

INDEX TO SUBJECTS

This listing includes technical, sociological, economic, and general papers. Numbers refer to chronological list.

A

- Addition Circuits: 2826
 - Advance Ball: 2933
 - Air Dashpot: 2933
 - Amplifiers: 2729, 2734, 2735, 2736, 2760, 2766, 2777, 2797, 2802, 2828, 2866, 2872, 2906, 2931, 2936, 2937, 2952
 - Audio-Frequency: 2866, 2931
 - Gain: 2866
 - Ratings: 2866
 - Input Coupling Factor: 2866
 - Peak Limiting: 2931
 - Dynamic Performance: 2931
 - Balanced: 2866
 - Band-Pass: 2802
 - Double-Tuned: 2802
 - Triple-Tuned: 2802
 - Cathode-Biased: 2760
 - Degenerative: 2760
 - Graphical Analysis: 2760
 - Cathode-Degenerated: 2872
 - Graphical Analysis: 2872
 - Cathode-Follower: 2797, 2872
 - Conductance: 2797
 - Graphical Analysis: 2872
 - Input Admittance: 2797
 - Susceptance: 2797
 - Computing: 2777
 - Double-Tuned: 2802
 - Feedback: 2952
 - Performance Analysis: 2952
 - Inverse Nyquist Diagram: 2952
 - Grounded-Grid: 2936
 - Harmonic: 2828
 - Design: 2828
 - Impedance-Coupled: 2766
 - Intermediate-Frequency: 2729, 2906
 - Capacitance-Coupled: 2729
 - Radar: 2906
 - Magnetic: 2937
 - Microwave: 2734, 2735, 2736
 - Traveling-Wave: 2734, 2735, 2736
 - Operational: 2777
 - Power: 2936
 - Disk-Seal-Tube: 2936
 - Lighthouse-Tube: 2936
 - Ultra-High-Frequency: 2936
 - Push-Pull: 2766
 - Traveling-Wave: 2734, 2735, 2736
 - Triple-Tuned: 2802
 - Wide-Band: 2729, 2936
 - Amplitude Comparator: 2878
 - Amplitude Limiting: 2876
 - Effect on Noise: 2876
 - Analyzers, Electronic: 2777, 2826
 - Circuits: 2826
 - Operational Amplifiers: 2777
 - Annual Review: 2777
 - Antennas: 2717, 2777, 2782, 2792, 2822, 2823, 2829, 2869, 2877, 2889, 2917, 2935, 2945, 2946, 2947, 2948, 2949, 2964
 - Aircraft: 2945
 - Pattern Measurements: 2945
 - Using Models, 2945
 - Analysis: 2889
 - Microwave: 2889
 - Directional: 2889
 - Broadcasting: 2964
 - Capacitor: 2948, 2949
 - Circularly Polarized: 2949
 - "Cloverleaf": 2964
 - Coil: 2948, 2949
 - Cone: 2823
- Antennas (Cont'd.)
 - Cylindrical: 2823
 - Directional: 2889, 2935
 - Microwave: 2889
 - Analysis: 2889
 - Mutual Impedance: 2935
 - Directive: 2917
 - Parabolic Radiators: 2917
 - Design: 2917
 - Feed: 2917
 - Polarization: 2917
 - Driving-Point Impedance: 2877
 - Electric Dipole: 2948, 2949
 - Electric-Field Strength: 2829
 - Calculation: 2829
 - Field Intensities: 2877
 - Short: 2877
 - Top-Loaded: 2877
 - Vertical: 2877
 - Field Strength: 2829
 - Electric: 2829
 - Calculation: 2829
 - Flush-Type: 2947
 - Frequency Modulation: 2964
 - "Cloverleaf": 2964
 - Ground System: 2877
 - Helical: 2949
 - Impedance: 2877, 2935
 - Mutual: 2935
 - Vertical: 2835
 - Unequal Height: 2935
 - Inverted-L: 2877
 - Loop: 2792, 2869, 2948, 2949
 - Coupling Transformers: 2869
 - Input Circuits: 2792
 - Magnetic Dipole: 2948, 2949
 - Measurements: 2945, 2946
 - Gain: 2946
 - Patterns: 2945, 2946
 - Using Models: 2945
 - Microwave: 2782, 2823, 2889, 2917, 2946, 2947
 - Directional: 2889
 - Analysis: 2889
 - Flush-Type: 2947
 - Measurements: 2946, 2947
 - Beam Width: 2946
 - Gain: 2946
 - Mutual Coupling: 2946
 - Phase: 2946
 - Pocket: 2947
 - Polarization: 2946
 - Radiation Patterns: 2946
 - Slot: 2947
 - Omnidirectional: 2782
 - Parabolic: 2823, 2917
 - Design: 2917
 - Feeds: 2917
 - Focal Devices: 2823
 - Polarization: 2917
 - Mirrors: 2823
 - Parabolic: 2823
 - Focal Devices: 2823
 - Mutual Impedance: 2935
 - Vertical: 2935
 - Unequal Height: 2935
 - Omnidirectional: 2782
 - Tridipole: 2782
 - Wave-Guide: 2782
 - Parabolic: 2823, 2917
 - Design: 2917
 - Feeds: 2917
 - Focal Devices: 2823
 - Polarization: 2917
- Antennas (Cont'd.)
 - Pocket: 2947
 - Radar: 2717, 2822
 - Beacons: 2822
 - Radiation Patterns: 2945, 2946
 - Measurement: 2945, 2946
 - Using Models: 2945
 - Radiation Resistance: 2877
 - Short: 2877
 - T: 2877
 - Inverted-L: 2877
 - Slot: 2947
 - Small: 2948, 2949
 - Limitations: 2948
 - Top-Loaded: 2877
 - Tridipole: 2782
 - Vertical: 2877, 2935
 - Ground System: 2877
 - Mutual Impedance: 2935
 - Unequal Height: 2935
 - Short: 2877
 - Top-Loaded: 2877
 - Very-High Frequency: 2894
 - Free-Space Field: 2894
 - Wave-Guide: 2782
 - Articulation Index: 2855
 - Attenuator: 2752, 2895
 - Microwave: 2752, 2895
 - "S"-Band: 2752
 - Audio Frequencies: 2847, 2855, 2866, 2870, 2897, 2931, 2963, 2966, 2967
 - Amplifiers: 2931
 - Gain: 2866
 - Ratings: 2866
 - Peak-Limiting: 2931
 - Dynamic Performance: 2931
 - Articulation Index: 2855
 - Broadcasting: 2963
 - Program Transmission Standards: 2963
 - Distortion: 2897
 - Intermodulation: 2897
 - Disk Recording: 2897
 - Hearing: 2855
 - Indicators: 2847
 - Electronic: 2847
 - Intelligibility: 2855
 - Intermodulation Distortion: 2897
 - Analysis: 2897
 - Loudspeakers: 2866
 - Ratings: 2866
 - Measurements: 2847
 - Indicators: 2847
 - Microphones: 2866
 - Ratings: 2866
 - Noise Pickup: 2855
 - Orthotelephonic Gain: 2855
 - Oscillators: 2870
 - Frequency Modulated: 2870
 - Resistance-Capacitance: 2870
 - Frequency Modulated: 2870
 - Resistance-Tuned: 2870
 - Peak-Limiting Amplifiers: 2931
 - Dynamic Performance: 2931
 - Recording: 2966, 2967
 - Magnetic: 2967
 - Heads: 2967
 - Field Measurements: 2967
 - Vacuum-Tube Transducer: 2966
 - Sound Systems: 2866
 - Ratings: 2866
 - Speech Communication Systems: 2855
 - Design: 2855
 - Speech Spectra: 2855

Automatic Frequency Control: 2769, 2827, 2940
Servomechanical: 2827
Stabilized Oscillator: 2940

B

"Balun": 2898
Bolometer: 2791
"Box-Car" Lengtheners: 2880
Broadcasting: 2777, 2931, 2963, 2964
Antennas: 2964
"Cloverleaf": 2964
Frequency Modulation: 2964
Antennas: 2964
"Cloverleaf": 2964
Peak-Limiting Amplifiers: 2931
Dynamic Performance: 2931
Program Transmission Standards: 2963

