Delay Distortion | | |
| 800 - 2600 Hz | Not Controlled | Less than 1750 Microseconds |
| C-Notched Noise (with a -13dBm0 1000 Hz Test Signal) | Not Controlled | Noise level 24dB below signal level |
| Impulse Noise | Not Controlled | 15 Counts in 15 minutes at a threshold of 6dB below a -13dBm0 rms 1000 Hz Signal |
| Phase Jitter | Not Controlled | 10 degrees peak to peak |
| Non-Linear Distortion | | |
| 2nd Order Distortion | Not Controlled | 25dB below signal level |
| 3rd Order Distortion | Not Controlled | 30dB below signal level |

# B3. CHANNELS

## B3.2 Service Descriptions (Cont'd)

### B3.2.2 Voice Grade Service - Series 2000 (Cont'd)

**C.** Transmission parameters for voice grade service are described following:

1. Type 2230 - A two-wire interface with effective two-wire facilities engineered for a 1004 Hz net loss of 0 to 10dB. Generally furnished for voice transmission - Private Line Telephone, Mobile Radio Telephone, or Supervisory Control Use. Multipoint service may be provided at charges specified in B3.4.4.A. following.
2. Type 2231 - A two-wire interface with two or four-wire facilities engineered for a 1004 Hz net loss of 0dB to 4.5dB. This is generally used for PBX (or similar system) off-premises main or extension station services. Signaling is required for this service.
3. Type 2432 - A two or four-wire interface with effective four-wire facilities engineered for tie line service use between PBX's or customer-provided communications systems. Signaling is required for this service.
4. Type 2434- A two or four-wire interface for connection to the serving wire center where loop facilities are not required. This channel is suitable for tie line service (with E&M signaling) between Centrex Type Services or ESSX-1 Systems and may be connected with Type 2432 local channels.
5. Type 2435 - A four-wire interface with effective four-wire facilities engineered for a 1004 Hz net loss of 0 to 16db. Generally furnished for voice transmission. Multipoint service may be provided at charges specified in B3.4.4.A. following.
6. Type 2261 - A two-wire interface with effective two-wire facilities engineered for use in Telemetry/Alarm Bridging Service (TABS). (C)
7. Type 2462 - A four-wire interface with effective four-wire facilities engineered for use in Telemetry/Alarm Bridging Service (TABS). (C)
8. Type 2463 - A four-wire interface with four-wire facilities engineered for a 1004 Hz net loss of 16dB. Generally used in the provision of analog data services. Multipoint service may be provided at charges specified in B3.4.4.A. following.
9. Type 2464 - A two-wire interface with four-wire facilities engineered for a 1004 Hz net loss of 16dB. Generally used in the provision of analog data services. Multipoint service may be provided at charges specified in B3.4.4.A. following.

# B3. CHANNELS

## B3.2 Service Descriptions (Cont'd)

### B3.2.2 Voice Grade Service - Series 2000 (Cont'd)

**D.** Signaling Arrangements

1. Off Premises Stations
   a. For use with PBX (or similar system) off-premises channels for terminal equipment. Signaling arrangements are furnished for grandfathered and registered PBX (or similar) systems in accordance with Part 68 of the FCC Rules and Regulations or for customer-provided communications systems not subject to Part 68 of the FCC Rules and Regulations.
      Type A - Furnished for use with Class A PBX (or similar) system station ports capable of operation over loops with resistance in the range of 0-199 ohms.
      Type B - Furnished for use with Class B PBX (or similar) system station ports capable of operations over loops with resistance in the range of 200-899 ohms.
      Type C - Furnished for use with Class C PBX (or similar) system station ports capable of operation over loops with resistance in the range of 900 ohms or more.
   b. For connections to registered or grandfathered PBX (or similar) system equipment, the customer must specify the equipment capability for use with Type A, B, or C Signaling Arrangements.
2. Tie Lines
   a. E&M signaling is provided for use with tie line channels with E&M signaling interfaces. Signaling Arrangements are furnished for grandfathered and registered PBX's in accordance with Part 68 of the FCC Rules and Regulations or for customer-provided communications systems not subject to Part 68 of the FCC Rules and Regulations.
      - An E&M Signaling Arrangement is required for each tie line termination, operating in a Dial Repeating mode, at a customer's premises with a registered PBX.
      - An E&M Signaling Arrangement is required for each tie line termination at a customer's premises with grandfathered PBX's when the tie line is arranged with an E&M signaling interface.
      - An E&M Signaling Arrangement is not required with Types 2432 and 2434 channels for additions to or for new installations of grandfathered PBX equipment when not arranged with an E&M signaling interface.
      - An E&M Signaling Arrangement is required for each Type 2432 or 2434 channel termination at a customer's premises with a customer-provided communications system not subject to Part 68 of the FCC Rules and Regulations when arranged with an E&M signaling interface.

