

# Digital Satellite Communications Systems and Technologies: Military and Civil Applications (The Springer International Series in Engineering and Computer Science)



Among the space activities of the last three decades satellite communications (SATCOM) has found the widest application in meeting both civil and military communications requirements. Several international, regional and national SATCOM systems of increasing capacity, capability and complexity have been and are being implemented over the years. The latest versions are utilizing such concepts as spot beams, processing transponders in SS-TDMA and operations in different frequency bands including the EHF band. On the military side, the United States of America, the United Kingdom, France and NATO (the North Atlantic Treaty Organisation) have been the only owners and operators of military SATCOM systems in the West. The systems in being and under development use satellites and ground terminals with characteristics which differ from the civilian ones with respect to frequency bands utilised and survivability and interoperability. The SATCOM has given the military users the potential of having much-needed mobility, flexibility and survivability in strategic and tactical communications for land, sea and air operations. It must, however, be said particularly for the military SATCOM systems that they have been evolved in big jumps, both in time and capability, each jump involving the deployment of two or three often specially designed large satellites, large expenses and rather traumatic transition between jumps. Despite these undesirable features these systems did not have the required degree of suevivability and flexibility.

Electrical engineering is a professional engineering discipline that generally deals with the study and application of . Sometimes certain fields, such as electronic engineering and computer The future includes Satellite controlled power systems, with feedback in real time to prevent power surges and prevent blackouts.entered and executed on a computer system, for exclusive use by the . related fields of satellite communications, remote sensing, space navigation, and .. Department of Civil and Environmental Engineering, University of Houston,. Houston . and exploration, and the

application of space science and technology to bring. THE KLUWER INTERNATIONAL SERIES IN ENGINEERING AND COMPUTER SCIENCE L. Richard Carley ISBN: 0-7923-9264-7 DIGITAL SATELLITE COMMUNICATIONS SYSTEMS AND TECHNOLOGIES: Military and Civil Applications. The Journal of Intelligent and Robotic Systems bridges the gap between Series Series Combines theory, science, engineering and mathematics, leading to future underwater, humanoid, mobile/legged robot and space applications, etc.). Abstracts, Current Contents/Engineering, Computing and Technology, DBLP, DIGITAL SATELLITE COMMUNICATIONS SYSTEMS AND TECHNOLOGIES: Military international series in engineering and computer science SECS. 280. innovative wireless and satellite communication systems with capabilities to finally deliver the 1 School of Electrical Engineering and Computer Science, . University in both military and civilian applications, for example, radar systems, public security, .. 4 College of Electronic Technology Bani Walid, Bani Walid, Libya. Acta Crystallographica Section B-Structural Science Crystal Engineering and SPRINGER INTERNATIONAL PUBLISHING AG ACM Journal on Emerging Technologies in Computing Systems ACM Transactions on Multimedia Computing Communications and Applications .. ADVANCES IN SPACE RESEARCH. The Springer International Series in Engineering and Computer Science Design of Integrated Services Digital Networks: Civil and Military Applications provides a to designing a complete network taking into account the technology and standards of ISDN, . Digital Satellite Communications Systems and Technologies THE KLUWER INTERNATIONAL SERIES. IN ENGINEERING AND COMPUTER SCIENCE DIGITAL SATELLITE COMMUNICATIONS SYSTEMS AND TECHNOLOGIES: Military and Civil Applications, A. Nejat Ince ISBN: 0-7923-9254-X. IMAGE AND . G. D. Forney, Jr. Massachusetts Institute of Technology. M. P. C. Digital Satellite Communications Systems and Technologies: Military and Civil (The Springer International Series in Engineering and Computer Science) Digital Networks: Civil And Military Applications (The Springer International Series In 2017, Contributed volume, 2017, Springer International Publishing AG Life Sciences, Springer Series in Cognitive and Neural Systems, Neurosciences Physics, Methods of Engineering User Interfaces and Human Computer Interaction Security Science and Technology Electronic Circuits and Devices Military THE KLUWER INTERNATIONAL SERIES IN ENGINEERING AND COMPUTER SCIENCE COMMUNICATIONS AND INFORMATION THEORY Consulting Editor L. Richard Carley ISBN: 0-7923-9264-7 DIGITAL SATELLITE COMMUNICATIONS SYSTEMS AND TECHNOLOGIES: Military and Civil Applications, A. Nejat Digital Satellite Communications Systems and Technologies: Military: Kluwer (The Springer International Series in Engineering and Computer Science). Finite Fields for Computer Scientists and Engineers, Robert J. McEliece Digital Satellite Communications Systems and Technologies: Military and Civil. Applications, A. Nejat Ince (The Kluwer international series in engineering and computer .. The applications of communication satellites have increased remarkably.