C

Calorimeter: 2848
Microwave: 2848
Coaxial Load: 2848
Camera: 2962
Television: 2962
Field Pickup: 2962
Canada: 2749
Radar Development: 2749
Canadian Council, I.R.E., 2727, 2810, 2860
Report of Education Committee, Montreal: 2727, 2860
Report on Professional Standing: 2727
Cathode Followers: 2760, 2797, 2872
Amplifiers: 2797
Conductance: 2797
Graphical Analysis: 2872
Input Admittance: 2797
Susceptance: 2797
Degenerative: 2760
Graphical Analysis: 2760
Cathode-Ray Tubes: 2764, 2777, 2847
Indicators: 2847
Audio Frequency: 2847
Cavity Resonators: 2771, 2777, 2783, 2849, 2921
Analysis: 2771, 2783
Circle Diagrams: 2771, 2783
Design Charts: 2849
Filter Elements: 2921
Measurements: 2771, 2783
Circle Diagrams: 2771, 2783, 2824
Impedance Plotting: 2824
Circuit Analysis: 2729, 2739, 2740, 2741, 2753, 2761, 2763, 2766, 2771, 2777, 2783, 2802, 2824, 2830, 2849, 2857, 2872, 2898, 2890, 2910, 2918, 2919, 2920, 2921, 2951, 2952
Amplifiers: 2729, 2766, 2802, 2872, 2952
Balanced: 2766
Band-Pass: 2802
Double-Tuned: 2802
Triple-Tuned: 2802
Capacitance-Coupled: 2729
Wide-Band: 2729
Cathode-Degenerated: 2872
Cathode-Follower: 2872
Double-Tuned: 2802
Feedback: 2952
Inverse Nyquist Diagram: 2952
Impedance-Coupled: 2766
Push-Pull: 2766
Triple-Tuned: 2802
Cathode-Degenerated Amplifiers: 2872
Cathode-Follower Amplifiers: 2872
Cavity Resonators: 2849
Design Charts: 2849
Circle Diagrams: 2771, 2783, 2824
Coaxial Lines: 2857, 2888, 2922, 2951
Phase Discontinuities: 2951
Short Circuits: 2857, 2888, 2922

Circuit Analysis (Cont'd.)

Noncontacting: 2857, 2888, 2922
Broadband: 2857, 2888, 2922
Crystal Circuits: 2763
Directional Couplers: 2919
Distributed-Constant Circuits: 2910
Transient Behavior: 2916
Filters: 2921
Microwave: 2921
Quarter-Wave Coupled: 2921
Hybrid Circuits: 2918
"Ideal Filter": 2740
Impedance Plotting: 2824
Circle Diagrams: 2824
Inverse Nyquist Diagram: 2952
Feedback Analysis: 2952
Servomechanism Analysis: 2952
Microwave Resonant Systems: 2771, 2783
n-Meshed Tuned Circuits: 2763
Nyquist Diagram: 2952
Feedback Analysis: 2952
Servomechanism Studies: 2952
Pass Band: 2740
Phase Discontinuities: 2951
Coaxial Lines: 2951
Q Circle: 2771, 2783, 2824
Rectifiers: 2753
Resonant Cavities: 2849
Design Charts: 2849
Resonators: 2890
Equivalent Circuit: 2890
Servomechanisms: 2741, 2952
Inverse Nyquist Diagram: 2952
Short Circuits: 2857, 2922
Noncontacting: 2857, 2922
Broad-Band: 2857, 2922
Step Response: 2740
Transducers: 2890
Resonators: 2890
Transformer Cores: 2761
Noise Loss: 2761
Transition Time: 2741
Transformers: 2898
Balanced-to-Unbalanced Line: 2898
Transient Behavior: 2910
Virtual Displacements: 2910
Transmission Lines: 2898, 2890
Matching Transformers: 2898, 2890
"Balun": 2898
Balanced-to-Unbalanced Line: 2898
Virtual Displacements: 2910
Transient Behavior: 2910
Wave Guide: 2830, 2918
Corner Bend: 2920
Equivalent Circuit: 2920
Hybrid Circuits: 2918
Rectangular: 2830
Ridge: 2830
"Cloverleaf" Antenna: 2964
Coaxial Cable: 2934
Networks: 2934
Coaxial Lines: 2759, 2848, 2857, 2918, 2951
Calorimeter Wattmeter: 2848
Ultra-High Frequency: 2848
Hybrid Circuits: 2918
Junctions: 2759
To Wave Guide: 2759
Broad-Band: 2759
Noncontacting Short Circuits: 2857, 2922
Broad-Band: 2857, 2922
Phase Discontinuities: 2951
Coils: 2834, 2883, 2965
Inductance Calculation: 2834
Nomogram: 2834
Iron-Core: 2883
High-Frequency Excitation: 2883
Losses: 2883
Winding: 2965
Universal: 2965
Ordinary: 2965

Coils (Cont'd.)

Progressive: 2965
Collective Bargaining: 2726
Communication: 2777, 2821, 2934
Coaxial-Cable Networks: 2934
Radio: 2777
Submarine: 2821
Commutation-Method Multiplex: 2903
Commutator, Electronic: 2912
Cyclophon: 2912
Computers: 2777, 2826, 2937
Electronic: 2777, 2826
Circuits: 2826
Magnetic Amplifiers: 2937
Conductance: 2797
Cathode-Follower Amplifiers: 2797
Cone Antennas: 2823
Constitution: 2809
Amendments: 2809
Conversion Gain: 2719
Noise Measurement: 2719
Converters, Frequency: 2769, 2902
Crystal: 2769
Microwave: 2902
Point-Contact: 2902
Silicon: 2902
Co-planar Tubes: 2764
Copper-Oxide Rectifiers: 2753
Corner Bend: 2920
Wave Guide: 2920
Equivalent Circuit: 2920
Counters: 2826, 2912
Cyclophon: 2912
Crystal Circuits: 2763
Predimensioning: 2763
Crystals: 2759, 2719, 2758, 2764, 2777, 2831, 2874, 2902
Low-Coefficient: 2874
Synthetic: 2874
Noise: 2719, 2758, 2759
Piezoelectric: 2777, 2831, 2874
Artificial Twinning: 2831
EDT: 2874
DKT: 2874
Filter: 2874
Oscillator Control: 2874
Synthetic: 2874
Silicon: 2902
Point-Contact Rectifier: 2902
Synthetic: 2874
Low-Coefficient: 2874
Rectifiers: 2764
Cyclophon: 2912
Cyclotron-Frequency Magnetron: 2795
Cylindrical Antenna: 2823

D

Dauphine Twinning: 2831
Delay Lines: 2968
Detectability: 2907
Radar Targets: 2907
Dichroic Mirrors: 2852
Differential Analyzers: 2777
Differentiating Transformers: 2878
Differentiator: 2937
Magnetic Amplifier: 2937
Dimensional Analysis: 2938
Electromagnetic Quantities: 2938
Directional Couplers: 2739, 2919
Theory: 2919
Discriminability: 2907
Radar Targets: 2907
Disk Recording (See "Recording")
Disk-Seal Tube: 2781, 2911, 2936
Amplifier: 2936
Wide-Band: 2936
Input Conductance: 2911
Oscillator: 2781
Transadmittance: 2911
DKT Crystals: 2874

Donutron: 2772
Distortion: 2897, 2909, 2943
Frequency-Modulated Wave: 2943
Transmission Network: 2943
Intermodulation: 2897, 2943
Disk Recording: 2897
Analysis: 2897
Frequency Modulation: 2943
Pulse-Duration Modulation: 2909
Analysis: 2909
Doppler Effect: 2932
Aircraft Speed Measurement: 2932
Duct Propagation: 2780, 2856, 2984
Duplexers: 2769
Dynamics: 2779
Analysis of Problems: 2779

E

Earphones: 2855
Noise Pickup: 2855
Echoing Areas: Radar: 2717
Eddy-Current Loss: 2761
Transformer Cores: 2761
Noise Excitation: 2761
EDT Crystals: 2874
Education, Engineering: 2810, 2860, 2865, 2930
Canadian Council: 2860
Curricula: 2930
E-Layer: 2786
Electromagnetic Quantities: 2938
Dimensional Analysis: 2938
Electronic Analyzers: 2777, 2826
Circuits: 2826
ENIAC: 2826
Operational Amplifiers: 2777
Electronic Collisional Frequency: 2757
Electronic Computers: 2826, 2937
Addition Circuits: 2826
Counters: 2826
Circuits: 2826
Counters: 2826
ENIAC: 2826
Flip-Flops: 2826
Magnetic Amplifiers: 2937
Memory Circuits: 2826
Flip-Flops: 2826
Multiplication Circuits: 2826
Electronic Switching: 2912
Cyclophon: 2912
Electronics: 2821, 2843, 2893
In Submarine Warfare: 2821
Peacetime Applications: 2843
Research: 2893
Office of Naval Research: 2893
Electron Multipliers: 2885
Magnetic: 2885
Gain: 2885
Frequency Variation: 2885
Electron-Ray Tubes: 2900
Tuning Indicator: 2900
Electron Reflectors: 2830
Electron Trajectory: 2830
Electron Tubes (see Vacuum Tubes)
Engineering Education: 2810, 2930
Curricula: 2930
Engineering Profession: 2845
Relation to World Affairs: 2845
ENIAC: 2826
Equivalent Units: 2938
Exponential Transmission Line: 2798
Straight Conductors: 2798
Tapered: 2798

F

Facsimile: 2777
Federal Communications Commission: 2799
Filters: 2921
Band-Pass: 2921
Microwave: 2921

Filters (Cont'd.)

