

1. Record Nr.	UNINA9910456050503321
Autore	Poisel Richard
Titolo	Introduction to communication electronic warfare systems / / Richard Poisel
Pubbl/distr/stampa	Boston : , : Artech House, , ©2002 [Piscataqay, New Jersey] : , : IEEE Xplore, , [2002]
ISBN	9781580535534 1-58053-553-4
Descrizione fisica	1 online resource (572 p.)
Collana	Artech House information warfare library
Disciplina	355.3/43 623.73
Soggetti	Military telecommunication Information warfare Computer networks - Security measures Electronics in military engineering Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	V -- Preface xiii -- Acknowledgments xv -- 1 Communication Electronic Warfare Systems 1 -- 1.1 INTRODUCTION 1 -- 1.2 INFORMATION WARFARE 1 -- 1.3 ELECTRONIC WARFARE 3 -- 1.4 ELECTRONIC SUPPORT 5 -- 1.5 ELECTRONIC ATTACK 10 -- 1.6 TYPICAL EW SYSTEM CONFIGURATION 11 -- 1.7 CONCLUDING REMARKS 16 -- References 16 -- 2 Electromagnetic Signal Propagation 19 -- 2.1 INTRODUCTION 19 -- 2.2 SIGNAL PROPAGATION 19 -- 2.3 RF BAND DESIGNATIONS 20 -- 2.4 POLARIZATION 22 -- 2.5 POWER DENSITY 22 -- 2.6 FREE-SPACE PROPAGATION 24 -- 2.7 DIRECT WAVE 27. 2.8 WAVE DIFFRACTION 33 -- 2.9 REFLECTED WAVES 35 -- 2.10 SURFACE WAVE 40 -- 2.11 DUCTING 41 -- 2.12 METEOR BURST 41 -- 2.13 SCATTERING 42 -- 2.14 CHARACTERISTICS OF THE MOBILE VHF CHANNEL 43 -- 2.15 PROPAGATION VIA THE IONOSPHERE 46 -- 2.16 CONCLUDING REMARKS 52 -- References 53 -- 3 Noise and Interference 55 -- 3.1 INTRODUCTION 55 -- 3.2 THERMAL NOISE 56 --

3.3 INTERNAL NOISE SOURCES 56 -- 3.4 EXTERNAL NOISE SOURCES 57
-- 3.5 COCHANNEL AND MULTIPATH INTERFERENCE 59 -- 3.6
CONCLUDING REMARKS 60 -- References 60 -- 4 Radio
Communication Technologies 61.
4.1 INTRODUCTION 61 -- 4.2 MODULATION 63 -- 4.3 CODING OF
COMMUNICATION SIGNALS 110 -- 4.4 MODEMS 134 -- 4.5 FACSIMILE
140 -- 4.6 COMMUNICATION SECURITY 140 -- 4.7 CONCLUDING
REMARKS 148 -- References 149 -- 5 System Engineering 151 -- 5.1
INTRODUCTION 151 -- 5.2 SYSTEM ENGINEERING 151 -- 5.3
CONCLUDING REMARKS 175 -- References 176 -- 6 Electronic Support
177 -- 6.1 INTRODUCTION 177 -- 6.2 INTERCEPT 177 -- 6.3
GEOLOCATION 179 -- 6.4 TRIANGULATION WITH MULTIPLE BEARINGS
180 -- 6.5 DEPLOYMENT CONSIDERATIONS 184 -- 6.6 ELECTRONIC
MAPPING 185.
6.7 COMMON OPERATIONAL PICTURE 185 -- 6.8 OPERATIONAL
INTEGRATION WITH OTHER DISCIPLINES 186 -- 6.9 SUPPORT TO
TARGETING 187 -- 6.10 CONCLUDING REMARKS 187 -- References
187 -- 7 Electronic Attack 189 -- 7.1 INTRODUCTION 189 -- 7.2
COMMUNICATION JAMMING 189 -- 7.3 JAMMER DEPLOYMENT 193 --
7.4 LOOK-THROUGH 194 -- 7.5 ANALOG COMMUNICATIONS 195 --
7.6 DIGITAL COMMUNICATIONS 196 -- 7.7 NARROWBAND/PARTIAL-
BAND JAMMING 197 -- 7.8 BARRAGE JAMMING 198 -- 7.9 JAMMING LPI
TARGETS 201 -- 7.10 FOLLOWER JAMMER 202 -- 7.11 CONCLUDING
REMARKS 203 -- References 203.
8 Antennas 207 -- 8.1 INTRODUCTION 207 -- 8.2 ISOTROPIC
ANTENNA 209 -- 8.3 ANTENNA GAIN 210 -- 8.4 WIRE ANTENNAS 211
-- 8.5 ACTIVE ANTENNAS 220 -- 8.6 APERTURE ANTENNAS 222 -- 8.7
GENETICALLY DESIGNED ANTENNAS 225 -- 8.8 MORE ON ANTENNA
GAIN 226 -- 8.9 CONCLUDING REMARKS 228 -- References 228 -- 9
Receivers 231 -- 9.1 INTRODUCTION 231 -- 9.2 RECEIVERS 232 -- 9.3
TYPES OF RECEIVERS 246 -- 9.4 CONCLUDING REMARKS 263 --
References 264 -- 10 Signal Processing 265 -- 10.1 INTRODUCTION
265 -- 10.2 ORTHOGONAL FUNCTIONS 266 -- 10.3 TRANSFORMS 267.

