PLENARY SESSION

1. SATCOM HIGHLIGHTS — PRESENTATION/PANEL

ORGANIZER: Dr. Kamilo Feher, Professor, University of Ottawa, and a Consultant, SPAR Aerospace Limited

CHAIRMAN: David A. Golden, Chairman of the Board, Telesat Canada

KEYNOTE SPEAKER

1.1 The Honorable Francis Fox — "Highlights of Canadian Satcom Systems, Program Developments", Minister of Communications, Government of Canada

A BRIEF ADDRESS FOLLOWED BY PANEL DISCUSSION

1.2 Larry D. Clarke — "Satellite Systems Programs: A Manufacturer's Viewpoint", — Chairman of the Board, SPAR Aerospace Limited, Toronto

*1.3 Dr. Martin Fournier — "Highlights of Teleglobe Programs in Satcom", — Vice-President, Engineering, Teleglobe Canada, Montreal

1.4 John Almond — "Telesat Programs, Plans" — Vice-President, Engineering, Telesat Canada, Ottawa

*1.5 Robert Kinzie — "COMSAT's Role in U.S. and International Satcom Systems" — President, COMSAT General Corporation, Washington, D.C., U.S.A.

*1.6 Richard D. Brandes — "Highlights of U.S./Canadian Cooperative Efforts on Commercial Communications Satellite Programs" — Group Vice-President, Hughes Aircraft, California

1.7 Dr. Bert C. Blevis — "Canadian Satcom R & D" — Director General, Space Technology and Applications, Communications Research Centre, DOC, Ottawa

1.8 Dr. C. Siocos — "Satcoms in Canadian Broadcasting" — Director of Engineering, Canadian Broadcasting Corporation, Montreal

1.9 R.M. Warren — "Electronic Mail" — President, Canada Post Office

1.10 G.W. Hopkins — "A User Point of View" — Senior Vice-President, Operations and Systems, Bank of Montreal, Toronto

1.11 W. Brian Hewat — "Highlights of TCTS Satellite Services" — Vice-President, Marketing and Development, Bell Canada, Ottawa

*Paper not received at date of printing
ORGANIZER: Dr. Wen Jui, Project Engineer, Hughes Aircraft Co., Los Angeles, Cal.
CHAIRMAN: R.D. Brandes, Group Vice-President, Hughes Aircraft Co.


2.2 J.A. Frohbieter — “RCA's Approach to Increased Communications Satellite Performance” — Director, Satellite Programs, RCA, Princeton

2.3 R. Berry — “High Capacity Satellites for Efficient Utilization of the Geostationary Arc” — Director, Space Systems, Ford Aerospace, Palo Alto

*2.4 L. Steve Pilcher — “US Satellite Communications Systems Development: Hughes Perspectives” — Vice-President, Hughes Aircraft, Los Angeles

PANEL DISCUSSION: U.S. SATELLITE USERS
Each satellite user's company viewpoint on past, present and future trends on satellite applications will be presented and discussed. Coherent, compatible and non-overlapping ten (10) minute formal presentations will be coordinated by the Panel Chairman, Mr. R.D. Brandes.

CHAIRMAN: Mr. R.D. Brandes, Group Vice-President, Hughes Aircraft

PANELISTS
*2.5 Dr. John Pope, Vice President; A.W. Brook, Western Union, N.J.
*2.6 Mr. Joe Napoli, Manager, Satellite Programs, GTE Satellite Corp., Stamford, Conn.
*2.7 Mr. Otto Hoernig, Vice President, American Satellite Company
*2.8 Mr. Michael Lyons, Director, Satellite Business Systems
*2.9 Mr. Leo M. Keane, Vice President, Satellite Television Corporation
*2.10 Mr. Robert F. Latter, Engineering Director, AT&T Long Lines
*2.11 Mr. Robert Kinzie, President, Comsat General Corporation
*2.12 Dr. C. Jerry Waylan, Vice President & General Manager, Southern Pacific Sat.
*2.13 Mr. J. Almond, Vice President, Telesat Canada (Special Guest Panelist)
*2.14 Mr. L. Steve Pilcher, Vice President, Hughes Communications International
*2.15 Mr. L.E. Foster, General Manager, GE, Spacecraft Operations
*2.16 Mr. Bob Berry, Director, Space Systems, Ford Aerospace
*2.17 Mr. J.A. Frohbieter, Director, Satcom Programs, RCA Astro Elec.
3. VIDEO TELECONFERENCING — ELECTRONIC TRAVEL

ORGANIZER/CHAIRMAN: L.R. Steinman, President, Canadian Teleconference Network Inc., Toronto

3.1 L.R. Steinman — "Strategic Planning, Conference Design, Networking, Production, Display and Other Aspects of Video-Teleconference Management" — President, Canadian Teleconference Network Inc., Toronto, Ontario

3.2 Mary Mackintosh — "Growth in the Single Event Video Conferencing Industry and Applications for Video Conferencing" — Consultant, Telespan, Altadena, California

*3.3 K. Leddick — "Network Development in the U.S.A." — President, VideoStar Connections Inc., Atlanta, Georgia, U.S.A.