Band-Rejection: 2921
Microwave: 2921
Microwave: 2921
Quarter-Wave Couplings: 2921
Resonant-Element: 2921
Quarter-Wave-Coupled: 2921
Resonant-Element: 2921
Microwave: 2921
Flip-Flop Circuits: 2826, 2878
Flop-Over Circuit: 2878
Fluctuation Noise: 2876, 2903, 2914
Microwave Tetrodes: 2914
Pulse-Height Multiplex: 2903
Flush-Type Radiators: 2947
Frequency Control: 2804, 2805, 2806, 2827, 2940
Automatic: 2827
Servomechanical: 2827
Electron-Beam: 2804, 2805, 2806
Magnetron Oscillator: 2804, 2805, 2806
Electron-Beam: 2804, 2805, 2806
Negative-Grid Controlled: 2804, 2805, 2806
Oscillators: 2804, 2805, 2806
Stabilized Oscillator: 2940
Frequency Converters: 2769, 2902
Crystal: 2769
Microwave: 2902
Point-Contact: 2902
Silicon: 2902
Frequency Measurement: 2868, 2871
Calibration: 2871
Wavemeters: 2871
Microwave: 2871
Frequency Standards: 2868
Secondary: 2868
Microwave: 2868
Harmonic Generators: 2868
Silicon-Crystal: 2868
Harmonic Multipliers: 2868
Heterodyne Detectors: 2868
Microwave: 2868, 2871
Wavemeters: 2871
Calibration: 2871
Wavemeters: 2868, 2871
Coaxial-Line: 2868
Microwave: 2871
Calibration: 2871
Frequency Modulation: 2718, 2737, 2738, 2777, 2804, 2805, 2806, 2808, 2867, 2870, 2875, 2882, 2896, 2900, 2941, 2943, 2964
Amplifier-Limiter: 2941
Synchronous: 2941
Bandwidth: 2875
Variation with Modulation Index: 2875
Broadcasting: 2964
Antennas: 2964
"Cleverleaf": 2964
Center-Frequency-Stabilized: 2896
Demodulator: 2941
Synchronized Oscillator: 2941
Deviation Ratio: 2943
Distortion: 2943
Distortion: 2943
Calculation: 2943
Transmission Network: 2943
Electron-Beam: 2804, 2805, 2806
Electron-Ray Indicator: 2900
Interference: 2882
Off-Channel: 2882
Co-Channel: 2882
Intermediate-Frequency Amplifiers: 2857
Intermodulation Distortion: 2943
Limiter-Amplifier: 2941
Synchronous: 2941
Magnetron Oscillators: 2804, 2805, 2806
Electron-Beam Control: 2804, 2805, 2806
Modulation Index: 2875
Variation of Bandwidth: 2875

Frequency Modulation (Cont'd.)

Modulator Tube: 2718
Multitone: 2808
Theory: 2808
Negative-Grid-Controlled: 2804, 2805, 2806
Electron Beam: 2804, 2805, 2806
Oscillators: 2804, 2805, 2806, 2870, 2896
Audio-Frequency: 2870
Resistance-Tuned: 2870
Center-Frequency-Crystallized: 2896
Feedback: 2870
Resistance-Tuned: 2870
Magnetron: 2804, 2805, 2806
Electron-Beam Control: 2804, 2805, 2806
Resistance-Capacitance: 2870
Resistance-Tuned: 2870
Resistance-Tuned: 2870
Phase-Modulator Tube: 2718
Phasitron: 2718
Ranges: 2737, 2738
Co-Channel Interference-Limited: 2737
Noise-Limited: 2737
Receivers: 2867, 2900, 2941, 2943
Amplifier-Limiter: 2941
Synchronous: 2941
Demodulator: 2941
Synchronized Oscillator: 2941
Distortion: 2943
Calculation: 2943
Intermediate-Frequency Amplifiers: 2867
Limiter-Amplifier: 2941
Synchronous: 2941
Tuning Indicator: 2900
Electron-Ray: 2900
Spectrum: 2808
Transmission: 2896
Center-Frequency Stabilized: 2896
Tuning Indicator: 2900
Electron-Ray: 2900
Frequency Multipliers: 2828
Design: 2828
Frequency-Shift Keying: 2777
Frequency Stabilization: 2804, 2805, 2806, 2940
Automatic: 2804, 2805, 2806
Magnetron Oscillators: 2804, 2805, 2806
Electron-Beam Control: 2804, 2805, 2806
Negative-Grid Control: 2804, 2805, 2806
Magnetron Oscillators: 2804, 2805, 2806
Negative-Grid Control: 2804, 2805, 2806
Electron-Beam: 2804, 2805, 2806
Microwave Oscillators: 2940
Oscillators: 2804, 2805, 2806
Magnetron: 2804, 2805, 2806
Electron-Beam Control: 2804, 2805, 2806
Negative-Grid Control: 2804, 2805, 2806
Frequency Standards: 2868
Harmonic Generators: 2868
Silicon Crystal: 2868
Harmonic Multipliers: 2868
Heterodyne Detectors: 2868
Microwave: 2868
Secondary: 2868
Microwave: 2868
Wavemeters: 2868
Coaxial-Line: 2868

G

Generators: 2854
Noise: 2854
Electrical: 2854
Random: 2854

Ground Reflection: 2717
Radar: 2717
Ground-Wave Transmission: 2894
Grounded-Grid Amplifier: 2936
Wide-Band: 2936

H

Harmonic Amplifiers: 2828, 2868
Design: 2828
Frequency Standard: 2868
Harmonic Generators: 2868
Silicon-Crystal: 2868
Headphones: 2855
Noise Pickup: 2855
Hybrid Circuits: 2918

I

Iconoscope: 2913
Video Storage: 2913
Secondary Emission: 2913
"Ideal Filter": 2740
Identification Friend or Foe: 2821
Submarine: 2821
Image Orthicon: 2962
Field-Pickup Camera: 2962
Impedance: 2790, 2824
Plotting: 2824
Transmission Line: 2790
Measurement: 2790
Impulse Noise: 2876
Indicators: 2847, 2907
Audio-Frequency: 2847
Cathode-Ray Tube: 2847
Electronic: 2847
Cathode-Ray Tube: 2747
Electronic: 2847
Radar: 2907
Plan-Position: 2907
Remote Projection: 2907
Detectability: 2907
Discriminability: 2907
Inductance: 2834
Inductors: 2883
Iron-Core: 2883
High-Frequency Excitation: 2883
Losses: 2883
Loop Antennas: 2792
Institute of Radio Engineers: 2726, 2727, 2799, 2800, 2809, 2810, 2843, 2844, 2845, 2860, 2865
Canadian Council: 2727, 2810, 2860
Report of Education Committee, Montreal: 2727, 2860
Report on Professional Standing: 2727
Committee on Professional Recognition: 2726
Report on Collective Bargaining: 2726
Constitutional Amendments: 2809
Engineering Profession: 2845
Relation to World Affairs: 2845
Sections: 2844
Test for Success: 2844

Instrumentation (See "Measurements")

K

Klystrons: 2756, 2764, 2795, 2886, 2942, 2953
Buncher: 2886
Grid Spacing: 2886
Gaps: 2886
Transit-Time Effect: 2886
Reflex: 2756, 2942, 2953
Double Resonator: 2759
Efficiency: 2756
Multifrequency Bunching: 2953
Transit-Time Effect: 2886

L

Lighthouse Tubes: 2781, 2936, 2911
Amplifier: 2936

Lighthouse Tubes (Cont'd.)

