

# TABLE OF CONTENTS

<b>About This Textbook .....</b>	xiii
<b>How to Use the <i>National Electrical Code</i> .....</b>	1
<b>Article 90—Introduction to the <i>National Electrical Code</i> .....</b>	7
90.1    Purpose of the <i>NEC</i> .....	7
90.2    Scope of the <i>NEC</i> .....	9
90.3 <i>Code Arrangement</i> .....	11
90.4    Enforcement.....	12
90.5    Mandatory Requirements and Explanatory Material .....	14
90.6    Formal Interpretations .....	14
90.7    Examination of Equipment for Product Safety.....	14
90.9    Units of Measurement.....	15
<b>Article 90 Practice Questions .....</b>	16
 <b>CHAPTER 1—GENERAL RULES .....</b>	19
<b>Article 100—Definitions .....</b>	21
<b>Part I. General .....</b>	21
100    Definitions.....	21
 <b>Article 110—Requirements for Electrical Installations.....</b>	49
<b>Part I. General Requirements.....</b>	49
110.1    Scope.....	49
110.2    Approval of Conductors and Equipment.....	49
110.3    Examination, Identification, Installation, Use, and Product Listing (Certification) of Equipment.....	50
110.4    Voltages .....	50
110.5    Conductor Material.....	50
110.6    Conductor Sizes .....	51
110.7    Wiring Integrity.....	51
110.8    Suitable Wiring Methods.....	51
110.9    Interrupting Overcurrent Protection Rating .....	52
110.10    Equipment Short-Circuit Current Rating .....	53
110.11    Deteriorating Agents.....	53
110.12    Mechanical Execution of Work.....	55
110.13    Mounting and Cooling of Equipment.....	56
110.14    Conductor Termination and Splicing .....	56
110.15    High-Leg Conductor Identification .....	61
110.16    Arc-Flash Hazard Warning .....	62
110.21    Markings.....	63
110.22    Identification of Disconnecting Means .....	64
110.24    Available Fault Current .....	64
110.25    Lockable Disconnecting Means.....	65
<b>Part II. 1,000V, Nominal, or Less .....</b>	65
110.26    Spaces About Electrical Equipment .....	65
110.27    Guarding .....	73
110.28    Enclosure Types .....	74
<b>Chapter 1 Practice Questions .....</b>	75
 <b>CHAPTER 5—SPECIAL OCCUPANCIES .....</b>	91
<b>Article 500—Hazardous (Classified) Locations .....</b>	93
500.1    Scope—Articles 500 Through 504 .....	94
500.3    Other Articles .....	94
500.4    General .....	94
500.5    Classifications of Locations .....	95
500.6    Material Groups.....	97
500.7    Protection Techniques .....	98
500.8    Equipment.....	99
500.9    Specific Occupancies .....	101
 <b>Article 501—Class I Hazardous (Classified) Locations .....</b>	103
<b>Part I. General .....</b>	103
501.1    Scope.....	103
<b>Part II. Wiring .....</b>	103
501.10    Wiring Methods .....	103
501.15    Raceway and Cable Seals .....	106
501.20    Conductor Insulation .....	111
501.30    Grounding and Bonding.....	112
<b>Part III. Equipment .....</b>	113
501.100    Transformers and Capacitors.....	113
501.105    Meters, Instruments, and Relays .....	113
501.115    Enclosures .....	113

501.120 Control Transformers and Relays.....	114	<b>Article 511—Commercial Garages, Repair and Storage .....</b>	135
501.125 Motors .....	114	511.1 Scope.....	135
501.130 Luminaires.....	114	511.2 Definitions.....	135
501.135 Utilization Equipment.....	116	511.3 Classification of Hazardous Areas.....	136
501.140 Flexible Cords .....	116	511.4 Wiring and Equipment in Hazardous (Classified) Locations .....	136
501.145 Receptacles and Attachment Plugs.....	116	511.7 Wiring and Equipment Above Hazardous (Classified) Locations .....	137
