ADVANCED SATELLITE RESEARCH PROJECT:

SCAR Research Database

1.0 INTRODUCTION/METHODOLOGY

1.1 Contents

This literature search and review was prepared under NASA contract. The purpose of this process was to locate and analyze the most recent literature that was relevant to the contract research. This was done by cross-relating books, articles, monographs and journals that relate to the following topics:

Experimental Systems:

- Advanced Communications Technology Satellite (ACTS)

ISDN and Advanced Communication Techniques:

- ISDN and Satellites
- Integrated System Digital Network (ISDN) Standards
- Broadband ISDN
- Frame relay and switching
- Computer networks and Satellites
- Satellite Orbits and Technology
- Satellite Orbits
- Satellite Transmission Quality
- Networks
- Network Configuration

1.2 Search Methodology

The literature search was carried out by two methods. A computer search of technical databases was performed on a series of key words (and combinations of key words) and resulted in 1777 titles. These titles were examined and 288 relevant articles were chosen. Full citations and abstracts were obtained for these articles. The databases examined include:

- NTIS (Corp. 1990 NTIS)
- Aerospace (Corp. AIAA 1990)
- Inspec 2 (Corp. IEE 1990)
- Compendex Plus (Corp. Engineering Info Inc. 1990)
- Computer Database (Corp. Information Access Company 1990)
- ABI/Inform (Corp. UMI/Data Courier 1990)
- Supertech (Corp. R.R. Bowker Company 1990)

The second part of the search was a manual examination of a selection of journal and books. The journals examined include:

- Via Satellite
- Telecommunications Magazine
- Satellite Communication
- International Journal of Satellite Communication and Broadcast
- Network World
- Telephony
- Teleconnect
- Data Communication
- IEEE Documents
- CCITT Recommendations

Other articles and theses were obtained from the Center for Space and Geosciences Policy (University of Colorado at Boulder), the Interdisciplinary Telecommunications Program (University of Colorado at Boulder), The Institute for Telecommunications Science (ITS) and the National Institute for Standards and Technology (NTIA).

1.3 Description and User's Guide to the Advanced Satellite Research Project: SCAR Research Database

1.3.1 Content of the Database

The database contains the following information about each article from the literature search:

- Article title
- Author(s)
- Source (Journal, Thesis, Conference, etc.)
- Volume and Number
- Publication date
- Key words relating to the article content
- If the article or abstract is on file
- Index number of the article at the Interdisciplinary Telecommunications Program (ITP) at the University of Colorado at Boulder

1.3.2 Uses of the Database

The intended use of the database is to allow users to quickly extract bibliographic citations for articles dealing with a specific topic. In order to do this, the user follows the menu selections to select articles by key word. Once the key words have been chosen, the printer should be readied and then the citations will be printed by following the menu. The citations will be printed out in groups by key word.

The information found on each article will be printed out, including an index number for each article or abstract. This index number corresponds to physical article in a filing cabinet at the CU ITP library. These numbers have been chosen arbitrarily and have been assigned to articles as grouped by key word.

1.3.3 Limitations of the Database

The database is a very basic electronic file created through the above described literature search process. Bibliographical references are simply organized by key word in an effort to provide reasonable functionality at minimal cost.

More specifically, due to budgetary constraints, the references will not be sorted alphabetically or by author, source, title or date. There is no citation filtering, so articles may be printed multiple times in a multiple key word search if they fall into more than one key word category.

Additional sort features may be added at some future time but have not been included in this initial database file.

2.0 SCAR LITERATURE SEARCH ANALYSIS

2.1 The Advanced Communications Technology Satellite (ACTS)

ACTS is an experimental, rather than operational communications satellite featuring a number of advanced capabilities. These capabilities include:

- on-board processing
- dynamic bandwidth, power, and time slot allocation
- Ka Band frequency with 2.5 GHz of useable bandwidth
- hopping spot beams
- steerable antenna

Although ACTS itself is meant for experimental purposes, the advanced technologies involved show promise for future development and use in commercial communications satellites.

A majority of the ACTS literature is composed of technical descriptions of the satellite and its capabilities. There is limited literature on the implications of the satellite's capabilities or the nature of the communications experiments that will be performed with ACTS.

2.2 The Integrated System Digital Network (ISDN) and Satellites

2.2.1 Availability of information on satellites and ISDN

There doesn't appear to be a large body of articles on the subject of ISDN and satellites. From the results of our research one might estimate that articles on ISDN and terrestrial

communications are twenty times more numerous than ISDN and satellites. We also found more literature concerning policy than technical issues.

2.2.2 Compatibility Issues of ISDN with Satellites

Satellites are under current "I" series provisions are compatible with ISDN and will provide an important transmission link in a future worldwide ISDN network, as they already do in present international networks. The current joint CCIR/CCITT Committee on establishing full compatibility between satellite and ISDN is the most important part of the exercise at this time but these activities have not yet been reported in the literature.

2.2.3 ISDN Standards Issues for Satellites

There is perhaps twenty times more literature concerning ISDN as a fiber-based terrestrial transport standard than as a satellite standard. In order to assure that satellites are included in a future world wide network, transmission delay tolerances need to continue being oriented to the least common denominator, ie: the satellite transmission path of approximately 250 ms. The current 400ms recommendation of the CCITT (G.114) appears likely to stand for the present time (see Sec. 2.2.2 above).

2.2.4 The Place of Satellites in the Future Worldwide ISDN Network

Satellites are very strong in broadcast services and are considered to remain as the dominant video broadcast transmission medium for some time to come. A worldwide HDTV network and standard may prove unworkable without a satellite compatible BISDN standard. Satellites already play an important role in international network redundancy and can continue to provide such services within a global ISDN network. The role of satellites in backing up terrestrial networks is strongly represented in the literature we found. ISDN satellite services may remain the only cost effective means of connecting remote areas into the network.

2.2.5 Forces Working Against Satellite Compatible ISDN

Terrestrial networks often require more expensive equipment, more investment from the network user and therefore are frequently the focus of manufacturers' development thrusts. Satellites allow relatively inexpensive bypass of the terrestrial networks and as such represent a

threat to the profits of certain manufacturers and service providers; eg: fiber & switch manufacturing, public network and carrier services and in the U.S. Regional Bell Operating Companies (RBOCs).

2.3 Summary of SCAR Literature Search for topic of ISDN Standards:

2.3.1 Availability of Information on ISDN Standards

The complete and most recent CCITT recommendations are available in the University of Colorado Engineering library, and at Contel/GTE. Complete past and present recommendations are available at the NIST and ITS libraries at the Department of Commerce in Boulder. There is a small body of literature in journals analyzing the implications and developments concerning ISDN standards, but the official CCITT recommendations are the definitive source for this information.

2.3.2 The Importance of ISDN Standards

There is an industry-wide consensus that ISDN will not work unless world-wide standards are set immediately. The differences between the Synchronous Optical Network standard (SONET) in the United States and the Digital Synchronous Hierarchy (DSH) standard in Europe illustrate that full cooperation hasn't been achieved yet. The point of an ISDN is to encourage and facilitate integration which is impossible without a comprehensive body of agreed upon standards. The literature increasingly reflects a viewpoint that ISDN is too small a bandwidth and too slow a throughput to meet 21st century needs and that BISDN standards versus private networks using FDDI is the key element of discussing standards issues.

2.4 Summary of SCAR Literature Search for topic of BISDN:

2.4.1 Availability of information on BISDN

There are a number of articles available covering BISDN. Although there is a small percent of popularly oriented literature in the journals, they are generally confined to the journals specializing in current industry news. As would be expected, the most detailed technical articles were found in IEEE journals and colloquia or conference documentation.

2.4.2 Promise of BISDN

BISDN will is intended to be a worldwide standard for high capacity information exchange. The increasing use of video and graphics transmission and on-line interactive services are cited in some journals as providing the market pull needed to develop this technology. HDTV is seen as an important developing technology which will enhance the drive toward BISDN. Other developing technologies which will accompany BISDN are Asynchronous Transfer Mode (ATM) and fast packet switching.

2.4.3 Migration from ISDN to BISDN

As noted in 2.3.2, ISDN has an industry-wide reputation as being too little too late. The transmission speeds of ISDN are no longer competitive with other installed systems for data links such as Local Area Network (LAN) based FDDI. The services available via ISDN, especially at Basic Rate Interface (BRI; 144 Kilobits/sec) does not provide enough incentive to sell customers on the cost of this service.

BISDN, with SONET level speeds of 155.5 Megabit/sec and 622 Megabit/sec does suggest that ISDN could lead to a useful broadband service in the longer term. The BISDN channels are compatible with ISDN channels and will offer much greater bandwidth and flexibility to users. Services such as bandwidth on demand, videoconferencing and simultaneous voice and data will be supported.

2.4.4 Caveats about BISDN

Manufacturers are becoming impatient with the slow rate of standards making and are already producing non-standard ISDN-like services. If this trend continues with BISDN, the whole point of BISDN may also be lost.

2.5 Frame Relay and Switching

2.5.1 The Technical Concept Behind Frame Relay.

Frame relay eliminates intermediate node processing for error correction and flow control which speeds up network throughput and efficiency. The inherently lower BER of fiber makes it possible to do these functions only at the network 'edges' without loss of transmission quality. A reduction in overhead results from fast packet switching. All of these aspects, however, tend to

create problems with satellite transmission delay. There is unfortunately virtually no literature addressing the problems of satellite compatibility with frame relay.

2.5.2 The Difference Between Frame Relay and Cell Relay.

Frame relay systems enclose variable-sized user packets (called frames) that add addressing and verification information. Frame length varies greatly in length up to a design limit. In cell relay incoming data is uniformly divided into fixed cell-sized increments. Cells may be full, empty, or partially filled.

2.5.3 Synchronous Versus Asynchronous Transfer Modes.

Time division multiplexing requires end to end synchronization for correct decoding and time slot allocation. Framing bits are used to identify the start and end of frames and bandwidth is allocated whether or not there is information to transmit. Asynchronous Transfer Mode (ATM) recognizes the usually bursty nature of traffic and constructs a packet of information with headers indicating routing and other network services. ATM is synchronous at the bit level within packets/cells but asynchronous at the channel level. No bandwidth is allocated in an ATM trunk to an idle channel, so that more channels are handled with the same trunk bandwidth. Again ATM creates problems for satellite transmission, because of delay, and this is little addressed in the literature.

2.5.4. Implementation of Fast Packet Switching Technology

Frame relay services have been implemented on a connection-oriented basis only while cell relay has also been specified for connectionless services. The shorter processing delays of fast packet switching makes it acceptable for voice transmission unlike traditional packet switching which is suited only for data. The combination of voice and data into one network takes advantage of the economy of network consolidation. Error correction techniques for satellite transmission is affected by fast packet switching technology.

2.5.5. Different Options Available in Switching Design

Among the many design factors and tradeoffs involved in fast packet switching are packet length and variability; priority classes and congestion management; error control; switch size;

standards; and, network management. These are all sensitive to satellite transmission characteristics.

2.5.6 International Standards Versus Proprietary Protocols

CCITT Study Group XVIII, which deals with ISDN issues, has recommended fixed length packets (cells) with five (5) byte headers and 48 byte 'payloads', and a header error control field of one of the five (5) header bytes. Many corporate networks use the proprietary protocols of a particular vendor which limits or complicates interconnectivity.

2.6 Computer Networks and Satellites:

2.6.1 The First Generation of Very Small Aperture Terminals (VSATs)

The key to computer networks using satellite connections are VSAT operations and on-board processing to allow MESH configuration networks. There have been three distinct stages of VSAT evolution. The first generation of receive-only terminals introduced around 1980 was concurrent with the higher powered C band satellites. They used spread spectrum modulation techniques, known as Code Division Multiple Access (CDMA) and refined contention access schemes and provided low-speed (less than 9.6 kbps) data services.

2.6.2 The Second Generation of Very Small Aperture Terminals

The second generation in 1983-1984 introduced the first two-way, interactive, and primarily low-speed systems at C and Ku bands. Data communications applications and network management techniques began to evolve. These networks are typically characterized as hardware defined multi-port, multi-protocol, multi-application systems. These typically use bi-Phase Shift Key (BPSK) operations rather than CDMA.

2.6.3 The Third Generation of Very Small Aperture Terminals

The third and current generation appeared in 1987 with the following key characteristics: switched networks, based on standardized architectures such as X.25; multi-port/multi-protocol systems; better bandwidth management which allows improved satellite access and increased capacity; compatibility with hybrid network configurations; a high degree of software definition; and, the beginning of application transparency.

2.6.4 Multiple Access Techniques for VSAT Networks

The efficiency of the access method used depends on the nature of the traffic being handled. The most flexible method is time division multiple access (TDMA). Each VSAT accesses the hub during its assigned time slot. More advanced sub-access methods are also used. Random Aloha is a pure contention method with the least timing demands and expense and is suited for very low traffic. Slotted Aloha has predefined time slot boundaries for VSAT access which reduces collisions by half and thus doubles traffic throughput. Reservation access is suited for long or widely varying message lengths or traffic rates providing demand-assigned capacity as needed on a priority basis. Dedicated stream access may be used for a steady flow of data or voice traffic or applications where response times justify less efficient capacity use. Adaptive techniques may be used to respond to changing traffic patterns: using slotted Aloha then going to reservation/stream access under heavy traffic.

2.6.5 The Plethora of VSAT Applications

These include two-way and NxN multi-switched video/audioconferencing; centrally hub-controlled data communication networks; mesh connectivity for direct access eliminating hubs; low burst rate TDMA with DS-1 formatted T1 carrier user interface; direct ISDN access to areas without basic telephone service; and, support of the HDLC protocol to exchange data with appropriate error and flow control.

2.6.6 VSATs, Data Networks and ACTS

The ability of ACTS to easily carry out on-board processing greatly enhances the ability to erect cost effective N X N or MESH networks. The literature little addresses this issue, however, ACTS tests should emphasize this new capability.

2.7 Satelite Orbits

2.7.1 Types of Orbits

There are three basic types of orbits used for satellite communications: low, medium, and geosynchronous earth orbit. Each of these orbits may have one or more of the following

characteristics: polar, inclined, or equatorial; circular or elliptical; and, geostationary, geosynchronous, or sun-synchronous.

2.7.2 Highly Inclined, Elliptical and Semi-synchronous (12-hour period) Orbits

These orbits such as the highly elliptical orbit of the Molniya satellite, are useful for coverage of latitudes exceeding +/- 75 degrees providing good visibility at high elevation angles for mobile satellite services. As the orbital period is increased, the apogee distance is also increased together with propagation delay and path attenuation. A variation on this concept is the "Loopus Orbit." In the apogee region of the HEO or Loopus Obit, the satellite appears almost stationary for a substantial duration of its orbit. Nevertheless, the orbit requires considerable tracking capability.

2.7.3 Apogee at Constant time-of-day Equatorial (ACE) Orbit

This new type of orbit has been proposed recently by LORAL (Ford Aerospace)/NASA-Lewis Research Center avoiding the need for a coveted slot in the geostationary arc and which is capable of providing worldwide coverage at peak traffic periods with a single satellite. If the plane of the orbit lies in the plane of the earth's equator and the perigee and apogee are set so that the apsidal line rotates within the equatorial plane at 360 degrees per year, the orbit becomes sun synchronous. If the orbital period is sub-synchronous (i.e. a simple fraction of a day) the satellite reaches apogee at the same time every day. The optimum ACE orbit of 4.8 hours provides coverage every 72 degrees longitude for up to three hours at the same time of day. Free space loss is 7 Db lower and delay is less than half that of a geostationary orbit.

2.7.4 Inclined Orbit Operation in Geosynchronous Orbit

Comsat Labs have recently patented a modification of the geostationary orbit: the inclined orbit maneuver. This technique is used to extend the useful life of an aging satellite by halting its North-South station keeping and allowing it to decay slowly into an inclined orbit at a rate of about 0.85 degrees per year. Reverse inclination also may be applied at launch to double this effect. More fuel is used for North-South than is used for East-West station keeping and one month's supply of fuel for North-South station keeping is nearly equivalent to an additional year

of useful life for East-West station keeping. Inclined orbits require Az-El tracking because the satellite traces a figure-of-eight movement in the sky as seen by the earth observer.

2.7.5 Low Orbit Satellites with Inter-Satellite Links

The use of low circular orbit constellations has been studied for nearly thirty years as an alternate method of providing worldwide coverage compared to geostationary satellites which are not visible at the poles. Motorola recently proposed a 77-spacecraft constellation, using eleven satellites in seven polar orbits, at an altitude of 400-500 nautical miles, for a geographically independent global digital cellular communications network. The system would use L-band links to subscriber units, and Ka band satellite-to-gateway links and intersatellite cross-links with on-board processing. Very high levels of frequency reuse, up to 37 times, can be achieved by these satellites.

2.7.6 New Concepts in Satellite Positioning

The demands of 21st Century satellite operations are driven toward combining wideband, wide geographic coverage, high quality and N dimensional networks with near-zero second delay. The Motorola Iridium project may show new opportunity in all respects. Other concepts such as use of ground generated power to "fly" a satellite at 500 miles altitude, building upon the Canadian SHARP project is another new concept. The sparse literature available on such advanced concepts will be augmented over time.

2.8 Satelite Transmission Quality

Several types of signal impairments may affect satellite transmission quality. These may be caused by technical design limitations, atmospheric propagation effects, acts of nature, operational problems, satellite problems, earth station or feeder link difficulties among others. There are a variety of techniques that can be used to control, avoid, or minimize such impairments. There is a rich literature in this area and selections have been chosen as carefully as possible.

2.8.1 Technical Design Limitations

Design limitations can include cross-polarization interference in frequency reuse systems; co-channel interference due to over-deviation in FDM/FM systems; sidelobe radiation from parabolic antennas; associated or non-associated spurious emissions including swept radar; adjacent satellite interference; terrestrial microwave interference; and, digital intersymbol interference.

2.8.2 Propagation Impairments

These can include: atmospheric absorption; atmospheric rain attenuation; atmospheric and ionospheric scintillation; tropospheric multipath fading; land and sea multi-path fading; Faraday rotation; rain and ice depolarization; and, Doppler frequency shift and ranging.

2.8.3 Uncontrollable Acts of Nature

These include: sun-spot activity which occurs in eleven year cycles; sun transit outage when the satellite is between the sun and the earth; biannual eclipses at the equinoxes when the earth is between the sun and the satellite; severe Ku and Ka band weather degradation at low elevation angles due to the increased antenna noise temperature caused by heavy rainfall.

2.8.4 Operational Problems and Human Errors

Operational problems of all types may contribute to transmission impairments. These include: inadvertent channel carrier emissions (usually blocked off-hook) especially in SCPC systems; unauthorized carriers in FDMA systems; uplink polarization errors; antenna pointing inaccuracies; and, inadequate updata, repair or maintenance of earth station equipment.

2.8.5 Satellite Related Malfunctions

These may include: frequency and power variations in beacon signals which cause tracking problems; inadequate isolation of spatial beams and opposite polarizations; footprint contour uncertainty due to spacecraft instability; variations in transponder gain, sensitivity and output power; solar/DC power bus load variations; inoperative matrix switching for beam to receivers and TWTAs/SSPAs; and, catastrophic satellite failures which may require point-over restoration to in-orbit spare capacity if available.

2.8.6 The Use of ISDN on Satellites

This presents a unique challenge to meet media transparent specifications. Terrestrial based radio and line systems usually have shorter transmission delays and can also have less performance with regard to bit error rates, especially fiber optic systems. Non-synchronous satellites, especially Highly Elliptical Orbit Satellites, used for mobile applications, present the added challenge of Doppler frequency shift compensation. In the future, both inclined orbit and geosynchronous orbit satellites may require increased use of storage and of buffers in digital systems such as TDMA/SSTDMA and IDR/IBS to compensate for time differences due to range variations as other synchronization and BER problems.

2.9 Network Configuration

This is a rich area where seventy-four articles were selected to achieve reasonable balance and comprehensiveness. In fact, several hundred articles might have been selected because of the great number of contributions that have been made in the last five years in this area. This is both because it is such an important area, and even more so because there are at least a dozen sub-elements of this overall topic. Specific areas covered include:

(a) Hybrid or Integrated Space/Terrestrial Networks:

This is a key area frequently addressed in the literature with some eight articles specifically addressing this topic and many others touching upon it. Since ACTS hybrid space/terrestrial tests and demonstrations are intended, this should be of particular value.

(b) Satellites vs. Fiber Optics:

The relative merits and performance of satellites and fiber optics in different applications and network configurations is also addressed in several articles, but without definitive conclusions.

(c) Network Architectures and Route Optimization:

This is among the most carefully and precisely addressed topics with many articles providing precise analysis and recommended design or software concepts.

(d) Survivability and Reliability:

The issues of survivability, system availability and reliability is closely tied to network configuration and the characteristics of the traffic being carried through the network (e.g. burstiness, flow control, etc.). A number of good articles on these topics are included in the bibliography.

(e) Defense and Tactical Communications:

The issue of special defense and tactical communications are closely related to survivability and reliability and terrestrial vs. radio and satellite communications. Several key articles on this topic have been included.

(f) Network Management and Network Reconfiguration:

Key elements of network management and network configuration are addressed. These are largely software rather than hardware dependent.

(g) Technology and Future Satellite Network Configurations:

This is the area where the largest number of articles have been selected, because of their great relevance to the SCAR project and ACTS. The great bulk of articles address on-board switching, on-board processing and even CCIS/No.7 signalling issues.

(h) Network Configuration and Services:

A number of services and their relationship to network configuration is discussed. The implications for video services, ISDN, mobile satellite services, telephone, data and multi-media services are addressed in the various selected articles.

(i) Network Configuration and VSATs:

The implications of conventional vs. VSAT earth stations and star vs. MESH networks are among the key elements addressed in terms of satellite ground equipment.

(j) Specific Network Architecture and Operations:

The operation of specific networks such as BITNET and INTELNET are addressed in several articles indicating their operational approach and network strengths and weaknesses.

(k) National or Regional Networks:

A number of articles present in some detail national or regional systems. Selected articles cover Australia, Germany (Kopernicus), Europe, Japan and the U.S.

(i) Economic and Financial Evaluation of Network Configuration:

Although there are a limited number of good articles that address the economic or financial aspects of network configuration, there are still some valuable articles that address hybrid networks, satellite vs. fiber optic considerations, etc. These are included in the bibliography where identified, but far more work is needed in this area.

3.0 CONCLUSIONS

The Advanced Satellite Research Project; SCAR Research Database is seen as a resource that should grow and become more useful over time. New entries can be made and new and more sophisticated methods to access the database can be designed. As new areas of inquiry emerge, new fields can be added to the database as desired. The idea is make the database extremely portable so that it can be quickly installed as a d-BASE system on virtually any computer desired. The ITP at the CU/Boulder will undertake to update and expand the system as needed. Any inquiries regarding the database should be directed to:

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Campus Box 530
Engineering Center OT 2-41
University of Colorado
Boulder, CO 80309-0530
(303) 492-4769

SCAR

Technical Literature

Data Base

Compiled and Produced

by the

University of Colorado

Interdisciplinary Telecommunications Program

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Table of Contents

SCAR Data Base Handbook

The SCAR Technical Literature Data Base is intended to be straightforward and easy to operate. There should be a 3.5" disk included with this documentation which contains the following files:

SCAR.DBF .....The dBASE III Plus file containing all the article source listings collected from the literature search.

NAMES.NDX .....dBASE index file for support of the SOURCE data base program.

SOURCE.EXE .....This is a compiled dBASE III Plus program which will run on its own without dBASE III Plus on any MS-DOS compatible computer.

SOUT.OVL .....Support file for SOURCE.EXE.

SOUT.DBC .....Support file for SOURCE.EXE.

The above files must remain in the same directory together for the program to function. The SCAR.DBF file may be used with other dBASE III Plus programs to manipulate the data in different ways.

The SOURCE program is a very simple menu-driven program designed to create ASCII files of the article sources. The files can then be loaded into any text editor, word processor or desktop publisher to organize and print it.

In this documentation are all the listings in the data base grouped by keyword. Each of the groups is listed alphabetically by author. Note that articles may be listed in several keyword areas if the subject matter falls into the different categories.

Loading the program to a hard disk

The program will run faster if it is installed on a hard disk, and there should be no concern about disk space there either. To copy the files to the hard disk, put the disk in the **B:** drive and type the following commands:

```
C:
CD\
MD SCAR
CD \SCAR
COPY B:\*.*
```

Now all the files on the floppy disk should be on the hard disk. Whether a hard disk is being used or not, the following instructions will apply to using the program.

How to operate the program:

Move to the directory containing the SOURCE.EXE program and type **SOURCE**. The entry screen for the program should display on the screen. From here one may either Print the sources or Quit the program. Type a **P** or a **Q** for the option desired.

If the Print option is selected the next screen will display the print options screen. All eleven categories for the articles are shown with a corresponding number next to them. In order to print a group of sources, enter the number which corresponds to that category. For example, enter **06** to print all the articles which are in the **ACTS** keyword category. Both numbers must be entered for the selection to be accepted.

Next an ASCII file will be created which contains all the sources. If it is desired, the file may be viewed on the screen. This is the same as using the **TYPE** MS-DOS command on any text file at the DOS prompt. To pause the display as the entries go by, press the **CTRL-S** key combination and any other key to resume the scrolling display.

In order to save the file, enter a **Y** when prompted. After this screen, the cycle starts over again from the beginning.

Note: Once the program has been run, there will be a SCRAP.TXT file created in the current directory. This will be a duplicate of the last keyword group which was selected for printing. It may be deleted with no harm to the system or program.

The rest of this documentation is a listing of the categories in the data base. Each of these groups can be recreated from the program as an ASCII file and then incorporated into any document or report.

Description of the data

The Title, Author, Source, Vol. and No. data entries are self explanatory.

The Date refers to the date of publication. In some cases the date on our resource was only precise to the year or month. In these cases the date was entered as the 1st of the month or year. (it is a requirement of the dBASE program for the date field format that the entire field be filled)

The Index# entry on each source listing corresponds to the place that article is stored in the ITP file cabinet. Researchers may contact the ITP and request files by this number.

Limitations of the program

This program was intended to be a "quick and dirty" data base program which will provide access to the sources contained in the data base. Ideally this program will help researchers find articles of interest and make locating them easier.