**E.** (DELETED)

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# B3. CHANNELS

## B3.2 Service Descriptions (Cont'd)

### B3.2.2 Voice Grade Service - Series 2000 (Cont'd)

**F.** Telemetry/Alarm Bridging Service (TABS)

1. ***Terms and Conditions*** (T)

   a. This Section contains the ***Terms and Conditions*** applicable for Telemetry/Alarm Bridging Service (TABS) (T)

   b. Except as otherwise specified following, the ***Terms and Conditions*** contained herein are in addition to the ***Terms and Conditions*** found in other Sections of this Guidebook. (T)

   c. TABS requires the use of equipment as specified in B3.2.2.F and Type 2261 or 2462 voice grade local channels described in B3.2.2.C.

   d. Terminal equipment provided by the customer for use with TABS must meet specifications for such customer-provided equipment found in other Sections of this Guidebook.

   e. No more than 128 remote stations may be connected to a master station over an individual Split Band Active Bridge.

   f. In Split Band Active Bridging arrangements, secondary bridges must be directly connected to the primary bridge via mid-link channels. Secondary bridges cannot be connected through other secondary bridges to allow additional layers of tandeming.

   g. Secondary bridges, utilized in Split Band, Active Bridging arrangements, reduce the two-wire remote station capacity of the primary bridge. The initial secondary bridge reduces the primary bridge capacity by twelve two-wire remote station connections. Each subsequent secondary bridge reduces the primary bridge capacity by four additional two-wire remote station connections. At the customer's option external bridging may be provided for connecting secondary bridges at the rate applicable in B3.4.4.A.1.a without reducing the two-wire capacity of the primary bridge.

   h. Standard multipoint bridging charges as provided in other sections of this Guidebook are not applicable to TABS, except as provided in g. (T)

   i. Access over four-wire master station channels for Split Band Active Bridging is provided using a Type 2462 local channel.

   j. Access over remote station channels is provided through a Type 2261 local channel and through the appropriate channel connection as contained in B3.4.4.A.1.e. Interconnection of remote stations located outside the serving wire center where the bridge to which they are to be connected is located will require interoffice channels at charges contained in B3.4.3. (T)

   k. Access over each four-wire mid-link channel for Split Band Active Bridging is through voice grade interoffice channels at charges contained in B3.4.3. Additionally, mid-link channel connections are required as described in B3.4.4.A.1.e. (T)

# B3. CHANNELS

## B3.2 Service Descriptions (Cont'd)

### B3.2.2 Voice Grade Service - Series 2000 (Cont'd)

**F.** Telemetry/Alarm Bridging Service (TABS) (Cont'd)

2. Service Description

a. Telemetry/Alarm Bridging Service is a multi-station, voice frequency, private line service designed to provide connections between a master station and a number of remote stations simultaneously. Direct transmission between remote stations is not intended. This service is intended for application in multipoint, voice frequency, data or tone signaling arrangements with transmission at rates up to 400 baud.

b. TABS is provided in the following arrangement:

Split Band, Active Bridging - A bridging arrangement providing for a four-wire (master station or mid-link channel) frequency split common port and multiple two-wire (remote station) ports intended for application in multipoint, voice frequency, data or tone signaling arrangements. Two-way (polling) communication between the master station and each remote station is intended.

### B3.2.3 Wired Music Service - Series 6000 *(Obsoleted, See Section B103)* (O)

# B3. CHANNELS

## B3.2 Service Descriptions (Cont'd)

**B3.2.3 Wired Music Service - Series 6000 *(Obsoleted, See Section B103)* (Cont'd)** (O)

**Pages 10.1 and 10.2 are hereby deleted in their entirety and removed from this Guidebook.**

# B3. CHANNELS

## B3.3 Rate *Terms And Conditions* (T)

### B3.3.1 Types Of Rates And Charges (T)

**A.** The two types of rates and charges are monthly rates and nonrecurring charges and are described as follows: (T)(M)

1. Monthly Rates (M)

   Monthly rates are recurring charges that apply each month or fraction thereof that a service is provided. For billing purposes, each month is considered to have 30 days. (M)