501.150 Limited-Energy and Communications Systems .....	117	511.8 Underground Wiring .....	137
<b>Article 502—Class II Hazardous (Classified) Locations .....</b>	119	511.9 Seals.....	138
<b>Part I. General .....</b>	119	511.10 Special Equipment .....	138
502.1 Scope.....	119	511.12 GFCI-Protected Receptacles .....	138
502.5 Explosionproof Equipment.....	119		
<b>Part II. Wiring .....</b>	120		
502.10 Wiring Methods.....	120	<b>Article 514—Motor Fuel Dispensing Facilities .....</b>	139
502.15 Seals.....	122	514.1 Scope.....	139
502.30 Grounding and Bonding.....	123	514.2 Definition.....	139
<b>Part III. Equipment .....</b>	124	514.3 Classification of Locations.....	140
502.115 Switches, Circuit Breakers, Motor Controllers, and Fuses .....	124	514.4 Wiring and Equipment Within Class I Locations .....	141
502.120 Control Transformers.....	125	514.7 Wiring and Equipment Above Class I Locations.....	141
502.125 Motors .....	125	514.8 Underground Wiring .....	142
502.130 Luminaires.....	125	514.9 Raceway Seal.....	142
502.140 Flexible Cords .....	127	514.11 Circuit Disconnects .....	143
502.145 Receptacles and Attachment Plugs.....	127	514.13 Maintenance and Service of Dispensing Equipment .....	144
502.150 Limited-Energy and Communications Systems .....	128	514.16 Grounding and Bonding.....	144
<b>Article 503—Class III Hazardous (Classified) Locations .....</b>	129		
<b>Part I. General .....</b>	129		
503.1 Scope.....	129	<b>Article 517—Health Care Facilities .....</b>	145
503.5 General .....	129	<b>Part I. General .....</b>	146
<b>Part II. Wiring .....</b>	129	517.1 Scope.....	146
503.10 Wiring Methods.....	129	517.2 Definitions.....	146
503.30 Grounding and Bonding.....	130	<b>Part II. Wiring and Overcurrent Protection .....</b>	148
<b>Part III. Equipment .....</b>	131	517.10 Applicability.....	148
503.115 Switches, Circuit Breakers, Motor Controllers, and Fuses .....	131	517.12 Wiring Methods.....	148
503.120 Control Transformers.....	131	517.13 Grounding of Equipment in Patient Care Spaces.....	148
503.125 Motors .....	131	517.16 Isolated Ground Receptacles .....	150
503.130 Luminaires.....	132	517.18 General Care (Category 2) Spaces .....	152
503.140 Flexible Cords .....	132		
503.145 Receptacles and Attachment Plugs.....	133		
503.150 Limited-Energy and Communications Systems .....	133		
		<b>Article 518—Assembly Occupancies .....</b>	153
		518.1 Scope.....	153
		518.2 General Classifications .....	153
		518.3 Other Articles .....	154
		518.4 Wiring Methods .....	154

<b>Article 525—Carnivals, Circuses, Fairs, and Similar Events .....</b>	157	<b>Article 555—Marinas, Boatyards, and Commercial and Noncommercial Docking Facilities .....</b>	173
<b>Part I. General Requirements.....</b>	157	555.1 Scope.....	173
525.1 Scope.....	157	555.2 Definitions.....	173
525.2 Definitions.....	157	555.3 Ground-Fault Protection .....	174
525.3 Other Articles .....	158	555.5 Transformers.....	175
525.5 Overhead Conductor Clearances .....	158	555.7 Location of Service Equipment.....	175
525.6 Protection of Electrical Equipment.....	159	555.9 Electrical Connections.....	175
<b>Part II. Electric Power Sources .....</b>	159	555.10 Electrical Equipment Enclosures.....	176
525.10 Services .....	159	555.12 Load Calculations for Service and Feeder Conductors .....	176
525.11 Multiple Sources of Supply.....	159	555.13 Wiring Methods and Installation .....	177