The data in the .DBF file may be used in other ways too, but the added time and cost of developing a more sophisticated program was not possible at this time. If further development is desired at some future date, the users may contact the ITP at their convenience.

ISDN and Satellites

Title: IEEE COLLOQUIUM ON THE ROLE OF SATELLITES IN TOMORROWS FIBER-OPTIC WORLD
Author:
Source: IEEE CONFERENCE MAY 88
Date: 01/01/88 Vol.: No.: Index#: 00049-00

Title: THE INTEGRATED SERVICES DIGITAL NETWORK AND THE FIXED SATELLITE SERVICE
Author:
Source: TELECOMMUNICATION JOURNAL
Date: 12/01/87 Vol.: 54 No.: 12 Index#: 00050-00

Title: SATELLITE BASED ISDN AND THE CRITCAL STANDARDS ISSUES
Author:
Source:
Date: / / Vol.: No.: Index#: 00051-00

Title: ISDN NOW/PROCEEDINGS
Author:
Source: ISDN NOW CONFERENCE
Date: / / Vol.: No.: Index#: 00053-00

Title: THE EIGHTH NORTH AMERICAN ISDN USERS FORUM
Author:
Source:
Date: 05/04/90 Vol.: 8 No.: Index#: 00054-00

Title: NORTH AMERICAN ISDN USERS FORUM/WORKING AGREEMENTS FOR ISDN
Author:
Source: PROCEEDINGS OF THE NIU-FORUM
Date: 06/11/90 Vol.: 1 No.: Index#: 00055-00

Title: SATELLITE NETWORKS IN THE ISDN ERA
Author: AMADESI, P. ET.AL.
Source: INTERNATIONAL JOURNAL OF SATELLITE COMMUNICATIONS
Date: 10/01/86 Vol.: 4 No.: Index#: 00001-00

Title: NASA AND THE CHALLENGE OF ISDN
Author: BEYERLY, R. ET.AL.
Source: REPORT NO. NAS 1.26:182749;NASA-CR-182749
Date: 05/25/88 Vol.: No.: Index#: 00002-00

Title: ISDN: CURRENT DEVELOPMENTS
Author: BODIN, P. ET.AL.
Source: DOCUMENT SUPPLY SERVICE OF ATT LIBRARY NETWORK
Date: 01/01/89 Vol.: No.: Index#: 00002-20

Title: THE CONTROVERSIES SURROUNDING ISDN
Author: BOLGER, THOMAS E.
Source:
Date: / / Vol.: No.: Index#: 00104-10

Title: IMPLEMENTATION OF ISDN SERVICES ON DIGITAL CELLULAR SERVICES
Author: BRUNSGAARD, NIELS O.
Source: THESIS (MS) ITP-UNIVERSITY OF COLORADO/BOULDER
Date: 01/01/88 Vol.: No.: Index#: 00003-00

Title: CLOSE UP: ISDN IN THE USA
Author: BUSHAUS, DAWN
Source: COMMUNICATIONS WEEK
Date: 05/28/90 Vol.: No.: Index#: 00104-20

Title: NASA AND THE CHALLENGE OF ISDN; THE ROLE OF SATELLITES IN AN ISDN WORLD
Author: BYERLY, R.; BARNES, F.; CODDING, G.; HOFGARD, J.
Source: CENTER FOR SPACE AND GEOSCIENCES POLICY - CU/BOULDER
Date: 05/25/88 Vol.: No.: Index#: 00052-00

Title: PROPOSED SYSTEMS CONFIGURATIONS FOR A SATELLITE BASED ISDN
Author: CAPECE, M. ET.AL.
Source: INTERNATIONAL CONFERENCE ON SATELLITE SYSTEMS FOR MOBILE COMMUNICATIONS AND NAVIGATION
Date: 01/01/88 Vol.: No.: Index#: 00004-00

Title: SCENARIOS OF INTEGRATION OF SATELLITE SYSTEMS IN THE ISDN
Author: CASAS, J. M.
Source: IEEE COLLOQUIUM ON THE ROLE OF SATELLITES IN TOMORROW'S FIBER-OPTIC WORLD MAY 88
Date: 01/01/88 Vol.: No.: Index#: 00006-00

Title: THE ROLE OF SATELLITES IN THE ISDN ERA
Author: CASAS, J. M. ET.AL.
Source: INTERNATIONAL CONFERENCE OF NETWORKING TECHNOLOGY AND ARCHITECTURE JUNE 89
Date: 01/01/89 Vol.: No.: Index#:

Title: NETWORK ARCHITECTURES FOR SATELLITE ISDN
Author: CHITRE D. M. ET.AL.
Source: AIAA INTERNATIONAL COMMUNICATIONS SATELLITE SYSTEMS CONFERENCE MARCH 1990
Date: 01/01/90 Vol.: No.: Index#: 00813-00

Title: ISDN AND SATELLITE COMMUNICATIONS
Author: CHITRE, D. M.
Source: COMSAT LABS, CONFERENCE SLIDES
Date: 01/01/90 Vol.: No.: Index#: 00007-00

Title: ISDN PROTOCOLS AND SATELLITES
Author: CHITRE, D. M. ET.AL.
Source: ICC 86 CONFERENCE JUNE 86
Date: 01/01/86 Vol.: No.: Index#: 00008-00

Title: EUROPEAN COMMUNICATIONS SATELLITE: INTEGRATION IN THE EUROPEAN NETWORK AND INTERFACING WITH THE ITALIAN PUBLIC TELEPHONE NETWORK
Author: DE ROSA, D. ET.AL.
Source: NOTE RECENSIONI E NOTIZIE
Date: 01/01/88 Vol.: 37 No.: 1-2 Index#: 00815-00

Title: THE ROLE OF A DOMESTIC SS-TDMA SATELLITE SYSTEM IN THE NETWORK EVOLUTION STRATEGY TOWARDS THE ISDN
Author: DEPADOVA, S.
Source: GLOBECOM 85 CONFERENCE
Date: 12/01/85 Vol.: No.: Index#: 00009-00

Title: ISDN SYMPOSIA: A HISTORICAL OVERVIEW
Author: DEWITT, RUSSELL G.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 04/01/90 Vol.: 28 No.: 4 Index#: 00108-00

Title: THE INTELSAT SYSTEM IN THE ISDN ERA
Author: DICKS, J. L. ET.AL.
Source: IEEE COLLOQUIUM MAY 89
Date: 01/01/89 Vol.: No.: Index#: 00010-00

Title: DOCUMENT DELIVERY VIA/ISDN OR SATELLITE NETWORKS
Author: DUNNING, ANTHONY J.
Source: AGARD CONFERENCE
Date: 03/01/90 Vol.: No.: Index#: 00011-00

Title: COMBINING SATELLITE AND FIBEROPTIC TECHNOLOGIES IMPROVES INTERNATIONAL SERVICES AND COSTS
Author: EDWARDS, M.
Source: COMMUNICATIONS NEWS
Date: 06/01/87 Vol.: 24 No.: 6 Index#: 00012-00

Title: FIBER OPTICS AND SATELLITES IN THE INTEGRATED SERVCIES DIGITAL NETWORK
Author: FERRIS, PAUL E.
Source: THESIS (MS) ITP UNIVERSITY OF COLORADO/BOULDER
Date: 01/01/88 Vol.: No.: Index#: 00013-00

Title: BUSINESS COMMUNICATIONS AND THE ISDN
Author: FOUQUES, M. ET.AL.
Source: DOCUMENT SUPPLY SERVICE OF ATT LIBRARY NETWORK
Date: / / Vol.: No.: Index#: 00013-50

Title: CONSIDERATIONS ON SIGNALLING FOR AN OBP SATELLITE SYSTEM OFFERING ISDN SERVICES
Author: FOURNON, F. M. ET.AL.
Source: IEEE COLLOQUIUM ON SATELLITES AND ISDN MAY 89
Date: 01/01/89 Vol.: No.: Index#: 00014-00

Title: WHITE PAPER TO MANAGEMENT: ISDN TAKES SHAPE
Author: GANTZ, JOHN
Source: NETWORK MANGEMENT
Date: 01/01/89 Vol.: 7 No.: 1 Index#: 00117-25

Title: SATELLITE-BASED ISDN
Author: GODWIN, J. P.
Source: ISDN 87 CONFERENCE-BROADBAND NETWORKS FOR THE FUTURE JUNE 87
Date: 01/01/87 Vol.: No.: Index#: 00015-00

Title: USAT TECHNOLOGY FOR TODAY AND FOR THE FUTURE PART 7
Author: GOLDING, LEN
Source: COMMUNICATIONS NEWS
Date: 04/01/88 Vol.: 25 No.: 4 Index#: 00016-00

Title: SMALL APERTURE EARTH STATION NETWORKS AND THEIR RELATIONSHIP TO ISDN
Author: GOLDING, LEONARD S.
Source: GLOBECOM 87 CONFERENCE
Date: 01/01/87 Vol.: No.: Index#: 00017-00

Title: USERS SHOULD BE DOING THEIR ADVANCE PLANNING TO TAKE ADVANTAGE OF THE ISDN TECHNOLOGIES
Author: HAHN, JAMES
Source: COMMUNICATIONS NEWS
Date: 01/01/87 Vol.: 24 No.: 1 Index#: 00118-50

Title: THE GLOBAL SATELLITE NETWORK AND ISDN
Author: HAMPTON, J.
Source: NETWORK PLANNING IN THE 1990'S - SYMPOSIUM SEPT. 89
Date: 01/01/89 Vol.: No.: Index#: 00018-00

Title: PROPAGATION ASPECTS OF ISDN SATELLITE LINKS ABOVE 10 GHZ
Author: HENDRICKX, M. P.
Source: ICAP 89 CONFERENCE
Date: 01/01/89 Vol.: No.: Index#: 00019-00

Title: THE ADVANCED COMMUNICATIONS TECHNOLOGY SATELLITE COMPILATION OF ISDN CAPABILITIES
Author: HOVORKA, DIRK S.
Source: ITP - UNIVERSITY OF COLORADO NASA (NAGW-1105)
Date: 01/01/90 Vol.: No.: Index#: 00020-00

Title: SYNCHRONIZATION OF REMOTE DIGITAL CLUSTERS VIA SATELLITE FOR ISDN
Author: JOHANNSEN, KLAUS G.
Source: INTERNATIONAL JOURNAL OF SATELLITE COMMUNICATIONS
Date: 07/01/87 Vol.: 5 No.: Index#: 00021-00

Title: ADVANCED SATELLITE SYSTEM ARCHITECTURE FOR VSATS WITH ISDN COMPATABILITY
Author: JORASCH, RONALD E. ET.AL.
Source: AIAA INTERNATIONAL COMMUNICATION SATELLITE SYSTEMS CONFERENCE MARCH 88
Date: 01/01/88 Vol.: No.: Index#: 00022-00

Title: ISDN IMPLEMENTATION STRATEGY OF THE DEUTSCHE BUNDESPOST TELCKOVE
Author: KAHL, PETER
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 04/01/90 Vol.: 28 No.: 4 Index#: 00022-50

Title: IT OFFERS MORE CAPACITY THAN ITS PRIMARY NEED, SO ISDN'S D CHANNEL COULD ADD OTHER USERS
Author: KEOGH, CAROLE

Source: COMMUNICATIONS NEWS
Date: 01/01/87 Vol.: 24 No.: 1 Index#: 00123-10

Title: INCLUDING SATELLITES IN ISDN
Author: KERVER, TOM
Source: SATELLITE COMMUNICATIONS
Date: 11/01/88 Vol.: 12 No.: 11 Index#: 00023-00

Title: AN OVERVIEW OF SATELLITE TRANSMISSION ISSUES AND THE ISDN
Author: KNIGHT, IVOR N. ET.AL.
Source: ICC 86 CONFERENCE JUNE 86
Date: 01/01/86 Vol.: No.: Index#: 00024-00

Title: APPLICABILITY OF ATM TECHNIQUES TO SATELLITE COMMUNICATIONS SYSTEMS
Author: KUHLEN, H. ET.AL.
Source: ICDSC-8 CONFERENCE APRIL 89
Date: 01/01/89 Vol.: No.: Index#: 00025-00

Title: EARTH STATIONS FOR NEW STANDARDS, SYSTEMS AND SERVICES
Author: LEFRANCOIS, G.
Source: ELECTRICAL COMMUNICATION
Date: 01/01/88 Vol.: 62 No.: 1 Index#: 00026-00

Title: SATELLITES AND THE ISDN
Author: LEWIS, J.
Source: INTERNATIONAL JOURNAL OF SATELLITE COMMUNICATION
Date: 10/01/83 Vol.: 1 No.: Index#: 00027-00

Title: KU-BAND PAYLOAD TRADE-OFFS FOR ISDN SERVICES IN EUROPE
Author: LOPRIORE, M. ET.AL.
Source: AIAA INTERNATIONAL COMMUNICATION SATELLITE SYSTEMS CONFERENCE AND EXHIBIT
Date: 01/01/90 Vol.: No.: Index#: 00028-00

Title: DATA APPLICATIONS IN AN ISDN ENVIRONMENT
Author: MAIDEN, RICK
Source: THESIS (MS) ITP-UNIVERSITY OF COLORADO/BOULDER
Date: 01/01/89 Vol.: No.: Index#: 00129-00

Title: MULTI-SERVICE DEMAND ASSIGNMENT SYSTEM AIMING AT ISDN
Author: MATSUO, K. ET.AL.
Source: ICDSC-7 CONFERENCE MAY 86
Date: 01/01/86 Vol.: No.: Index#: 00029-00

Title: SATELLITE ISDN FOR DEVELOPING NATIONS
Author: MCDOUGAL, P. J.
Source: ISDN 87 CONFERENCE - BROADBAND NETWORKS FOR THE FUTURE JUNE 87
Date: 01/01/87 Vol.: No.: Index#: 00030-00

Title: RESULTS AND EXPERIENCE GAINED IN THE PARTICIPATION OF ISDN DEMONSTRATION VIA SATELLITE
Author: MONTAGUE, M. R.
Source: IEEE COLLOQUIUM ON SATELLITES AND ISDN MAY 89
Date: 01/01/89 Vol.: No.: Index#: 00031-00

Title: ISDN AS AN ENABLER FOR ENTERPRISE INTEGRATION
Author: MORGAN, DAVID ET.AL.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 04/01/90 Vol.: 28 No.: 4 Index#: 00031-00

Title: SATELLITE DIGITAL COMMUNICATION SERVICE (SDCS)
Author: MORIHIRO, Y. ET.AL.
Source: REVIEW OF THE ELECTRICAL COMMUNICATION LABORATORIES
Date: 03/01/87 Vol.: 35 No.: 2 Index#: 00032-00

Title: INTERNATIONAL EXTENSIONS OF ISDN AND TERMINAL IMPLICATIONS
Author: PEEL, ERIC
Source: IEEE COMPUTER COMMUNICATIONS
Date: 08/01/88 Vol.: 11 No.: 4 Index#: 00032-80

Title: ISDN THE CASE FOR SATELLITES
Author: PELTON, J. AND MCDOUGAL, P. J.
Source: SPACE COMMUNICATION AND BROADCASTING
Date: 05/01/87 Vol.: 5 No.: Index#: 00036-01

Title: ISDN SERVICES VIA SATELLITE AND TERRESTRIAL MEANS
Author: PELTON, J. N.
Source: TELECOMMUNICATIONS JOURNAL
Date: 06/01/89 Vol.: 56 No.: 6 Index#: 00034-00

Title: ISDN: SATELLITES VERSUS CABLE
Author: PELTON, J. N.
Source: TELECOMMUNICATIONS
Date: 06/01/88 Vol.: 22 No.: 6 Index#: 00035-00

Title: SATELLITES AND FIBER OPTICS IN AN ISDN WORLD
Author: PELTON, JOSEPH N.

Source: SPACE COMMUNICATION AND BROADCASTING
Date: 06/01/89 Vol.: 6 No.: Index#: 00033-00

Title: SATELLITES AND FIBER OPTICS IN OUR ISDN WORLD
Author: PELTON, JOSEPH N.
Source: SPACE COMMUNICATIONS AND BROADCASTING
Date: 06/01/89 Vol.: 6 No.: 5 Index#: 00036-00

Title: ISDN MUST INCORPORATE SATELLITE TECHNOLOGY TO CLOSE POSSIBLE GAPS IN THE GLOBAL NET
Author: PELTON, JOSEPH N. ET.AL
Source: COMMUNICATIONS NEWS
Date: 11/01/87 Vol.: 24 No.: 1 Index#: 00034-10

Title: A TST/SS-TDMA TELECOMMUNICATIONS SYSTEM - FROM CABLE TO SWITCHBOARD IN THE SKY
Author: PENNONI, G.
Source: ESA
Date: 01/01/84 Vol.: 8 No.: 2 Index#: 00307-03

Title: ASSESSMENT OF THE STATUS AND TRENDS IN SATELLITE COMMUNICATIONS 1986-88
Author: POLEY, W. A. ET.AL.
Source: NASA REPORT NAS 1.15:88867;E-3270;NASA-TM-88867
Date: 11/01/86 Vol.: No.: Index#: 00036-02

Title: ISDN AND SATELLITES
Author: POTTS, JIM
Source: SATELLITE COMMUNICATIONS
Date: 08/01/86 Vol.: 10 No.: 8 Index#: 00037-00

Title: ERROR PERFORMANCE OR SATELLITE ISDN CONNECTIONS
Author: PUGA, MARCOS W. ET.AL.
Source: GLOBECOM 87 CONFERENCE
Date: 01/01/87 Vol.: No.: Index#: 00038-00

Title: SATELLITE COMMUNCATION PROTOCOLS - A PERFORMANCE
Author: QUERNHEIM, U.
Source: AACHENER LUFORMATIK - BERICHTE, NO. 88-14
Date: 01/01/88 Vol.: No.: Index#: 00038-01

Title: THE VALUE OF ISDN FOR BANKING APPLICATIONS
Author: RICHARDS, DAVE ET.AL.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 04/01/90 Vol.: 28 No.: 4 Index#: 00140-00

Title: ISDN APPLICATIONS AT TENNECO GAS
Author: ROY, RUSSELL
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 04/01/90 Vol.: 28 No.: 4 Index#: 00038-50

Title: GENERAL CONSIDERATIONS CONCERNING THE INTEGRATION OF SATELLITES INTO A REGIONAL ISDN
Author: SAMUEL, R. J.
Source: IEEE COLLOQUIUM ON SATELLITES AND ISDN MAY 89
Date: 01/01/89 Vol.: No.: Index#: 00039-00

Title: INFORMATION AGE AND SATELLITE COMMUNICATIONS
Author: SATO, R.
Source: JOURNAL OF THE INSTITUTE OF ELECTRONICS, INFORMATION AND COMMUNICATION ENGINEERS
Date: 11/01/89 Vol.: 72 No.: 11 Index#: 00040-00

Title: DESIGN AND OPERATIONAL ISSUES OF USAT APPLICATIONS IN ISDN TYPE NETWORKS
Author: SHARIFI, M. H. ET.AL.
Source: IEEE JOURNAL ON SELECTED AREAS OF COMMUNICATIONS
Date: 10/01/88 Vol.: 6 No.: 8 Index#: 00041-00

Title: ISDN AND THE DEVELOPING WORLD
Author: SINGH, I. B.
Source: TELEPHONE ENGINEER AND MANAGEMENT
Date: 12/01/88 Vol.: 92 No.: 23 Index#: 00042-00

Title: ADVANCED DATA AND ISDN SERVICES IN THE DFS SATELLITE COMMUNICATIONS SYSTEM
Author: SLABON, RUEDIGER W. ET.AL.
Source: ICDSC-7 CONFERENCE MAY 86
Date: 01/01/86 Vol.: No.: Index#: 00043-00

Title: ISDN; AN INTRODUCTION
Author: STALLINGS, WILLIAM
Source: MACMILLIN PUBLISHING COMPANY, NEW YORK
Date: 01/01/89 Vol.: No.: Index#: 00145-00

Title: ISDN: WHAT IS ITS PROMISE?
Author: STEPHENS, GUY M.
Source: SATELLITE COMMUNICATIONS
Date: 06/01/89 Vol.: 13 No.: 7 Index#: 00044-00

Title: STILL TESTING ISDN
Author: STEPHENS, GUY M.
Source: SATELLITE COMMUNICATIONS
Date: 03/01/90 Vol.: 14 No.: 3 Index#: 00045-00

Title: ISDN: FIELD EXPERIENCE IN THE REAL WORLD
Author: SZEKERES, TIBOR G.
Source: BUSINESS COMMUNICATIONS REVIEW
Date: 06/01/90 Vol.: 20 No.: 6 Index#: 00149-50

Title: TRANSMISSION LINK FACILITIES FOR ISDN
Author: TANAKA, S. ET.AL.
Source: NEC RESEARCH AND DEVELOPMENT
Date: 01/01/87 Vol.: No.: Index#: 00046-00

Title: TRANSMISSION AND PERFORMANCE QUALITY STANDARDS FOR SATELLITE LINKS IN THE ISDN
Author: WEINREICH, D. E.
Source: ICC 86 CONFERENCE JUNE 86
Date: 01/01/86 Vol.: No.: Index#: 00047-00

Title: THE WONDERS OF ISDN BEGIN TO TURN INTO SOME REAL-WORLD BENEFITS AS USERS COME ON LINE
Author: WILEY, DON
Source: COMMUNICATIONS NEWS
Date: 01/01/87 Vol.: 24 No.: 1 Index#: 00047-00

Title: VALUES FOR ISDN ATTRIBUTES
Author: WU, WILLIAM W. ET.AL.
Source: GLOBECOM 87 CONFERENCE NOV. 87
Date: 01/01/87 Vol.: No.: Index#: 00048-00

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Title: MISSING LINK: 2BIQ, A 4-LEVEL LINE CODE, WILL FINALLY DIGITIZE THE LOCAL LOOP
Author:
Source: COMMUNICATIONS NEWS
Date: 01/01/90 Vol.: 27 No.: 1 Index#: 00154-00

Title: PREAMBLE AND GENERAL STRUCTURE OF THE I-SERIES RECOMMENDATIONS FOR ISDN
Author:
Source: CCITT BLUE BOOK RECOMMENDATION I.110
Date: 11/01/88 Vol.: 3 No.: 3.7 Index#: 00155-00

Title: VOCABULARY OF TERMS FOR ISDN
Author:
Source: CCITT BLUE BOOK RECOMMENDATIONS I.112
Date: 11/01/88 Vol.: 3 No.: 3.7 Index#: 00156-00

Title: ISDN
Author:
Source: CCITT BLUE BOOK RECOMMENDATIONS I.120
Date: 11/01/88 Vol.: 3 No.: 3.7 Index#: 00158-00

Title: ISDN - NETWORK FUNCTIONAL PRINCIPLES
Author:
Source: CCITT BLUE BOOK RECOMMENDATIONS I.310
Date: 11/01/88 Vol.: 3 No.: 3.8 Index#: 00159-00

Title: ISDN PROTOCOL REFERENCE MODEL
Author:
Source: CCITT BLUE BOOK RECOMMENDATIONS I.320
Date: 11/01/88 Vol.: 3 No.: 3.8 Index#: 00160-00

Title: DEFINITIONS AND GENERAL PRINCIPLES FOR ISDN INTERNETWORKING
Author:
Source: CCITT BLUE BOOK RECOMMENDATIONS I.510
Date: 11/01/80 Vol.: 3 No.: 3.9 Index#: 00162-00

Title: GENERAL STRUCTURE OF THE ISDN INTERNETWORKING RECOMMENDATIONS
Author:
Source: CCITT BLUE BOOK RECOMMENDATIONS I.500

Date: 11/01/88 Vol.: 3 No.: 3.9 Index#: 00161-00

Title: ISDN-TO-ISDN LAYERED INTERNETWORKING INTERFACE
Author:
Source: CCITT BLUE BOOK RECOMMENDATION I.511
Date: 11/01/88 Vol.: 3 No.: 3.9 Index#: 00163-00

Title: FUNCTIONS AND INFO. FLOWS FOR SERVICES IN THE ISDN
Author:
Source: CCITT BLUE BOOK RECOMMENDATION Q.11
Date: 11/01/88 Vol.: 6 No.: 6.1 Index#: 00164-00

Title: STAGE 2 OF THE METHOD FOR THE CHARACTERIZATION OF SERVICES SUPPORTED BY AN ISDN
Author:
Source: CCITT BLUE BOOK RECOMMENDATION Q.65
Date: 11/01/88 Vol.: 6 No.: 6.1 Index#: 00165-00

Title: ISDN 64 KBPS CIRCUIT MODE SWITCHED BEARER SERVICES
Author:
Source: CCITT BLUE BOOK, RECOMMENDATION Q.71
Date: 11/01/88 Vol.: 6 No.: 6.1 Index#: 00166-00

Title: INTRO. TO STAGE 2 SERVICES DESCRIPTIONS FOR SUPPLEMENTARY SERVICE
Author:
Source: CCITT BLUE BOOK, RECOMMENDATION Q.80
Date: 11/01/88 Vol.: 6 No.: 6.1 Index#: 00167-00

Title: UTILITY POLISHES PRIVATE NETWORK
Author:
Source: COMMUNICATIONS NEWS
Date: 01/01/90 Vol.: 27 No.: 1 Index#: 00870-00

Title: SATELLITE NETWORKS IN THE ISDN ERA
Author: AMADESI, P. ET.AL.
Source: INTERNATIONAL JOURNAL OF SATELLITE COMMUNICATIONS
Date: 10/01/86 Vol.: 4 No.: Index#: 00001-00

Title: HOW WILL ISDN AFFECT NETWORK MANAGEMANT?
Author: BAKER, H. C.
Source: BUSINESS COMMUNICATIONS REVIEW
Date: 09/01/89 Vol.: 19 No.: 9 Index#: 00803-00

Title: ISDN RATE ADAPTATION
Author: BEAN, JAMI
Source: COMMUNICATIONS NEWS
Date: 07/01/89 Vol.: 26 No.: 7 Index#: 00101-00

Title: ISDN REAL ECONOMIES, REAL APPLICATIONS
Author: BELITSOS, BYRON
Source: COMPUTER DECISIONS
Date: 06/01/88 Vol.: 20 No.: 6 Index#: 00102-00