Wide-Band: 2936
Input Conductance: 2911
Oscillators: 2781
Transadmittance: 2911
Limiters: 2876
Amplitude: 2876
Effect on Noise: 2876
Links, Relay: 2903
Multiplex: 2903
Commutation: 2903
Fluctuation Noise: 2903
Pulse-Height: 2903
Loudspeakers: 2866
Ratings: 2866

M

Magnetic Amplifiers: 2937
Magnetic Recording: 2967
Heads: 2967
Field Measurement: 2967
Magnetrons: 2764, 2772, 2795, 2804, 2805, 2806
Cyclotron-Frequency: 2795
Donutron: 2772
Frequency-Modulated: 2804, 2805, 2806
Electron-Beam Control: 2804, 2805, 2806
Negative-Grid Control: 2804, 2805, 2806
Multicavity: 2795
Negative-Resistance: 2795
Rieke Diagram: 2795
"Rising-Sun": 2795
Squirrel-Cage: 2772
Strapped: 2795
Traveling-Wave: 2795
Tunable: 2772
Measurements: 2719, 2730, 2732, 2751, 2758, 2759, 2765, 2767, 2790, 2791, 2847, 2848, 2868, 2871, 2884, 2895, 2897, 2908, 2909, 2916, 2931, 2932, 2941, 2945, 2946
Aircraft Speed: 2932
Doppler Effect: 2932
Amplifiers: 2931
Dynamic Performance: 2931
Antenna: 2945, 2946
Gain: 2946
Radiation Patterns: 2945, 2946
Using Models: 2945
Audio Frequency: 2847
Cathode-Ray Tube: 2847
Electronic Indicator: 2847
Automatic-Slideback Voltmeter: 2751
Bolometric: 2791
Cathode-Ray-Tube Indicators: 2847
Circulated-Pulse Testing: 2908
Crystals: 2719, 2758, 2759
Distortion: 2909
Intermodulation: 2897
Disk Recording: 2897
Pulse-Duration Modulation: 2909
Field-Intensity Meter: 2941
Synchronized Oscillator: 2941
Frequency: 2868, 2871
Harmonic Generators: 2868
Silicon-Crystal: 2868
Harmonic Multipliers: 2868
Heterodyne Detectors: 2868
Microwave: 2886
Standards: 2868
Secondary: 2868
Microwave: 2868
Wavemeters: 2868, 2871
Calibration: 2871
Coaxial-Line: 2868
Impedance: 2790, 2916
Oscillographic Presentation: 2916
Reflection-Coefficient Plane: 2916

Measurements (Cont'd.)

Transmission Line: 2790, 2916
Indicators: 2847
Audio Frequency: 2847
Cathode-Ray Tube: 2847
Intermodulation Distortion: 2897
Disk Recording: 2897
Noise: 2719, 2730, 2758, 2759, 2765
Accuracy: 2730
Conversion Gain: 2719
Crystal Mixers: 2758, 2759
Crystal Rectifiers: 2758, 2759
Meters: 2730
Peak Voltmeter: 2751
Power: 2732, 2791, 2848
Bolometric: 2791
Calorimeter: 2848
Ultra-High Frequency: 2848
Calorimeter: 2848
Coaxial Load: 2848
Water-Filled Line: 2848
Pulse: 2908
Testing Repeaters: 2908
Pulse-Duration Modulation: 2909
Distortion: 2909
Pulse-Measuring Voltmeter: 2751
Radar: 2767, 2923
Field: 2767
Maintenance: 2767
Receiver: 2765
Noise: 2765
Sensitivity: 2765
Recording: 2897
Disk: 2897
Intermodulation: 2897
Sensitivity: 2765
Signal Generators: 2895
Ultra-High Frequency: 2895
Wide-Range: 2895
Spectrum Analyzers: 2884
Double-Heterodyne: 2884
Microwave: 2884
Wide-Range: 2884
Square Wave: 2908
Synchronized Oscillators: 2941
Field-Intensity Meter: 2941
Linear Voltmeter: 2941
Testing Repeaters: 2908
Transient Response: 2908
Circulated-Pulse Testing: 2908
Transmission-Line Chart: 2916
Oscillographic Presentation: 2916
Transmission Lines: 2790
Damping: 2790
Impedance: 2790
Phase-Shift: 2790
Voltmeter: 2751, 2941
Linear: 2941
Synchronized Oscillator: 2941
Peak-Measuring: 2751
Automatic Slideback: 2751
Meteorological Conditions: 2944
Wave Propagation: 2944
Tropospheric: 2944
Microphones: 2855, 2866
Input-Coupling Factor: 2866
Noise Pickup: 2855
Ratings: 2866
Microwaves: 2728, 2731, 2732, 2739, 2752, 2756, 2758, 2759, 2769, 2770, 2771, 2772, 2777, 2780, 2781, 2782, 2783, 2791, 2795, 2804, 2805, 2806, 2807, 2824, 2827, 2830, 2856, 2868, 2871, 2884, 2888, 2889, 2890, 2895, 2898, 2902, 2904, 2911, 2914, 2917, 2918, 2919, 2921, 2936, 2940, 2946, 2947, 2950, 2951
Amplifiers: 2936
Power: 2936

Microwaves (Cont'd.)

Grounded-Grid: 2936
Wide-Band: 2936
Antennas: 2782, 2889, 2917, 2946, 2947
Directional: 2889
Analysis: 2889
Flush-Type: 2947
Measurements: 2946
Omnidirectional: 2782
Parabolic Radiators: 2917
Design: 2917
Feeds: 2917
Polarization: 2917
Pocket: 2947
Slot: 2947
Attenuator: 2752
"Balun": 2898
Coaxial Lines: 2951
Phase Discontinuities: 2951
Converters: 2902
Diffraction: 2889
Directional Couplers: 2739, 2919
Ducts: 2780
Feed: 2889
Filters: 2921
Quarter-Wave Couplings: 2921
Resonant-Element: 2921
Frequency Control: 2827
Automatic: 2827
Servomechanical: 2827
Frequency Converters: 2902
Microwave: 2902
Wide-Band: 2902
Point-Contact: 2902
Silicon: 2902
Frequency Measurement: 2868, 2871
Standards: 2886, 2871
Frequency Modulation: 2804, 2805, 2806
Electron-Beam: 2804, 2805, 2806
Magnetrons: 2804, 2805, 2806
Negative-Grid: 2804, 2805, 2806
Frequency Stabilization: 2804, 2805, 2806, 2940
Electron-Beam: 2804, 2805, 2806
Electronic: 2940
Magnetron: 2804, 2805, 2806
Negative-Grid: 2804, 2805, 2806
Frequency Standards: 2868, 2871
Secondary: 2868
Hybrid Circuits: 2918
Junctions: 2759
Coaxial to Wave-Guide: 2759
Broad Band: 2759
Magnetrons: 2804, 2805, 2806
Frequency Modulated: 2804, 2805, 2806
Electron-Beam: 2804, 2905, 2806
Frequency Stabilized: 2804, 2805, 2806
Measurements: 2732, 2791, 2884, 2895
Power: 2791
Bolometric: 2791
Water Load: 2732
Signal Generators: 2895
Wide-Range: 2895
Spectrum Analyzers: 2884
Double-Heterodyne: 2884
Wide-Range: 2884
Omnidirectional: 2782
Tridipole: 2782
Wave-Guide: 2782
Oscillators: 2731, 2758, 2781, 2795, 2827, 2940
Disk-Seal Tube: 2781
Double-Resonator Klystron: 2795
Frequency Control: 2827
Automatic: 2827
Frequency-Stabilized: 2940
Electronic: 2940
Klystron: 2795
Lighthouse Tube: 2781
Magnetron: 2795

Microwaves (Cont'd.)

Reflex: 2731, 2758
Velocity-Modulated: 2758
Reflex Klystron: 2795
Triode: 2795
Velocity-Modulated: 2758
Velocity-Variation: 2731, 2795
Wide-Tuning-Range: 2731
Point-Contact Rectifier: 2902
Propagation: 2770, 2780, 2807, 2856
Duct: 2780, 2856
Low-Level: 2780
Low Ocean: 2856
Rain, Effect of: 2770
Attenuation: 2770
Through Rain: 2770
Refraction: 2807
Tropospheric: 2807
Receivers: 2769, 2902
Converters: 2902
Wide-Band: 2902
Radar: 2769
Reflectors: 2889
Relay: 2728, 2777
Multichannel: 2728
"S"-Band Attenuator: 2752
Signal Generators: 2898
Wide-Range: 2895
Silicon Rectifiers: 2902
Spectrum Analyzers: 2884
Double-Heterodyne: 2884
Wide-Range: 2884
Transducers: 2890
Resonators: 2890
Equivalent Circuit: 2890
Transformers: 2898
Wide-Band: 2898
Balanced-to-Unbalanced Line: 2898
"Balun": 2898
Transmission Lines: 2919
Directional Couplers: 2919
Vacuum Tubes: 2756, 2772, 2899, 2911, 2914
Disk-Seal Tubes: 2911
Input Conductance: 2911
Transmittance: 2911
Donutron: 2772
Electrode Dissipation: 2899
Magnetron: 2772
Space-Charge Effects: 2914
Squirrel-Cage Magnetron: 2772
Tetrodes: 2914
Space-Charge Effects: 2914
Transit-Time Effects: 2914
Wave-Guide: 2830, 2890, 2918, 2919, 2950
Differential Phase-Shift Section: 2950
Directional Couplers: 2919
Hybrid Circuits: 2918
Phase Changer: 2950
Ridge: 2830
Transducers: 2890
Equivalent Circuit: 2890
Wavemeters: 2868, 2871
Wave Propagation: 2904
Tropospheric: 2904
Index of Refraction: 2904
Miller Effect: 2730
In Noise Meters: 2730
Mixers: 2719, 2758, 2759
Crystal: 2719, 2758, 2759
Noise: 2719, 2758, 2759
Modulation: 2728, 2777, 2796, 2808, 2875, 2879, 2880, 2896, 2903, 2909, 2912
Amplitude: 2808
Multitone: 2808
Spectrum: 2808
Theory: 2808
Frequency: 2808, 2875, 2896
Bandwidth: 2875

Modulation (Cont'd.)