Sommario/riassunto

Annotation This comprehensive engineering-level resource provides you with an excellent introduction to electronic warfare (EW) for communication systems. Extensively referenced with over 600 equations, it details the components, systems, and operations of electronic warfare systems dedicated to protecting and attacking military communications networks. You are provided with a complete understanding of how modern direction finders for communication signals work, along with their limitations.

2. Record Nr.	UNINA9910299408603321
Titolo	Hydrologic Modeling : Select Proceedings of ICWEES-2016 // edited by Vijay P Singh, Shalini Yadav, Ram Narayan Yadava
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2018
ISBN	981-10-5801-6
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (XXI, 731 p. 327 illus., 251 illus. in color.)
Collana	Water Science and Technology Library, , 1872-4663 ; ; 81
Disciplina	551.48
Soggetti	Engineering geology Water Hydrology Geology Geoengineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	1. Rainfall Probability Distribution Analysis in Selected Lateral Command Area of Upper Krishna Project (Karnataka), India, by N.K. Rajeshkumar -- 2. Analyzing Rainfall and Reservoir Release Pattern for Ajwa Reservoir – A Case Study, by Pushkar Sharma -- 3. Preliminary Investigations on Localized Rainfall Interception Losses Under Real Field Observations, by M. L. Gaur -- 4. Probabilistic Estimation of Design Daily Runoff from Bamhani Watershed, India by Sarita Gajbhiye Meshram -- 5. Development of Generalized Higher-Oder Neural Network Based Models for Estimating Pan Evaporation, by Sirisha Adamala -- 6. Sensitivity Analysis of FAO-56 Penman-Monteith Reference Evapotranspiration Estimates Using Monte-Carlo Simulations, by Gicy M. Kovoor -- 7. Quantification of Error in Estimation of Reference Crop Evapotranspiration by Class A Pan and its Correction, by S. Praharaj -- 8. Spatial and Temporal Analyses of Impervious Surface Area on Hydrological Regime of Urban Watersheds, by Tauseef A. Ansari -- 9. An Assessment of Hydrological Impacts Due to Changes in the Urban Sprawl in Bhopal City and ITS Peripheral Urban-Rural Fringe, by L Patel -- 10. Simulation of Urban Drainage System Using Disaggregated Rainfall Data, by Vinay Ashok Rangari -- 11.