Title: ISSUES IN ISDN IMPLEMENTATION
Author: BHATT, ANIL
Source: THESIS (MS) ITP - UNIVERSITY OF COLORADO/BOULDER
Date: 01/01/90 Vol.: No.: Index#: 00103-00

Title: THE IMPACT OF TECHNOLOGY TRENDS ON THE TELECOMMUNICATION NETWORK
Author: BIRING, D. S.
Source: NORTHCOM 87 CONFERENCE SEPT. 1987
Date: 01/01/87 Vol.: No.: Index#: 00806-00

Title: HOW TO PREPARE FOR ISDN
Author: BODIN, MADELINE
Source: TELECONNECT
Date: 11/01/89 Vol.: 7 No.: 11 Index#: 00104-00

Title: ISDN STATUS AND OPPORTUNITIES FOR SATELLITE SYSTEMS
Author: CASAS, J. M. ET.AL.
Source: NASA REPORT NO. ESA-STR-220
Date: 01/01/87 Vol.: No.: Index#: 00105-00

Title: IMPLEMENTATION OF SS7: STALTEL'S: EXPERIENCE
Author: CAZZANIGA, MAURIZIO ET.AL.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 07/01/90 Vol.: 28 No.: 7 Index#: 00106-00

Title: UPDATE ON ISDN
Author: CERVENKA, DANA
Source: COMMUNICATIONS
Date: 07/01/90 Vol.: 27 No.: 7 Index#: 00107-00

Title: ISDN AND SATELLITE COMMUNICATIONS
Author: CHITRE, D. M.
Source: COMSAT LABS, CONFERENCE SLIDES

Date: 01/01/90 Vol.: No.: Index#: 00007-00

Title: THE BIG QUESTION IS, WHAT KIND OF AN IMPACT WILL ISDN HAVE ON YOUR CORPORATE NETWORK?
Author: DEWITT, RUSSELL
Source: COMMUNICATIONS NEWS
Date: 01/01/87 Vol.: 24 No.: 1 Index#: 00108-01

Title: ISDN: THE LATEST WEAPON IN THE BATTLE BETWEEN CENTREX AND PBX
Author: DUS, LARRY L.
Source: UNIVERSITY OF COLORADO - ITP THESIS (MS)
Date: 01/01/90 Vol.: No.: Index#: 00109-00

Title: T-1 MUX VENDORS PREPARE WARES FOR ADVENT OF ISDN
Author: ECKERSON, WAYNE
Source: NETWORK WORLD
Date: 02/13/89 Vol.: 6 No.: 6 Index#: 00110-00

Title: TRIAL OF OPEN SYSTEMS INTERCONNECTION PROTOCOLS OVER ISDN
Author: EDGAR, C. A.
Source: REPORT # NISTIR - 89/4160
Date: 08/01/89 Vol.: No.: Index#: 00111-00

Title: EUROPE PUSHES ISDN TO BACK SINGLE MARKET
Author: EDWARDS, MORRIS
Source: COMMUNICATIONS NEWS
Date: 06/01/89 Vol.: 26 No.: 6 Index#: 00112-00

Title: COMPETITORS MATCHING AT&T IN THE MIGRATION TO ISDN
Author: EDWARDS, MORRIS
Source: COMMUNICATIONS NEWS
Date: 05/01/86 Vol.: 73 No.: 5 Index#: 00113-00

Title: WITHOUT DEVELOPING NECESSARY TEST PROCEDURES, THE USE OF ISDN CAN NEVER BECOME REALITY
Author: EVENCHIK, LEONARD ET.AL.
Source: COMMUNICATIONS NEWS
Date: 05/01/87 Vol.: 24 No.: 5 Index#: 00114-00

Title: DATA NETWORKS IN THE 90'S
Author: FORSON, HENRY
Source: COMMUNICATION NEWS
Date: 12/01/88 Vol.: 25 No.: 12 Index#: 00115-00

Title: THE DEVELOPMENT OF PROPER STANDARDS IS THE KEY TO TURNING THE DREAM OF ISDN INTO THE REALITY
Author: FUNG, KIT ET.AL.
Source: COMMUNICATIONS NEWS
Date: 01/01/87 Vol.: 24 No.: 1 Index#: 00116-00

Title: PROPOSAL AND IMPLEMENTATION OF OSI ORIENTED APPLICATION INTERFACE FOR ISDN
Author: FURUYA, N. ET.AL.
Source: KDD TECHNICAL JOURNAL
Date: 07/01/89 Vol.: No.: 141 Index#: 00117-00

Title: RESOURCE MANAGEMENT OF DIMENSIONING IN ATM NETWORKS
Author: GALLASSI, G.; KIGOLIO, G.; VERRI, L.
Source: IEEE NETWORK
Date: 05/01/90 Vol.: 4 No.: 3 Index#: 00117-20

Title: CRITICAL INTERNATIONAL ISSUES MUST BE RESOLVED IF THE PROMISE OF AN ISDN FUTURE IS TO BE KEPT
Author: GILLIS, LESLEY
Source: COMMUNICATIONS NEWS
Date: 01/01/87 Vol.: 24 No.: 1 Index#: 00117-40

Title: A CASE FOR PRIVATE ISDN
Author: GUNN, HOWARD
Source: TELECOMMUNICATIONS
Date: 05/01/90 Vol.: 24 No.: 5 Index#: 00118-00

Title: COLOUR FACSIMILE APPARATUS IN ISDN
Author: HAMPEL, H.
Source: TELEMATICA 88 CONFERENCE
Date: 01/01/88 Vol.: No.: Index#: 00119-00

Title: ISDN: CATALYST TOWARD AN INFORMATION SOCIETY
Author: HARPEL, TODD C.
Source: THESIS (MS) ITP - UNIVERSITY OF COLORADO/BOULDER
Date: 01/01/88 Vol.: No.: Index#: 00120-00

Title: ISDN APPLICATIONS: THEIR IDENTIFICATION AND DEVELOPMENT
Author: IFFLAND, FREDERICK C. ET.AL.
Source: IEEE NETWORK
Date: 09/01/89 Vol.: 3 No.: 5 Index#: 00120-50

Title: INTERNATIONAL ASPECTS OF ISDN - TAKING STOCK
Author: IRMER, T.
Source: TELEMATICA 88 CONFERENCE JUNE 88
Date: 01/01/88 Vol.: No.: Index#: 00121-00

Title: ISDN USER-NETWORK INTERFACE MANAGEMENT PROTOCOL
Author: ISHII, HIROSHI
Source: IEEE NETWORK
Date: 09/01/89 Vol.: 3 No.: 5 Index#: 00121-10

Title: ISDN OVER THE PACIFIC
Author: KAWASAKI, TATSUO
Source: TELECOMMUNICATIONS
Date: 08/01/90 Vol.: 24 No.: 8 Index#: 00122-00

Title: THE ROLE OF ISDN SIGNALING IN GLOBAL NETWORKS
Author: KEARNS, TIMOTHY J. ET.AL.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 07/01/90 Vol.: 28 No.: 7 Index#: 00123-00

Title: AN IXC'S LOOK AT GLOBAL ISDN
Author: KERO, T.
Source: TELEPHONY
Date: 04/23/90 Vol.: 218 No.: 17 Index#: 00242-00

Title: DO-IT YOURSELF ISDN
Author: KOENIG, ROGER L.
Source: DATA COMMUNICATIONS
Date: 05/01/89 Vol.: No.: Index#: 00123-11

Title: AN APPROACH TO THE MULTIFUNCTION GRAPHIC TERMINAL FOR THE ISDN ENVIRONMENT
Author: KOMIGA, TAKASHI ET.AL.
Source: IEEE NETWORK
Date: 09/01/89 Vol.: 3 No.: 5 Index#: 00123-20

Title: THE ISDN CHALLENGE IS MANAGEABLE IF THE USER IS ARMED WITH THE RIGHT NETWORK KNOWLEDGE
Author: LANGFORD, GREG
Source: COMMUNICATIONS NEWS
Date: 01/01/88 Vol.: 25 No.: 1 Index#: 00124-00

Title: ISDN TERMINAL PORTABILITY IN THE RBOC NETWORKS
Author: LASSERS, HAROLD

Source: IEEE NETWORK
Date: 09/01/89 Vol.: 3 No.: 5 Index#: 00125-00

Title: COMMON CHANNEL SIGNALING FOR INTERNATIONAL SERVICE APPLICATIONS
Author: LAWSEN, JOHN J. ET.AL.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 07/01/90 Vol.: 28 No.: 7 Index#: 00125-10

Title: STAND AND DELIVER: ISDN'S PROMISE TO THE PBX MARKET OF TOMORROW
Author: LEIBOWITZ, ED
Source: TELECONNECT
Date: 07/01/89 Vol.: 7 No.: 7 Index#: 00126-00

Title: WHAT EVER HAPPENED TO ISDN
Author: LEWIS, P. J.
Source: IEE REVIEW
Date: 10/01/90 Vol.: No.: Index#: 00126-10

Title: VISUAL TELEPHONY AS AN ISDN APPLICATION
Author: LIOU, MING L.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 02/01/90 Vol.: 28 No.: 2 Index#: 00127-00

Title: ISDN AND COMPUTER III
Author: LIPMAN, ANDREW D. ET.AL.
Source: SATELLITE COMMUNICATIONS
Date: 06/01/86 Vol.: 10 No.: 6 Index#: 00128-00

Title: INTERNETWORKING LANS VIA THE ISDN BEARER SERVICES
Author: MARSDEN, P. N.
Source: IEEE COLLOQUIUM ON INTERCONNECTION OF LANS MAY 90
Date: 01/01/90 Vol.: No.: Index#: 00130-00

Title: MULTI-SERVICE DEMAND ASSIGNMENT SYSTEM AIMING AT ISDN
Author: MATSUO, K. ET.AL.
Source: ICDSC-7 CONFERENCE MAY 86
Date: 01/01/86 Vol.: No.: Index#: 00029-00

Title: SCREEN BASED TELEPHONY
Author: MCNINCH, BOB
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 04/01/90 Vol.: 28 No.: 4 Index#: 00131-00

Title: ISDN PROTOCOLE
Author: MCROBERT, STEVE
Source: COMMUNICATIONS NEWS
Date: 12/01/88 Vol.: 25 No.: 12 Index#: 00132-00

Title: ISDN ADAPTERS MAKERS RACE TO SUPPORT NTI'S DMS-100
Author: MESSMER, ELLEN
Source: NETWORK WORLD
Date: 09/03/90 Vol.: 7 No.: 36 Index#: 00133-00

Title: TOWARD AN INTERNATIONAL BROADBAND ISDN STANDARD
Author: MINZER, S. E.
Source: TELECOMMUNICATIONS
Date: 10/01/87 Vol.: 21 No.: 10 Index#: 00133-10

Title: SIGNALING SYSTEM NO. 7: A TUTORIAL
Author: MODARRESSI, ABDI R. ET.AL.
Source:
Date: / / Vol.: No.: Index#: 00134-00

Title: ISDN IS HERE, WILL SOON BE THERE, AND NOW THE QUESTION IS IF AND WHEN IT WILL BE EVERYWHERE
Author: MORKEN, CAL
Source: COMMUNICATIONS NEWS
Date: 01/01/88 Vol.: 25 No.: 1 Index#: 00135-00

Title: INCEPTION OF INS EXPERIENCE MODEL SYSTEM SETS IN SERVICE (ISDN)
Author: MURAKAMI, T.
Source: JAPAN TELECOMMUNICATIONS REVIEW
Date: 01/01/85 Vol.: 27 No.: 1 Index#: 00136-00

Title: ISDN IS COMING, SO NOW'S THE TIME TO PREPARE FOR REALITY BY BECOMING A BANDWIDTH MANAGER
Author: NEVERS, DAVID
Source: COMMUNICATIONS NEWS
Date: 01/01/88 Vol.: 25 No.: 1 Index#: 00137-00

Title: ASSESSING THE ISDN REVOLUTION: IT'S ON ITS WAY AND IT WILL BE HERE SOONER THAN YOU MAY THINK
Author: POPKO, JOHN
Source: COMMUNICATIONS NEWS
Date: 10/01/86 Vol.: 23 No.: 10 Index#: 00138-00

Title: ASPECTS OF CCS7 NETWORK CONFIGURATIONS
Author: PUSCH, H.
Source: TELECOMMUNICATIONS
Date: 10/01/87 Vol.: 21 No.: 10 Index#: 00139-00

Title: ISDN: OVERVIEW AND ARCHITECTURAL CONCEPTS
Author: SCHOT, J. ET.AL.
Source: REPORT NO. MEMO-INF-88-42; ISDN-9-03-650202-0
Date: 10/01/87 Vol.: No.: Index#: 00141-00

Title: EXAMINING THE POTENTIAL APPLICATIONS. POSSIBILITIES FOR BUSINESS MAKING USE OF ISDN FEATURES.
Author: SIMONSON, RICHARD
Source: COMMUNICATIONS NEWS
Date: 01/01/87 Vol.: 24 No.: 1 Index#: 00141-20

Title: ISDN AND THE DEVELOPING WORLD
Author: SINGH, I. B.
Source: TELEPHONE ENGINEER AND MANAGEMENT
Date: 12/01/88 Vol.: 92 No.: 23 Index#: 00042-00

Title: WHAT'S RIGHT WITH ISDN
Author: SIROTA, WARREN
Source: COMMUNICATIONS NEWS
Date: 01/01/90 Vol.: 27 No.: 1 Index#: 00142-00

Title: ADVANCED DATA AND ISDN SERVICES IN THE DFS SATELLITE COMMUNICATIONS SYSTEM
Author: SLABON, RUEDIGER W. ET.AL.
Source: ICDSC-7 CONFERENCE MAY 86
Date: 01/01/86 Vol.: No.: Index#: 00043-00

Title: THE PROMISE OF ISDN STANDARDS
Author: SMITH, GAIL
Source: COMMUNICATIONS NEWS
Date: 07/01/89 Vol.: 26 No.: 7 Index#: 00144-00

Title: POLICE DEPT.'S BRI LINES TO SUPPORT VOICE, DATA, IMAGES
Author: SMITH, TOM
Source: NETWORK WORLD
Date: 07/23/90 Vol.: 7 No.: 30 Index#: 00143-00

Title: ISDN; AN INTRODUCTION
Author: STALLINGS, WILLIAM

Source: MACMILLIN PUBLISHING COMPANY, NEW YORK
Date: 01/01/89 Vol.: No.: Index#: 00145-00

Title: ISDN: WHAT IS ITS PROMISE?
Author: STEPHENS, GUY M.
Source: SATELLITE COMMUNICATIONS
Date: 06/01/89 Vol.: 13 No.: 7 Index#: 00044-00

Title: SOUTHWESTERN BELL TELEPHONE'S ISDN EXPERIENCE
Author: STEPHENSON, RICHARD W.
Source: IEEE NETWORK
Date: 09/01/89 Vol.: 3 No.: 5 Index#: 00145-20

Title: THE BUILDING BLOCKS OF ISDN ARE IN PLACE AND THE NETWORK WILL EVOLVE THROUGH THE DEMANDS OF USERS
Author: STEWART, ADAM
Source: COMMUNICATIONS NEWS
Date: 01/01/88 Vol.: 25 No.: 1 Index#: 00147-00

Title: ISDN 1989: POISED ON THE EDGE OF SUCCESS
Author: STEWART, ALAN
Source: COMMUNICATIONS NEWS
Date: 01/01/89 Vol.: 26 No.: 1 Index#: 00146-00

Title: CAN FEDS HANDLE ISDN?
Author: STEWART, ALAN
Source: COMMUNICATIONS NEWS
Date: 05/01/89 Vol.: 26 No.: 5 Index#: 00148-00

Title: ISDN INTERNET ENVIRONMENT AND STANDARDS ANALYSIS
Author: SU, J. ET.AL.
Source: GEORGIA INSTITUTE OF TECHNOLOGY REPORT NO. ASQBG-C-89-022
Date: 08/01/88 Vol.: No.: Index#: 00149-00

Title: SUCCESS OUT WEST
Author: TANZILLO, KEVIN
Source: COMMUNICATIONS NEWS
Date: 01/01/89 Vol.: 26 No.: 1 Index#: 00150-00

Title: A MAIL AND PROTOCOL CONVERSION NODE FOR ISDN FACSIMILIE APPLICATION
Author: TSUJI, HIROKUNI ET.AL.
Source: IEEE NETWORK
Date: 09/01/89 Vol.: 3 No.: 5 Index#: 00151-00

Title: DAVID SYSTEMS GETS $7M INVESTMENT FOR ISDN R AND D
Author: WALLACE, BOB
Source: NETWORK WORLD
Date: 01/30/89 Vol.: 6 No.: 4 Index#: 00152-00

Title: NICE GUYS REFUSE TO FINISH LAST IN ISDN
Author: WALLACE, BOB
Source: NETWORK WORLD
Date: 01/30/89 Vol.: 6 No.: 4 Index#: 00153-00

Title: TACTICAL ISDN TECHNOLOGY PROGRAM
Author: WEINSTEIN, C. J. ET.AL.
Source: MIT FINAL REPORT SEPT. 89 NO. ESD-TR-90-010
Date: 09/30/89 Vol.: No.: Index#: 00153-20

B-ISDN

Title: ISDN/87: BROADBAND NETWORKS FOR THE FUTURE
Author:
Source: THIRD INTERNATIONAL INTEGRATED SERVICES DIGITAL NETWORKS EXPOSITION
Date: 06/01/87 Vol.: No.: Index#: 00285-00

Title: VOCABULARY OF TERMS FOR BROADBAND ASPECTS OF ISDN
Author:
Source: CCITT BLUEBOOK RECOMMENDATION I.113
Date: 01/01/88 Vol.: 3 No.: 3.7 Index#: 00157-00

Title: EXCESS PROCESS POLICING SCHEME FOR BISDN
Author: AAGESEN, F. A. ET.AL.
Source:
Date: 01/18/90 Vol.: No.: Index#: 00201-00

Title: CONCEPT AND REALIZATION OF THE BROADBAND ISDN
Author: ANDRICH, W. ET.AL.
Source: ELECTRICAL COMMUNICATION
Date: 01/01/87 Vol.: 61 No.: 1 Index#: 00202-00

Title: PRESENT STATUS AND FUTURE TRENDS OF THE STUDY OF BROADBAND ISDN
Author: ASATANI, K. ET.AL.
Source: TRANSACTIONS OF THE INSTITUTE OF ELECTRONICS, INFORMATION AND COMMUNICATIONS ENGINEERS
Date: 11/11/89 Vol.: J72B-I No.: 11 Index#: 00203-00

Title: RACE (RESEARCH AND DEVELOPMENT IN ADVANCED TECH FOR EUROPE) 1989
Author: BLACKBURN, J. F.
Source: OFFICE OF NAVAL RESEARCH
Date: 03/01/89 Vol.: No.: Index#: 00205-01

Title: A PERSPECTIVE ON FUTURE LARGE SCALE TELELCOMMUNICATIONS ARCHITECTURES SUPPORTING BISDN SERVICES
Author: BLOOMFIELD, R. S. ET.AL.
Source: BROADBAND FOC/LAN EXPOSITION OCT. 1989
Date: 01/01/89 Vol.: No.: Index#: 00204-00

Title: ASYNCHRONOUS TRANSFER MADE BROADBAND ISDN
Author: BOLT, RAYMOND

Source: COMMUNICATIONS INTERNATIONAL
Date: 02/01/89 Vol.: 16 No.: 2 Index#: 00205-00

Title: BROADBAND ISDN: DYNAMIC FORCES IN EVOLUTION
Author: BROYLES III, SAMUEL K.
Source: THESIS (MS) ITP - UNIVERSITY OF COLORADO/BOULDER
Date: 01/01/89 Vol.: No.: Index#: 00206-00

Title: ROUTING AND RESOURCE CONTROL IN THE BROADBAND ISDN
Author: BURGIN, J. L.
Source: AUSTRAILIAN TELECOMMUNICATION RESEARCH
Date: 01/01/88 Vol.: 22 No.: 1 Index#: 00207-00

Title: ARCHITECTURES FOR FUTURE MULTIGIGABIT LIGHTWAVE NETWORKS
Author: BURR, W. E.
Source: NIST REPORT NO. NISTIR-90/4240
Date: 03/01/90 Vol.: No.: Index#: 00207-20

Title: A SECOND-GENERATION BISDN PROTOTYPE
Author: BUSSEY, H. E. ET.AL.
Source: INTERNATIONAL JOURNAL OF DIGITAL AND ANALOG CABLED SYSTEMS
Date: 10/01/88 Vol.: 1 No.: 4 Index#: 00208-00

Title: WORLD-WIDE STANDARDIZATION OF BROADBAND ISDN
Author: BYRNE, W. R. ET.AL.
Source: INTERNATIONAL JOURNAL OF DIGITAL AND ANALOG CABLED SYSTEMS
Date: 10/01/88 Vol.: 1 No.: 4 Index#: 00209-00

Title: BROADBAND ISDN TECHNOLOGY AND ARCHITECTURE
Author: BYRNE, W. R. ET.AL.
Source: IEEE NETWORK
Date: 01/01/89 Vol.: 3 No.: 1 Index#: 00210-00

Title: BROADBAND ISDN TECHNOLOGY AND ARCHITECTURE
Author: BYRNE, WILLIAM R. ET.AL.
Source: IEEE NETWORK
Date: 01/01/89 Vol.: 3 No.: 1 Index#: 00211-00

Title: A PACKET VIDEO/AUDIO SYSTEM USING THE ASYNCHRONOUS TRANSFER MODE
Author: CHAO, H. J. ET.AL.
Source: IEEE TRANSACTIONS AND CONSUMER ELECTRONICS
Date: 05/01/89 Vol.: 35 No.: 2 Index#: 00212-00

Title: ATM: A CONTRIBUTION TO THE DEBATE ON BROADBAND ISDN
Author: COUDREUSE, J. P.
Source: INTERNATIONAL JOURNAL OF DIGITAL AND ANALOG CABLED SYSTEMS
Date: 12/01/88 Vol.: 1 No.: 4 Index#: 00213-00

Title: BROADBAND ISDN AND PACKETSWITCHING
Author: DAY, A. ET.AL.
Source: TELECOMMUNICATION JOURNAL OF AUSTRALIA
Date: 01/01/89 Vol.: 39 No.: 1 Index#: 00214-00

Title: EVOLUTION FROM ISDN TO BISDN: A LOGICAL STEP TOWARDS ATM
Author: DE PRYCKER, M.
Source: COMPUTER COMMUNICATIONS
Date: 06/01/89 Vol.: 12 No.: 3 Index#: 00216-00

Title: RECENT DEVELOPMENTS IN BROADBAND - ISDN
Author: DE STIGTER, J.
Source: ISDN 88 CONFERENCE
Date: 01/01/88 Vol.: No.: Index#: 00217-00

Title: DATA COMMUNICATION IN AN ATM NETWORK
Author: DEPRYEKER, M.
Source: TELECOMMUNICATIONS (INTERNATIONAL ED.)
Date: 06/01/89 Vol.: 23 No.: 6 Index#: 00215-00

Title: BISDN
Author: DOMANN, G. H.
Source: JOURNAL OF LIGHTWAVE TECHNOLOGY
Date: 11/01/88 Vol.: 6 No.: 11 Index#: 00218-00

Title: BROADBAND NETWORK EVOLUTION IN TELECOM AUSTRALIA
Author: DOUGALL, CHARLES J.
Source: IEEE COMMMUNICATIONS MAGAZINE
Date: 04/01/90 Vol.: 28 No.: 4 Index#: 00219-00

Title: USERS CAN'T WAIT FOR PROMISE OF BROADBAND
Author: ECKERSON, WAYNE
Source: NETWORK WORLD
Date: 02/13/89 Vol.: 6 No.: 6 Index#: 00222-00

Title: NARROWBAND AND BROADBAND ISDN CPE DIRECTIONS
Author: EIGEN, D. J.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 04/01/90 Vol.: 28 No.: 4 Index#: 00220-00

Title: NARROWBAND AND BROADBAND ISDN CPE DIRECTIONS
Author: EIGEN, DARYL J.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 04/01/90 Vol.: 28 No.: 4 Index#: 00221-00

Title: BROADBAND ISDN
Author: FISHER, D. G.
Source: IEEE COMPUTER COMMUNICATIONS
Date: 08/01/88 Vol.: 11 No.: 4 Index#: 00223-00

Title: ON THE ROAD TO BROADBAND ISDN
Author: FOLDVIK, RANDOLPH G.
Source: THESIS (MS) ITP UNIVERSITY OF COLORADO/BOULDER
Date: 01/01/88 Vol.: No.: Index#: 00224-00

Title: BROADBAND SERVICE NEEDS
Author: FRAME, M.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 04/01/90 Vol.: 28 No.: 4 Index#: 00225-00

Title: BROADBAND SERVICE NEEDS
Author: FRAME, MIKE
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 04/01/90 Vol.: 28 No.: 4 Index#: 00226-00

Title: PROPOSAL ON BASIC STRUCTURE OF SIGNALLING SYSTEMS FOR NETWORKS BASED ON ATM
Author: FUJIOKA, M. ET.AL.
Source: TRANSACTION OF THE INSITIUTE OF ELECTRONICS, INFORMATION AND COMMUNICATIONS ENGINEERS
Date: 11/01/89 Vol.: J72B-I No.: 11 Index#: 00227-00

Title: CONCEPTUAL ISSUES FOR ATM
Author: GECHTER, JERRY ET.AL.
Source: IEEE NETWORK
Date: 01/01/89 Vol.: 3 No.: 1 Index#: 00228-00

Title: CONCEPTUAL ISSUES FOR ATM
Author: GECHTER, JERRY ET.AL.
Source: IEEE NETWORK
Date: 01/01/89 Vol.: 3 No.: 1 Index#: 00229-00

Title: WHICH WAY FOR BROADBAND SWITCHING?
Author: GILHOOLY, D.