   Rates are subject to Company initiated changes. (M)

2. Nonrecurring Charges (T)(M)

   Nonrecurring Charges are one-time charges that apply for a specific work activity. The three types of nonrecurring charges that apply are installation of service, installation of features and functions and service rearrangements. (M)

   a. Installation of Service

      Nonrecurring charges apply for each service terminated at the customer's premises. For the installation of local channels when more than one of the same type of service, between the same locations, for the same customer is ordered and installed at the same time, one at each location is billed at the First Service Installed rate and the others are billed at the Additional Service Installed rate. The nonrecurring charges for the Installation of Services are set forth in B3.4 as Nonrecurring Charges for the Local Channel and Interoffice Channel rate elements.

   b. Nonrecurring charges apply for the installation of features and functions available with the various services. For some features and functions there is a lower charge if installed coincident with the service and a higher charge if installed subsequent to the service.

   c. Service Rearrangements

      (1) Service rearrangements are changes to existing (installed) services which do not result in either a change in the minimum period requirements or a change in the physical location of the point of termination at a customer premises. Changes which result in the establishment of new minimum period obligations are treated as disconnects and starts. Changes in the physical location of the point of termination are treated as moves and are described and charged for as set forth in B3.3.2.

      The charge to the customer for the service rearrangement is dependent on whether the change is administrative only in nature or involves actual physical change to the service.

      Administrative changes will be made without charge(s) to the customer. Such changes require the continued provision and billing of the Private Line Service to the same entity (i.e., customer remains responsible for all outstanding indebtedness for the service). Administrative changes are as follows:

      - Change of customer name (i.e., the customer of record does not change but rather the customer of record changes name),
      - Change of customer or customer's premises address when the change of address is not a result of a physical relocation of equipment.
      - Change in billing data (name, address or contact name or number).
      - Change of jurisdiction, e.g., intraLATA to intrastate, intrastate to interstate, etc.

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# B3. CHANNELS

## B3.3 Rate *Terms And Conditions* (Cont'd) (T)

### B3.3.1 Types Of Rates And Charges (Cont'd)

**A.** (Cont'd)

2. Nonrecurring Charges (Cont'd)

c. Service Rearrangements (Cont'd)

(2) All other service rearrangements will be charged for as follows: (T)

- If the change involves the addition of other customer designated premises to an existing multipoint service, the nonrecurring charge for the local channel and bridging rate elements being added will apply. Nonrecurring charges for interoffice channel mileage and/or optional features may also apply. (M1)
- If the change involves the addition of other customer designated premises to an existing two-point service, resulting in a multipoint circuit configuration, the nonrecurring charge for the local channel and bridging rate elements being added will apply. Nonrecurring charges for interoffice channel mileage and/or optional features may also apply. (M1)
- If the change involves the disconnection of a customer designated premises from an existing multipoint circuit resulting in a two-point circuit configuration, no charges will apply. (M1)
- If the change involves the addition of an optional feature or function which has a separate nonrecurring charge, that nonrecurring charge will apply. (M1)
- If the change involves changing the type of signaling on a voice grade service the subsequent, nonrecurring charge will apply for the new type signaling. The charge will apply per service termination affected. (M1)
- For rearrangements and all other activities involving physical changes to the service provided or the addition of optional features without separate nonrecurring charges, a charge equal to a local channel rate element nonrecurring charge will apply. Only one such charge will apply per service order, per change.
- For a change of customer of record, where no specific transfer of service charge is stated, and for all other activities involving no physical changes, the following charges will apply: (1) if the request is for multiple circuits of the same type, a charge equal to one "First" Local Channel nonrecurring charge applies, (2) if the request is for only one circuit, a charge equal to one "Additional" Local Channel nonrecurring charge applies, (3) if the request is for multiple circuits of different types, charges will be applicable for each type of circuit according to the same guidelines in (1) and (2). (T)

### B3.3.2 Moves

**A.** A move involves a change in the physical location of one of the following:

1. The point of interface at the customer premises.
2. The customer's premises.

**B.** The charges for the move are dependent on whether the move is to a new location within the same building or to a different building.

1. Moves Within the Same Building

   When the move is to a new location within the same building, the charge for the move will be an amount equal to one-half the nonrecurring (i.e., installation) charge for the affected service termination at the customer's premises. There will be no change in the minimum period requirements. If a move is made at the same time a service rearrangement is made, the total charge will never exceed a full nonrecurring charge for the basic service.