<b>Part III. Wiring Methods .....</b>	159	555.15 Grounding .....	177
525.20 Wiring Methods.....	159	555.17 Boat Receptacle Disconnecting Means.....	178
525.21 Rides, Tents, and Concessions.....	160	555.19 Receptacles .....	178
525.22 Outdoor Portable Distribution or Termination Boxes .....	160	555.22 Repair Facilities.....	179
525.23 GFCI-Protected Receptacles and Equipment.....	160	555.24 Electric Shock Hazard Signage .....	180
<b>Part IV. Grounding and Bonding.....</b>	161	<b>Article 590—Temporary Installations .....</b>	181
525.30 Equipment Bonding.....	161	590.1 Scope.....	181
525.31 Equipment Grounding.....	161	590.2 Installations.....	181
525.32 Portable Equipment Grounding Conductor Continuity.....	161	590.3 Time Constraints .....	182
<b>Article 547—Agricultural Buildings .....</b>	163	590.4 General .....	182
547.1 Scope.....	163	590.5 Listing of Decorative Lighting .....	185
547.2 Definitions.....	164	590.6 Ground-Fault Protection for Personnel .....	185
547.5 Wiring Methods.....	164	<b>Chapter 5 Practice Questions .....</b>	189
547.8 Luminaires .....	165		
547.10 Equipotential Planes .....	165		
<b>Article 550—Mobile Homes, Manufactured Homes, and Mobile Home Parks .....</b>	167	<b>CHAPTER 6—SPECIAL EQUIPMENT .....</b>	211
<b>Part I. General .....</b>	167	<b>Article 600—Electric Signs and Outline Lighting .....</b>	213
550.1 Scope.....	167	600.1 Scope.....	213
550.2 Definitions.....	168	600.2 Definitions.....	214
550.4 General Requirements.....	168	600.3 Listing .....	215
<b>Part II. Mobile and Manufactured Homes .....</b>	168	600.4 Markings.....	215
550.13 Receptacle Outlets .....	168	600.5 Branch Circuits.....	215
550.15 Wiring Methods and Materials .....	169	600.6 Disconnecting Means .....	216
550.25 AFCI Protection.....	170	600.7 Grounding and Bonding.....	218
<b>Part III. Services and Feeders .....</b>	170	600.9 Location .....	219
550.30 Distribution Systems .....	170	600.10 Portable or Mobile Signs.....	220
550.31 Allowable Demand Factors .....	170	600.21 Ballasts, Transformers, Class 2 Power Sources, and Electronic Power Supplies .....	220
550.32 Service Disconnect.....	170	600.24 Class 2 Power Sources.....	221
550.33 Feeder.....	171	600.34 Photovoltaic (PV) Powered Sign .....	221

<b>Article 604—Manufactured Wiring Systems .....</b>	223	<b>Part II. Arc Welders .....</b>	239
604.1 Scope.....	223	630.11 Ampacity of Supply Conductors.....	239
604.2 Definition.....	223	630.12 Overcurrent Protection .....	241
604.6 Listing Requirements .....	223	630.13 Disconnecting Means.....	241
604.7 Securing and Supporting .....	224	<b>Part III. Resistance Welders .....</b>	241
604.10 Uses Permitted.....	224	630.31 Ampacity of Supply Conductor .....	241
604.100 Construction.....	225	630.32 Overcurrent Protection .....	242
<b>Article 620—Elevators, Escalators, and Moving Walks .....</b>	227	630.33 Disconnecting Means.....	243
<b>Part I. General .....</b>	227	<b>Article 640—Audio Signal Processing, Amplification, and Reproduction Equipment .....</b>	245
620.1 Scope.....	227	<b>Part I. General .....</b>	245
<b>Part II. Conductors .....</b>	227	640.1 Scope.....	245
620.16 Short-Circuit Current Rating .....	227	640.2 Definitions.....	246
<b>Part III. Wiring .....</b>	228	640.3 Locations and Other Articles.....	246
620.23 Branch Circuits for Machine Room/Machinery Space .....	228	640.4 Protection of Electrical Equipment.....	247