Source: TELECOMMUNICATIONS
Date: 06/01/87 Vol.: 21 No.: 6 Index#: 00230-00

Title: THE POLITICS OF BROADBAND (NETWORKS)
Author: GILHOOLY, D.
Source: TELECOMMUNICATIONS (INTERNATIONAL EDITION)
Date: 06/01/88 Vol.: 22 No.: 6 Index#: 00231-00

Title: NETWORK EVOLUTION TOWARDS AN ATM-BASED B-ISDN
Author: GIORCELLI, S.
Source: CSELT TECHNICAL REPORTS
Date: 12/01/89 Vol.: 17 No.: 6 Index#: 00232-00

Title: SYNCHRONOUS OPTICAL NETWORKS AND BROADBAND ISDN PROTOCOLS
Author: HAC, A. ET.AL.
Source: COMPUTER
Date: 11/01/89 Vol.: 22 No.: 11 Index#: 00233-00

Title: ESTIMATION OF THE COST OF SUBSCRIBER - SUBSCRIBER CONNECTION IN BISDN
Author: HACKBARTH, K. D.
Source: FERNMELDE-INGENIEUR
Date: 03/01/89 Vol.: 43 No.: 3 Index#: 00235-00

Title: COSTS OF AN AVERAGE SUBSCRIBER RELATION IN THE BROADBAND ISDN
Author: HACKBARTH, K. D. ET.AL.
Source: FOURTH INTERNATIONAL PLANNING SYMPOSIUM
Date: 01/01/89 Vol.: No.: Index#: 00234-00

Title: BROADBAND INTEGRATED SERVICES DIGITAL NETWORKS
Author: HANDEL, R.
Source: TELECOMMUNICATIONS
Date: 04/01/87 Vol.: 21 No.: 4 Index#: 00236-00

Title: EVOLUTION OF ISDN TOWARDS BROADBAND ISDN
Author: HANDEL, R.
Source: IEEE NETWORK
Date: 01/01/89 Vol.: 3 No.: 1 Index#: 00237-00

Title: BROADBAND SWITCHING SYSTEM ARCHITECTURE
Author: HIRAIDE, K. ET.AL.
Source: IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS
Date: 10/01/87 Vol.: SAC-5 No.: 8 Index#: 00238-00

Title: AN ATM SELF-ROUTING SWITCH ARCHITECTURE
Author: HITOSHI, IMAGAWA ET.AL.
Source: INTERNATIONAL JOURNAL OF DIGITAL AND ANALOG CABLED SYSTEMS
Date: 10/01/88 Vol.: 1 No.: 4 Index#: 00239-00

Title: POSSIBLE APPLICATIONS IN BROADBAND NETWORKS (ISDN)
Author: JOBMANN, K. ET.AL.
Source: TELEMATICA CONFERENCE
Date: 01/01/88 Vol.: No.: Index#: 00240-00

Title: DEVELOPMENT OF THE BROADBAND ISDN (B-ISDN) NETWORK
Author: JUVONEN, R. ET.AL.
Source: SAEHKOE ELECTRICITY AND ELECTRONICS
Date: 04/01/90 Vol.: 63 No.: 4 Index#: 00241-00

Title: AN IXC'S LOOK AT GLOBAL ISDN
Author: KERO, T.
Source: TELEPHONY
Date: 04/23/90 Vol.: 218 No.: 17 Index#: 00242-00

Title: BROADBAND SWITCHING AND THROUGH SWITCHING IN THE PRELIMINARY BROADBAND NETWORK (ISDN)
Author: KOECK, K.
Source: TELEMATICA CONFERENCE
Date: 01/01/88 Vol.: No.: Index#: 00243-00

Title: BROADBAND ISDN - A GENERAL PURPOSE UNIVERSAL COMMUNICATIONS BUS?
Author: KUMAR, A.
Source: INTERNATIONAL CONFERENCE ON DATA COMMUNICATIONS
Date: 01/01/88 Vol.: No.: Index#: 00244-00

Title: THE METAMORPHOSIS OF THE NETWORK (BROADBAND ISDN)
Author: LAVIA, A.
Source: TELEPHONY
Date: 12/25/89 Vol.: 217 No.: 27 Index#: 00245-00

Title: PACKET-SWITCHED SERVICES FOR ISDN SUBSCRIBERS
Author: LECLERC, F. ET.AL.
Source: COMMUTATION AND TRANSMISSION
Date: 01/01/89 Vol.: 11 No.: 4 Index#: 00246-00

Title: A BROADBAND ISDN EXPERIMENTAL PROTOTYPE SYSTEM
Author: LINNELL, L. ET.AL.

Source: 13TH EUROPEAN CONFERENCE ON OPTICAL COMMUNICATION TECHNICAL DIGEST
Date: 01/01/87 Vol.: No.: Index#: 00247-00

Title: A HYBRID LIGHTWAVE TRANSMISSION SYSTEM FOR SUBSCARRIER MULTIPLEXED VIDEO AND DIGITAL BISDN SERVICES IN THE LOCAL LOOP.
Author: LO, C. N.
Source: JOURNAL OF LIGHTWAVE TECHNOLOGY
Date: 11/01/89 Vol.: 7 No.: 11 Index#: 00248-00

Title: WHTA, WHEN AND HOW? (BROADBAND ISDN)
Author: LUTKOWITZ, M.
Source: TELEPHONE ENGINEER AND MANAGEMENT
Date: 02/15/90 Vol.: 94 No.: 4 Index#: 00249-00

Title: EXPERIMENTATION ON ASYNCHRONOUS SWITCHING TECHNIQUES FOR BISDN
Author: MELEN, R.
Source: INTERNATIONAL JOURNAL OF DIGITAL AND ANALOG CABLED SYSTEMS
Date: 10/01/88 Vol.: 1 No.: 4 Index#: 00250-00

Title: IMPLEMENTATION OF A BROADBAND INTEGRATED SERVICES HYBRID NETWORK
Author: MESIYA, M. F.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 01/01/88 Vol.: 26 No.: 1 Index#: 00251-00

Title: TOWARD AN INTERNATIONAL BROADBAND ISDN STANDARD
Author: MINZER, S. E.
Source: TELECOMMUNICATIONS
Date: 10/01/87 Vol.: 21 No.: 10 Index#: 00133-10

Title: NEW DIRECTIONS IN SIGNALING FOR BROADBAND ISDN
Author: MINZER, S. E. ET.AL.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 02/01/89 Vol.: 27 No.: 2 Index#: 00252-00

Title: A BROADBAND ATM SWITCHING SYSTEM
Author: MURAKAMI, K. ET.AL.
Source: ELECTRONICS AND COMMUNICATIONS IN JAPAN, PART I
Date: 12/01/89 Vol.: 72 No.: 12 Index#: 00253-00

Title: TECHNOLOGIES TOWARDS BROADBAND ISDN
Author: MURANO, K. ET.AL.

Source: IEEE COMMUNICATIONS MAGAZINE
Date: 04/01/90 Vol.: 28 No.: 4 Index#: 00254-00

Title: TECHNOLOGIES TOWARDS BROADBAND ISDN
Author: MURANO, KAZUO ET.AL.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 04/01/90 Vol.: 28 No.: 4 Index#: 00255-00

Title: A MIGRATION STRATEGY TO BISDN
Author: NIAN-CHYI, HUANG
Source: BROADBAND (FOC/LAN) 89 CONFERENCE
Date: 01/01/89 Vol.: No.: Index#: 00256-00

Title: BIGFON AND ITS UTILIZATION POSSIBILITIES
Author: OHNSORGE, H.
Source: NACHRICHTENTECHNISCHE ZEITSCHRIFT
Date: 12/01/84 Vol.: 37 No.: 12 Index#: 00257-00

Title: DISCUSSION OF EMERGING BROADBAND ISDN STANDARDS
Author: PARASANNA, P. K. ET.AL.
Source: IEEE TRANSACTIONS ON CONSUMER ELETRONICS
Date: 05/01/89 Vol.: 35 No.: 2 Index#: 00258-00

Title: TERMINAL-TO-NETWORK COMMUNICATION IN AN ATM BASED ISDN
Author: PAUWELS, B.
Source: INTERNATIONAL JOURNAL OF DIGITAL AND ANALOG CABLED SYSTEMS
Date: 01/01/89 Vol.: 2 No.: 1 Index#: 00259-00

Title: FROM BROADBAND ISDN TO MULTIMEDIA COMPUTER NETWORKS
Author: POPESCU-SELETIN, R.
Source: COMPUTER NETWORKS AND ISDN SYSTEMS
Date: 11/24/89 Vol.: 18 No.: 1 Index#: 00260-00

Title: EVOLUTION OF ISDN TOWARDS BROADBAND ISDN
Author: RAINER, HANDEL
Source: IEEE NETWORK
Date: 01/01/89 Vol.: 3 No.: 1 Index#: 00261-00

Title: BROADBAND ISDN AND THE SUBSCRIBER PREMISES NETWORK
Author: RAO, S.
Source: TELECOMMUNICATIONS (INTERNATIONAL EDITION)
Date: 06/01/88 Vol.: 22 No.: 6 Index#: 00262-00

Title: ATM SWITCHES - BASIC ARCHITECTURES AND THEIR PERFORMANCE
Author: RATHGEB, E. P. ET.AL.

Source: INTERNATIONAL JOURNAL OF DIGITAL AND ANALOG CABLED SYSTEMS
Date: 10/01/89 Vol.: 2 No.: 4 Index#: 00263-00

Title: PROTOCOLS FOR ATM ACCESS NEWORKS
Author: RIDER, MICHAEL J.
Source: IEEE NETWORK
Date: 01/01/89 Vol.: 3 No.: 1 Index#: 00264-00

Title: STANDARDS GET BACKING.(SYNCHRONOUS OPTICAL NETWORK, OR SONET, AND ATM)
Author: ROCKWELL, MARK
Source: COMMUNICATIONS WEEK
Date: 10/23/89 Vol.: No.: 271 Index#: 00265-00

Title: ISDN GETS GLOBAL EMBRACE
Author: SAGHAFI, MASSOUD M. ET.AL.
Source: TELEPHONY
Date: 04/23/90 Vol.: 218 No.: 17 Index#: 00266-00

Title: NETWORK ARCHITECTS PLAN BROADENING OF FUTURE ISDN
Author: SAZEGARI, STEVEN A.
Source: DATA COMMUNICATIONS
Date: 07/01/87 Vol.: No.: Index#: 00267-00

Title: EFFORTS FOR NATIONWIDE BROADBAND ISDN
Author: SHIMAMURA, K. ET.AL.
Source: JOURNAL OF THE INSTITUTE OF TELEVISION ENGINEERS OF JAPAN
Date: 03/01/89 Vol.: 43 No.: 3 Index#: 00268-00

Title: BRAODBAND STANDARDS PROGRESS AND FUTURE POSSIBILITIES
Author: SINHA, R.
Source: BROADBAND (FOC/LAN) 89 CONFERENCE
Date: 01/01/89 Vol.: No.: Index#: 00269-00

Title: OPEN NETWORK ARCHITECTURES AND BROADBAND ISDN
Author: SOLOMON, R.J.
Source: ISDN: EVOLVING TO ISDN IN NORTH AMERICA CONFERENCE SEPT. 1987
Date: 01/01/87 Vol.: No.: Index#: 00270-00

Title: BROADBAND ISDN - SERVICE VISIONS AND TECHNOLOGICAL REALITIES
Author: SPEARS, D. R.
Source: INTERNATIONAL JOURNAL OF DIGITAL AND ANALOG CABLED SYSTEMS
Date: 01/01/88 Vol.: 1 No.: 1 Index#: 00271-00

Title: BROADBAND ISDN SWITCHING CAPABILITIES FROM A SERVICES PERSPECTIVE
Author: SPEARS, D.R.
Source: IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS
Date: 10/01/87 Vol.: No.: 8 Index#: 00272-00

Title: ISDN; AN INTRODUCTION
Author: STALLINGS, WILLIAM
Source: MACMILLIN PUBLISHING COMPANY, NEW YORK
Date: 01/01/89 Vol.: No.: Index#: 00145-00

Title: CCITT STANDARDS FORESHADOW BROADBAND ISDN
Author: STALLINGS, WILLIAM
Source: TELECOMMUNICATIONS
Date: 03/01/90 Vol.: 24 No.: 3 Index#: 00273-00

Title: ISDN: FROM ITS CURRENT REALITY TO ITS BROADBAND FUTURE
Author: SUMMER, ERIC E.
Source: IEEE NETWORK
Date: 01/01/89 Vol.: 3 No.: 1 Index#: 00274-01

Title: TECHNOLOGY PERSPECTIVE
Author: SUMNER, ERIC E.
Source: IEEE NETWORK
Date: 01/01/89 Vol.: 3 No.: 1 Index#: 00274-00

Title: BROADBAND ISDN ATM LAYER MANAGEMENT: OPERATION, ADMINISTRATION AND MAINTENANCE CONSIDERATIONS
Author: SUSUMU, YONEDA
Source:
Date: 05/01/90 Vol.: 4 No.: 3 Index#: 00274-20

Title: PACKET-SATELLITE NETWORKS: UPDATING AND EXPANDING THE HYBRID CONCEPT
Author: TAFFEL, A. B.
Source: DATA COMMUNICATIONS
Date: 11/01/87 Vol.: 16 No.: 12 Index#: 00275-00

Title: UPGRADING STRATEGIES FOR BISDN SUBSCRIBER LOOPS
Author: TAKASAKI, Y.
Source: JOURNAL OF LIGHTWAVE TECHNOLOGY
Date: 11/01/89 Vol.: 7 No.: 11 Index#: 00277-00

Title: PRELIMINARY STUDIES FOR UPGRADABLE BROADBAND ISDN PLANNING
Author: TAKOSAKI, Y.
Source: 1ST WORLD ELECTRONIC MEDIA SYMPOSIUM
Date: 01/01/89 Vol.: No.: Index#: 00276-00

Title: MIGRATION TO BROADBAND ISDN
Author: TODA, I.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 04/01/90 Vol.: 28 No.: 4 Index#: 00278-00

Title: MIGRATION TO BROADBAND ISDN
Author: TODA, IWAO
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 04/01/90 Vol.: 28 No.: 4 Index#: 00279-00

Title: A BISDN CUSTOMER ACCESS ARCHITECTURE OPTIMIZED IN RELATION TO NETWORK IMPLEMENTATION TECHNOLOGY
Author: TRONDOLI, A. ET.AL.
Source: INTERNATIONAL JOURNAL OF DIGITAL AND ANALOG CABLED SYSTEMS
Date: 07/01/89 Vol.: 2 No.: 3 Index#: 00280-00

Title: TELECOMMUNICATIONS IN THE COMING DECADES
Author: WEINSTEIN, STEPHEN B.
Source: IEEE SPECRTRUM
Date: 11/01/87 Vol.: No.: 0018-92 Index#: 00281-00

Title: COMPARISON OF ATM SWITCHING ARCHITECTURES
Author: WULLEMAN, R. ET.AL.
Source: INTERNATIONAL JOURNAL OF DIGITAL AND ANALOG CABLED SYSTEMS
Date: 10/01/89 Vol.: 2 No.: 4 Index#: 00282-00

Title: INTRODUCING THE DISTRIBUTED HIGH-THROUGHPUT PACKET SWITHCING SYSTEMS INTO THE DDX-P NETWORK
Author: YANO, A.
Source: JAPAN TELECOMMUNICATIONS REVIEW
Date: 04/01/87 Vol.: 29 No.: 2 Index#: 00284-00

Title: BROADBAND ISDN ATM LAYER MANAGEMENT: OPERATIONS ADMINISTRATION AND MAINTENANCE CONSIDERATIONS
Author: YONEDA, S.
Source: IEEE NETWORK
Date: 05/01/90 Vol.: 4 No.: 3 Index#: 00283-00

Frame Relay or Switching

Title: STUDY OF SSIN PARALLEL PROCESSING INTERCONNECTION NETWORKS
Author: AGRAWAL, D. P.
Source: NORTH CAROLINA STATE UNIVERSITY AT RALEIGH
Date: / / Vol.: No.: Index#: 00311-00

Title: SS/TDMA SATELLITE SYSTEM WITH ON-BOARD TST SWITCHING STAGE
Author: ALARIA, G.B.; PENNONI, G.
Source: INTERNATIONAL CONFERENCE ON COMMUNICATIONS
Date: 06/01/84 Vol.: 12 No.: Index#: 00300-01

Title: USER'S GUIDE TO FRAME RELAY
Author: BHUSHAN, BRIJ
Source: TELECOMMUNICATIONS
Date: 07/01/90 Vol.: No.: Index#: 00300-00

Title: OVERLOAD CONTROL FOR SWITCHES OF COMMUNICATION SYSTEMS: A TWO-PHASE MODEL OR CALL REQUEST PROCESSING
Author: BOLL, R.K. ET.AL.
Source: NASA REPORT NO. CWI-OS-R8601,B8664684
Date: 01/01/86 Vol.: No.: Index#: 00312-00

Title: FRAME RELAY ISDN PACKET BEARER SERVICE
Author: CARSON, MARGARET E.P.
Source: THESIS (MS) ITP UNIVERSITY OF COLORADO/BOULDER
Date: 01/01/89 Vol.: No.: Index#: 00301-00

Title: A MULTIBEAM PACKET SATALLITE USING RANDOM ACCESS TECHNIQUES
Author: CHANG, J.F.
Source: IEEE TRANSACTIONS ON COMMUNICATIONS
Date: 10/01/83 Vol.: COM-31 No.: Index#: 00301-02

Title: ANALYSIS AND DESIGN OF A HIGHLY RELIABLE TRANSPORT ARCHITECTURE FOR ISDN FRAME RELAY NETWORKS
Author: CHEN, K.J. ET.AL.
Source: IEEE JOURNAL ON SELECTED AREAS OF COMMUNICATION
Date: 10/01/89 Vol.: 7 No.: 8 Index#: 00313-00

Title: CALCULUS FOR NETWORK DELAYS AND A NOTE ON TOPOLOGIES, OF INTERCONNECTION NETWORKS
Author: CRUZ, R.L.
Source: NATIONAL SCIENCE FOUNDATION REPORT # UILU-ENG-87-229 NSF/ENG-8708

Date: 07/01/87 Vol.: No.: Index#: 00314-00

Title: GEIS TO BOOST SNA NET WITH FRAME RELAY
Author: DESMOND, PAUL
Source: NETWORK WORLD
Date: 09/24/90 Vol.: 7 No.: 39 Index#: 00301-01

Title: CONGESTION CONTROL IN ISDN FRAME RELAY NETWORKS
Author: DOSHI, B.T.
Source: AT&T TECHNICAL JOURNAL
Date: 11/12/88 Vol.: 67 No.: 6 Index#: 00315-00

Title: WHAT USERS CAN EXPECT FORM NEW VIRTUAL WIDEBAND SERVICES
Author: FLEMING, STEPHEN
Source: TELECOMMUNICATIONS
Date: 10/01/90 Vol.: No.: Index#: 00302-00

Title: ON BOARD DEMAND SCHEDULING OF A SS/TDMA MULTIBEAM SATELLITE...
Author: FRANK, A.J. AND STERN, T.E.
Source: INTERNATIONAL CONFERENCE ON DIGITAL SATELLITE COMMUNICATIONS 6TH
Date: 01/01/83 Vol.: No.: Index#: 00302-01

Title: NEAR REALTIME CSG RENDERING USING TREE NORMALIZATION AND GEOMETRIC PRUNING
Author: GOLDFEATHER, J.
Source: IEEE COMPUTER GRAPHICS AND APPLICATIONS
Date: 05/01/89 Vol.: 9 No.: 3 Index#: 00316-00

Title: MINIMIZING THE NUMBER OF SWITCHINGS IN AN SS/TDMA SYSTEM
Author: GOPAL, I.; WONG, C.K.
Source: SATELLITE AND COMPUTER COMMUNICATIONS; PROC. OF INTN'L SYMPOSIUM
Date: 01/01/83 Vol.: No.: Index#: 00302-02

Title: A SELF-ROUTING MULTISTAGE SWITCHING NETWORK FOR B-ISDN
Author: KIM, HYONG S.
Source: IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS
Date: 04/01/90 Vol.: 8 No.: 3 Index#: 00310-01

Title: SPEECH CODING TECHNOLOGY FOR ATM NETWORKS
Author: KITAWAKI, N. ET.AL.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 01/01/90 Vol.: 28 No.: 1 Index#: 00303-00

Title: EVALUATING FRAME RELAY AS THE HIGH THROUGHPUT PACKET TECHNOLOGY FOR CORPS. OF THE 90'S
Author: KORPI, NANCY A.
Source: MS TELECOM THESIS FALL '90
Date: 10/01/90 Vol.: No.: Index#: 00304-00

Title: PACKET SWITCHING AND ISDN: HOW DOES IT WORK
Author: KUTREY, JOHN
Source: TELEPHONE ENGINEER AND MANAGEMENT
Date: 12/01/88 Vol.: No.: Index#: 00305-00

Title: PACKET MODE SERVICES
Author: LAI, WAI SUM
Source: COMPUTER COMMUNICATIONS
Date: 02/01/89 Vol.: 12 No.: 1 Index#: 00318-00

Title: SOME EXPERIENCE WITH LAN INTERCONNECTION VIA FRAME RELAYING
Author: LAMONT, JIM ET.AL.
Source: IEEE NETWORK
Date: 09/01/89 Vol.: 3 No.: 5 Index#: 00306-00

Title: IMPART OF CCITT MHS STRUCTURE ON PERFORMANCE
Author: LEE, PAUL
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 09/01/90 Vol.: 28 No.: 9 Index#: 00307-00

Title: ITALSAT SATELLITE ON-BOARD BASEBAND PROCESSOR
Author: MARCONICCHIO, F.
Source: TELESPACIO ROME GLOBCOM CONFERENCE PAPER
Date: 01/01/87 Vol.: No.: Index#: 00913-00

Title: DOING BUSINESS ELECTRONICALLY: FRAME RELAY PROMISES AND PITFALLS
Author: MCQUINLAN, J.
Source: BUSINESS COMMUNICATIONS REVIEW
Date: 11/01/89 Vol.: 19 No.: 11 Index#: 00319-00

Title: DELAY ANALYSIS OF PACKET SWITCHING SYSTEM WITH A SATELLITE HAVING PROCESSING CAPABILITY
Author: MINE, H.; OHNO, K.; SHIOYANA, T.
Source: IEEE TRANSACTIONS ON COMMUNICATIONS
Date: / / Vol.: COH-32 No.: Index#: 00307-01

Title: MULTIPLE ROUTING CIRCUIT COST MINIMIZATION FOR A TRANSMISSION NETWORK
Author: MOCCI, U.
Source: NASA REPORT NO. FUB-38-1979
Date: 12/01/79 Vol.: No.: Index#: 00320-00

Title: ANALYSIS OF A DISCRETE TIME SINGLE-SERVER QUEUE WITH BURSTY INPUTS FOR TRAFFIC CONTROL IN ATM NETWORK
Author: MURATA, MASAYUKI
Source: IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS
Date: 04/01/90 Vol.: 8 No.: 3 Index#: 00310-02

Title: ANALYSIS AND APPLICATION OF FRAMED ALOHA CHANNEL IN SATELLITE PACKET SWITCHING NETWORKS
Author: OKADA, H.; IGARASHI, Y.; NAKANISHI, Y.
Source: ELECTRONICS AND COMMUNICATIONS IN JAPAN
Date: 08/01/77 Vol.: 60 No.: Index#: 00307-02

Title: A TST/SS-TDMA TELECOMMUNICATIONS SYSTEM - FROM CABLE TO SWITCHBOARD IN THE SKY
Author: PENNONI, G.
Source: ESA
Date: 01/01/84 Vol.: 8 No.: 2 Index#: 00307-03

Title: ORBITAL EFFICIENCY THROUGH SATELLITE DIGITAL SWITCHING
Author: SCARCELLA, T.; AND ABBOT, R.V.
Source: IEEE COMMUNICAITONS MAGAZINE
Date: 05/01/83 Vol.: 21 No.: Index#: 00722-00

Title: CIRCUIT AND PACKET INTEGRATED SWITCHING IN A SATELLITE COMMUNICATION CHANNEL
Author: SUDA, T.; HASEGAWA, T.
Source: ELECTRONICS AND COMMUNICATIONS IN JAPAN
Date: 02/01/82 Vol.: 65 No.: Index#: 00307-04

Title: FAST PACKET SWITCH ARCHITECTURES FOR B-ISDN
Author: TOBAGI, FOUAD A.
Source: PROCEEDING OF THE IEEE
Date: 01/01/90 Vol.: 78 No.: 1 Index#: 00308-00

Title: APPROXIMATE ANALYSIS OF TIME SYNCHRONOUS PACKET NETWORKS
Author: VITABI, ANDREW M.
Source: IEEE JOURNAL OF SELECTED AREAS IN COMMUNICATIONS
Date: 09/01/86 Vol.: 4 No.: 6 Index#: 00322-00

Title: NETWORK AND MODEL ARCHITECTURES FOR THE INTERNET WORKING BETWEEN FRAME RELAYING SERVICES
Author: WAI, SUM LAI
Source: COMPUTER COMMUNICATION REVIEW
Date: 01/01/89 Vol.: 19 No.: 1 Index#: 00308-01

Title: USERS TAKE WARY VIEW OF FRAME RELAY
Author: WALLACE, BOB
Source: NETWORK WORLD
Date: 10/22/90 Vol.: 7 No.: 43 Index#: 00309-00

Title: MULTIMEDIA TRAFFIC MANAGEMENT PRINCIPLES FOR GUARANTEED ATM NETWORK PERFORMANCE
Author: WOODRUFF, GILLIAN M.
Source: IEEE JOURNAL ON SEL. AREAS IN COMMUNICATIONS
Date: 04/01/90 Vol.: 8 No.: 3 Index#: 00310-00

Computer Networks and Satellites

Title: SATELLITE DATA NETWORKS FOR NATIONAL DEVELOPMENT
Author: ABRAMSON, NORMAN
Source: TELECOMMUNICATION POLICY
Date: 03/01/84 Vol.: 18n1 No.: Index#: 00400-02

Title: CONSUMER DRIVEN DEMAND: MEANS HEALTHY SNG MARKET OUTLOOK
Author: BLUM, STEPHEN A.
Source: VIA SATELLITE
Date: 12/01/90 Vol.: V No.: 12 Index#: 00422-00

Title: USERS TALK VSATS PART I
Author: CALDWELL, RICHARD
Source: VIA SATELLITE
Date: 04/01/88 Vol.: 3 No.: 4 Index#: 00423-00

Title: USERS TALK VSATS PART II
Author: CALDWELL, RICHARD
Source: VIA SATELLITE
Date: 05/01/89 Vol.: 4 No.: 5 Index#: 00424-00