2. To a Different Building

   Moves to a different building will be treated as a discontinuance and start of service and all associated nonrecurring charges will apply. New minimum period requirements will be established at the new location. The customer will also remain responsible for satisfying all outstanding minimum period charges for the discontinued service.

(M2)

M1 - Material appearing on this page previously appeared on page(s) 11.1 of this section.
M2 - Material previously appearing on this page now appears on page(s) 13 of this section.

# B3. CHANNELS

## B3.3 Rate *Terms and Conditions* (Cont'd) (T)

### B3.3.3 Mileage Measurements (T)

**A.** When station locations of a private line service are located in different wire center serving areas, interoffice channel charges apply. Charges are based on the direct airline distance measured between the serving wire centers. Mileage is determined in accordance with the following: (T)(M1)

1. Obtain the "V" and "H" coordinates for each wire center, as listed in the National Exchange Carrier Association Tariff F.C.C. No. 4. (M1)
2. Obtain the difference between the "V" coordinates of the two wire centers. Obtain the difference between the "H" coordinates. The difference is always obtained by subtracting the smaller coordinate from the larger coordinate. (M1)
3. Square each difference obtained in 2. (M1)(T)
4. Add the squares of the "V" difference and the "H" difference obtained in 3. (M1)(T)
5. Divide the sum of the squares obtained in 4, by 10. (M1)(T)
6. Obtain the square root of the result obtained in 5. This is the rate distance in miles. (Fractional miles being considered as full miles.)

   EXAMPLE: The rate distance is required between City One and City Two.

| | V | | H |
|---|---|---|---|
| City One | 7260 | | 2083 |
| City Two | 7364 | | 1865 |
| Difference | 104 | | 218 |
| Squared | 10,816 + 47,524 | = | 58,340 |

   58,340 divided by 10 = 5834

   Square root of 5834 = 76.38 = 77 Airline miles

**B.** When a private line is furnished over facilities which the Company elects to provide on a direct basis and is not routed through a central office, one two-point channel charge from B3.4.2 will apply. The arrangement is limited to channels not more than one airline mile in length.

**C.** For the purpose of applying multipoint charges, the bridging or hubbing locations are determined by that combination of airline distances connecting the serving wire center which will produce the lowest interoffice mileage charges. Bridging charges apply when three or more channels connect at the same location.

**D.** For Series 1000, 2000 and 6000 channels the customer may specify the sequence in which the service points are to be connected in which case the rate mileage is the shortest airline mileage determined in accordance with C., which will connect the wire centers of the service points in the specified sequence.

(M2)

# B3. CHANNELS

## B3.4 Rates And Charges

### B3.4.1 Local Channels

| | | Monthly Rate | Nonrecurring Charge First | Nonrecurring Charge Additional | USOC | |
|---|---|---|---|---|---|---|
| **A.** | Sub Voice Grade | | | | | |
| | 1. Per point of termination | | | | | |
| | (a) Type 1204 | ***$ 505.00*** | **$ 561.00** | **$ 224.40** | **P1JAX** | (I) |
| | (b) Type 1205 | ***460.00*** | **422.40** | **158.40** | **P1JHX** | (I) |
| **B.** | Voice Grade, Per point of termination | | | | | |
| | 1. Voice | | | | | |
| | (a) Type 2230 | ***1,389.00*** | **409.20** | **151.00** | **P2JUX** | (I) |
| | (b) Type 2231 | ***1,389.00*** | **310.00** | **115.00** | **P2JHX** | (I) |
| | (c) Type 2432 | ***2,085.00*** | **360.00** | **150.00** | **P2JQX** | (I) |
| | (d) Type 2434 | ***432.00*** | **140.00** | **74.00** | **P2JGX** | (I) |
| | (e) Type 2435 | ***2,085.00*** | **435.60** | **171.60** | **P2JWX** | (I) |
| | (f) Type 2261 | ***1,615.00*** | **666.60** | **303.60** | **P2JLX** | (I) |
| | (g) Type 2462 | ***1,923.00*** | **660.00** | **297.00** | **P2JRX** | (I) |
| | 2. Data | | | | | |
| | (a) Type 2463 | ***2,202.00*** | **495.00** | **211.20** | **P2JMX** | (I) |
| | (b) Type 2464 | ***2,202.00*** | **495.00** | **211.20** | **P2JNX** | (I) |
| **C.** | Wired Music (Obsoleted, See Section B103) | | | | | |