Variation with Modulation Index: 2875
Center-Frequency Stabilized: 2896
Modulation Index: 2875
Variation of Bandwidth: 2875
Multitone: 2808
Oscillators: 2896
Center-Frequency Stabilized: 2896
Spectrum: 2808
Theory: 2808
Pulse: 2880, 2903, 2909, 2912
Cyclophon: 2912
Duration: 2909
Distortion: 2909
Lengtheners: 2880
"Box-Car" Type: 2880
Pulse-Height Multiplex: 2903
Fluctuation Noise: 2903
Pulse-Time-Division: 2728
Microwave Relay: 2728
Selective Demodulation: 2796
Time: 2878, 2879
Modulation Index: 2875
Frequency Modulation: 2875
Variation of Bandwidth: 2875
Moon Radar: 2717
Mosaics: 2913
Video Storage: 2913
Secondary Emission: 2913
Multiar: 2878
Multiplex: 2728, 2796, 2903, 2912
Pulse-Time Modulation: 2912
Cyclophon: 2912
Commutation: 2903
Fluctuation Noise: 2903
Microwave Relay: 2728
Pulse-Height: 2903
Pulse-Time Division: 2728
Selective Demodulation: 2796
Multipliers: 2828, 2885
Electron: 2885
Magnetic: 2885
Frequency Variation: 2885
Gain: 2885
Frequency: 2828
Design: 2828
Multitone Modulation: 2808

N
Naval Research: 2893
Electronic Research: 2893
Navigation: 2762
Error: 2762
Propagated Wave: 2762
Navigation Aids: 2777
Negative-Resistance Magnetron: 2795
Network Analysis: 2761
Noise Loss: 2761
Transformer Cores: 2761
Networks: 2739, 2740, 2910, 2943
Directional Coupler: 2739
Distortion: 2943
Frequency-Modulated Wave: 2943
"Ideal Filter": 2740
Pass Band: 2740
Step Response: 2740
Transient Analysis: 2910
Virtual Displacements: 2910
Transition Time: 2740
Virtual Displacements: 2910
Transient Behavior: 2910
Noise: 2717, 2719, 2730, 2758, 2759, 2761, 2765, 2769, 2792, 2854, 2876, 2883, 2903, 2914
Amplitude Limiting: 2876
Effect on Receiver Performance: 2876
Coils: 2883
Iron-Core: 2883
High-Frequency Excitation: 2883

Noise (Cont'd.)

Losses: 2883
 Conversion: 2758, 2759
 Crystal Rectifiers: 2719, 2758, 2759
 Fluctuation: 2876, 2903, 2914
 Frequency Selectivity: 2876
 Effect on Receiver Performance: 2876
 Generators: 2854, 2876
 Electrical: 2854
 Gas Tube: 2854
 Impulse: 2876
 Input-Circuit: 2792
 Loop Antennas: 2792
 Measurement: 2719, 2730
 Accuracy: 2730
 Conversion Gain: 2719
 Effect of Bandwidth: 2730
 Response Time: 2730
 Meters: 2730
 Accuracy: 2730
 Microwaves: 2914
 Tetrodes: 2914
 Space-Charge Effects: 2914
 Transit-Time Effects: 2914
 Noise Figure: 2769
 Noise Loss: 2761
 Transformer Cores: 2761
 Radar: 2717
 Random: 2761
 Eddy-Current Loss: 2761
 Receiver: 2765
 Measurement: 2765
 Specification: 2765
 Receiver Performance: 2876
 Amplitude Limiting: 2876
 Frequency Selectivity: 2876
 Sine Wave: 2761
 Sources: 2854
 Electrical: 1854
 Gas Tube: 2854
 Spectrum, 2758, 2759
 Crystal Rectifiers: 2758, 2759
 Temperature: 2717
 Transformers: 2883
 Iron-Core: 2883
 High-Frequency Excitation: 2883
 Losses: 2883
 Vacuum Tubes: 2914
 Space-Charge Effects: 2914
 Transit-Time Effects: 2914
 Nomograms: 2834
 Inductance Calculation: 2834
 Nonlinear Transformers: 2937
 Nyquist Diagram: 2952
 Servomechanism Analysis: 2952

O

Orthotelephonic Gain: 2855
 Oscillators: 2781, 2804, 2805, 2806, 2827, 2870, 2895, 2896, 2940, 2941
 Audio Frequency: 2870
 Feedback: 2870
 Resistance-Tuned: 2870
 Frequency Modulated: 2870
 Disk-Seal Tube: 2781
 Frequency Control: 2827
 Automatic: 2827
 Servomechanical: 2827
 Frequency-Modulated: 2870, 2804, 2805, 2806, 2896
 Audio Frequency: 2870
 Resistance-Tuned: 2870
 Center-Frequency-Stabilized: 2896
 Magnetron: 2804, 2805, 2806
 Electron-Beam: 2804, 2805, 2806
 Negative-Grid Control: 2804, 2805, 2806
 Frequency Stabilization: 2804, 2805, 2806
 Magnetron: 2804, 2805, 2806
 Electron-Beam: 2804, 2805, 2806

Oscillators (Cont'd.)

Negative-Grid Control: 2804, 2805, 2806
 Frequency-Stabilized: 2940
 Electronic: 2940
 Microwave: 2940
 Lighthouse Tube: 2781
 Microwave: 2781, 2795, 2827
 Automatic Frequency Control: 2827
 Servomechanical: 2827
 Disk-Seal Tube: 2781
 Double-Resonator Klystron: 2795
 Frequency Control: 2827
 Servomechanical: 2827
 Klystron: 2795
 Lighthouse Tube: 2781
 Magnetron: 2795
 Reflex-Klystron: 2795
 Stabilized: 2940
 Triode: 2795
 Velocity-Variation: 2795
 Stabilized 2940
 Electronic: 2940
 Synchronized: 2941
 Oscillograph: 2801, 2916
 Impedance Representation: 2916
 Radiographic: 2801
 Transmission-Line Presentation: 2916

P

Parabolic Antennas: 2823, 2917
 Focal Devices: 2823
 Peak-Limiting Amplifiers: 2931
 Dynamic Performance: 2931
 Peak-Measuring Voltmeter: 2751
 Phase Changer: 2950
 Differential Phase-Shift Section: 2950
 Phase-Modulator Tube: 2718
 Phasitron: 2718
 Pick-Off Circuit: 2878
 Piezoelectric Crystals: 2777, 2831, 2874
 Artificial Twinning: 2831
 DKT: 2874
 EDT: 2874
 Filters: 2874
 Low-Coefficient: 2874
 Oscillator Control: 2874
 Synthetic: 2874
 Twinning: 2831
 Planar Tubes: 2764
 Plan-Position Indicator: 2907
 Remote Rejection: 2907
 Detectability: 2907
 Discriminability: 2907
 Pocket Antennas: 2947
 Point-Contact Rectifiers: 2902
 Positioning System: 2793
 Radio Control: 2793
 Power: 2732, 2791
 Measurement: 2732
 Bolometric: 2791
 Water Load: 2732
 Coaxial Type: 2732
 Professional Recognition: 2726
 Professional Standing: 2727
 Programming Circuits: 2826
 Program Transmission Standards: 2963
 Broadcasting: 2963
 Pulse-Height Multiplex: 2903
 • Fluctuation Noise: 2903
 Pulse Transmission: 2728, 2879, 2880, 2895, 2903, 2908, 2909, 2912
 Commutation Multiplex: 2903
 Fluctuation Noise: 2903
 Demodulation: 2879
 Distortion: 2909
 Analysis: 2909
 Lengtheners: 2880
 "Box-Car" Type: 2880
 Pulse-Duration Modulation: 2909

Pulse Transmission (Cont'd.)