Title: THE MORE TOWARD DATA
Author: CALDWELL, RICHARD H.
Source: SATELLITE COMMUNICATIONS
Date: 02/01/87 Vol.: No.: Index#: 00400-00

Title: CCSDS TELEMETRY SYSTEMS EXPERIENCE OF GODDARD SPACE FLIGHT CENTER
Author: CARPER, RICHARD D. ET.AL.
Source: IEEE NETWORK
Date: 09/01/90 Vol.: 4 No.: 5 Index#: 00401-00

Title: CORPORATE NETWORKS AND THE COMPETITIVE EDGE
Author: CHASE, SCOTT
Source: VIA SATELLITE
Date: 01/01/89 Vol.: 4 No.: 1 Index#: 00425-00

Title: VSAT REALITIES: THE INDUSTRY SPEAKS
Author: CHASE, SCOTT
Source: VIA SATELLITE
Date: 10/01/88 Vol.: 3 No.: 10 Index#: 00426-00

Title: RADIO AND SATELLITES: THE NEW NETWORKS, THE NEW OPPORTUNITIES
Author: CHASE, SCOTT
Source: VIA SATELLITE
Date: 09/01/88 Vol.: 3 No.: 9 Index#: 00427-00

Title: VSATS IN AMERICA
Author: CHASE, SCOTT
Source: VIA SATELLITE
Date: 11/01/90 Vol.: V No.: 11 Index#: 00428-00

Title: FLYAWAYS AND TRANSPORTABLES
Author: CHASE, SCOTT
Source: VIA SATELLITE
Date: 11/01/88 Vol.: 3 No.: 11 Index#: 00431-01

Title: BY SHARING A VSAT VAN, A SMALL USER IS ABLE TO GET THE SAME NEWORK SUPPORT AS LARGE USER
Author: CLARK, AL ET.AL.
Source: COMMUNICATIONS NEWS (SPECIAL REPORT: SATELLITE COMMUNICATIONS)
Date: 03/01/87 Vol.: No.: Index#: 00406-02

Title: VSAT BASED VIDEOCONFERENCING NETWORKS
Author: COUIAMAWI, E.R.
Source: PTC 1990 CONFERENCE
Date: 01/14/90 Vol.: No.: Index#: 00450-00

Title: S. AMERICAN CARRIERS SUPPORT DIGITAL LINKS
Author: CROCKETT, BARTON
Source: NETWORK WORLD
Date: 09/24/90 Vol.: 7 No.: 39 Index#: 00429-00

Title: VIDEO CONFERENCING NETWORK IS LINKED BY SATELLITE TO 26 EARTH STATIONS
Author: DANNA, SAMMY
Source: COMMUNICATIONS NEWS
Date: 02/01/86 Vol.: 23 No.: 2 Index#: 00402-00

Title: MICRO EARTH-STATIONS-TECHNOLOGY AND APPLICATIONS
Author: DEMAN, CRAIG
Source: TELEMATICS AND INFORMATICS
Date: 01/01/87 Vol.: 4 No.: 1 Index#: 00443-00

Title: VSAT NET GIVES MCKESSON COMPETITIVE EDGE, SAVINGS
Author: DESMOND, PAUL
Source: NETWORK WORLD
Date: 10/24/88 Vol.: 5 No.: 43 Index#: 00430-00

Title: THE SHARE A HUB ALTERNATIVE EMERGES
Author: EAGLE, BRYAN M.
Source: VIA SATELLITE
Date: 11/01/88 Vol.: 3 No.: 11 Index#: 00431-00

Title: DATA DRIVING CHRYSLER'S VSAT NETWORK
Author: ECKEL, KATHY
Source: SATELLITE COMMUNICATIONS
Date: 05/01/89 Vol.: No.: Index#: 00403-00

Title: DEVELOPMENT OF STANDARDS PROMISES TO ENSURE THE MULTIVENDOR INTEROPERABILITY OF NETWORKS
Author: EDWARDS, MORRIS
Source: COMMUNICATIONS NEWS
Date: 07/01/86 Vol.: No.: Index#: 00420-01

Title: LESS DEVELOPED COUNTRIES AND SATELLITE COMMUNICATIONS
Author: EL KOUCH, RACHID
Source: THESIS (MS) ITP-UNIVERSITY OF COLORADO/BOULDER
Date: 01/01/89 Vol.: No.: Index#: 00404-00

Titleitle: THE GALILEO ORBITER: COMMAND AND TELEMETRY SUBSYSTEMS ON THEIR WAY TO JUPITER
Author: ERICKSON, JAMES K.
Source: IEEE NETWORK
Date: 09/01/90 Vol.: 4 No.: 5 Index#: 00401-01

Title: DEMONSTRATION OF A LOCO COST TRACKING MECHANISM FOR C-BAND VSAT APPLICATIONS
Author: FAINE, E. A.
Source: PTC 1990 CONFERENCE
Date: 01/01/90 Vol.: No.: Index#: 00404-01

Title: SNG NETWORK IS DESIGNED FOR TRANSPORTABLE UPLINKS
Author: FLYNN, BRANWELL
Source: COMMUNICATIONS NEWS
Date: 04/01/86 Vol.: 23 No.: 4 Index#: 00405-00

Title: HOW TO AVOID PITFALLS AND PRATFALLS WHEN BUYING YOUR OWN VSAT SATELLITE NETWORK AND SERVICE
Author: FRIEDMAN, DAVID
Source: COMMUNICATIONS NEWS (SPECIAL REPORT: SATELLITE COMMUNICATIONS)
Date: 03/01/87 Vol.: No.: Index#: 00406-00

Title: TELESCIENCE TESTBED PILOT PROGRAM QUARTERLY REPORT
Author: GALLAGHER, M.L. ET.AL.
Source: REPORT NO. NAS 1.26:184594;RIACS-M88.5;NASA-CR-184592
Date: / / Vol.: No.: Index#: 00432-00

Title: VSAT TECHNOLOGY FOR TODAY AND FOR THE FUTURE PART 6
Author: GARNER, WILLIAM
Source: COMMUNICATIONS NEWS
Date: 03/01/88 Vol.: 75 No.: 3 Index#: 00908-00

Title: USAT TECHNOLOGY FOR TODAY AND FOR THE FUTURE PART 7
Author: GOLDING, LEN
Source: COMMUNICATIONS NEWS
Date: 04/01/88 Vol.: 25 No.: 4 Index#: 00016-00

Title: COMMUNICATION SATELLITES AND THE HDLC PROTOCOL
Author: GROTHE, DAVID ET.AL.
Source: SATELLITE COMMUNICATIONS
Date: 09/01/89 Vol.: No.: Index#: 00407-00

Title: SATELLITES IN CONTINGENCY PLANNING
Author: HAWKINS, DON
Source: COMMUNICATIONS NEWS
Date: 01/01/89 Vol.: 26 No.: 1 Index#: 00433-00

Title: A MOBILE ISDN PROTOCOL ARCHITECTURE
Author: HAYAKAWA, FUMIYASU
Source: AT&T LIBRARY NETWORK/IEEE
Date: 03/01/88 Vol.: No.: Index#: 00408-00

Title: CCSDS ADVANCED ORBITING SYSTEMS: INTL DATA COMM STANDARD FOR SPACE STATION FREEDOM
Author: HOOKE, ADRIAN J.
Source: IEEE NETWORK
Date: 09/01/90 Vol.: 4 No.: 5 Index#: 00401-02

Title: ECONOMICS OF PRIVATE PACKET SWITCHING AND VSAT NETWORKS
Author: HOSSEIN, M.
Source: IEEE NETWORK
Date: 05/01/89 Vol.: 3 No.: 3 Index#: 00409-00

Title: QUALCOMM: MESSAGES ON THE MOVE
Author: HOUSE, JIM
Source: VIA SATELLITE
Date: 09/01/89 Vol.: 4 No.: 9 Index#: 00435-00

Title: TODAY'S VSAT NETWORKS
Author: HOWES, KAREN J.P.
Source: VIA SATELLITE
Date: 01/01/90 Vol.: V No.: 1 Index#: 00436-00

Title: SMALL APARTURE EARTH STATIONS CAN BE ALTERNATIVE TO PRIVATE LINE NETWORKS
Author: HUANG, LARRY
Source: COMMUNICATIONS NEWS
Date: 03/01/86 Vol.: 23 No.: 3 Index#: 00410-00

Title: VSAT TECH. FOR TODAY AND FOR THE FUTURE-PART 5 PLANNING AND IMPLEMENTING THE NETWORK
Author: JONES, LAWRENCE
Source: COMMUNICATIONS NEWS
Date: 02/01/88 Vol.: No.: Index#: 00411-00

Title: THE HYBRID APPROACH: MIXING SATELLITE WITH LAND BASED SOLUTIONS
Author: KAMAL, CHERIN S.
Source: COMMUNICATIONS NEWS
Date: 03/01/90 Vol.: No.: Index#: 00412-00

Title: MULTIBEAM SYSTEM APPLICATIONS AND IMPACT ON SATELLITE COMMUNICATIONS
Author: KAWAI, M. AND NAKAYA, K.
Source: NTT RADIO/41ST CONGRESS OF INTERNATIONAL ASTRONAUTICAL FEDERATION
Date: 10/06/90 Vol.: No.: IAF-90- Index#: 01012-00

Title: EMBRACING VSATS
Author: KERVER, TOM
Source: SATELLITE COMMUNICATIONS
Date: 05/01/87 Vol.: No.: Index#: 00413-00

Title: THE POTENTIAL OF THE INMARSAT STANDARD-C SYSTEM IN THE PACIFIC REGION
Author: KHADEM, RAMIN ET.AL.
Source: PTC 1990 CONFERENCE
Date: 01/14/90 Vol.: No.: Index#: 00447-00

Title: NEW DIRECTIONS IN BYPASS
Author: KOLODZIEJ, STAN
Source: COMPUTERWORLD
Date: 09/17/86 Vol.: 20 No.: 37 Index#: 00434-00

Title: INTERNATIONAL DIGITAL BUSINESS SERVICES VIA SATELLITE
Author: KOPINSKI, JOHN
Source: PTC 1990 CONFERENCE
Date: 01/14/90 Vol.: No.: Index#: 00445-01

Title: A SHARED HUB VSAT NETWORK FOR THE ASEAN REGION
Author: KUHNS, MUHAMMAD ET.AL.
Source: PTC 1990 CONFERENCE
Date: 01/14/90 Vol.: No.: Index#: 00449-00

Title: A GUIDE TO IMPLEMENTING DAMA NETWORKS
Author: LEE, S.M.C.
Source: PTX 1990 CONFERENCE
Date: 01/14/90 Vol.: No.: Index#: 00444-00

Title: EARTH STATIONS FOR NEW STANDARDS, SYSTEMS AND SERVICES
Author: LEFRANCOIS, G.
Source: ELECTRICAL COMMUNICATION
Date: 01/01/88 Vol.: 62 No.: 1 Index#: 00026-00

Title: DATA SECURITY IN VSAT SYSTEM
Author: LOCKWOOD, DONNA
Source: SATELLITE COMMUNICATIONS
Date: 02/01/90 Vol.: No.: Index#: 00418-02

Title: THE SUCCESSFUL OPERATION OF A SATELLITE SYSTEM DEPENDS...
Author: MCBEATH, JOHN
Source: COMMUNICATIONS NEWS
Date: 03/01/88 Vol.: 25 No.: 3 Index#: 00908-01

Title: INCEPTION OF INS EXPERIENCE MODEL SYSTEM SETS IN SERVICE (ISDN)
Author: MURAKAMI, T.
Source: JAPAN TELECOMMUNICATIONS REVIEW

Date: 01/01/85 Vol.: 27 No.: 1 Index#: 00136-00

Title: ENGINEERING TEST SATELLITE IV AND FUTURE APPLICATIONS
Author: NAKAMARV, K. ET.AL.
Source: 41ST CONGRESS OF THE INTERNATIONAL ASTRONAUTICAL FEDERATION
Date: 10/06/90 Vol.: No.: IAF-90- Index#: 01020-00

Title: EFFICIENT SPACE SEGMENT UTILIZATION IN SATELLITE DATA NETWORKS
Author: NOCEDAL, F.
Source: PROCEEDINGS OF THE IEEE
Date: 11/01/84 Vol.: 72 No.: 11 Index#: 00413-01

Title: VSAT'S EVOLVING: THIRD GENERATION
Author: NOWICK, STEVEN
Source: SATELLITE COMMUNICATIONS
Date: 02/01/90 Vol.: No.: Index#: 00418-01

Title: NESPAC - A TWO WAY SATELLITE EDUCATION NETWORK
Author: OHTAKE, YASOU ET.AL.
Source: PTC 1990 CONFERENCE
Date: 01/14/90 Vol.: No.: Index#: 00446-00

Title: GLOBAL PAGING - AN INMARSAT SOLUTION
Author: PATEL, BASHIR
Source: VIA SATELLITE
Date: 10/01/90 Vol.: 5 No.: 10 Index#: 00438-00

Title: CHINESE DATACOMM
Author: QINGHUA, ZHAR
Source: COMMUNICATIONS NEWS
Date: 12/01/88 Vol.: 25 No.: 12 Index#: 00439-00

Title: ON TARGET (VSAT SYSTEM FOR TARGET STORES)
Author: ROBERTS, ANNE MARIE
Source: SATELLITE COMMUNICATIONS
Date: 07/01/90 Vol.: No.: Index#: 00419-01

Title: VSAT TECHNOLOGY FOR TODAY AND FOR THE FUTURE - REAL WORLD APPLICATIONS PROVE BENEFITS
Author: SALAMOFF, STEVEN
Source: COMMUNICATIONS NEWS
Date: 01/01/88 Vol.: 25 No.: 1 Index#: 00440-00

Title: FINDING JUST THE RIGHT TECHNOLOGICAL "MIX" HELPS MEET CHANGING COMMUNICATIONS NEEDS
Author: SCOTT, WILLIAM
Source: COMMUNICATIONS NEWS (SPECIAL REPORT: SATELLITE COMMUNICATIONS)
Date: 03/01/87 Vol.: No.: Index#: 00406-04

Title: C-BAND VSAT NETWORKING
Author: SHAUM, MITTAE ET.AL.
Source: PTC 1990 CONFERENCE
Date: 01/14/90 Vol.: No.: Index#: 00414-00

Title: FIRST IN A SERIES TO EXPLAIN VSAT TECH AND ITS MANY APPLICATIONS TODAY AND TOMORROW
Author: SHIFF, MICHAEL
Source: COMMUNICATIONS NEWS
Date: 09/01/87 Vol.: No.: Index#: 00421-00

Title: SATELLITES ARE CREATING THE CORPORATE VILLAGE IN THE SAME WAY THEY...
Author: SHIMABUKURO, TOM
Source: COMMUNICATIONS NEWS
Date: 03/01/88 Vol.: 25 No.: 3 Index#: 00908-02

Title: VSATS AND THE PIPELINE INDUSTRY
Author: SIMO, ERNEST
Source: SATELLITE COMMUNICATIONS
Date: 08/01/88 Vol.: No.: Index#: 00415-00

Title: OVERVIEW OF THE SPACE STATION COMMUNICATIONS NETWORKS
Author: SMITH, JOSEPH F. ET.AL.
Source: IEEE NETWORK
Date: 09/01/90 Vol.: 4 No.: 5 Index#: 00401-03

Title: COLLEGE IS USING A SATELLITE/FIBER OPTIC SYSTEM TO HELP TEACH TELECOMMUNICATIONS TECHNOLOGY
Author: STAFF WRITER
Source: COMMUNICATIONS NEWS (SPECIAL REPORT: SATELLITE COMMUNICATIONS)
Date: 03/01/87 Vol.: No.: Index#: 00406-03

Title: BANK SPEEDS ITS INTERNATIONAL TRANSACTIONS AND CUTS TELECOM COSTS WITH IBS SATELLITE SERVICE
Author: STAFF WRITER

Source: COMMUNICATIONS NEWS
Date: 07/01/86 Vol.: No.: Index#: 00420-00

Title: TECHNOLOGY: BEING PULLED BY MARKETS
Author: STEPHENS, GUY
Source: SATELLITE COMMUNICATIONS
Date: 05/01/88 Vol.: No.: Index#: 00416-00

Title: VSAT'S INCREASING PRESENCE IN DATA COMMUNICATIONS
Author: STEPHENS, GUY M.
Source: SATELLITE COMMUNICATIONS
Date: 02/01/90 Vol.: No.: Index#: 00418-00

Title: KEEP THE DATA FLOWING
Author: STEPHENS, GUY M.
Source: SATELLITE COMMUNICATIONS
Date: 02/01/90 Vol.: No.: Index#: 00418-03

Title: THE THIRD WORLD: LEAPING TELECOMMUNICATION HURDLES
Author: STEPHENS, GUY M.
Source: SATELLITE COMMUNICATIONS
Date: 05/01/90 Vol.: No.: Index#: 00419-00

Title: VSAT TECHNOLOGY PROVIDES A PRICE - STABLE AND STRATEGIC TOOL FOR HANDLING CORPORATE GROWTH
Author: STEWART, ALAN
Source: COMMUNICATIONS NEWS
Date: 05/01/88 Vol.: No.: Index#: 00417-00

Title: USA TODAY AND OTHER LARGE USERS REAP BENEFITS OF RELIABLE HIGH SPEED COMMUNICATIONS LINKS
Author: STEWART, NAU
Source: COMMUNICATIONS NEWS (SPECIAL REPORT: SATELLITE COMMUNICATIONS)
Date: 03/01/87 Vol.: No.: Index#: 00406-05

Title: REUTERS' WAY
Author: STODDARD, ROB
Source: SATELLITE COMMUNICATIONS
Date: 02/01/87 Vol.: No.: Index#: 00400-01

Title: VSAT NETWORKING WITH OSI
Author: STRATIGOS, JIM
Source: VIA SATELLITE
Date: 05/01/90 Vol.: 5 No.: 5 Index#: 00441-00

Title: NASA ADDS NATIONWIDE PAGING AS DEMAND GROWS
Author: WARFIELD, DONALD
Source: VIA SATELLITE
Date: / / Vol.: No.: Index#: 00442-00

Title: VSAT TECHNOLOGY FOR TODAY AND FOR THE FUTURE: PART 3 USE PRIVATE NETWORK OR LEASED SERVICES?
Author: WILKERSON, DAVID
Source: COMMUNICATIONS NEWS
Date: 11/01/87 Vol.: No.: Index#: 00442-01

Title: LONG DISTANCE TEACHING THROUGH POLAPA SATELLITE
Author: YATIM, NURDIN
Source: PTC 1990 CONFERENCE
Date: 01/14/90 Vol.: No.: Index#: 00445-00

Title: VSATS PROVIDE A QUICK AND ECONOMICAL WAY TO CREATE HIGHLY SOPHISTICATED DATA COMM NETWORK
Author: YOUSSEFZADEH, EMIL
Source: COMMUNICATIONS NEWS (SPECIAL REPORT: SATELLITE COMMUNICATIONS)
Date: 03/01/87 Vol.: No.: Index#: 00406-01

ACTS

Title: REPORT OF THE ACTS/SCIENCE WORKSHOP
Author:
Source: UNIVERSITY OF COLORADO; CENTER FOR SPACE AND GEOSCIENCES POLICY
Date: / / Vol.: No.: Index#: 00516-00

Title: ACTS: THE BLUE PRINT FOR FUTURE TELECOMMUNICATIONS
Author:
Source: NASA
Date: / / Vol.: No.: Index#: 00517-00

Title: ADVANCED COMMUNICATIONS TECHNOLOGY (ACTS) PROGRAM
Author:
Source: NASA-PRESENTATION TO SSAAC/CISS (BY DEAN OLMSTEAD) AND SCHERTLER, R.
Date: 04/23/90 Vol.: No.: Index#: 00519-00

Title: ACTS SYMPOSIUM BOULDER, COLORADO
Author:
Source:
Date: 07/18/90 Vol.: No.: Index#: 00518-00

Title: QUANTIFYING ACTS COMMUNICATION SYSTEM PERFORMANCE
Author: CASS, ROBERT D.
Source: AIAA 12TH INTERNATIONAL COMMUNICATION SATELLITE SYSTEMS CONFERENCE
Date: / / Vol.: No.: AIAA-88 Index#: 00501-01

Title: NASA'S ADVANCED COMMUNICATION TECHNOLOGY SATELLITE (ACTS) WILL IT BENEFIT COMMERICAL/MILITARY SATELLITES
Author: COSGROVE, JR., COLIN B.
Source: THESIS (MS) ITP UNIVERSITY OF COLORADO/BOULDER
Date: 01/01/88 Vol.: No.: Index#: 00501-00

Title: THE ADVANCED COMMUNICATIONS TECHNOLOGY SATELLITE (ACTS) MAKING IT ACCESSIBLE TO SCIENCE USERS
Author: HABEGGER, JAY AND BYERLY, R.
Source: CENTER FOR SPACE AND GEOSCIENCES POLICY - CU/BOULDER
Date: 06/01/90 Vol.: No.: Index#: 00502-00

Title: SWITCHBOARD IN THE SKY
Author: HERBST, KRIS

Source: NETWORK WORLD
Date: 04/17/89 Vol.: 6 No.: 15 Index#: 00503-00

Title: THE ADVANCED COMMUNICATIONS TECHNOLOGY SATELLITE (ACTS) CAPABILITIES FOR SERVING SCIENCE
Author: MEYER, THOMAS AND BYERLY, R.
Source: CENTER FOR SPACE AND GEOSCIENCES POLICY CU/BOULDER
Date: 05/16/90 Vol.: No.: Index#: 00505-00

Title: NASA'S ADVANCED COMMUNICATION TECHNOLOGY SATELLITE (ACTS): AN OVERVIEW
Author: NADERI, FM; CAMPANELLA, S. JOSEPH
Source: AIAA INTERNATIONAL COMMUNICATION SATELLITE SYSTEM CONFERENCE 12TH
Date: 01/01/88 Vol.: No.: Index#: 00506-00

Title: NASA EYES ACTS EXPERIMENTERS BUT HIGH COSTS MAY CURTAIL NUMBER
Author: NEWS DEPARTMENT
Source: SATELLITE COMMUNICATIONS
Date: 12/01/89 Vol.: 13 No.: 13 Index#: 00507-00

Title: ACTS - THE BLUEPRINT FOR FUTURE TELECOMMUNICATIONS
Author: OLMSTEAD, DEAN A. ET.AL.
Source: VIA SATELLITE
Date: 10/01/89 Vol.: No.: Index#: 00508-00

Title: ACTS AND FEDERAL INDIFFERENCE
Author: STODDARD, ROB
Source: SATELLITE COMMUNICATION
Date: / / Vol.: No.: Index#: 00510-00

Title: ACTS: IMPLICATIONS FOR THE 90'S
Author: STODDARD, ROB
Source: SATELLITE COMMUNICATIONS
Date: 01/01/90 Vol.: 14 No.: 1 Index#: 00511-00

Title: MAINTAINING AS NO. 1
Author: STODDARD, ROB
Source: SATELLITE COMMUNICATIONS
Date: 09/01/86 Vol.: 10 No.: 10 Index#: 00512-00

Title: OF HOPES AND DREAMS
Author: STODDARD, ROB
Source: SATELLITE COMMUNICATIONS

Date: 11/01/87 Vol.: 11 No.: 11 Index#: 00513-00

Title: ONBOARD BASEBAND SWITCH CONFIGURATION IN MULTI-BEAM SATELLITE SYSTEM
Author: SUZUKI, S.; AVITA, T.; YABUSAKI, M.; ISHINO, F.
Source: TRANSACTIONS OF THE INSTITUTE OF ELECTRONICS AND COMMUNICATIONS ENGINEERS OF JAPAN
Date: 11/01/86 Vol.: No.: Index#: 00514-00

Title: ACTS WILL HAVE MAJOR IMPACT ON INDUSTRY
Author: ZARLENGO, GARY ET.AL.
Source: ACTS UPDATE
Date: 01/01/87 Vol.: No.: 87/1 Index#: 00515-00

Traffic Network Simulation

Title: A NEW SATELLITE MULTIPLE ACCESS TECHNIQUE FOR PACKET SWITCHING COMBINING FIXED AND DEMAND ASSIGNMENTS
Author: AHMADI, H. ET.AL.
Source: NTC 80 CONFERENCE PAPER
Date: 01/01/80 Vol.: No.: Index#: 00601-00

Title: STUDY, IMPLEMENTATION AND MODELS OF HOW STORAGE PROTOCOLS FOR INTEGRATED SERVICES NETWORK
Author: AI, W.
Source: ECOLE NATIONALE SUPERIEVRE DES TELECOMMUNICATIONS #ENST-85E008
Date: / / Vol.: No.: Index#: 00602-00

Title: TELEPHONY TRAFFIC ASPECTS OF A SATELLITE COMMUNICATION SYSTEM
Author: ANDERBERG, M; AND EDSTROM N.H.
Source: ERICSSON TECHNICS
Date: 01/01/74 Vol.: 30 No.: 1 Index#: 00603-00

Title: A PRACTICAL APPROACH FOR SS/TDMA TRAFFIC ASSIGNMENT
Author: ATIA, O.
Source: ICC '85 CONFERENCE ON COMMUNICATIONS AIAA TECHNICAL LIBRARY
Date: 01/01/85 Vol.: No.: Index#: 00604-00

Title: USE OF THE SIMULA LANGUAGE IN TELEPHONE TRAFFIC SIMULATIONS
Author: BOCCALARO, E. AND GRILLO, D.
Source: REPORT #FUB-41-1978 (NIIS)
Date: 11/01/78 Vol.: No.: Index#: 00605-00

Title: AVAILABILITY, MAINTENANCE AND COST OF COMMERCIAL SATELLITE SYSTEMS
Author: CANTAVELLA, G. P.
Source: INTERNATIONAL CONFERENCE ON COMMUNICATIONS 1973
Date: 01/01/73 Vol.: 2 No.: Index#: 00606-00

Title: INTELSAT PLANNING AND MODELLING SOFTWARE IN SUPPORT OF IDR
Author: DVESING, RICHARD W. AND KELINSKY, M. J.
Source: INTERNATIONAL JOURNAL OF SATELLITE COMMUNICATIONS
Date: 12/01/88 Vol.: No.: Index#: 00607-00