3.4 J. Kirouac, D.N. Bullock — "Video Conferencing: Electronic Travel TCTS One-Way Point to Multipoint Service" — TransCanada Telephone System, Ottawa, Ontario

3.5 N.P. West — "COM2/TASI Voice Concentrator" — STC Communications Corp., Colorado

4. PETROLEUM INDUSTRY: PRESENTATIONS AND PANEL

ORGANIZER/CHAIRMAN: B. Page and M. Delisle, Shell/Imperial Oil

4.1 D. Cooper — "Canadian Petroleum Association Involvement with the Department of Communications Anik B Experimental Satellite Program" — Telecom. Supervisor, Amoco Petroleum Limited, Calgary, Alberta

*4.2 P. Knapp — "Offshore Navigation Using the Global Positioning System" — Nortech Surveys (Canada) Inc., Calgary, Alberta

*4.3 M. Delisle — "Imperial Oil Limited — Satellite Communications Network" — Imperial Oil Limited, Calgary, Alberta

*4.4 A.M. House — "Offshore Medical Applications for the Resource Industry Using Satellite Communications" — Memorial University of Newfoundland

*4.5 B. Page — "Offshore Communications Using A Low Cost Satellite Stabilized Antenna Platform on Dynamically Positioned Drilling Rigs and Drill Ships" — Shell Canada Resources Ltd., Calgary, Alberta

PETROLEUM INDUSTRY PANEL

*4.6 R. Cooper, M. Delisle, B. Page et al. representing the Canadian Petroleum Association — PETROLEUM INDUSTRY — PANEL Satcom Programs, new developments and plans of the petroleum industry will be highlighted by members of the Canadian Petroleum Association

5. MODULATION / SYSTEM STUDIES

ORGANIZER/CHAIRMAN: Dr. P. McLane, Professor, Queen's University, Kingston, Ontario

5.1 N. Boutin — "Pulse and Spectrum Shaping with Soft-Limiter" — University of Sherbrooke

5.2 N. Ekanayake — "DPSK Signaling over Hard-Limited Satellite Channels in the Presence of Intersymbol Interference" — Memorial University of Newfoundland

5.3 N. Ekanayake — "Performance Analysis of MSK AND Offset QPSK Signals Transmitted through Band-Limited Non-Linear Satellite Channels" — Memorial University of Newfoundland

5.4 M.A. Yongacoglu, I. Tazcan, K. Feher — "Unbalanced-UQPSK Satellite Modulation Techniques for Nonlinear Channels" — University of Ottawa

5.5 S. Jong-Soo, K. Feher — "Modified Minimum Shift Keyed (MMSK) Modems for Mobile Satellite Systems" — University of Ottawa

5.6 Dr. X.T. Vuong, A. Guibord — "Modelling of Nonlinear Elements with Memory" — Telesat Canada

5.7 Dr. L. Mason — "Analysis and Simulation of a DMSK Receiver" — Communications Research Centre (CRC), Ottawa

5.8 J. Seary, Dr. P. McLane — "Carrier and Timing Recovery for MSK Like Modulation" — Professor, Queen's University, Kingston

*Paper not received at date of printing
6. ORGANIZATIONS / INTERFACE TRADEOFFS

ORGANIZERS: Dr. A. Javed, Manager, Transmission Systems Bell Northern Research, Ottawa, T. Le-Ngoc, Supervisor, SR Telecom Inc., Dorval

CHAIRMAN: Dr. A. Javed


6.2 R. Leym — "CPDL and Satellite Communications Technology" — Canadian Parents and Development Limited, Ottawa, Ontario


6.4 Dr. A. Javed, R. Iyer — Interfacing of Terrestrial Facilities with TDMA Satellite Systems — Bell Northern Research, Kanata, Ontario

6.5 R. Iyer, S. El-Sagir — "Synchronization Considerations in Interfacing Terrestrial DS-1 Facilities with Satellite-Based TDMA System" — Bell Northern Research Kanata, Ontario

6.6 G.D. Griffiths — "Protocol Choices for Data Transmission by Satellite" — Bell Northern Research, Kanata, Ontario

6.7 John M. Henry — "Amateur Radio in Space: Historical Review" — Senior Marketing Engineer, Broadcast Services, Telesat Canada, Ottawa, Ontario

6.8 Dr. S.N. Rashwan — "Reliabilities of Satellite Communication Systems" — Assoc. Professor, Saudi Islamic University Riyadh, Saudi Arabia