Distortion: 2909
 Analysis: 2909
 Pulse-Height Multiplex: 2903
 Fluctuation Noise: 2903
 Pulse-Time Division: 2728
 Microwave Relay: 2728
 Pulse-Time Modulation: 2912
 Cyclophon: 2912
 Measurements: 2895, 2908
 Circulated Pulses: 2908
 Signal Generators: 2895
 Testing Repeaters: 2908
 Modulation: 2879
 Multiplex: 2912
 Cyclophon: 2912
 Push-Pull Amplifiers: 2766

R

Radar: 2717, 2731, 2749, 2764, 2767, 2769, 2777, 2788, 2795, 2821, 2822, 2878, 2879, 2906, 2907, 2918, 2923, 2942, 2953, 2968
 Antennas: 2822
 Beacon: 2822
 Atmosphere, Reflections from: 2788
 ATR: 2769
 Beacon: 2822
 Airborne: 2822
 Blanking Gate: 2822
 Coder: 2822
 Discriminator: 2822
 Ground: 2822
 Centimeter-Wave: 2769
 Receivers: 2769
 Design: 2769
 Detectability: 2907
 Plan-Position Indicator: 2907
 Remote Projection: 2907
 Development: 2749
 In Canada: 2749
 Discriminability: 2907
 Plan-Position Indicator: 2907
 Remote Projection: 2907
 Duplexer: 2769
 Echoing Areas: 2717
 Generators: 2795
 Indicators: 2907
 Plan-Position: 2907
 Projection: 2907
 Intermediate-Frequency Amplifiers: 2906
 Maintenance: 2767
 Field: 2767
 Measurements: 2923
 Modulators: 2822
 Beacon: 2822
 Moon: 2717
 Navigation: 2822
 Beacon: 2822
 Noise Figure: 2769
 Oscillator Tubes: 2731, 2942, 2953
 Reflex: 2731
 Reflex-Klystron: 2942, 2953
 Velocity-Variation: 2731
 Wide-Tuning-Range: 2731
 Plan-Position Indicator: 2907
 Projection: 2907
 Detectability: 2907
 Discriminability: 2907
 Range: 2717
 Range-Finding Circuits: 2878, 2879
 Receivers: 2769, 2822, 2906, 2942, 2953
 Automatic Frequency Control: 2769
 Beacon: 2822
 Beating Oscillators: 2942, 2953
 Crystal Converters: 2769
 Design: 2769
 Intermediate-Frequency Amplifier: 2769, 2906
 Design: 2906

Radar (Cont'd.)
Local-Oscillator: 2769
Noise Figure: 2769
Reflex-Klystron Oscillators: 2942, 2953
Reflections from Lower Atmosphere: 2788
Submarine: 2821
Systems: 2822
Beacon: 2822
Targets: 2907
Detectability: 2907
Discriminability: 2907
Test Equipment: 2767
Airborne: 2767
Time Demodulation: 2879
Time Modulation: 2878
Transmit-Receive Switches: 2769, 2918
Hybrid Circuits: 2918
Transmitters: 2822
Beacon: 2822
Types: 2749
Vacuum Tubes: 2764, 2942, 2953
Reflex Klystron: 2942, 2953
Multifrequency Bunching: 2953
Video Delay Lines: 2968
Radio Control: 2793
Radiography: 2801
High-Speed: 2801
Receivers: 2750, 2765, 2777, 2867, 2876,
2902, 2906, 2942, 2953
Amplitude Limiting: 2876
Effect on Noise: 2876
Beating Oscillators: 2942, 2953
Reflex Klystron: 2942, 2953
Broadcast: 2867
Frequency Modulation: 2867
Intermediate-Frequency Amplifiers:
2867
Communications: 2750
Converters: 2902
Microwave: 2902
Wide-Band: 2902
Point-Contact: 2902
Silicon: 2902
Fluctuation Noise: 2876
Frequency Modulation: 2867
Frequency Selectivity: 2876
Effect on Noise: 2876
Impulse Noise: 2876
Intermediate-Frequency Amplifiers:
2867, 2906
Frequency Modulation: 2867
Radar: 2906
Naval: 2750
Communications: 2750
Ultra-High-Frequency: 2750
Noise Performance: 2876
Amplitude Limiting: 2876
Frequency Selectivity: 2876
Radar: 2906, 2942, 2953
Beating Oscillators: 2942, 2953
Reflex Klystron: 2942, 2953
Intermediate-Frequency Amplifiers:
2906
Selectivity: 2876
Frequency: 2876
Effect on Noise: 2876
Sensitivity: 2765
High-Frequency: 2765
Measurement: 2765
Specification: 2765
Reciprocity Theorem: 2918
Hybrid Circuits: 2918
Recording: 2881, 2897, 2933, 2966, 2967
Advance Ball: 2933
Air Dashpot: 2933
Bounce: 2933
Cutting Force: 2933
Disk: 2897, 2933
Distortion: 2897
Intermodulation: 2897

Recording (Cont'd.)
Magnetic: 2967
Heads: 2967
Field Measurements: 2967
Lacquer: 2933
Stylus-Tip Force: 2933
Vacuum-Tube Transducer: 2966
Sky-Wave Signals: 2881
Broadcast Stations: 2881
Rectifiers: 2753, 2758, 2759
Copper-Oxide: 2753, 2759
Crystal: 2753, 2759
Noise: 2758
Thermionic: 2753
Voltage-Doubling: 2753
Reflectors: 2889
Microwave: 2889
Reflectors, Electron: 2830
Reflex Klystrons: 2756, 2795, 2942, 2953
Beating Oscillators: 2942
Bunching: 2953
Multifrequency: 2953
Efficiency: 2756
Reflex Oscillators: 2731, 2758
Refractive Index: 2904
Tropospheric Layers: 2904
Regulator Tubes: 2784
Voltage: 2784
Characteristics: 2784
Relay Links: 2728, 2777, 2988
Microwave: 2728
Multichannel: 2728
Multichannel: 2728
Repeaters: 2908
Testing: 2908
Circulated-Pulse Method: 2908
Repeaters: 2908
Testing: 2908
Circulated-Pulse Method: 2908
Research: 2893
United States Navy: 2893
Electronic Research: 2893
Resonators: 2771, 2777, 2783, 2849, 2890,
2921
Analysis: 2771, 2783
Circle Diagrams: 2771, 2783
Design Charts: 2849
Equivalent Circuit: 2890
Filter Elements: 2921
Measurements: 2771, 2783
Resonator: 2764
Ridge Wave guide: 2830
Rieke Diagram: 2795
"Rising-Sun" Magnetron: 2795
Rosa Inductance Calculation: 2834
Nomogram: 2834

S

"S"-Band Attenuator: 2752
Sections, I.R.E.: 2844
Test for Success: 2844
Selective Demodulation: 2796
Servomechanisms: 2741, 2827, 2952
Automatic Frequency Control: 2827
Performance Studies: 2952
Inverse Nyquist Diagram: 2952
Servomotors: 2793
Signal Corps: 2728, 2764
Microwave Relay: 2728
Vacuum Tubes: 2764
Signal Generators: 2895
Microwave: 2895
Wide-Range: 2895
Ultra-High-Frequency: 2895
Wide-Range: 2895
Slot Antennas: 2947
Sound (see "Audio Frequencies")
Space-Charge Effects: 2914
Microwave Tetrodes: 2914

Space-Current Division: 2773
In Tetrodes: 2773
Speakers (see Loudspeakers)
Spectrum Allocation: 2799
Spectrum Analyzers: 2884
Double-Heterodyne: 2884
Wide-Range: 2884
Spectrum, Modulation: 2808
Amplitude: 2808
Frequency: 2808
Speech: 2855
Articulation Index: 2855
Communication Systems: 2855
Design: 2855
Hearing: 2855
Intelligibility: 2855
Orthotelephonic Gain: 2855
Spectra: 2855
Speed Measurements: 2932
Doppler Effect: 2932
Sporadic-E Layer: 2786
Squirrel-Cage Magnetron: 2772
Step Response: 2740
Strapped Magnetron: 2795
Stylus-Tip Force: 2933
Lacquer-Disk Recording: 2933
Submarine Warfare: 2821
Communications: 2821
Electronics: 2821
Summer: 2937
Magnetic Amplifier: 2937
Synchronization: 2941
Oscillator: 2941