Title: LINK CALCULATION METHOD FOR 30/20 GHZ BAND SATELLITE COMMUNICATIONS SYSTEM
Author: HATSUDA, T. AND NAKAJMA, S.; MORIHIRO, Y.
Source: ELECTRICAL COMMUNICATIONS LABORATORIES, REVIEW
Date: 08/01/80 Vol.: 28 No.: Index#: 00608-00

Title: TRENDS IN REGIONAL SATELLITE COMMUNICATIONS AND BROADCASTING
Author: HUGHES, C. D.
Source: ELECTRICAL ENGINEERS CONFERENCE 10/70 IEEE CONFERENCE PUB #72
Date: 01/01/70 Vol.: No.: Index#: 00609-00

Title: OPTIONAL TIME SLOT ASSIGNMENT FOR SS/TDMA SYSTEM
Author: ITO, Y.; VRANO Y.; MURATANI, T.
Source: ELECTRONICS AND COMMUNICATIONS IN JAPAN
Date: 02/01/78 Vol.: 61 No.: Index#: 00610-00

Title: COMPUTER MODELLING OF ROUTING PATTERN WITHIN NETWORK CONFIGURATION
Author: KOVAL, D.O. AND HUNGKWENG, KU
Source: PROCEEDINGS OF THE IASTED INTERNATIONAL SYMPOSIUM ON MODELLING AND SIMULATION
Date: 06/01/85 Vol.: No.: Index#: 00611-00

Title: COMPUTER MODELLING AND SIMULATION OF NETWORK OPERATIONAL PATHS
Author: KOVAL, D.O.; AND HUNGKWENG, KUA
Source: PROCEEDINGS OF THE IASED INTERNATIONAL SYMPOSIUM: APPLIED SIMULATION
Date: 01/01/85 Vol.: No.: Index#: 00612-00

Title: SPEECH POWER ESTIMATION WITHIN TRUNCATED NORMAL DISTRIBUTION
Author: LU, C. H.
Source: PROCEEDINGS: ICASSP '87 INTERNATIONAL CONFERENCE ON ACOUSITCS SPEECH AND SIGNAL
Date: / / Vol.: 3 No.: Index#: 00613-00

Title: TRAFFIC SIMULATION IN A TLELPHONE NETWORK VIA SATELLITE WITH PREASSIGNED
Author: MANUCCI, G. AND TONIETTA, A.
Source: CENTVOSTUDI LABORATORI TELECOMUNICAZIONI/AIAA TECHNICAL LIBRARY
Date: 03/01/79 Vol.: No.: Index#: 00614-00

Title: MODELS AND ALGORITHMS FOR OPTIMAL TRAFFIC ASSIGNMENT IN SSTDMA SWITCHING SYSTEMS
Author: MINOUX, M.
Source: INTERNATIONAL JOURNAL OF SATELLITE COMMUNICATIONS
Date: 03/01/87 Vol.: 5 No.: JAN/MAR Index#: 00952-00

Title: A STUDY ON SATELLITE CIRCUIT ASSIGNMENT AND DIMENSIONING METHODS...
Author: MIYAKE, K.
Source: ELECTRONICS AND COMMUNICATIONS IN JAPAN, PART 1; AIAA TECHNICAL LIBRARY
Date: 02/01/85 Vol.: No.: Index#: 00615-00

Title: COEXISTENCE OF FREQUENCY HOPPING AND FM: AN INTERLEAVING OVERLAY APPROACH
Author: RAZ, GHULAM H.
Source: GLOBECOM '87 - GLOBAL TLELCOMMUNICATIONS CONFERENCE
Date: 01/01/87 Vol.: 1 No.: Index#: 00616-00

Title: SIMULATION OF MARISAT OFFSHORE DATA TRANSFER (SATELLITE COMMUNICATION SYSTEM)
Author: WEINREICH, D. E.
Source: COMMUNICATIONS SATELLITE SYSTEMS CONFERENCE 7TH
Date: 01/01/78 Vol.: No.: IAA7813 Index#: 00617-00

Title: PERFORMANCE MODELING OF SIGNALING SYSTEM NO. 7
Author: WILLMANN, GERT ET.AL.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 07/01/90 Vol.: 28 No.: 7 Index#: 00865-00

Satellite Orbits

Title: SATELLITES HAVE REVOLUTIONIZED COMMUNICATIONS WORLD SINCE SATCOMM...
Author:
Source: COMMUNICATIONS NEWS
Date: 03/01/88 Vol.: 25 No.: 3 Index#: 00908-03

Title: SOME TECHNICAL FEATURES OF LOW ORBIT SATELLITES
Author: ARDVINI, C.; BOUNGIORA G.; PONZI, U.; RAVELLI, G.
Source: SERI - ITS ATTI DEL CENTRO RIC AEROSPAZIALE NO. 21
Date: 03/01/69 Vol.: No.: 21 Index#: 00700-00

Titletle: PACKET SWITCHING FOR MOBILE EARTH STATIONS VIA LOW-ORBIT SATELLITE
Author: BRAYER, K.
Source: IEEE PROCEEDING
Date: 11/01/84 Vol.: 72 No.: Index#: 00701-00

Title: ENGINEERING TEST SATELLITE VI
Author: BROCHURE
Source: NASDA - JAPAN
Date: 01/01/90 Vol.: No.: Index#: 00702-00

Title: HORIZON SENSOR FOR A LOW-ORBIT SATELLITE WITH THREE-AXIS ATTITUDE STABILIZATION
Author: DESVIGNES, F. ET.AL.
Source: FRENCH JOURNAL TRANSLATION / ACTA ELECTRONICA
Date: 07/01/70 Vol.: 13 No.: Index#: 00703-00

Title: CELLULAR PACKET COMMUNICATIONS
Author: GOODMAN, DAVID J.
Source: IEEE TRANSCRIPT ON COMMUNICATION
Date: 08/01/90 Vol.: 38 No.: 8 Index#: 00704-00

Title: MOTOROLA BIDS TO RING THE WORLD
Author: GREEN-ARMATAGE, J.
Source: COMPUTER WEEKLY
Date: 07/05/90 Vol.: No.: 1221 Index#: 00819-00

Title: ORBIT/SPECTRUM UTILIZATION STUDY V.1
Author: JERUCHIM, M.C.; AND SAYER, T.C.
Source: GENERAL ELECTRIC COMPANY REPORT #69SD4270
Date: / / Vol.: 1 No.: Index#: 00704-01

Title: CDMA VS FDMA CHANNEL CAPACITY IN MOBILE SATELLITE COMMUNICATION
Author: JOHANNSEN, KLAUS G.
Source: IEEE TRANSCRIPT ON VEHICULAR TECHNOLOGY
Date: 02/01/90 Vol.: 39 No.: 1 Index#: 00705-00

Title: SATCOM IN THE SOVIET UNION
Author: JOHNSON, NICHOLAS L.
Source: SATELLITE COMMUNICATIONS
Date: 06/01/88 Vol.: No.: Index#: 00706-00

Title: A SYSTEM SIMULATOR FOR HOW ORBIT SATELLITE COMMUNICATION NETWORK
Author: KALDENBACH, BRIAN ET.AL.
Source: MILCOM '87 - IEEE MILITARY COMMUNICATIONS CONFERENCE
Date: 01/01/87 Vol.: No.: 1 Index#: 00720-00

Title: ORBIT/SPECTRUM UTILIZATION STUDY V.III ECONOMIC CONSIDERATION
Author: KAN, D.A.; AND JERUCHIM, M.C.
Source: GENERAL ELECTRIC COMPANY NTIS REPORT #70SD4246
Date: 06/30/70 Vol.: III No.: Index#: 00707-00

Title: LOW-EARTH ORBIT GLOBAL CELLULAR COMMUNICATIONS NETWORK
Author: LEOPOLD, RAYMOND J.
Source: MOTOROLA SATELLITE COMMUNICATIONS
Date: 08/23/90 Vol.: No.: Index#: 00708-00

Title: LOW-ORBIT SATELLITES - AN INTERFERENCE MODEL
Author: LOCKE, P. AND RINKER, A.
Source: ITU TELECOMMUNICATION JOURNAL
Date: 05/01/78 Vol.: 45 No.: Index#: 00709-00

Title: KU-BAND PAYLOAD TRADE-OFFS FOR ISDN SERVICES IN EUROPE
Author: LOPRIORE, M. ET.AL.
Source: AIAA INTERNATIONAL COMMUNICATION SATELLITE SYSTEMS CONFERENCE AND EXHIBIT
Date: 01/01/90 Vol.: No.: Index#: 00028-00

Title: GEOSTATIONARY OPERATIONAL ENVIRONMENTAL SATELLITE DATA COLLECTION SYSTEM
Author: MACCALLUM, DOUGLAS H. ET.AL.
Source: NATIONAL ENVIRONMENTAL SATELLITE DATA AND INFORMATION SERVICE, D.C. NTIS: PC A04/NF A01
Date: 06/01/83 Vol.: No.: Index#: 00721-00

Title: C-BOUND SATELLITE LOCATIONS
Author: MORGAN, WALTER C.
Source: SATELLITE COMMUNICATIONS
Date: 12/01/90 Vol.: No.: Index#: 00710-00

Title: DEVELOPMENT OF AERONAUTICAL SATELLITE COMMUNICATION
Author: NAKAMURA, HIROGUKI ET.AL.
Source: PTC 1990 CONFERENCE
Date: 01/14/90 Vol.: No.: Index#: 00448-00

Title: INCLINED ORBIT OPERATIONS WITH TRANSPORTABLE TERMINALS
Author: OVERSTREET, JOHN
Source: VIA SATELLITE
Date: 10/01/90 Vol.: 5 No.: 10 Index#: 00710-01

Title: 21ST CENTURY SATELLITE COMMUNICATIONS
Author: PELTON, JOSEPH N.
Source: VIA SATELLITE
Date: 12/01/88 Vol.: 3 No.: Index#: 00710-02

Title: SYSTEM CONSIDERATIONS IN INTELSAT DOMESTIC NETWORK
Author: PEVILLAN, L. AND EFTEKHAVI, R.
Source: NTC '80; NATIONAL TELECOMMUNICATIONS CONFERENCE
Date: 12/04/80 Vol.: 2 No.: Index#: 00711-00

Title: ITALSAT: MOVING TO KA-BAND
Author: PIVARD, THEO
Source: SATELLITE COMMUNICATIONS
Date: 07/01/88 Vol.: No.: Index#: 00712-00

Title: ORBITAL DESIGN STRATEGY FOR DOMESTIC COMMUNICATION SATELLITE SYSTEMS
Author: RAMJI, S AND SAWITZ, P.
Source: INTERNATIONAL CONFERENCE ON COMMUNICATION
Date: 01/01/73 Vol.: 2 No.: Index#: 00713-00

Title: FINDING FIXED SATELLITE SERVICE ORBITS WITH A K-PERMNTATION ALGORITHM
Author: REILLY, CHARLES A. ET.AL.
Source: IEEE TRANSCSRIPT ON COMMUNICATIONS
Date: 08/01/90 Vol.: 38 No.: 8 Index#: 00714-00

Title: MOTOROLA SETS SATELLITE PHONE LINK
Author: ROSE, ROBERT L. ET.AL.

Source: WALL STREET JOURNAL
Date: 06/26/90 Vol.: No.: Index#: 00715-00

Title: A NEW SATELLITE SYSTEM FOR HAND MOBILE COMMUNICATIONS AT EHF
Author: RUGGIERI, M. ET.AL.
Source: 41ST CONGRESS OF THE INTERNATIONAL ASTRONAUTICAL FEDERATION
Date: 10/06/90 Vol.: No.: IAF-90- Index#: 00716-00

Title: APPLICATION OF ELECTRON BEAMS IN SPACE FOR ENERGY STORAGE AND OPTICAL GENERATION
Author: SALTER, R. M.
Source: AIAA CONFERENCE PAPER
Date: 01/01/78 Vol.: No.: Index#: 00717-00

Title: THE PROBLEM OF HIGH ORBIT INCLINATION SATELLITES
Author: SCANIO, JR., THOMAS J.
Source: SATELLITE COMMUNICATIONS
Date: 04/01/90 Vol.: No.: Index#: 00718-00

Title: ORBITAL EFFICIENCY THROUGH SATELLITE DIGITAL SWITCHING
Author: SCARCELLA, T.; AND ABBOT, R.V.
Source: IEEE COMMUNICAITONS MAGAZINE
Date: 05/01/83 Vol.: 21 No.: Index#: 00722-00

Title: REDUCED DOMESTIC SATELLITE ORBITAL SPACING AT 4/G GHZ
Author: SHARP, G. L.
Source: OFFICE OF SCIENCE AND TECHNOLOGY NTIS HC A08/MF
Date: 05/01/83 Vol.: No.: Index#: 00719-00

Title: CONTROLLED TETHER EXTENDS SATELLITES ORBITAL RANGE
Author: WIGOTSKY, V.
Source: AEROSPACE AMERICA
Date: 06/01/84 Vol.: 22 No.: Index#: 00723-00

Title: GEOSTATIONARY ORBITAL CROWDING: AN ANALYSIS OF PROBLEMS AND SOLUTIONS
Author: WILKISON, JR., ROBERT M.
Source: THESIS (MS) ITP - UNIVERSITY OF COLORADO/BOULDER
Date: 01/01/90 Vol.: No.: Index#: 00724-00

Network Configuration

Title: IEEE COLLOQUIUM ON THE ROLE OF SATELLITES IN TOMORROWS FIBER-OPTIC WORLD
Author:
Source: IEEE CONFERENCE MAY 88
Date: 01/01/88 Vol.: No.: Index#: 00049-00

Title: UTILITY POLISHES PRIVATE NETWORK
Author:
Source: COMMUNICATIONS NEWS
Date: 01/01/90 Vol.: 27 No.: 1 Index#: 00870-00

Title: VARIOUS PAPERS ON GLOBAL TELECOMMUNICATIONS
Author:
Source: GLOBECOM 85 DEC. 1985
Date: 01/01/85 Vol.: No.: Index#: 00871-00

Title: COLLECTION OF ARTICLES
Author:
Source: NETWORK WORLD
Date: 09/10/90 Vol.: No.: Index#: 00872-00

Title: COLLECTION OF NETWORKING ARTICLES
Author:
Source: IEEE NETWORK
Date: 07/01/89 Vol.: 3 No.: 4 Index#: 00873-00

Title: COLLECTION OF NETWORKING ARTICLES (11)
Author:
Source: AT&T TECHNICAL JOURNAL
Date: 11/01/88 Vol.: 67 No.: 6 Index#: 00874-00

Title: SATELLITE AND TERRESTRIAL NETWORKS FOR MULTI-MEDIA COMMUNICATIONS
Author: ADAMS, C. J.
Source: IN ESA, OLYMPUS UTILIZATION CONFERENCE (NTIS)
Date: 05/01/89 Vol.: No.: Index#: 00801-00

Title: SATELLITE AND TERRESTRIAL NETWORKS FOR MULTI-MEDIA COMMUNICATION
Author: ADAMS, C. J.
Source: SCIENCE AND ENGINEERING RESEARCH COUNCIL/OLYMPUS UTILIZATION CONFERENCE

Date: 05/01/89 Vol.: No.: Index#: 00802-00

Title: HOW WILL ISDN AFFECT NETWORK MANAGEMANT?
Author: BAKER, H. C.
Source: BUSINESS COMMUNICATIONS REVIEW
Date: 09/01/89 Vol.: 19 No.: 9 Index#: 00803-00

Title: ROUTE OPTIMISATION, NETWORK GUIDANCE AND SYSTEM MINIMISATION AS...
Author: BASSLER, R.
Source: NACHRICHTEN TECHNIK ELEKTRONIK
Date: 01/01/86 Vol.: 36 No.: 12 Index#: 00804-00

Title: GORDON BELL CALLS FOR A US RESEARCH NETWORK
Author: BELL, GORDON C.
Source: IEEE SPECTRUM
Date: 02/01/88 Vol.: No.: Index#: 00805-00

Title: THE IMPACT OF TECHNOLOGY TRENDS ON THE TELECOMMUNICATION NETWORK
Author: BIRING, D. S.
Source: NORTHCOM 87 CONFERENCE SEPT. 1987
Date: 01/01/87 Vol.: No.: Index#: 00806-00

Title: A PERSPECTIVE ON FUTURE LARGE SCALE TELELCOMMUNICATIONS ARCHITECTURES SUPPORTING BISDN SERVICES
Author: BLOOMFIELD, R. S. ET.AL.
Source: BROADBAND FOC/LAN EXPOSITION OCT. 1989
Date: 01/01/89 Vol.: No.: Index#: 00204-00

Title: COMMON CHANNEL SIGNALING: THE NEXUS OF AN ADVANCED COMMUNICATION NETWORK
Author: BOYLES, STEPHANIE M. ET.AL.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 07/01/90 Vol.: 28 No.: 7 Index#: 00807-00

Title: POISSON - PROCEDURE FOR THE OPTIMAL INSERTION OF A SWITCHING SATELLITE IN AN OPERATIVE NETWORK
Author: BUTTO, MILENA
Source: ALTA FREQUENZA
Date: 02/01/88 Vol.: 57 No.: 12 Index#: 00808-00

Title: ON-BOARD PROCESSING SATELLITES NETWORK ARCHITECTURE AND CONTROL STUDY
Author: CAMPANELLA, S.J.; PONTANO, B; CHALMERS, H.

Source: COMMUNICATIONS SATELLITE CORPORATION, CLARKSBURG, MD; NTIS PC A02/MF A01
Date: 06/01/87 Vol.: No.: Index#: 00810-00

Title: SUBJECTIVE EVALUATION OF DEDICATED MULTIPLE-HOP SATELLITE COMMUNICATION FOR GOVERNMENT AND MILITARY USERS
Author: CAMPANOLLA, S. J.; ONUFRY M.; SUYDERHOUD, H. G.
Source: IEEE TRANSACTIONS ON COMMUNICATION TECHNOLOGY
Date: 10/01/70 Vol.: COM-18 No.: Index#: 00809-00

Title: SURVIVABILITY: MORE THAN REDUNDANT LINES AND HARDWARE (NETWORK MANAGEMENT)
Author: CAMPBELL, R. P.
Source: TELECOMMUNICATIONS PRODUCTS PLUS TECHNOLOGY
Date: 12/01/86 Vol.: 4 No.: 12 Index#: 00811-00

Title: ISDN STATUS AND OPPORTUNITIES FOR SATELLITE SYSTEMS
Author: CASAS, J. M. ET.AL.
Source: NASA REPORT NO. ESA-STR-220
Date: 01/01/87 Vol.: No.: Index#: 00105-00

Title: NETWORK ARCHITECTURES FOR SATELLITE ISDN
Author: CHITRE D. M. ET.AL.
Source: AIAA INTERNATIONAL COMMUNICATIONS SATELLITE SYSTEMS CONFERENCE MARCH 1990
Date: 01/01/90 Vol.: No.: Index#: 00813-00

Title: DESIGN AND ANALYSIS OF VERY HIGH-SPEED NETWORK ARCHITECTURE
Author: CHLAMTAC, I.; GANZ, A.
Source: IEEE TRANSACTIONS ON COMMUNICATIONS
Date: 03/01/88 Vol.: 36 No.: 3 Index#: 00812-00

Title: EUROPEAN COMMUNICATIONS SATELLITE: INTEGRATION IN THE EUROPEAN NETWORK AND INTERFACING WITH THE ITALIAN PUBLIC TELEPHONE NETWORK
Author: DE ROSA, D. ET.AL.
Source: NOTE RECENSIONI E NOTIZIE
Date: 01/01/88 Vol.: 37 No.: 1-2 Index#: 00815-00

Title: SPACE BASED SWITCHING SYSTEMS
Author: DEAVES, C.
Source: COMMUNICATIONS ENGINEERING INTERNATIONAL
Date: 01/01/89 Vol.: 10 No.: 10 Index#: 00814-00

Title: THE BIG QUESTION IS, WHAT KIND OF AN IMPACT WILL ISDN HAVE ON YOUR CORPORATE NETWORK?
Author: DEWITT, RUSSELL
Source: COMMUNICATIONS NEWS
Date: 01/01/87 Vol.: 24 No.: 1 Index#: 00108-01

Title: SITE DIVERSITY: A POWERFUL ANTIFADING TECHNIQUE FOR SATELLITE COMMUNICATIONS IN 20/30 GHZ BAND
Author: DI ZENOBIO, D.; LOMBARDI, P.; MIGLIORINI, P.; AND RUSSO, E.
Source: OLYMPUS UTILISATION CONFERENCE PROCEEDINGS; ESA, PARIS, FRANCE
Date: 01/01/89 Vol.: No.: Index#: 00816-00

Title: COMBINING SATELLITE AND FIBEROPTIC TECHNOLOGIES IMPROVES INTERNATIONAL SERVICES AND COSTS
Author: EDWARDS, M.
Source: COMMUNICATIONS NEWS
Date: 06/01/87 Vol.: 24 No.: 6 Index#: 00012-00

Title: COMPETITORS MATCHING AT&T IN THE MIGRATION TO ISDN
Author: EDWARDS, MORRIS
Source: COMMUNICATIONS NEWS
Date: 05/01/86 Vol.: 73 No.: 5 Index#: 00113-00

Title: DATA NETWORKS IN THE 90'S
Author: FORSON, HENRY
Source: COMMUNICATION NEWS
Date: 12/01/88 Vol.: 25 No.: 12 Index#: 00115-00

Title: PROPOSAL AND IMPLEMENTATION OF OSI ORIENTED APPLICATION INTERFACE FOR ISDN
Author: FURUYA, N. ET.AL.
Source: KDD TECHNICAL JOURNAL
Date: 07/01/89 Vol.: No.: 141 Index#: 00117-00

Title: NETWORKS, SIGNALING AND SWITCHING FOR POST-DIVESTITURE AND THE ISDN
Author: GLEN, D.V.
Source: NTIA REPORT NUMBER NTIA/86-191;NCS-TIB-86-2
Date: 02/01/86 Vol.: No.: Index#: 00817-00

Title: COMMON CHANNEL SIGNALING INTERFACE FOR LOCAL EXCHANGE CARRIER TO INTEREXCHANGE CARRIER INTERCONNECTION
Author: GOLDBERG, RICHARD; AND SHRADER, DAVID

Source: IEEE COMMUNICATIONS MAGAZINE
Date: 07/01/90 Vol.: 28 No.: 7 Index#: 00818-00

Title: MOTOROLA BIDS TO RING THE WORLD
Author: GREEN-ARMATAGE, J.
Source: COMPUTER WEEKLY
Date: 07/05/90 Vol.: No.: 1221 Index#: 00819-00

Title: A CASE FOR PRIVATE ISDN
Author: GUNN, HOWARD
Source: TELECOMMUNICATIONS
Date: 05/01/90 Vol.: 24 No.: 5 Index#: 00118-00

Title: USERS SHOULD BE DOING THEIR ADVANCE PLANNING TO TAKE ADVANTAGE OF THE ISDN TECHNOLOGIES
Author: HAHN, JAMES
Source: COMMUNICATIONS NEWS
Date: 01/01/87 Vol.: 24 No.: 1 Index#: 00118-50

Title: SYNCHRONIZATION TECHNIQUES FOR DIGITAL NETWORKS
Author: HARTMANN, H.L.; STEINER, E.
Source: IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS
Date: 06/01/86 Vol.: SAC-4 No.: 4 Index#: 00820-00

Title: SATELLITE AND/OR GROUND BASED NETWORKS: USER CONCERNS
Author: HINE, M.G.N.
Source: IN ESA, OLYMPUS UTILIZATION CONFERENCE P167-171
Date: 05/01/89 Vol.: No.: Index#: 00821-00

Title: PHOTONIC SWITCHING FABRICS
Author: HINTON, H. SCOTT
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 04/01/90 Vol.: 28 No.: 4 Index#: 00822-00

Title: AN ATM SELF-ROUTING SWITCH ARCHITECTURE
Author: HITOSHI, IMAGAWA ET.AL.
Source: INTERNATIONAL JOURNAL OF DIGITAL AND ANALOG CABLED SYSTEMS
Date: 10/01/88 Vol.: 1 No.: 4 Index#: 00239-00

Title: 30/20 GHZ BAND SCPC SATELLITE COMMUNICATION USING SMALL EARCH STATIONS
Author: INOVE T.; NAKAJIWA, S.; MASAMURA, T.; KAITSUKA, T.; SATCH, R.
Source: IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS
Date: 09/01/83 Vol.: SAC-1 No.: 4 Index#: 00823-00

Title: T3 NETS REQUIRE STRONG, FLEXIBLE MANAGEMENT
Author: JAKUBSON, J. E. ET.AL.
Source: TPT
Date: 02/01/89 Vol.: 7 No.: 2 Index#: 00824-00

Title: ISDN OVER THE PACIFIC
Author: KAWASAKI, TATSUO
Source: TELECOMMUNICATIONS
Date: 08/01/90 Vol.: 24 No.: 8 Index#: 00122-00

Title: AN IXC'S LOOK AT GLOBAL ISDN
Author: KERO, T.
Source: TELEPHONY
Date: 04/23/90 Vol.: 218 No.: 17 Index#: 00242-00

Title: CURRENT ROLE AND FUTURE EVOLUTION OF THE ISDN SIGNALING SYSTEM IN NTT'S NETWORK
Author: KITAMI, KENICHI ET.AL.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 07/01/90 Vol.: 28 No.: 7 Index#: 00826-00

Title: AN OVERVIEW OF SATELLITE TRANSMISSION ISSUES AND THE ISDN
Author: KNIGHT, IVOR N. ET.AL.
Source: ICC 86 CONFERENCE JUNE 86
Date: 01/01/86 Vol.: No.: Index#: 00024-00

Title: DESIGN OF A DEMAND-ASSIGNMENT SATELLITE-SWITCHED SPACE DIVISION MULTIPLE ACCESS COMMUNICATIONS NETWORK
Author: KO, K. T. ET.AL.
Source: ATR/AUSTRALIAN TELECOMMUNICATION RESEARCH
Date: 01/01/82 Vol.: 16 No.: 2 Index#: 00825-00

Title: COMPUTER MODELLING OF ROUTING PATTERN WITHIN NETWORK CONFIGURATION
Author: KOVAL, D.O. AND HUNGKWENG, KU
Source: PROCEEDINGS OF THE IASTED INTERNATIONAL SYMPOSIUM ON MODELLING AND SIMULATION
Date: 06/01/85 Vol.: No.: Index#: 00611-00