7. CANADIAN SATELLITE PROGRAMS

ORGANIZER/CHAIRMAN: D.E. Weese, Director, Communication Systems Engineering, Telesat Canada

7.0 Dr. David R. Low — "The Canadian Space Program" — Chairman, Interdepartmental Committee on Space-Science and Technology, Canada

7.1 F.H. Smart — "Overview of Anik C Satellite and Services" — Senior Specialist, Communication Systems Engineering, Telesat Canada

7.2 Dr. A.R. Smalley — "Overview of Anik D Satellite and Services" — Senior Specialist, Communication Systems Engineering, Telesat Canada

7.3 O.S. Roscoe — "Technical and Economic Modelling of a DBS System in Canada" — Department of Communications, Government of Canada

7.4 B.W. Kozminchuk, R. Renner, R. Bibby — "Initial Operational Experiences of the SARSAT System" — DREO, CAL, CRC

7.5 Dr. A.L. Barry — "The Canadian MSAT Program" — Satellite Systems Engineer, Department of Communications, Government of Canada

7.6 Dr. C. Franklin — "Overview of Canadian Satellite Programs" — Director-General, Space Program and Industry Development, Department of Communications, Government of Canada

8. PERFORMANCE MONITORING TECHNIQUES

ORGANIZER: Dr. S. Pasupathy, Professor, University of Toronto, Dr. D. Schaefer, Director, M/A-Linkabit, Inc.

CHAIRMAN: Dr. S. Pasupathy, University of Toronto

8.1 Dr. R. Mamen — "The David Florida Laboratory and Communications in Canada" — Director, DFL, Department of Communications

8.2 P.S. Weijers — "Automatic RF Measurements for Communications Satellite" — SPAR Aerospace Limited, Ste-Anne-de-Bellevue, Quebec

8.3 H. Pham Van — "Design Concept and Performance of the Test and Maintenance Center (TMC) of a TDMA/DSI Terminal" — SPAR Aerospace Limited


8.5 D. Mott, F. Assal, R. Kroll — "Guard Space and Burst Duration Monitor for TDMA" — COMSAT Labs, Clarksburg, Maryland

9. SPREAD SPECTRUM SATCOM SYSTEMS

ORGANIZER/CHAIRMAN: Dr. T. Healy, Professor, University of Santa Clara, California

9.1 Dr. T. Healy — "An Overview of Spread Spectrum in Communications" — Professor, Department of Electrical Engineering, University of Santa Clara

9.2 Dr. R.W. Nettleton — "Spread Spectrum Principles for Multi-Access Systems" — Professor, Department of Electrical Engineering and Computer Science, Michigan State University

9.3 Dr. B.H. Baston, Dr. G.K. Huth — "Past and Prospective Future Applications of Spread Spectrum" — NASA/Johnson Space Centre, Houston, Texas

9.4 Dr. W.E. Stark — "Coded Spread Spectrum Systems" — Professor, University of Michigan

9.5 Dr. P.A. Kullstam — "Dynamic Signal-to-Noise Ratio Performance of Adaptive Array Systems" — Director, Engineering and Radio Services, Ontario Ministry of Government Services

9.6 F. Amoroso — "Sweep Aided Costa Loop Acquisition of a Spread Spectrum Signal" — Hughes Aircraft, California, U.S.A.

10. SOCIAL AND EDUCATIONAL SATELLITE SERVICES/DEVELOPMENTS

ORGANIZER/CHAIRMAN: W.T. Kerr, A/ Director, Communications Research Centre, DOC

10.1 D. Jelly — "DOC's Role in Social Services Satellite Delivery Systems" — Acting Manager, CRC, DOC Government of Canada

10.2 W. Hardwick — "Evolution of the Knowledge Network: current and planned operations of public and closed-circuit systems" — Chairman and President, Knowledge Network, Victoria, B.C.

10.3 A.M. House — "Telehealth in Newfoundland and Labrador: the Essential Role of Communications Satellites" — Associate Dean, Faculty of Medicine, Memorial University of Newfoundland

10.4 G. Chung-Yan — "Ontario Government Service Applications Development Using Communications Satellites" — Manager, Engineering and Radio Services, Ontario Ministry of Government Services

10.5 J. Padlayat — "Inuit Use of Satellite Communications for Community Development and Cultural Preservation" — Inuit Broadcasting Corporation, Ottawa

10.6 B. Weinstein — "The Cultural Implications of Satellite Communications on Remote, Rural and Indigenous Communities" — Chief, Community Information Systems, Government of Canada

11. ATMOSPHERIC / NAVIGATIONAL SATCOM SYSTEMS

ORGANIZER: I. Godier, Manager, Bell Northern Research, Ottawa, M.S. Gold, Manager, Bell Northern Research, Ottawa

CHAIRMAN: I. Godier, