Appendix I: Specifications of RDVS Model 3080
System Functions: Integrated intercom, telephone and radio communications
System Availability: >0.99999
Classes of Service: Non-blocking, programmable through a Configuration Control Terminal
System Architecture: TDM method using 64 KB PCM digitized voice switching
Switching Control Scheme: Distributed processors under digital communications control via a LAN
Blocking: 100% non-blocking
Call Setup: <200 ms
PTT Delay: <50 ms
Recorder Output: All position, telephone and radio interfaces are 600 ohms
Frequency Response: 300 Hz to 3000 Hz, ± 1 dB, 600 ohms, balanced to ground, >6 dB/octave rolloff below 300 Hz and above 3000 Hz
Impulse Noise: 0 hits above 40 dBrnCO in a 3-minute period
Idle Channel Noise: <20 dBmC0 at any transmit output; <25 dBrnCO at receive headset jack
Crosstalk Isolation: Better than 70 dB
Trunk Circuits: 600 or 900 ohms selectable impedance
Radio Circuits: 600 ohms impedance
Microphone Jack Input: 50 ohms impedance
Headset Jack Output: 600 ohms impedance
Headset Hearing Protection: Amplitude Limiting to -12 dBm max, tone notching filter (DSP)
Receive Signal Level Regulation: : ± 1.0 dB of nominal receive level over a range of ± 8 dB with AGC enabled; AGC on/off selection
Transmit Signal Level Regulation: ±1 dB for 15 dB of compression, ± 15 dB AGC optional
Radio/ Trunk Channel Receive Level: +30 dBm to -30 dBm (1 dB step adjustments)
Radio/ Trunk Channel Transmit Level: +30 dBm to -30 dBm (1 dB step adjustments)
Radio Channel Push-to-Talk: Dry connect, ground, -48V, external voltage, or simplex arrangement, Relays meet FCC Part 68.302 and FCC Part 68.304 requirements
Information Tones: Dial, Busy, Reorder (Fast Busy), Ringback, Unauthorized, Zip, Chime, Guard, and Conference Notification
DTMF Signaling: Per ANSI/FIA/TIA 464A
Interface Options: Radio best signal selection options, E1, T1 or ISDN interfaces for positions, trunks, and radios; European MFG-R2 Interface options
Digital Interface: T1. DS1, and fractional T1 services. and El services in accordance with CEPT
Telecommunications Interfaces: Public Switched Telephone Network (PSTN), Federal Telecommunication System 2000, PBX w/DTMF and Pulse Dial signaling, Tie trunk 4-wire E+M, Analog w/loop start and ground start, National ISDN PRI/BRI, AT&T 5ESS and Northern Telecom DMS 100
Voice Data: Meets ITU H.320 (p 64), H.324 (modem). and H.120 standards
Radio Communications Interfaces: Plain or secure signaling, cipher mode indicate, cipher mode select,
System Power: -48 Vdc operation
AC-CD Supply: 92 Vac to 264 Vac, 47 Hz to 63 Hz, Single Phase
Battery System: Sealed, Maintenance-Free, Non-venting battery set
Temperature: 40 -104°F (4 - 40°C)
Relative Humidity: 10-95% non-condensing
Altitude: Up to 10,000 feet (3048 meters)
Operator Instruments: Headset with PTT, Handset with PTT, Footswitch with PTT, Hand Microphone with PTT, Combined Speaker or separated A/G and G/G Speakers