Title: VOCODERS IN MOBILE SATELLITE COMMUNICATIONS
Author: KRIEDTE, W.; CANAVESIO, F.; DAL DEGAN, N.; PIRANI, G. ET.AL.
Source: ESA JOURNAL
Date: 01/01/84 Vol.: 8 No.: 3 Index#: 00827-00

Title: COMPUTER AIDED SYNTHESIS OF COMMUNICATION SATELLITE SYSTEMS
Author: KRIEGL, W.; LOEHLE H.
Source: SPACE COMMUNICATION AND BROADCASTING
Date: 06/01/85 Vol.: 3 No.: Index#: 00828-00

Title: THE ISDN CHALLENGE IS MANAGEABLE IF THE USER IS ARMED WITH THE RIGHT NETWORK KNOWLEDGE
Author: LANGFORD, GREG
Source: COMMUNICATIONS NEWS
Date: 01/01/88 Vol.: 25 No.: 1 Index#: 00124-00

Title: INTEGRATION OF A TERRESTRIAL COMMUNICATION NETWORK INTO A COMMUNICATION SATELLITE SYSTEM
Author: LOEHLE, H.
Source: DORNIER-WERKE GIMIBIH
Date: 07/01/80 Vol.: No.: Index#: 00829-00

Title: INVESTIGATION OF THE INTEGRATION OF A TERRESTRIAL COMMUNICATION NETWORK WITHIN A SATELLITE SYSTEM
Author: LOEHLE, H.
Source: AIAA TECHNICAL LIBRARY
Date: 07/01/80 Vol.: No.: Index#: 00830-00

Title: BROADCASTERS URGED TO TRY FIBER OPTICS AS ALTERNATIVE TO SATELLITE TRANSMISSION
Author: LOPEZ, JULIE A.
Source: WALL STREET JOURNAL
Date: 02/27/90 Vol.: No.: Index#: 00831-00

Title: SIGNALING SYSTEM NO. 7 IN CORPORATE NETWORKS
Author: MARR, FRANCIS K.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 07/01/90 Vol.: 28 No.: 7 Index#: 00832-00

Title: INTERNETWORKING LANS VIA THE ISDN BEARER SERVICES
Author: MARSDEN, P. N.
Source: IEEE COLLOQUIUM ON INTERCONNECTION OF LANS MAY 90
Date: 01/01/90 Vol.: No.: Index#: 00130-00

Title: MULTI-SERVICE DEMAND ASSIGNMENT SYSTEM AIMING AT ISDN
Author: MATSUO, K. ET.AL.
Source: ICDSC-7 CONFERENCE MAY 86
Date: 01/01/86 Vol.: No.: Index#: 00029-00

Title: NETWORK INFRASTRUCTURE: PAY NOW OR PAY LATER
Author: MCQUILLAN, JOHN
Source: BUSINESS COMMUNICATIONS REVIEW
Date: / / Vol.: No.: Index#: 00833-00

Title: THE USE OF SATELLITES IN MEETING THE TELECOMMUNICATION NEEDS OF DEVELOPING NATIONS
Author: MITCHELL, W. C.
Source: STANFORD UNIVERSITY PH.D DISSERTATION
Date: 01/01/75 Vol.: No.: Index#: 00934-00

Title: A SWITCH IN THE SKY
Author: MONTGOMERY, ROB R. ET.AL.
Source: CELLULAR BUSINESS
Date: 04/01/89 Vol.: 6 No.: 4 Index#: 00835-00

Title: IMPACT OF EMERGING SWITCHING-TRANSMISSION COST TRADEOFFS ON FUTURE TELECOMMUNICATIONS NETWORK ARCHITECTURES
Author: MOONDRA, S. L.
Source: IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS
Date: 10/01/89 Vol.: 7 No.: 8 Index#: 00836-00

Title: VSAT NETWORKING CONCEPTS AND NEW APPLICATIONS DEVELOPMENT
Author: MURTHY, K.M. SUNDARA; GORDON, KENNETH G.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 05/01/89 Vol.: 27 No.: Index#: 00837-00

Title: A KA-BAND CO-OPERATIVE DATA EXPERIEMENT FOR OLYMPUS
Author: MWANAKATWE, M. ET.AL.
Source: IEE COLLOQUIUM ON EXPERIEMENTS USING THE OLYMPUS SATELLITE
Date: 10/27/87 Vol.: No.: 81 Index#: 00838-00

Title: FUTURE ADVANCED SATELLITE COMMUNICATIONS SYSTEMS WITH INTEGRATED TRANPONDERS
Author: NAKAMURA, M. ET.AL.
Source: COMMUNICATIONS SATELLITE SYSTEMS CONFERENCE 9TH
Date: 01/01/82 Vol.: No.: Index#: 00839-00

Title: ISDN IS COMING, SO NOW'S THE TIME TO PREPARE FOR REALITY BY BECOMING A BANDWIDTH MANAGER
Author: NEVERS, DAVID
Source: COMMUNICATIONS NEWS
Date: 01/01/88 Vol.: 25 No.: 1 Index#: 00137-00

Title: DESIGN OF AN INTERNATIONAL BUSINESS SATELLITE COMMUNICAITONS NETWORK...
Author: NOHARA, M.; TAKEUCHI, Y.; YAMAZAKI, T.; TAKAHATA, F.; HIRATA, Y.
Source: TRANSACTIONS OF THE INSTITUTE OF ELECTRONICS AND COMMUNICATION ENGINEERS OF JAPAN
Date: / / Vol.: J69B No.: 11 Index#: 00840-00

Title: BITNET NETWORK: AN AID TO RESEARCH
Author: NTIS TECH NOTE
Source: NATIONAL INSTITUTES OF HEALTH, BETHESDA, MD
Date: / / Vol.: No.: Index#: 00841-00

Title: PLUGGING INTO THE SWITCHBOARD IN THE SKY
Author: PAYNE, M.
Source: NEW SCIENTIST
Date: 04/01/75 Vol.: 66 No.: Index#: 00841-01

Title: SYSTEM CONSIDERATIONS IN INTELSAT DOMESTIC NETWORK
Author: PEVILLAN, L. AND EFTEKHAVI, R.
Source: NTC '80; NATIONAL TELECOMMUNICATIONS CONFERENCE
Date: 12/04/80 Vol.: 2 No.: Index#: 00711-00

Title: NETWORK RELIABILITY AND AVAILABILITY ANALYSIS TO MINIMIZE DOWNTIME COSTS FOR COMMUNICATIONS NETWORKS
Author: PULAT, S. ET.AL.
Source: MICROELECTRONICS AND RELIABLITY
Date: 01/01/89 Vol.: 29 No.: 1 Index#: 00842-00

Title: ATM SWITCHES - BASIC ARCHITECTURES AND THEIR PERFORMANCE
Author: RATHGEB, E. P. ET.AL.
Source: INTERNATIONAL JOURNAL OF DIGITAL AND ANALOG CABLED SYSTEMS
Date: 10/01/89 Vol.: 2 No.: 4 Index#: 00263-00

Title: COEXISTENCE OF FREQUENCY HOPPING AND FM: AN INTERLEAVING OVERLAY APPROACH
Author: RAZ, GHULAM H.
Source: GLOBECOM '87 - GLOBAL TLELCOMMUNICATIONS CONFERENCE
Date: 01/01/87 Vol.: 1 No.: Index#: 00616-00

Title: DOMSAT DOWN UNDER
Author: REINECKE, IAN
Source: TELEPHONY
Date: 01/21/80 Vol.: 198N3 No.: Index#: 00843-00

Title: INVESTIGATIONS OF INTERLIBRARY RESOURCE-SHARING NETWORKS
Author: REINTJES, J. FRANCIS
Source: NATIONAL SCIENCE FOUNDATION REPORT NO. LIDS-R-1176
Date: 03/01/82 Vol.: No.: Index#: 00844-00

Title: EXPERT SYSTEMS WILL SHAPE DATA NETWORKS OF THE FUTURE
Author: REIS, J.
Source: INFORMATION WEEK
Date: 12/08/86 Vol.: No.: 95 Index#: 00845-00

Title: SELF-ORGANIZING COMMUNICATION NETWORKS
Author: ROBERTAZZI, T.G.; SARACHIK, P.E.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 01/01/86 Vol.: 24 No.: 1 Index#: 00846-00

Title: NEW RADIO NETWORKS FOR TACTICAL COMMUNICATIONS
Author: RUSTAD, JOHN ERIK ET.AL.
Source: IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS
Date: 06/01/90 Vol.: 8 No.: 5 Index#: 00847-00

Title: INTEGRATION OF SATELLITE CIRCUITS IN THE TERRESTRIAL TELECOMMUNICATIONS NETWORK
Author: SATAGOPAN, S.
Source: CNES SYMPHONIC SYMPOSIUM
Date: 01/01/80 Vol.: No.: Index#: 00848-00

Title: NETWORK DSIGN ISSUES FOR THE 1990'S
Author: SCHAEVITZ, A. Y.
Source: BUSINESS COMMUNICATIONS REVIEW
Date: 11/01/88 Vol.: 18 No.: 6 Index#: 00849-00

Title: THE GERMAN TELECOMMUNICATIONS SATELLITE SYSTEM DFS KOPERNIKES
Author: SCHUNELLER, O.
Source: COMMUNICATION SATELLITE SYSTEMS CONFERENCE 11TH
Date: 01/01/86 Vol.: No.: Index#: 00852-00

Title: RELIABILITY ALLOCATION METHODOLOGY FOR LARGE-SCALE COMMUNICATIONS NETWORKS
Author: SELMAN, V.; CHAO, K.; MOWAFI, O.
Source: PROCEEDINGS OF THE 1986 SUMMER COMPUTER SIMULATION CONFERENCE
Date: 01/01/86 Vol.: No.: Index#: 00850-00

Title: CASADE BENES REARRANGEABLE MULTICONNECTION NONBLOCKING SWITCHING NETWORKS
Author: SEZAKI, K.; TANAKA, Y.; AKIYAMA, M.
Source: TRANSACTIONS OF THE INSTITUTE OF ELECTRONICS, INFORMATION AND COMMUNICATION ENGINEERS
Date: / / Vol.: J71B No.: 8 Index#: 00851-00

Title: COMPARISON OF SATELLITE AND FIBER OPTICS TECHNOLOGIES FOR INTERCITY AND INTERCONTINENTAL COMMUNICATION
Author: SHARIFI, HOSSEIN M.
Source: ICC '86 PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON COMMUNICATIONS, TORONTO
Date: 01/01/86 Vol.: No.: 2 Index#: 00853-00

Title: A CENTRALIZED MULTIPLE SATELLITE NETWORK FOR REAL TIME GLOBAL SPACE, LAND AND MOBILE COMMUNICATION
Author: SHARIFI, M. HOSSEIN AND AVOZULLAH, MAHAMMED
Source: MILCOM '87 IEEE MILITARY COMMUNICATIONS CONFERENCE
Date: 01/01/87 Vol.: 3 No.: Index#: 00854-00

Title: A MULTIFUNCTION SATELLITE NETWORK FOR TAIWAN
Author: SIMHA, SESH AND ONG, CHONG
Source: SATELLITE COMMUNICATIONS
Date: 10/01/90 Vol.: 14 No.: 10 Index#: 00855-00

Title: POLICE DEPT.'S BRI LINES TO SUPPORT VOICE, DATA, IMAGES
Author: SMITH, TOM
Source: NETWORK WORLD
Date: 07/23/90 Vol.: 7 No.: 30 Index#: 00143-00

Title: FUTURE FIBER ACCESS NEEDS AND SYSTEMS
Author: SNELLING, RICHARD K. ET.AL.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 04/01/90 Vol.: 28 No.: 4 Index#: 00856-00

Title: A ROUTING ARCHITECTURE FOR VERY LARGE NETWORKS UNDERGOING RAPID RECONFIGURATION
Author: SNYDER, J. M.
Source: COMPUTER COMMUNICATION REVIEW
Date: 09/01/89 Vol.: 19 No.: 4 Index#: 00857-00

Title: SATELLITE COMMUNICATIONS: A PRACTICAL NETWORK ALTERNATIVE FOR TELECOM USERS
Author: SOBCZAK, JAMES J.

Source: TELECOMMUNICATIONS PRODUCTS AND TECHNOLOGY
Date: 11/01/85 Vol.: 3 No.: 11 Index#: 00858-00

Title: SOUTHWESTERN BELL TELEPHONE'S ISDN EXPERIENCE
Author: STEPHENSON, RICHARD W.
Source: IEEE NETWORK
Date: 09/01/89 Vol.: 3 No.: 5 Index#: 00145-20

Title: ISDN INTERNET ENVIRONMENT AND STANDARDS ANALYSIS
Author: SU, J. ET.AL.
Source: GEORGIA INSTITUTE OF TECHNOLOGY REPORT NO. ASQBG-C-89-022
Date: 08/01/88 Vol.: No.: Index#: 00149-00

Title: OPTIMUM DESIGN ALGORITHMS FOR TERRESTRIAL/SATELLITE COMMUNICATION NETWORK SYSTEMS
Author: SUGANO, M. ET.AL.
Source: TRANSACTIONS OF THE INSTITUTE OF ELECTRONICS, INFORMATION AND COMMUNICATIONS ENGINEERS
Date: 02/01/87 Vol.: J70A No.: 2 Index#: 00859-00

Title: FDDI: A LIGHTWAVE DATA NETWORK STANDARD AND ITS APPLICATIONS
Author: SUMNER, ERIC E.
Source: IEEE NETWORK
Date: 09/01/89 Vol.: 3 No.: 5 Index#: 00860-00

Title: SATELLITE COMMUNICATIONS SYSTEMS AND EARTH STATIONS TECHNOLOGIES
Author: SUZUKI, R.; SAGA, R.; NAKANISH, M.
Source: JOURNAL OF THE INSTITUTE OF ELECTRONICS, INFORMATION AND COMMUNICATION ENGINEERS
Date: 11/01/89 Vol.: 72 No.: 11 Index#: 00861-00

Title: SUCCESS OUT WEST
Author: TANZILLO, KEVIN
Source: COMMUNICATIONS NEWS
Date: 01/01/89 Vol.: 26 No.: 1 Index#: 00150-00

Title: VSAT SYSTEM IV. SATELLITE NETWORK CONTROL PROCESSOR
Author: TESHIGAWARA, Y. ET.AL.
Source: NEC RESEARCH AND DEVELOPMENT
Date: 04/01/88 Vol.: No.: 89 Index#: 00862-00

Title: THE ITALSAT PEROPERATIONAL PROGRAMME
Author: TIRRO, S.

Source: INTERNATIONAL CONFERENCE ON DIGITAL SATELLITE COMMUNICATION 6TH
Date: 01/01/83 Vol.: No.: Index#: 00863-00

Title: COMBINING FDM AND CDM IN A HIGH CAPACITY OPTICAL NETWORK
Author: VANNUCCI, GIOVANNI
Source: IEEE NETWORK
Date: 03/01/89 Vol.: 3 No.: 2 Index#: 00864-00

Title: DAVID SYSTEMS GETS $7M INVESTMENT FOR ISDN R AND D
Author: WALLACE, BOB
Source: NETWORK WORLD
Date: 01/30/89 Vol.: 6 No.: 4 Index#: 00152-00

Title: NICE GUYS REFUSE TO FINISH LAST IN ISDN
Author: WALLACE, BOB
Source: NETWORK WORLD
Date: 01/30/89 Vol.: 6 No.: 4 Index#: 00153-00

Title: TACTICAL ISDN TECHNOLOGY PROGRAM
Author: WEINSTEIN, C. J. ET.AL.
Source: MIT FINAL REPORT SEPT. 89 NO. ESD-TR-90-010
Date: 09/30/89 Vol.: No.: Index#: 00153-20

Title: COMPARISON OF ATM SWITCHING ARCHITECTURES
Author: WULLEMAN, R. ET.AL.
Source: INTERNATIONAL JOURNAL OF DIGITAL AND ANALOG CABLED SYSTEMS
Date: 10/01/89 Vol.: 2 No.: 4 Index#: 00282-00

Title: SATELLITE COMMUNICATIONS IN THE GOVERNMENT ORGANIZATIONS AND PUBLIC CORPORATIONS
Author: YAMAMOTO, M.; ET.AL.
Source: JOURNAL OF THE INSTITUTE OF ELECTRONIC, INFORMATION AND COMMUNICATION ENGINEERS
Date: 11/01/89 Vol.: 72 No.: 11 Index#: 00866-00

Title: FUTURE PROSPECTS OF VISUAL COMMUNICATIONS NETWORK
Author: YASUDA, H.
Source: JOURNAL OF THE INSTITUTE OF TELEVISION ENGINEERS OF JAPAN
Date: 06/01/88 Vol.: 47 No.: 6 Index#: 00867-00

Title: TELECOMMUNICATIONS NETWORK PRINCIPLES AND STRUCTURE TOWARDS INFO NETWOR
Author: YASUI, T.
Source: CONFERENCE: 33RD INTERNATIONAL CONGRESS ON

ELECTRONICS/SPACE JOINT CONGRESS
Date: 01/01/86 Vol.: No.: Index#: 00868-00

Title: THE ORGANIZATION AND SYNCHRONIZATION OF A SWITCHED SPOT-BEAM SYSTEM
Author: YEH, Y.S.; REUDINK, D.O.
Source: INTERNATIONAL CONFERENCE ON DIGITAL SATELLITE COMMUNICATIONS 4TH
Date: 01/01/79 Vol.: No.: Index#: 00869-00

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Title: IEEE COLLOQUIUM ON THE ROLE OF SATELLITES IN TOMORROWS FIBER-OPTIC WORLD
Author:
Source: IEEE CONFERENCE MAY 88
Date: 01/01/88 Vol.: No.: Index#: 00049-00

Title: VARIOUS PAPERS ON GLOBAL TELECOMMUNICATIONS
Author:
Source: GLOBECOM 85 DEC. 1985
Date: 01/01/85 Vol.: No.: Index#: 00871-00

Title: SATELLITES HAVE REVOLUTIONIZED COMMUNICATIONS WORLD SINCE SATCOMM...
Author:
Source: COMMUNICATIONS NEWS
Date: 03/01/88 Vol.: 25 No.: 3 Index#: 00908-03

Title: DOWNLINK PERFORMANCE DEGRADATIONS CAUSED BY AN ON-BOARD BASEBAND SWITCHING MATRIX
Author: AMADESI, P. ET.AL.
Source: CSLET RAPPORTI TECNICI (ITALY)
Date: 08/01/82 Vol.: 10 No.: 4 Index#: 00928-00

Title: OPTICAL TECHNOLOGIES FOR SIGNAL PROCESSING IN SATELLITE REPEATERS
Author: ANANASSO, FULVIO ET.AL.
Source: IEEE COMMUNICATION MAGAZINE
Date: 02/01/90 Vol.: 28 No.: 2 Index#: 00901-00

Title: INTEGRRATION AND TESTING OF AN SS-TDMA 120 MBIT/S REGONERATIVE REPEATER...AT K-BAND
Author: ANANASSO, FULVIO; DELLACCINI, SERGIO
Source: IEE PROCEEDINGS, PART F-COMMUNICATIONS, RADAR AND SIGNAL PROC.
Date: 08/01/87 Vol.: No.: 5 Index#: 00900-00

Title: THE ROLE OF TECHNOLOGY IN INFLUENCING FUTURE CIVIL COMMUNICATION SATELLITES
Author: BAGWELL, JAMES
Source: PROCEEDINGS OF THE IEEE
Date: 07/01/90 Vol.: 78 No.: 7 Index#: 00906-03

Title: SELF-ADAPTIVE ECHO CANCELLATION FOR TELEPHONY
Author: BASTANI, M. H.
Source: NASA ENST-84 E013
Date: 07/04/84 Vol.: No.: Index#: 00929-00

Title: MEASUREMENTS ON A 30 CHANNEL PCM SYSTEM
Author: BATES, R.J.S.
Source: CAMBRIDGE UNIVERSITY (UK) CUED/B-ELECT/TR-53-1978
Date: 01/01/78 Vol.: No.: Index#: 00930-00

Title: SATELLITE SYSTEMS AVAILABILITY AND EFFECTIVENESS
Author: BEHMANN, F.F. ET.AL.
Source: ANNUAL RELIABILITY AND MAINTAINABILITY SYMPOSIUM (AIAA)
Date: 01/24/84 Vol.: No.: Index#: 00931-00

Titlele: APPLICATIONS '90: TELECOMMUNICATIONS
Author: BELL, TRUDY E.
Source: IEEE SPECTRUM
Date: 02/01/90 Vol.: No.: Index#: 00902-00

Title: DIFFRACTION BASED THEROETICAL MODEL FOR PREDICTION OF UHF PATH LOSS IN CITIES
Author: BERTONI, H. C. ET.AL.
Source: NASA GRAI 8815;STAR2612 (POLYTCH. INST. NY)
Date: 11/01/87 Vol.: No.: Index#: 00932-00

Title: TRANSMISSION QUALITY MEASUREMENTS FOR A COMPARISION BETWEEN TERRESTRIAL AND SIRIO SATELLITE TELEPHONE LINKS
Author: BIANCHI, F. ET.AL.
Source: NOTE RECENSIONI E NOTIZLE (ITALY)
Date: 10/01/81 Vol.: 30 No.: 4 Index#: 00932-10

Title: HIGH DATA RATE ATMOSPHERIC AND SPACE COMMUNICATION
Author: BITTEL, R.H. ET.AL.
Source: PROCEEDINGS OF SPIE (INTL. SOC. OF OPT. ENG.)
Date: 09/08/88 Vol.: 996 No.: Index#: 00903-00

Title: A COMPARISON OF TRELLIS CODED VERSUS CONVOLUTIONALLY CODED SSMA SYSTEMS
Author: BOUDREAW, GARY D. ET.AL.
Source: IEEE JOURNAL ON SELECTED AREAS ON COMMUNICATIONS
Date: 05/01/90 Vol.: 8 No.: 4 Index#: 00909-03

Title: NASA'S ATDRSS SYSTEM FOR THE YEARS 2000 AND BEYOND
Author: BRANDEL, DANIEL C. ET.AL.
Source: PROCEEDINGS OF THE IEEE
Date: 07/01/90 Vol.: 78 No.: 7 Index#: 00906-02

Title: TROUBLESHOOTING YOUR SATELLITE NETWORK
Author: BROSS, DAVID
Source: VIA SATELLITE
Date: 03/01/90 Vol.: V No.: 3 Index#: 00903-01

Title: INTERNATIONAL SATELLITE COMMUNICATIONS IN THE PACIFIC
DEVELOPMENT AND FUTURE PROSPECTS
Author: BURCH, DEAN
Source: PTC 1990 CONFERENCE
Date: 01/14/90 Vol.: No.: Index#: 00933-00

Title: COMMUNICATIONS SATELLITES: ORBITING IN THE '90S
Author: CAMPANELL, S.J.
Source: IEEE SPECTRUM
Date: 08/01/90 Vol.: No.: Index#: 00919-01

Title: COMPANDED SINGLE SIDEBAND (CSSB) AM/FDMA PERFORMANCE
Author: CAMPANELLA, S.J.
Source: INTERNATIONAL JOURNAL OF SATELLITE COMMUNICATIONS
Date: 07/01/83 Vol.: 1 No.: JUL-SEP Index#: 00934-00

Title: SATELLITE COMMUNICATIONS SYSTEMS AND TECHNOLOGY CIRCA 2000
Author: CAMPANELLA, S.J. ET.AL.
Source: PROCEEDINGS OF THE IEEE
Date: 07/01/90 Vol.: 78 No.: 7 Index#: 00906-01

Title: SUITABILITY OF ANSI STANDARDS FOR QUANTIFYING COMMUNICATION
SATELLITE SYSTEM PERFORMANCE
Author: CASS, ROBERT D.
Source: NTIA
Date: / / Vol.: No.: Index#: 00904-00

Title: SIDESTEPPING INTERFACE
Author: CORONDAN, WILLIAM
Source: SATELLITE COMMUNICATIONS
Date: 04/01/87 Vol.: No.: Index#: 00905-00

Title: SITE DIVERSTIY: A POWERFUL ANTIFADING TECHNIQUE FOR SATELLITE COMMUNICATIONS IN THE 20/30 GHZ BANDS
Author: DIZENBIO, D.
Source: FONDAZIONE UGO BORDON: (ITALY)/NASA
Date: / / Vol.: No.: Index#: 00935-00

Title: SCANNING THE ISSOE: SATELLITE COMMUNICATIONS
Author: DURRANI, SAIJAD H. ET.AL.
Source: PROCEEDINGS OF THE IEEE
Date: 07/01/90 Vol.: 78 No.: 7 Index#: 00906-00

Title: IMPACT OF OTS PROPAGATION RESULTS ON THE ECS SYSTEM
Author: DUTRONC, J. ET.AL.
Source: ESA OTS: 3RD YEAR IN ORBIT (CONFERENCE)
Date: 08/01/81 Vol.: No.: Index#: 00936-00

Title: COMBINING SATELLITE AND FIBEROPTIC TECHNOLOGIES IMPROVES INTERNATIONAL SERVICES AND COSTS
Author: EDWARDS, M.
Source: COMMUNICATIONS NEWS
Date: 06/01/87 Vol.: 24 No.: 6 Index#: 00012-00

Title: DIGITAL RECEIVER STRUCTURES AND METHODS FOR THE DETERMINATION FO THE SCANNING FREQUENCY IN MODEMS FOR FAST DATA TRANSMISSION VIA..
Author: EILENBERG, G.
Source: STUTTGART UNIVERSITY (GERMANY); NASA REPORT NO. GN-87-90429
Date: 01/01/86 Vol.: No.: Index#: 00937-00

Title: SATELLITE DIGITAL COMMUNICATIONS SYSTEMS
Author: ENDO, K. ET.AL.
Source: FUJITSU
Date: 01/01/87 Vol.: 38 No.: 1 Index#: 00907-00

Title: MEASURING PERFORMANCE OF COMMUNICATION SATELLITE SYSTEMS
Author: FEHRENBACH, H.
Source: TELECOMMUNICATIONS
Date: 04/01/81 Vol.: 15 No.: 4 Index#: 00938-00