T

Tapered Transmission Lines: 2798
Technical Audit: 2800
Technical Papers: 2833
Presentation: 2833
Television: 2729, 2761, 2777, 2846, 2851,
2852, 2853, 2880, 2913, 2915, 2934,
2949, 2962, 2968
Amplifiers: 2729
Intermediate-Frequency: 2729
Capacitance-Coupled: 2729
Antennas: 2949
Circularly Polarized: 2949
Helical: 2949
Camera: 2962
Portable: 2962
Coaxial-Cable Networks: 2934
Color: 2851, 2852, 2853
Sequential: 2851
Simultaneous: 2851, 2852, 2853
Deflection Circuits: 2846
Magnetic: 2846
Dichroic Mirrors: 2852
Eddy-Current Loss: 2761
Noise: 2761
Random Noise: 2761
Sine-Wave Noise: 2761
Transformer Loss (Noise): 2761
Iconoscope: 2913
Video Storage: 2913
Secondary Emission: 2913
Field Pickup: 2962
Image Orthicon: 2915, 2962
Electron Paths: 2915
Kinescopes: 2846
Magnetic Deflection: 2846
Mosics: 2913
Video Storage: 2913
Secondary Emission
Orthicon: 2915
Electron Paths: 2915
Pickup Tubes: 2915
Electron Paths: 2915
Pulse Modulation: 2880
Lengtheners: 2880

Television (Cont'd.)
Pulse Lengthener: 2880
Relay Networks: 2934
Coaxial-Cable: 2934
Sequential Color: 2851
Simultaneous Color: 2851, 2852, 2853
Storage Tube: 2913
Secondary Emission: 2913
Video Storage: 2913
Sweep Circuits: 2846
Sweep Distortion: 2846
Sweep Generators: 2846
Synchronization: 2912
Wave-Form Generation: 2912
Cyclophon: 2912
Trinoscope: 2853
Vacuum Tubes: 2915
Electron Paths: 2915
Video Delay Lines: 2968
Video Storage: 2913
Secondary Emission: 2913
Thermistor: 2742
Thyratron: 2764
Time Demodulation: 2879
Time Modulation: 2878
Top-Loaded Antenna: 2877
Performance: 2877
Trajectory, Electron: 2830
Transadmittance: 2911
Disk-Seal Tubes: 2911
Transducers: 2890, 2966
Recording: 2966
Vacuum-Tube: 2966
Resonators: 2980
Equivalent Circuit: 2890
Transformers: 2867, 2869, 2883, 2898, 2910, 2937
Antenna Coupling: 2869
Loop: 2869
"Balun": 2898
Intermediate Frequency: 2867
Frequency Modulation: 2867
Iron Core: 2883
High-Frequency Excitation: 2883
Loss: 2883
Loop Coupling: 2869
Microwave: 2898
"Balun": 2898
Balanced-to-Unbalanced Line: 2898
Nonlinear: 2937
Magnetic Amplifier: 2937
Pulse: 2910
Transient Analysis: 2910
Virtual Displacements: 2910
Transient Analysis: 2910
Transition Time: 2740
Filter Networks: 2740
Transit Time: 2720, 2830
Class-C Operation: 2720
Phase-Delay Angle: 2720
Reactance: 2720
"Frequency Pushing": 2720
Ultra-High-Frequency: 2720
Class-C Operation: 2720
Transit-Time Effects: 2914
Microwave Tetrodes: 2914
Transmission Lines: 2742, 2771, 2777, 2783, 2790, 2798, 2918, 2919, 2898, 2951, 2967
Circle Diagrams: 2771, 2783
Coaxial: 2951, 2968
Delay: 2968
Phase Discontinuities: 2951
Delay: 2968
Directional Couplers: 2919
Exponential: 2798
Four-Wire Line: 2798
Straight Conductors: 2798
Hybrid Circuits: 2918
Impedance Measurement: 2790

Transmission Lines (Cont'd.)
Matching Transformer: 2742, 2898
"Balun": 2898
Balanced-to-Unbalanced Line: 2898
Stub-Tuned: 2742
Measurements: 2771, 2783, 2790
Damping: 2790
Impedance: 2790
Phase Shift: 2790
Video Delay: 2968
Transmit-Receive Switches: 2764, 2918
Hybrid Circuits: 2918
Traveling-Wave Magnetron: 2795
Traveling-Wave Tubes: 2734, 2735, 2736
Tridipole Antennas: 2782
Trigger Circuit: 2878
Trinoscope: 2853
Tuning Indicators: 2900
Frequency Modulation: 2900

U

Ultra-High Frequencies: 2737, 2750, 2807, 2884, 2895, 2899, 2904, 2936, (see also "Microwaves")
Amplifiers: 2936
Power: 2936
Wide-Band: 2936
Measurements: 2895
Signal Generators: 2895
Wide-Range: 2895
Ranges: 2737
Co-Channel Interference-Limited: 2737
Noise-Limited: 2737
Receivers: 2750
Communications: 2750
Design: 2750
Naval: 2750
Signal Generators: 2895
Wide-Range: 2895
Spectrum Analyzers: 2884
Double-Heterodyne: 2884
Wide-Range: 2884
Vacuum Tubes: 2899
Electrode Dissipation: 2899
Wave Propagation: 2807, 2904
Tropospheric: 2807, 2904
Index of Refraction: 2807, 2904
United States Army: 2728
Microwave Relay: 2728
United States Navy: 2750, 2893
Office of Naval Research: 2893
Electronic Research: 2893
Receivers: 2750
Communications: 2750
Design: 2750
Ultra-High-Frequency: 2750
Very-High-Frequency: 2750
Universal Winding: 2965
Ordinary: 2965
Progressive: 2965

V

Vacuum Tubes: 2718, 2720, 2731, 2734, 2735, 2736, 2756, 2758, 2764, 2772, 2773, 2777, 2781, 2784, 2785, 2787, 2795, 2797, 2801, 2804, 2805, 2806, 2830, 2854, 2872, 2885, 2886, 2899, 2900, 2911, 2912, 2913, 2914, 2915, 2942, 2953, 2966
Admittance Matching: 2887
Wave-Guide: 2887
Irises: 2887
Broad-Band: 2887
Amplification Factor: 2885
Amplifiers: 2734, 2735, 2736, 2797, 2872
Cathode-Follower: 2797
Conductance: 2797
Input Admittance: 2797
Susceptance: 2797
Graphical Analysis: 2872
Cathode-Degenerated: 2872

Vacuum Tubes (Cont'd.)
Cathode-Follower: 2872
Traveling-Wave: 2734, 2735, 2736
Beam-Type: 2734, 2735, 2736
Traveling-Wave: 2734, 2735, 2736
Cathode-Ray Tubes: 2764
Cold-Cathode X-Ray: 2802
Commutator: 2912
Cathode-Ray Oscilloscope: 2912
Radial: 2912
Construction: 2764
Co-planar: 2764
Cyclophon: 2912
Development: 2764
Disk-Seal: 2781, 2911
Input Conductance: 2911
Transadmittance: 2911
Donutron: 2772
Electrode Dissipation: 2899
Ultra-High Frequencies: 2899
Electronic Switching: 2912
Electron Multipliers: 2882
Magnetic: 2885
Gain: 2885
Frequency Variation: 2885
Electron Paths: 2915
Electron Reflectors: 2830
Quadratic Axial Potential Distribution: 2830
Electron-Ray: 2900
Tuning Indicator: 2900
Electron Trajectory: 2830
Field-Emission Arc: 2802
Frequency Modulator: 2718
Gas Tubes: 2764, 2854
Noise Generators: 2854
Heating Element: 2787
High-Speed X-Ray: 2802
Hot-Cathode X-Ray: 2802
Iconoscopes: 2913
Video Storage: 2913
Secondary Emission: 2913
Image Orthicon: 2915
Electron Paths: 2915
Indicator Tubes: 2764
Input Admittance: 2797
Cathode Followers: 2797
Input Conductance: 2911
Disk-Seal Tubes: 2911
Irises: 2887
Wave Guide: 2887
Admittance Matching: 2887
Broad-Band: 2887
Klystrons, 2756, 2764, 2942, 2953
Buncher, 2886
Grid Spacing: 2886
Reflex: 2756, 2942, 2953
Efficiency: 2756
Multifrequency Bunching: 2953
Transit-Time Effect: 2886
Lighthouse: 2781, 2911
Input Conductance: 2911
Transadmittance: 2911
Magnetrons: 2764, 2772, 2804, 2805, 2806
Donutron: 2772
Frequency-Modulated: 2804, 2805, 2806
Electron-Beam: 2804, 2805, 2806
Negative-Grid Control: 2804, 2805, 2806
Frequency Stabilized: 2804, 2805, 2806
Electron-Beam: 2804, 2805, 2806
Negative-Grid Control: 2804, 2805, 2806
Squirrel-Cage: 2772
Tunable: 2772
Microwave: 2734, 2735, 2736, 2756, 2758, 2764, 2772, 2781, 2795, 2804, 2805, 2806, 2887, 2899, 2911, 2914, 2942, 2953
Orthicon: 2915
Electron Paths: 2915