620.24 Branch Circuit for Hoistway Pit Lighting and Receptacles .....	229	640.6 Mechanical Execution of Work.....	247
<b>Part IV. Installation of Conductors .....</b>	229	640.9 Wiring Methods.....	248
620.37 Wiring in Elevator Hoistways and Machine Rooms.....	229	640.10 Audio Systems Near Bodies of Water.....	248
<b>Part VI. Disconnecting Means and Control .....</b>	230	<b>Part II. Permanent Audio System Installations .....</b>	248
620.51 Disconnecting Means.....	230	640.21 Use of Flexible Cords and Flexible Cables.....	248
<b>Part IX. Grounding .....</b>	231	640.22 Wiring of Equipment Racks and Enclosures.....	249
620.85 GFCI-Protected Receptacles .....	231	640.23 Number of Conductors in a Raceway.....	249
<b>Article 625—Electric Vehicle Charging System .....</b>	233	640.25 Loudspeakers in Fire-Resistance-Rated Partitions, Walls, and Ceilings .....	249
<b>Part I. General .....</b>	234	<b>Article 645—Information Technology Equipment .....</b>	251
625.1 Scope.....	234	645.1 Scope.....	251
625.2 Definitions.....	234	645.2 Definitions.....	251
625.5 Listed .....	236	645.3 Other Articles .....	252
<b>Part II. Equipment Construction .....</b>	236	645.4 Special Requirements .....	252
625.15 Markings .....	236	645.5 Supply Circuits and Interconnecting Cables .....	252
<b>Part III. Installation .....</b>	236	645.10 Disconnecting Means .....	255
625.40 Electric Vehicle Branch Circuit .....	236	645.11 Uninterruptible Power Supplies (UPS) .....	255
625.41 Overcurrent Protection .....	236	645.14 System Grounding and Bonding .....	255
625.43 Disconnecting Means .....	236	645.15 Equipment Grounding and Bonding .....	255
625.50 Location .....	237	<b>Article 680—Swimming Pools, Spas, Hot Tubs, Fountains, and Similar Installations .....</b>	257
625.52 Ventilation .....	237	<b>Part I. General Requirements for Pools, Spas, Hot Tubs, and Fountains .....</b>	257
<b>Article 630—Electric Welders .....</b>	239	680.1 Scope.....	257
<b>Part I. General .....</b>	239	680.2 Definitions.....	258
630.1 Scope.....	239		
630.6 Listing .....	239		

680.4	Approval of Equipment .....	260	680.73	Accessibility .....	283
680.7	Grounding and Bonding Terminals.....	260	680.74	Equipotential Bonding .....	283
680.8	Cord-and-Plug-Connected Equipment.....	260	<b>Part VIII. Electrically Powered Pool Lifts .....</b> 284		
680.9	Overhead Conductor Clearance .....	260	680.81	Equipment Approval .....	284
680.10	Electric Water Heaters.....	262	680.82	Protection.....	285
680.11	Underground Wiring .....	262	680.83	Bonding.....	285
680.12	Equipment Rooms and Pits.....	262	680.84	Switching Devices.....	285
680.13	Maintenance Disconnecting Means.....	262	<b>Article 695—Fire Pumps .....</b> 287		
680.14	Corrosive Environment .....	263	695.1	Scope.....	287
<b>Part II. Permanently Installed Pools .....</b> 263			695.3	Electric Power Source(s).....	288
680.20	General .....	263	695.4	Continuity of Power .....	288
680.21	Motors .....	263	695.5	Transformers.....	290
680.22	Lighting, Receptacles, and Equipment.....	264	695.6	Power Wiring.....	290
680.23	Underwater Luminaires .....	267	695.7	Voltage Drop .....	291
680.24	Junction Box, Transformer, or GFCI Enclosure .....	269	695.14	Control Wiring .....	291
680.25	Feeders.....	271	695.15	Surge Protection .....	291
680.26	Equipotential Bonding .....	271	<b>Chapter 6 Practice Questions .....</b> 293		
680.27	Specialized Equipment.....	275	<b>CHAPTER 7—SPECIAL CONDITIONS .....</b> 313		