Title: FM SPECTRAL MODELING AND FDM/FM SIMULATION PROGRAMS
Author: FILIPPI, C. A.
Source: MYOSTR[PTY-83-134
Date: 10/01/83 Vol.: No.: Index#: 00939-00

Title: ONBOARD DEMAND SCHEDULING OF A MULTIBEAM SS/TDMA SATELLITE WITH INTEGRATED CIRCUIT AND PACKET SWITCHING
Author: FRANK, A. J.
Source: COLUMBIA UNIVERSITY NEW YORK (THESIS)
Date: 01/01/84 Vol.: No.: Index#: 00940-00

Title: VSAT TECHNOLOGY FOR TODAY AND FOR THE FUTURE PART 6
Author: GARNER, WILLIAM
Source: COMMUNICATIONS NEWS
Date: 03/01/88 Vol.: 75 No.: 3 Index#: 00908-00

Title: INCREASED CAPACITY USING CDMA FOR MOBILE SATELLITE COMMUNICATIONS
Author: GILHOUSE, KLEIN S. ET.AL.
Source: IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATION
Date: 05/01/90 Vol.: 8 No.: 4 Index#: 00909-00

Title: SUBMARINE CABLE VIS-A-VIS SATELLITE SYSTEMS: OPERATIONAL AND ECONOMIC ASPECTS
Author: GRENIER, J.
Source: CONFERENCE: SUBMARINE TELECOMMUNICATION SYSTEMS; IEEE CONFERNCE
Date: 01/01/80 Vol.: No.: Index#: 00910-00

Title: ON-BOARD SWITCHING AND PROCESSING
Author: HARROLD, JOSEPH L. ET.AL.
Source: PROCEEDINGS OF THE IEEE
Date: 07/01/90 Vol.: 78 No.: 7 Index#: 00906-04

Title: PROPAGATION ASPECTS OF ISDN SATELLITE LINKS ABOVE 10 GHZ
Author: HENDRICKX, M. P.
Source: ICAP 89 CONFERENCE
Date: 01/01/89 Vol.: No.: Index#: 00019-00

Title: CALCULATION OF THE BER IN SATELLITE DIGITAL BROADCAST SYTEMS BY IDENTIFICATION OF THE SYNCHRONIZING WORD
Author: HERRMAN, G. ET.AL.
Source: RUNDFUNKTECHNISCHE MITTEILUNGEN (GERMANY)
Date: 11/01/89 Vol.: 32 No.: 6 Index#: 00941-00

Title: ENCRYPTION IN THE 90S - IS THERE A NEW DECODER ON THE HORIZON?
Author: HOWES, KAREN J.P.
Source: VIA SATELLITE
Date: 06/01/90 Vol.: 5 No.: 6 Index#: 00437-00

Title: A NEW TECHNIQUE FOR DATA TRANSMISSION VIA TDMA SATELLITE LINK
Author: INAGAKI, K.; HIVATA, Y.; OGAWA, A.
Source: NTC '77 NATIONAL TELECOMMUNICATIONS CONFERENCE RECORD
Date: 01/01/77 Vol.: 1 No.: Index#: 00941-01

Title: ROBUST SIGNALING SYSTEM FOR LAND MOBILE SATELLITE SERVICES
Author: IRISH, D. ET.AL.
Source: AUSSAT PTY LTD, SYDNEY AUSTRALIA/NASA
Date: 03/01/89 Vol.: No.: Index#: 00911-00

Title: ANALYSIS OF SWITCH MATRIX FOR AN SS/TDMA SYSTEM
Author: ITO, Y. ET.AL.
Source: IEEE PROCEEDINGS
Date: 03/01/77 Vol.: 65 No.: Index#: 00912-00

Title: NNEL MULTIPLEX DIGITAL ECHO SUPPRESSOR
Author: IZUMI, K.
Source: INTL CONFERENCE ON DIGITAL SATELLITE COMMUNICATIONS (3RD, KYOTO)
Date: 01/01/75 Vol.: No.: Index#: 00942-00

Title: INTELSAT: THE NEXT 25 YEARS AND BEYOND
Author: JOHNSON, JAMES W.
Source: PTC 1990 CONFERENCE
Date: 01/14/90 Vol.: No.: Index#: 00943-00

Title: AN SS-TDMA SYSTEM USING ONBOARD REGENERATIVE REPEATERS AND BASEBAND SWITCH
Author: KATO, S.; SAMEJIMA, S.; YAMAMOTO, H.
Source: ICC '84 LINKS FOR THE FUTURE: SCIENCE, SYSTEMS AND SERVICES FOR COMMUNICATIONS
Date: 01/01/84 Vol.: 2 No.: Index#: 00924-00

Title: RESULTS AND CONCLUSIONS FROM TELEPHONE SIGNALING TESTS THROUGH TDMA/DSI SYSTEM
Author: KERRIDGE, M. L.
Source: ESA OTS: 3RD YEAR IN ORBIT/BTI CONFERENCE
Date: 08/01/81 Vol.: No.: Index#: 00944-00

Title: AN OVERVIEW OF SATELLITE TRANSMISSION ISSUES AND THE ISDN
Author: KNIGHT, IVOR N. ET.AL.
Source: ICC 86 CONFERENCE JUNE 86
Date: 01/01/86 Vol.: No.: Index#: 00024-00

Title: STUDY ON THE APPLICABILITY OF ASYNCHRONOUS TIME DIVISION (ATD), TECHNIQUES TO SATELLITE COMMUNICATIONS SYSTEMS.
Author: KUHLER, H. ET.AL.
Source: NASA ESA-CR(P)-2665; ETN-89-93911
Date: 07/01/88 Vol.: No.: Index#: 00945-00

Title: KU-BAND PAYLOAD TRADE-OFFS FOR ISDN SERVICES IN EUROPE
Author: LOPRIORE, M. ET.AL.
Source: AIAA INTERNATIONAL COMMUNICATION SATELLITE SYSTEMS CONFERENCE AND EXHIBIT
Date: 01/01/90 Vol.: No.: Index#: 00028-00

Title: COMMUNICATION LINK DESIGN OF THE GERMAN DFS NETWORK
Author: MAHNER, H.
Source: COMMUNICATION SATELLITE SYSTEMS CONFERENCE/AIAA
Date: 03/17/86 Vol.: No.: Index#: 00946-00

Title: ITALSAT SATELLITE ON-BOARD BASEBAND PROCESSOR
Author: MARCONICCHIO, F.
Source: TELESPACIO ROME GLOBCOM CONFERENCE PAPER
Date: 01/01/87 Vol.: No.: Index#: 00913-00

Title: MOBILE SATELLITE DISASTER COMMUNICATION SYSTEMS: INTEGRATION STRATEGIES
Author: MARTINEZ, LARRY F.
Source: PTC 1990 CONFERENCE
Date: 01/14/90 Vol.: No.: Index#: 00947-00

Title: FIRST INTERNATIONAL HDTV DIGITAL TRANSMISSION VIA INTELSAT SATELLITE
Author: MASUMOTO, SHUICHI ET.AL.
Source: PACIFIC TELECOM COUNCIL 1990 CONFERENCE
Date: 01/14/90 Vol.: No.: Index#: 00948-00

Title: FRAME SYNCHRONIZATION IN SS-TDMA
Author: MAZOR, R. A. ET.AL.
Source: NASA MCS-8021;ESA-CR(P)-1521
Date: / / Vol.: No.: Index#: 00949-00

Title: STUDY OF A CODING AND MODULATION SYSTEM FOR THE V32 CALL OF THE CCITT
Author: MEKRAOUI, M.
Source: ECOLE NATIONALE SUPERIEURE DES TELECOMMS (PARIS)/NASA REP # ENST-87E007

Date: 04/01/87 Vol.: No.: Index#: 00950-00

Title: DELAY ANALYSIS OF A SATELLITE CHANNEL RESERVATION SYSTEM WITH VARIABLE FRAME FORMAT
Author: MINE, H.; OHNO, K.; SHIOYAMA, T.
Source: IEE PROCEEDINGS, PART F
Date: 06/01/83 Vol.: No.: 4 Index#: 00914-00

Title: DELAY ANALYSIS OF PACKET SWITCHING SYSTEM WITH A SATELLITE HAVING PROCESSING CAPABILITY
Author: MINE, H.; OHNO, K.; SHIOYANA, T.
Source: IEEE TRANSACTIONS ON COMMUNICATIONS
Date: / / Vol.: COH-32 No.: Index#: 00307-01

Title: MODELS AND ALGORITHMS FOR OPTIMAL TRAFFIC ASSIGNMENT IN SSTDMA SWITCHING SYSTEMS
Author: MINOUX, M.
Source: INTERNATIONAL JOURNAL OF SATELLITE COMMUNICATIONS
Date: 03/01/87 Vol.: 5 No.: JAN/MAR Index#: 00952-00

Title: ECHO CONCELLATION AND ITS APPLICATIONS
Author: MURANO, KAZUO ET.AL.
Source: IEEE COMMUNICATIONS MAGAZINE
Date: 01/01/90 Vol.: No.: Index#: 00915-00

Title: NEW TRANSMISSION METHODS: SATELLITES AND OPTICAL CONDUCTORS
Author: NICOLICH, A.
Source: L'ANTENNA, ITALY
Date: 09/01/80 Vol.: 52 No.: 9 Index#: 00916-00

Title: EVOLVING TECHNOLOGIES - ACTS THE BLUEPRINT FOR FUTURE TELECOMMUNICATIONS
Author: OLMSTEAD, DEAN ET.AL.
Source: VIA SATELLITE
Date: 09/01/89 Vol.: 4 No.: 9 Index#: 00916-01

Title: THE ECONOMIC AND SOCIAL BENEFITS OF SPACE COMMUNICATION
Author: PELTON, JOSEPH N.
Source: SPACE POLICY
Date: 11/01/90 Vol.: No.: Index#: 00509-00

Title: NEW TRANSMISSION TECHNOLOGIES
Author: PELTON, JOSEPH N.
Source: VIA SATELLITE

Date: 09/01/90 Vol.: V No.: 9 Index#: 00917-01

Title: BIT AND BURST SYNCHRONISATION IN REGENERATIVE SSTDMA SYSTEMS
Author: PENNONI, G.
Source: ICC '85 INTERNATIONAL CONFERENCE RECORD
Date: 01/01/85 Vol.: 2 No.: Index#: 00917-00

Title: COMMUNICATION REQUIREMENTS FOR TERRESTRIAL AND SPACE RADIO LINKS AT FREQUENCIES ABOVE 10 GHZ
Author: PERONI, B.
Source: ESA PROB. OF SPACE AND TERRESTRIAL MICROWAVE PROPAGATION (ITALY)
Date: 05/01/76 Vol.: No.: Index#: 00953-00

Title: SYSTEM PERFORMANCE OF DUAL POLARIZATION SATELLITE COMMUNICATION LINKS...
Author: PRATT, T. ET.AL.
Source: MILCOM '83; PROCEEDINGS OF THE MILITARY COMMUNICATION CONFERENCE
Date: 11/02/83 Vol.: 1 No.: Index#: 00918-00

Title: MULTIPERSON MULTIPULSE LPC ANALYSIS IN NOISE FOR MEDIUM RATE SPEECH TRANSMISSION
Author: PREUSS, R. D.
Source: ECOLE NATIONALE SUPERIEURE DES TELECOMMUNICATIONS (PARIS)
Date: 12/30/85 Vol.: No.: Index#: 00954-00

Title: ERROR PERFORMANCE OR SATELLITE ISDN CONNECTIONS
Author: PUGA, MARCOS W. ET.AL.
Source: GLOBECOM 87 CONFERENCE
Date: 01/01/87 Vol.: No.: Index#: 00038-00

Title: A GENERAL METHOD FOR RADIO SPECTRUM EFFICIENCY DEFUXING
Author: RAMADANOVIC, LJUBOMIR
Source: ALTA FREQUEUZA (ITALY)
Date: 08/01/86 Vol.: 55 No.: JUL/AUG Index#: 00951-00

Title: PERFORMANCE OF A CODED BAND-LIMITED SSMA SCHEME USING CHANNEL SENSING
Author: RESHEFF, SAMUEL ET.AL.
Source: IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS
Date: 05/01/90 Vol.: 8 No.: 4 Index#: 00909-01

Title: SPREAD SPECTRUM GOES COMMERICAL
Author: SCHILLING, DONALD L.

Source: IEEE SPECTRUM
Date: 08/01/90 Vol.: No.: Index#: 00919-00

Title: A PREDICTOR MODEL FOR EHF COMMUNICATION SATELLITE SYSTEM AVAILABILITIES IN THE PRESENCE OF RAIN
Author: SCHWAB, L. M. ET.AL.
Source: LINCOLN LAB, M.I.T., LEXINGTON, MA
Date: 03/01/83 Vol.: No.: Index#: 00955-00

Title: EXPERIMENTAL MILLIMETER WAVE SATELLITE COMMUNICATION SYSTEM
Author: SHIMADA, MASAKI
Source: PTC 1990 CONFERENCE
Date: 01/04/90 Vol.: No.: Index#: 00956-00

Title: HOW VOICE/DATA INTEGRATION ISSUES IMPACT THE TECHNOLOGY OF T1 TRANSMISSION AND NETWORKING
Author: SPIEGLEMAN, A.
Source: COMMUNICATIONS NEWS
Date: 06/01/87 Vol.: 24 No.: 6 Index#: 00957-00

Title: NEXT GENERATION COMMUNICATION SATELLITES
Author: STAMMINGER, REINHARD ET.AL.
Source: SATELLITE COMMUNICATIONS
Date: 11/01/89 Vol.: No.: Index#: 00920-00

Title: RELIABILITY OF THE GLOBAL NASCOM NETWORK (NASA)
Author: STELTER, N.R.
Source: ANNUAL RELIABILITY AND MAINTAINABILITY SYMPOSIUM, SAN FRANCISCO, CA
Date: 01/01/72 Vol.: No.: Index#: 00921-00

Title: SATELLITE DOWN LINK CALCULATIONS FOR THE NON-ENGINEER PART I
Author: STEM, AC
Source: VIA SATELLITE
Date: 04/01/90 Vol.: 5 No.: 4 Index#: 00921-01

Title: DOWNLINK CALCULATIONS FOR THE NON-ENGINEER PART 2
Author: STEM, AL
Source: VIA SATELLITE
Date: 05/01/90 Vol.: 5 No.: 5 Index#: 00921-02

Title: RESULTS AND ANALYSIS OF WORLDWIDE ECHO CANCELLER FIELD TRIAL
Author: SUYERHOOD, H. G. ET.AL.
Source: INTERNATIONAL CONFERENCE ON DIGITAL SATELLITE

COMMUNICATIONS (3RD, KYOTO)
Date: 11/11/75 Vol.: No.: Index#: 00959-00

Title: PERFORMANCE EVALUATION OF A SATELLITE-LINKED EXPERIMENTAL NETWORK
Author: THOMA, G.R.
Source: IEEE TRANSACTIONS ON AEROSPACE AND ELETRONIC SYSTEMS
Date: 11/01/80 Vol.: 16 No.: Index#: 00922-00

Title: MULTISTAGE DECODING OF FREQUENCEY-HOPPED FSK SYSTEM
Author: TIMOR, V.
Source: BELL SYSTEM TECHNICAL JOURNAL (AIAA TECHNICAL LIBRARY)
Date: 04/01/81 Vol.: 60 No.: Index#: 00923-00

Title: THE SIRIO-SHF EXPERIMENT - FINAL SYSTEM CONFIGURATION
Author: TIRRO, S.
Source: INTERNATIONAL SCIENTIFIC-TECHNOLOGICAL CONFERENCE OF SPACE MARCH 1977
Date: 01/01/77 Vol.: No.: Index#: 00923-01

Title: VERY LOW RATE CONVOLUTIONAL CODES FOR MAXIMUM THEORETICAL PERFORMANCE OF SSMA CHANNELS
Author: VITORBI, ANDREW J.
Source: IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS
Date: 05/01/90 Vol.: 8 No.: 4 Index#: 00909-02

Title: TRANSMISSION AND PERFORMANCE QUALITY STANDARDS FOR SATELLITE LINKS IN THE ISDN
Author: WEINREICH, D. E.
Source: ICC 86 CONFERENCE JUNE 86
Date: 01/01/86 Vol.: No.: Index#: 00047-00

Title: COMPARISON OF SIGNAL PROCESSING TECHNIQUES FOR SATELLITE TELEPHONY
Author: WELTI, G. R.
Source: NTC '77; NATIONAL TELECOMMUNICATIONS CONFERENCE RECORD
Date: 01/01/77 Vol.: 1 No.: Index#: 00925-00

Title: PROPAGATION MEASUREMENTS FOR INMARSAT LANDMOBILE SATELLITE PAGING SERVICES
Author: WONG, S. W.
Source: INTERNATIONAL CONFERENCE ON ANTENNAS AND PROPAGATION (IEE, LONDON AND AIAA)
Date: 01/01/89 Vol.: No.: Index#: 00960-00

Title: APPROXIMATE PERFORMANCE ANALYSIS AND SIMULATION FOR VARIABLE CHANNEL PER BURST SS-TDMA
Author: YABUSAKI, MASAMI
Source: IEEE TRANSACTIONS ON COMMUNICATIONS
Date: 03/01/90 Vol.: 38 No.: 3 Index#: 00926-00

Title: GRADE OF SERVICE IN THE ISDN ERA
Author: YOKOI, TADAHIRO ET.AL.
Source: ATT LIBRARY NETWORK
Date: / / Vol.: No.: Index#: 00927-00

Miscellaneous

Title: INTERNATIONAL CONFERENCE ON DIGITAL SATELLITE COMMUNICATION 4TH
Author:
Source: JOURNAL ANNOUNCEMENT: IAA 7920
Date: 01/01/79 Vol.: No.: Index#: 01028-00

Title: FIFTH INTERNATIONAL CONFERENCE ON MOBILE RADIO AND PERSONAL COMMUNICATION
Author: ANON (ED)
Source: IEE CONFERENCE PUBLICATION
Date: 01/01/89 Vol.: No.: 315 Index#: 01001-00

Title: DAWN OF A NEW ERA IN EDUCATION THROUGH THE USE OF ELECTRONIC MEDIA
Author: ASANO, M.
Source: 1ST WORLD ELECTRONIC MEDIA SYMPOSIUM; SPEAKERS PAPERS
Date: 01/01/89 Vol.: No.: Index#: 01002-00

Title: L-SAT EUROPE'S LARGE SATELLITE FOR THE EIGHTIES
Author: BIGGS, P.D.; BLONSTEIN, J.L.
Source: INTERNATIONAL ASTRONAUTICAL CONGRESS 31ST #IAF PAPER 80-F-169
Date: 09/01/80 Vol.: No.: Index#: 01003-00

Title: MICROWAVE POWER TRANSMISSION SYSTEM: SPACE FLIGHT EXPERIMENT PROGRAM
Author: CHANG, KAI ET.AL.
Source:
Date: 10/06/90 Vol.: No.: 90-216 Index#: 01005-00

Title: CANADIAN INTERESTS AND ACTIVITIES IN SPACE COMMUNICATION AND NAVIGATION
Author: CHAPMAN, J. H.
Source: AMERICAN ASTRONAUTICAL SOCIETY 19TH ANNUAL MEETING
Date: 06/01/73 Vol.: No.: Index#: 01004-00

Title: FREQUENCY RE-USE IN THE INTELSAL SYSTEM
Author: EATON, R. AND SMITH, AL
Source: INTERNATIONAL CONFERENCE ON SATELLITE COMMUNICATION SYSTEMS TECH.
Date: 01/01/75 Vol.: No.: 1AA7517 Index#: 01006-00

Title: POWER SUPPLY TECHNOLOGIES - KEYSTONE FOR SPACE AND TERRESTRIAL DEVELOPMENT
Author: FRITZSCHE, A. ET.AL.
Source: 41ST CONGRESS OF THE INTERNATIONAL ASTRONAUTICAL FEDERATION
Date: 10/06/90 Vol.: No.: IAF-90- Index#: 01007-00

Title: SATELLITE COMMUNICATIONS LASER SIGNALS IN SPACE
Author: HACKER, G.
Source: FUNKSCHAU
Date: / / Vol.: No.: 26 Index#: 01008-00

Title: COMMUNICATION MISSION AND SYSTEM ASPECTS OF EUROPEAN REGIONAL SATELLITE SYSTEM
Author: HOWELL, T. F.
Source: ESA JOURNAL
Date: 01/01/80 Vol.: 4 No.: 3 Index#: 01009-00

Title: IMAGE BANKS; DEFINITIONS AND TECHNOLOGIES
Author: HUDRISIER, H.
Source: INFORMATION ET GESTION
Date: 05/01/83 Vol.: No.: Index#: 01010-00

Title: MULTI-DESTINATION/CIRCULAR/TRANSMISSIONS IN SATELLITE COMMUNICATION SYSTEMS IN USSR
Author: KANTOR, L. IA
Source: INTERNATIONAL ASTRONAUTICAL FEDERATION 28TH CONGRESS
Date: 09/01/77 Vol.: No.: Index#: 01011-00

Title: MULTIBEAM SYSTEM APPLICATIONS AND IMPACT ON SATELLITE COMMUNICATIONS
Author: KAWAI, M. AND NAKAYA, K.
Source: NTT RADIO/41ST CONGRESS OF INTERNATIONAL ASTRONAUTICAL FEDERATION
Date: 10/06/90 Vol.: No.: IAF-90- Index#: 01012-00

Title: BREAK THROUGH/ CONTRACT BETWEEN SATELLITE SERVICE AND TWO BANKS
Author: KERVER, TOM
Source: SATELLITE COMMUNICATIONS
Date: 08/01/86 Vol.: No.: Index#: 01013-00

Title: DEREGULATION INDICATES A HEALTHY SATELLITE SERVICES FUTURE
Author: KIRK, BARRIE

Source: COMPUTING CANADA
Date: 09/13/90 Vol.: V16 No.: 18 Index#: 01014-00

Title: COMMUNICATIONS SATELLITE SYSTEM FOR AFRICA
Author: KRIEGAL, W.; AND LAUFENBER, W.
Source: DORNIER-WEIKE GIMIBILTI
Date: 01/01/80 Vol.: No.: Index#: 01019-00

Title: SPACE SOMMUNICATIONS SYSTEMS - COST ANALYSIS AND GENERAL ECONOMIC OPTIMIZATIONS METHODS
Author: KRIEGL, W.; LOEHLE, H.; OTTO, D.
Source: SPACE, SPACE TELECOMMUNICATIONS AND SATELLITE RADIO BROADCASTING CONFERENCE
Date: 01/01/79 Vol.: No.: Index#: 01017-00

Title: THRESHOLD EXTENSION OF AN F.M. DEMODULATOR USING A DYNAMIC TRACKING FILTER
Author: LOCKYER, K. S.
Source: INSTITUTION OF ELECTRICAL ENGINEERS, PROCEEDINGS
Date: 08/01/68 Vol.: 115 No.: Index#: 01018-00

Title: COMMUNICATION SATELLITES FOR SOUTH AMERICA
Author: LOEHLE, H.; BRAUN, H.M.; SCHMIDBAUER, M.
Source: DORNIER-WERKE GIMIBILTI
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Title: THE SYMPHONIE PROJECT
Author: MADON, P.K. AND PFEIFFER, B.R.K.
Source: CONSORTIUM FRANCO ALLEMAND POUR LE SATELLITE SYMPHONIE
Date: 01/01/75 Vol.: No.: Index#: 01019-00

Title: ENGINEERING TEST SATELLITE IV AND FUTURE APPLICATIONS
Author: NAKAMARV, K. ET.AL.
Source: 41ST CONGRESS OF THE INTERNATIONAL ASTRONAUTICAL FEDERATION
Date: 10/06/90 Vol.: No.: IAF-90- Index#: 01020-00

Title: SYSTEM ENGINEERING PROBLEMS/DEVELOPMENT/SATELLITE SYMPHONIE
Author: PFEIFFER, B. R.
Source: INTERNATIONAL SYMPOSIUM ON SPACE TECHNOLOGY AND SCIENCE 10TH
Date: 01/01/73 Vol.: No.: Index#: 01021-00

Title: THE EUROPEAN COMMUNICATION SATELLITE AND DERIVATIVES
Author: RAITT-BROWN, CI; HAIGH, A.
Source: BRITISH INTERPLANETARY SOCIETY JOURNAL
Date: 05/01/79 Vol.: 32 No.: Index#: 01022-00

Title: A SATELLITE SYSTEM FOR EDUCATIONAL TELEVISION
Author: ROSEN, H.
Source: ASTRONAUTICS AND AERONAUTICS
Date: 04/01/68 Vol.: 6 No.: Index#: 01023-00

Title: FREQUENCY SHAVING BY FIXED AND MOBILE USERS IN THE 4-28 MHZ RANGE
Author: SAILORS, D.B. AND BROWN R.P.
Source: NAVAL OCEAN SYSTEMS CENTER REPORT #NOSC/TR-230
Date: 03/28/78 Vol.: No.: Index#: 01024-00

Title: DBS, DEREGULATION SPUR INTERNATIONAL BROADCASTING
Author: SATELLITE COMMUNICATIONS STAFF
Source: SATELLITE COMMUNICATIONS
Date: 12/01/89 Vol.: No.: Index#: 01025-00

Title: DIGITAL-ANALOG AND ANALOG TO DIGITAL CONVERSION USING PULSE DURATION MOD.
Author: SCHLEIFER, W.
Source: TECHNISCHE UNIVERSITY MUENCHEN (DOCTORIAL THESIS)
Date: 01/01/86 Vol.: No.: Index#: 01026-00

Title: MULTISTAGE DECODING OF FREQUENCEY-HOPPED FSK SYSTEM
Author: TIMOR, V.
Source: BELL SYSTEM TECHNICAL JOURNAL (AIAA TECHNICAL LIBRARY)
Date: 04/01/81 Vol.: 60 No.: Index#: 00923-00

Title: KEGGING PLANT: 2002 AD-ROBOT OR MAN
Author: WILKINSON, J.
Source: THORN EMI ROBOTICS, UK/INTEL/ET AL ISATA 86 AUTOMOTIVE TECH
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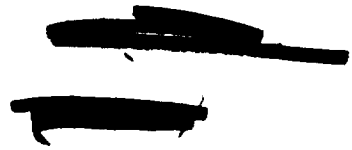

16. Abstract

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