**Page 14.1 is hereby deleted in its entirety and removed from this Guidebook.**

# B3. CHANNELS

## B3.4 Rates And Charges (Cont'd)

### B3.4.2 Non-Wire Center Connected Channels (Obsoleted, See Section B103)

### B3.4.3 Interoffice Channels[1]

**A.** Fixed and Mileage Charges applicable

1. Sub Voice Grade - Series 1000[2]

| | | Fixed Monthly Charge | Monthly Charge Per Mile | Nonrecurring Charge Per Channel | USOC | |
|---|---|---|---|---|---|---|
| (a) | 1 thru 8 Miles | *$633.00* | *$57.00* | - | 3LBAS | (I) |
| (b) | 9 thru 25 Miles | *633.00* | *57.00* | - | 3LBAS | (I) |
| (c) | Over 25 Miles | *633.00* | *57.00* | - | 3LBAS | (I) |

2. Voice Grade Service - Series 2000
Types 2230, 2231, 2432, 2434, 2435, 2261, 2462

| | | Monthly Rate | Nonrecurring Charge | USOC | |
|---|---|---|---|---|---|
| (a) | Fixed | *$2,005.00* | $92.00 | 3LBBS | (I) |
| (b) | Each mile or fraction thereof | *151.00* | - | 3LBBS | (I) |

3. Voice Grade Service - Series 2000, Types 2463, 2464

| | | Month to Month | Nonrecurring Charge | USOC | |
|---|---|---|---|---|---|
| (a) | Fixed | *$753.00* | $92.00 | 3LBMF | (I) |
| (b) | Each mile or fraction thereof | *46.00* | - | 3LBMA | (I) |

4. (Obsoleted, See Section B103)
5. (Obsoleted, See Section B103)
6. (Obsoleted, See Section B103)

**Note 1:** For method of determining mileage, see B3.3.3.A.

**Note 2:** Metallic interoffice channels are no longer available for new installations, moves or transfers. Metallic interoffice facilities are in continually decreasing supply due to modernization programs that replace existing metallic interoffice with non-metallic facilities such as fiber optics.

**Page 15.1 is hereby deleted in its entirety and removed from this Guidebook.**

# B3. CHANNELS

## B3.4 Rates And Charges (Cont'd)

### B3.4.4 Optional Features And Functions

**A.** Bridging

Bridging charges are applicable where more than two Local Channels, or one or more Local Channels and more than one Interoffice Channel, or more than one Local Channel and one Interoffice Channel are bridged or hubbed at the same wire center. `No additional bridging charges are applicable for Series 1000, Types 1204 and 1205.

| | Month to Month | Nonrecurring Charge | USOC | |
|---|---|---|---|---|
| 1. Voice Grade Bridges (Series 2000) | | | | |
| a. Voice Bridging | | | | |
| (1) Per Port | | | | |
| (a) Two-Wire (Type 2230) | ***$ 529.00*** | **$39.60** | **BQ9** | (I) |
| (b) Four-Wire (Type 2435) | ***690.00*** | **39.60** | **BQ9** | (I) |
| b. Data Bridging | | | | |
| (1) Per Port | | | | |
| (a) Four-Wire (Types 2463 and 2464) | ***997.00*** | **42.24** | **BQ9** | (I) |
| c. (DELETED) | | | | |
| d. (DELETED) | | | | |
| e. Telemetry and Alarm Bridging - Split Band, Active Bridging | | | | |
| (1) Common Equipment, per central office | | | | |
| (a) First bridging shelf, capacity of 48 two-wire connections | ***1,992.00*** | **370.00** | **XW1** | (I) |
| (b) Additional bridging shelf, capacity of 56 two-wire connections installed subsequent to the first bridging shelf | ***1,992.00*** | **335.00** | **XW2** | (I) |
| (c) Additional bridging shelf, capacity of 56 two-wire connections installed at the same time as the first bridging shelf | ***1,008.00*** | **205.00** | **XW8** | (I) |
| (2) Channel connections, per channel connected | | | | |
| (a) Remote station channel connection | ***79.00*** | **31.00** | **XW3** | (I) |
| (b) Mid-link channel connection, first channel | ***198.00*** | **41.00** | **XW4** | (I) |
| (c) Mid-link channel connection, subsequent channels | ***198.00*** | **41.00** | **XW5** | (I) |
| 2. Wired Music Bridges (Series 6000) (Obsoleted, See Section B103) | | | | |

# B3. CHANNELS

## B3.4 Rates And Charges (Cont'd)

### B3.4.4 Optional Features And Functions (Cont'd)

**B.** Signaling Arrangements

Signaling arrangements are provided at the customer's option to arrange channels for suitable signaling. Signaling is required on all off-premises extension channels and tie line channels associated with PBX (or similar) systems.

1. Per local channel

| | | Monthly Rate | Nonrecurring Charge Initial | Nonrecurring Charge Subsequent | USOC | |
|---|---|---|---|---|---|---|
| (a) | Ringdown-Manual | ***$322.00*** | **$50.16** | **$ 244.20** | **SL3** | (I) |
| (b) | Ringdown-Automatic | ***295.00*** | **18.48** | **72.60** | **SL5** | (I) |
| (c) | E & M Type | ***295.00*** | **58.08** | **224.40** | **SLM** | (I) |
| (d) | Type A (0-199 ohms) | ***174.00*** | **54.12** | **151.80** | **SAL** | (I) |
| (e) | Type B (200-899 ohms) | ***174.00*** | **48.84** | **151.80** | **SAU** | (I) |
| (f) | Type C (900 or more ohms) | ***79.00*** | **15.84** | **151.80** | **SAY** | (I) |

# B3. CHANNELS

## B3.4 Rates And Charges (Cont'd)

### B3.4.4 Optional Features And Functions (Cont'd)

**C.** Conditioning (Voice Grade Services)

1. Conditioning provides more specific transmission characteristics for data services. There are two types of C-conditioning and one type of D-conditioning, each with different technical specifications. C-Type conditioning controls attenuation distortion and envelope delay distortion. D-Type conditioning controls the signal to C-notched noise ratio and intermodulation distortion.

   Conditioning is charged for on a per Local Channel basis for two-point and multipoint service. For two-point services the parameters apply to each service. For multipoint services the parameters apply to any path between any two service points.

2. The types and description of the available conditioning options are as follow:

| **Type Conditioning** | **Frequency Response Specification** | **Envelope Delay Distortion Specification** |
|---|---|---|
| C1 (two-point or multipoint) | 300-2700 Hz, -2dB to +6dB. 1000-2400 Hz, -1dB to +3dB. 300-3000 Hz, -3dB to +12dB. | 1000-2400 Hz, less than 1000 microseconds |
| C2 (two-point or multipoint) | 300-3000 Hz, -2dB to +6dB. 500-2800 Hz, -1dB to +3dB. | 1000-2600 Hz, less than 500 microseconds 600-2600 Hz, less than 1500 microseconds 500-2800 Hz, less than 3000 microseconds |

| | | **Non-Linear Distortion** | |
|---|---|---|---|
| | **C-Notched Noise** | **2nd Order Distortion** | **3rd Order Distortion** |
| D1 (two-point) | Noise level 28dB below signal level | 35dB below signal level | 40dB below signal level |

3. When a channel is equipped with Type D1 conditioning and is utilized for voice communications, the Company does not undertake to represent that the channel will be suitable for such voice transmission.

| | **Monthly Rate** | **Nonrecurring Charge Initial** | **Subsequent** | **USOC** | |
|---|---|---|---|---|---|
| 4. C-Type Conditioning | | | | | |
| a. C-Type Conditioning is available for Types 2463 and 2464. | | | | | |
| (1) C-Types of Conditioning per local channel | | | | | |
| (a) C1-Type | ***$79.00*** | **$13.20** | **$88.44** | **P2W** | (I) |
| (b) C2-Type | ***79.00*** | **27.72** | **100.32** | **P3W** | (I) |
| 5. D-Type Conditioning | | | | | |
| a. D-Type Conditioning is available for Types 2463 and 2464. | | | | | |
| (1) D-Type Conditioning per local channel | | | | | |
| (a) D1-Type | ***79.00*** | **21.12** | **93.72** | **QHA** | (I) |

# B3. CHANNELS

**CANCELLATION PAGE** (N)

The following pages have been cancelled. (When utilizing these pages the revision level should be raised one level.) (N)

| Page | Revision |
|---|---|
| 20 | 0 |
| 21 | 0 |
| 22 | 0 |
| 23 | 0 |
| 24 | 0 |
| 25 | 0 |
| 26 | 2 |
| 27 | 0 |
| 28 | 0 |
| 29 | 1 |
| 30 | 1 |
| 31 | 1 |
| 32 | 1 |
| 33 | 1 |
| 34 | 1 |
| 35 | 1 |
| 36 | 1 |
| 37 | 1 |
| 38 | 1 |
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| 59 | 0 |