680.28	Gas-Fired Water Heaters .....	276	<b>Article 700—Emergency Systems .....</b> 315		
<b>Part III. Storable Pools, Storable Spas, and Storable Hot Tubs .....</b> 276			<b>Part I. General .....</b> 315		
680.30	General .....	276	700.1	Scope.....	315
680.31	Pumps.....	276	700.2	Definitions.....	316
680.32	GFCI-Protected Receptacles .....	276	700.3	Tests and Maintenance .....	316
680.34	Receptacle Locations .....	276	700.4	Capacity .....	316
<b>Part IV. Spas and Hot Tubs .....</b> 276			700.5	Transfer Equipment .....	316
680.40	General .....	276	700.7	Signs.....	317
680.41	Emergency Switch for Spas and Hot Tubs.....	277	700.8	Surge Protection .....	317
680.42	Outdoor Installations .....	277	<b>Part II. Circuit Wiring .....</b> 317		
680.43	Indoor Installations .....	278	700.10	Wiring .....	317
680.44	GFCI Protection .....	279	<b>Part III. Sources of Power .....</b> 319		
<b>Part V. Fountains .....</b> 280			700.12	General Requirements.....	319
680.50	General .....	280	<b>Part IV. Circuits for Lighting and Power .....</b> 321		
680.51	Luminaires, Submersible Pumps, and Other Submersible Equipment .....	280	700.15	Loads on Emergency Branch Circuits .....	321
680.53	Bonding.....	281	700.16	Emergency Illumination .....	321
680.55	Methods of Equipment Grounding .....	281	700.19	Multiwire Branch Circuits .....	321
680.56	Cord-and-Plug-Connected Equipment .....	281	700.25	Branch Circuit Emergency Lighting Transfer Switch.....	322
680.57	Electric Signs in or Adjacent to Fountains .....	281	<b>Part VI. Overcurrent Protection .....</b> 322		
680.58	GFCI Protection for Adjacent Receptacles .....	281	700.30	Accessibility .....	322
<b>Part VII. Hydromassage Bathtubs .....</b> 282			700.31	Ground-Fault Protection of Equipment.....	322
680.70	General .....	282	700.32	Selective Coordination.....	322
680.71	GFCI Protection .....	282			
680.72	Other Electrical Equipment.....	283			

<b>Article 701—Legally Required Standby Systems</b>	323
<b>Part I. General</b>	323
701.1 Scope.....	323
701.2 Definitions.....	323
701.3 Tests and Maintenance .....	324
701.4 Capacity and Rating .....	324
701.5 Transfer Equipment.....	324
701.7 Signs.....	325
<b>Part II. Circuit Wiring</b>	325
701.10 Wiring .....	325
<b>Part III. Sources of Power</b>	325
701.12 General Requirements.....	325
<b>Part IV. Overcurrent Protection</b>	326
701.25 Accessibility .....	326
701.26 Ground-Fault Protection of Equipment.....	326
701.27 Selective Coordination.....	326
<b>Article 702—Optional Standby Systems</b>	327
<b>Part I. General</b>	327
702.1 Scope.....	327
702.2 Definition.....	327
702.4 Capacity and Rating .....	328
702.5 Transfer Equipment.....	328
702.7 Signs.....	329
<b>Part II. Circuit Wiring</b>	330
702.10 Wiring .....	330
702.12 Outdoor Generator Sets.....	330
<b>Article 725—Remote-Control, Signaling, and Power-Limited Circuits</b>	331
<b>Part I. General</b>	331
725.1 Scope.....	331
725.2 Definitions.....	332
725.3 Other Articles .....	333
725.21 Electrical Equipment Behind Access Panels.....	336
725.24 Mechanical Execution of Work.....	336
725.25 Abandoned Cable .....	337
725.31 Safety-Control Equipment .....	337
725.35 Circuit Requirements.....	338
<b>Part II. Class 1 Circuit Requirements</b>	338
725.41 Class 1 Circuit Classifications and Requirements .....	338
725.43 Class 1 Circuit Overcurrent Protection .....	339
725.45 Class 1 Circuit Overcurrent Device Location .....	339