Vacuum Tubes (Cont'd.)
 Pickup: 2915, 2966
 Electron Paths: 2915
 Receiving Tubes: 2764
 Reflex: 2758
 Velocity-Modulated: 2758
 Reflex-Klystron: 2756, 2942, 2953
 Efficiency: 2756
 Resnatrons: 2764
 Space-Charge Effects: 2914
 Microwave Tetrodes: 2914
 Switching, Electronic: 2912
 Tetrodes: 2914
 Disk-Seal: 2914
 Input Conductance: 2914
 Transadmittance: 2914
 Transit-Time Effects: 2914
 Klystrons: 2886
 Microwave Tetrodes: 2914
 Velocity-Modulated: 2758
 Wide-Band: 2734, 2735, 2736
 Traveling-Wave: 2734, 2735, 2736
 Oscillators: 2731, 2758, 2781, 2942, 2953
 Disk-Seal Tube: 2781
 Microwave: 2781
 Reflex: 2731, 2758
 Velocity-Modulated: 2758
 Reflex Klystron: 2942, 2953
 Multifrequency Bunching: 2953
 Velocity-Modulated: 2758
 Velocity-Variation: 2731
 Wide-Tuning-Range: 2731
 Microwave: 2731
 Phase Modulator: 2718
 Phasitron: 2718
 Pickup Tubes: 2764
 Planar Tubes: 2764
 Power: 2773
 Tetrodes: 2773
 Space-Current Division: 2773
 Power Tubes: 2764
 Radiographic: 2801
 Reflex Klystron: 2942, 2953
 Reflex Oscillator: 2758
 Velocity-Modulated: 2758
 Regulator: 2784
 Characteristics: 2784
 Resnatrons: 2764
 Retarding Field: 2830
 Space-Current Division: 2773
 Squirrel-Cage Magnetron: 2772
 Tetrodes: 2773
 Power: 2773
 Space-Current Division: 2773
 Thyratrons: 2764
 Transadmittance: 2911
 Transducer: 2966
 Recording: 2966
 Transit Time: 2720, 2830
 Class-C Operation: 2720
 Transmit-Receive: 2764
 Traveling-Wave: 2734, 2735, 2736
 Triodes: 2911
 Lighthouse: 2911
 Input Conductance: 2911
 Transadmittance: 2911
 Tunable Magnetron: 2772
 Tuning Indicator: 2900
 Electron-Ray: 2900
 Velocity-Modulated Oscillator: 2758
 Voltage Regulator: 2784
 Characteristics: 2784
 War Types: 2764
 Wide-Band: 2734, 2735, 2736
 X-Ray: 2801
 Vehicular Communication: 2777
 Velocity-Modulated Oscillator: 2758
 Velocity-Variation Oscillator: 2731, 2795
 Vertical Antennas: 2877, 2935
 Mutual Impedance: 2935

Vertical Antennas (Cont'd.)
 Unequal Heights: 2935
 Performance: 2877
 Very-High Frequencies: 2737, 2738, 2750, 2807, 2884, 2904, 2944
 Propagation: 2807
 Refraction: 2807
 Tropospheric: 2807
 Ranges: 2737, 2738
 Co-Channel Interference-Limited: 2737
 Noise-Limited: 2737
 Receivers: 2750
 Communications: 2750
 Naval: 2750
 Spectrum Analyzers: 2884
 Double-Heterodyne: 2884
 Wide-Range: 2884
 Wave Propagation: 2904, 2944
 Tropospheric: 2904, 2944
 Index of Refraction: 2904
 Meteorological Conditions: 2944
 Video Delay Lines: 2968
 Virtual Displacements: 2910
 Transient Analysis: 2910
 Voltage Doublers: 2753
 Voltage-Regulator Tubes: 2784
 Characteristics: 2784
 Voltmeter: 2751
 Automatic Slideback: 2751
 Peak-Measuring: 2751
 Peak-Measuring: 2751

W

Wattmeter: 2791, 2848
 Bolometer: 2791
 Calorimeter: 2848
 Ultra-High-Frequency: 2848
 Coaxial Load: 2848
 Water-Filed Line: 2848
 Wave Guides: 2759, 2771, 2777, 2782, 2783, 2830, 2887, 2890, 2910, 2918, 2919, 2950
 Admittance Matching: 2887
 Irises: 2887
 Broad-Band: 2887
 Analysis: 2771: 2783
 Antennas: 2782
 Omnidirectional: 2782
 Circle Diagrams: 2771, 2783
 Corner Bend: 2920
 Equivalent Circuit: 2920
 Directional Couplers: 2919
 Hybrid Circuits: 2918
 Irises: 2887
 Broad-Band: 2887
 Admittance-Matching: 2887
 Junctions: 2759
 To Coaxial: 2759
 Broad-Band: 2759
 Measurements: 2771, 2783
 Phase Changer: 2950
 Differential Phase-Shift Section: 2950
 Rectangular: 2830
 Ridge: 2830
 Transducers: 2890
 Equivalent Circuit: 2980
 Wavemeters: 2868, 2871
 Calibration: 2871
 Coaxial-Line: 2868
 Microwave: 2871
 Calibration: 2871
 Wave Propagation: 2737, 2738, 2757, 2762, 2770, 2777, 2780, 2786, 2788, 2807, 2856, 2881, 2893, 2894, 2904, 2905, 2944
 Atmosphere, Reflections from: 2788
 Atmospheric Absorption: 2894
 Atmospheric Refraction: 2894
 Attenuation: 2770
 Through Rain: 2770
 Broadcast: 2881
 Sky-Wave Signals: 2881

Wave Propagation (Cont'd.)
 Recording: 2881
 Duct: 2780, 2856, 2894
 Low-Level: 2780
 Low Ocean: 2856
 Electronic Collisional Frequency: 2757
 Field Intensity: 2737, 2738
 Very-High-Frequency: 2737, 2738
 Free-Space: 2894
 Ground-Wave: 2894
 Ionosphere: 2757, 2905
 Electron Distribution: 2905
 Electronic Collisional Frequency: 2757
 Virtual Height: 2905
 Line-of-Sight: 2894
 Meteorological Conditions: 2944
 Microwave: 2780, 2807, 2856, 2894
 Duct: 2780, 2856
 Low-Level: 2780
 Over Ocean: 2780
 Refraction: 2780
 Wind Effects: 2807
 Navigation: 2762
 Error: 2762
 Over Ocean: 2856
 Duct: 2856
 Radar Reflections: 2788
 From Lower Atmosphere: 2788
 Rain, Effect on: 2770
 1.25 Centimeter Waves: 2770
 Ranges: 2737
 Co-Channel Interference-Limited: 2737
 Noise-Limited: 2737
 Recording: 2881
 Sky-Wave Signals: 2881
 Reflections, Atmospheric: 2788
 Refraction: 2894
 Research: 2893
 Office of Naval Research: 2893
 Sky-Wave Signals: 2881
 Recording: 2881
 Smooth-Earth Theory: 2894
 Sporadic-E Layer: 2786
 Tropospheric: 2708, 2894, 2904, 2944
 Beyond Horizon: 2807
 Beyond Line-of-Sight: 2807
 Index of Refraction: 2904
 Gradients: 2904
 Meteorological Conditions: 2944
 Refraction: 2807
 Ultra-High-Frequency: 2737, 2807, 2894
 Refraction: 2807
 Signal Ranges: 2737
 Very-High-Frequency: 2737, 2708, 2894, 2944
 Field Intensity: 2737, 2738
 Meteorological Conditions: 2944
 Refraction: 2807
 Signal Range: 2737, 2738
 Tropospheric Reception: 2944
 Meteorological Conditions: 2944
 Wave Selector: 2919
 Waves: 2717
 Radar: 2717
 Wide-Band Amplifiers: 2729
 Capacitance-Coupled: 2729
 Wide-Band Tubes: 2734, 2735, 2736
 Traveling-Wave Tubes: 2734, 2735, 2736
 Winding: 2965
 Coils: 2965
 Universal: 2965

X

X-Rays: 2755, 2801
 High-Intensity: 2755
 High-Speed: 2801
 Long-Wavelength: 2755
 1-Millionth-Second Radiography: 2801
 Source: 2755