Investigation of Drainage for Structures, Lithology and Priority (Flood & Landslide) Assessment Using Geospatial Technology, J&K NW Himalaya, by Umair Ali -- 12. Hydrologic Design Parameters Database for Water Harvesting Structures in Madhya Pradesh, by Ramadhar Singh -- 13. Application of Storm Water Management Model to an Urban Catchment, by V Swathi -- 14. A Study of Erosional Depositional Activity and Land Use Mapping of Majuli River Island Using Landsat Data, by Dipsikha Devi -- 15. Study of Soil Erosion and Deposition Around an Island in a Natural Stream, by Snighdhadip Ghosh -- 16. Impact Assessment of Alternate Land Cover and Management Practices on Soil Erosion: A Case Study, by T.R. Nayak -- 17. Geostatistical Analysis of River Sedimentation Behaviour in Kerala State, by Mathew K. Jose -- 18. Study of Mineralogical composition of sediment in Brahmaputra River in Urban stretch of Guwahati city, Assam, India, by Mamata Das -- 19. Hypsometric Analysis for Assessing Erosion Status of Watershed Using Geographical Information System, by S.K. Sharma -- 20. Assessment of Different Bathymetry Statistical Models Usinglandsat-8 Multispectral Images, by Omar Makboul -- 21. Estimation of Minimum and Maximum Air Temperature using MODIS Remote Sensing Imagery and Geographical Information System (GIS), by Sardhara Bharatkumar -- 22. A RS & GIS Approach for Estimation of Runoff and Soil Erosion in SA-13 Watershed, by H. N. Bhang -- 22. Rainwater Harvesting Structure Site Suitability Using Remote Sensing and GIS, by B.K Gavit -- 23. Land Surface Temperature Estimation Using Remote Sensing Data, by Vijay Solanki -- 24. Watershed Prioritization of Wardha River Basin, Maharashtra India Using Morphometric Parameters: A Remote Sensing and GIS Based Approach, by B. S. Manjare -- 25. Flood Assessment of Lolab Valley from Watershed Analysis Using Remote Sensing and GIS Techniques, by Mannan Bashir Wani -- 26. Delineation of Paleo-Channels in Periyar River Basin of Kerala Using Remote Sensing and Electrical Resistivity Methods by C P Proju -- 27. Application Of Eo-1 Hyperion Data For Mapping And Discrimination Of Agricultural Crops -- 28. Morpho-Mathematical Analysis of Bharar River Basin District Chhattarpur-Central India, by Pradeep Kumar Jain -- 29. Application of Principal Component Analysis for Grouping of Morphometric Parameters and Prioritization of Watershed by Sarita Gajbhiye Meshram -- 30. Velocity Distribution in Vortex Chamber at High Water Abstraction Ratio, by Mohammad Athar -- 31. Performance Appraisal of Friction Factor Estimators, by Abhishek Mishra -- 32. Experimental Investigations of Wave Height Attenuation by Submerged Artificial Vegetation by Beena Mary John -- 33. Developing Rating Curves for Nubia Lake, Sudan, Using RS/GIS, by Mohamed Elsahabi -- 34. A Spreadsheet Approach for Prediction of Rating Curve Parameters, by Javel Alam -- 35. Experimental Study on Role of Emergent Artificial Coastal Vegetation in Controlling Wave Run Up, by Beena Mary John -- 36. Development of Regional Soil Water Retention (SWR) Characteristics, by R. K. Jaiswal -- 37. Revision of Empirical Coefficients of Commonly Used Flood Formulae Using Flow Data from Karnataka Rivers, by Chandramohan T -- 38. Reservoir Inflow Forecasting Using Extreme Learning Machines, by Mukesh Kumar Tiwari -- 39. Quantifying Discontinuity, Connectivity, Variability, and Hierarchy in Overland Flow Generation: Comparison of Different Modeling Methods, by Xuefeng Chu -- 40. Nondimensional UH Based Smoothing of S-Curve Derived UH Oscillations, by P.R. Patil -- 41. Fuzzy-based Comprehensive Evaluation of Environmental Flow Alteration, by Kairong Lin -- 42. Spatial Characters of a Tropical River Basin, Southwest Coast of India, by Girish Gopinath.-43. Streamflow Estimation Using SWAT Model Over Seonath River Basin, Chhattisgarh, India, by Sabyasachi Swain -- 44.

Revisiting the Soil Conservation Service Curve Number Method, by S.K. Mishra -- 45. Hydrological Impacts of Rejuvenating Degraded Hilly Watershed in Shivalik Region by A.K. Tiwari -- 46. Modelling of a River Basin Using SWAT Model by B. Venkatesh -- 47. Performance of The Xinanjiang Model by Ajay Ahirwar.

Sommario/riassunto

This book contains seven parts. The first part deals with some aspects of rainfall analysis, including rainfall probability distribution, local rainfall interception, and analysis for reservoir release. Part 2 is on evapotranspiration and discusses development of neural network models, errors, and sensitivity. Part 3 focuses on various aspects of urban runoff, including hydrologic impacts, storm water management, and drainage systems. Part 4 deals with soil erosion and sediment, covering mineralogical composition, geostatistical analysis, land use impacts, and land use mapping. Part 5 treats remote sensing and geographic information system (GIS) applications to different hydrologic problems. Watershed runoff and floods are discussed in Part 6, encompassing hydraulic, experimental, and theoretical aspects. Water modeling constitutes the concluding Part 7. Soil and Water Assessment Tool (SWAT), Xinanjiang, and Soil Conservation Service-Curve Number (SCS-CN) models are discussed. The book is of interest to researchers and practitioners in the field of water resources, hydrology, environmental resources, agricultural engineering, watershed management, earth sciences, as well as those engaged in natural resources planning and management. Graduate students and those wishing to conduct further research in water and environment and their development and management find the book to be of value.