725.46 Class 1 Circuit Wiring Methods.....	339
725.48 Conductors of Different Circuits in Same Cable, C able Tray, Enclosure, or Raceway.....	339
725.49 Class 1 Circuit Conductors .....	340
725.51 Number of Conductors in a Raceway.....	340
<b>Part III. Class 2 and Class 3 Circuit Requirements</b>	340
725.121 Power Sources for Class 2 and Class 3 Circuits.....	340
725.124 Equipment Marking.....	341
725.127 Wiring Methods on Supply Side of the Class 2 or Class 3 Power Source .....	341
725.130 Wiring Methods on Load Side of the Class 2 or Class 3 Power Source.....	342
725.135 Installation of Class 2 and Class 3 Cables.....	342
725.136 Separation from Power Conductors .....	343
725.139 Conductors of Different Circuits in Same Cable, Enclosure, Cable Tray, Raceway, or Cable Routing Assembly .....	346
725.143 Support.....	347
725.144 Transmission of Power and Data .....	347
725.154 Applications of Class 2, Class 3, and PLTC Cables .....	348
<b>Part IV. Listing Requirements</b>	348
725.170 Listing and Marking of Equipment for Power and Data Transmission .....	348
725.179 Listing and Marking of Class 2 and Class 3 Cables.....	348
<b>Article 760—Fire Alarm Systems</b>	351
<b>Part I. General</b>	351
760.1 Scope.....	351
760.2 Definitions.....	352
760.3 Other Articles .....	352
760.21 Access to Electrical Equipment Behind Panels Designed to Allow Access .....	354
760.24 Mechanical Execution of Work.....	355
760.25 Abandoned Cable .....	356
760.30 Fire Alarm Circuit Identification.....	356
760.32 Fire Alarm Circuit Cables Extending Beyond a Building .....	357
760.35 Fire Alarm Circuit Requirements .....	357
<b>Part III. Power-Limited Fire Alarm (PLFA) Circuits</b>	357
760.121 Power Sources for Fire Alarm Circuits .....	357
760.124 Equipment Marking .....	357
760.130 Wiring Methods on Load Side of Fire Alarm Power Source.....	358
760.135 Installation of PLFA Cables in Buildings .....	358
760.136 Separation from Power Conductors .....	359

760.139	Fire Alarm Circuits, Class 2, Class 3, and Communications Circuits.....	359
760.143	Support.....	360
760.154	Applications of Listed Fire Alarm Cables (PLFA) .....	360
<b>Part IV. Listing Requirements</b>	.....	361
760.179	Listing and Marking of Power-Limited Fire Alarm Cables (PLFA) .....	361
<b>Article 770—Optical Fiber Cables and Raceways</b>	.....	363
<b>Part I. General</b>	.....	363
770.1	Scope.....	363
770.2	Definitions.....	363
770.3	Other Articles .....	364
770.21	Access to Electrical Equipment Behind Panels Designed to Allow Access.....	364
770.24	Mechanical Execution of Work.....	364
770.25	Abandoned Cable .....	365
770.26	Spread of Fire or Products of Combustion .....	366
<b>Part V. Installation Methods Within Buildings</b>	.....	366
770.110	Raceways and Cable Routing Assemblies for Optical Fiber Cables .....	366
770.113	Installation of Optical Fiber Cables.....	367
770.133	Installation of Optical Fiber Cables and Electrical Conductors.....	368
770.154	Applications of Listed Optical Fiber Cables .....	369
<b>Chapter 7 Practice Questions</b>	.....	371
<b>CHAPTER 8—COMMUNICATIONS SYSTEMS</b>	.....	383
<b>Article 800—Communications Circuits</b>	.....	385
<b>Part I. General</b>	.....	385
800.1	Scope.....	385
800.2	Definitions.....	386
800.3	Other Articles .....	386
800.18	Installation of Equipment.....	386
800.21	Access to Electrical Equipment Behind Panels Designed to Allow Access.....	386
800.24	Mechanical Execution of Work.....	387
800.25	Abandoned Cable .....	388
800.26	Spread of Fire or Products of Combustion .....	389
<b>Part II. Wires and Cables Outside and Entering Buildings</b>	....	390
800.48	Unlisted Cables Entering Buildings .....	390
800.49	Metallic Entrance Conduit Grounding.....	390
<b>Part III. Protection</b>	.....	390
800.90	Primary Protection.....	390
<b>Part IV. Grounding Methods</b>	.....	391
800.100	Cable and Primary Protector Bonding and Grounding .....	391
<b>Part V. Installation Methods Within Buildings</b>	.....	394
800.110	Raceways and Cable Routing Assemblies.....	394
800.113	Installation of Communications Cables, Raceways, and Cable Routing Assemblies .....	395
800.133	Installation of Communications Wires, Cables, and Equipment.....	397
800.154	Applications of Communications Cables, Communications Raceways, and Cable Routing Assemblies .....	398
800.156	Dwelling Unit Communications Outlet.....	399
<b>Part VI. Listing Requirements</b>	.....	399
800.179	Listing and Marking of Communications Wires and Cables.....	399
800.182	Cable Routing Assemblies and Communications Raceways .....	399
<b>Article 810—Radio and Television Satellite Equipment</b>	.....	401
<b>Part I. General</b>	.....	401
810.1	Scope.....	401
810.3	Other Articles .....	402
810.4	Community Television Antenna .....	402
810.6	Antenna Lead-In Protectors .....	402
810.7	Grounding Devices .....	402
<b>Part II. Receiving Equipment—Antenna Systems</b>	.....	403
810.12	Supports .....	403
810.13	Avoid Contact with Conductors of Other Systems .....	403
810.15	Metal Antenna Supports—Grounding .....	403
810.18	Clearances .....	403
810.20	Antenna Discharge Unit .....	404
810.21	Bonding Conductor and Grounding Electrode Conductors .....	405
<b>Part III. Amateur and Citizen Band Transmitting and Receiving—Antenna Systems</b>	.....	407
810.51	Other Sections .....	407
810.54	Clearance on Building .....	407
810.57	Antenna Discharge Units .....	408
810.58	Bonding Conductor or Grounding Electrode Conductors .....	408

<b>Article 820—Community Antenna Television (CATV) and Radio Distribution Systems (Coaxial Cable)</b> .....	409
<b>Part I. General</b> .....	409
820.1 Scope.....	409
820.2 Definitions.....	410
820.15 Power Limitations .....	410
820.21 Access to Electrical Equipment Behind Panels Designed to Allow Access.....	410
820.24 Mechanical Execution of Work.....	410
820.25 Abandoned Cable .....	412
820.26 Spread of Fire or Products of Combustion .....	412
<b>Part II. Coaxial Cables Outside and Entering Buildings</b> .....	413
820.47 Underground Coaxial Cables Entering Buildings .....	413
<b>Part III. Protection</b> .....	413
820.93 Grounding of the Outer Conductive Shield of Coaxial Cables.....	413
<b>Part IV. Grounding Methods</b> .....	413
820.100 Bonding and Grounding Methods .....	413
<b>Part V. Installation Methods Within Buildings</b> .....	416
820.113 Installation of Coaxial Cables.....	416
820.133 Installation of Coaxial Cables and Equipment .....	418
820.154 Applications of Coaxial Cables.....	419
<b>Part VI. Listing Requirements</b> .....	420
820.179 Listing and Marking of Coaxial Cables .....	420
<b>Chapter 8 Practice Questions</b> .....	421
<b>FINAL EXAM A</b> .....	427
<b>FINAL EXAM B</b> .....	437
<b>INDEX</b> .....	447
<b>About the Author</b> .....	455
<b>About the Illustrator</b> .....	456
<b>About the Mike Holt Team</b> .....	457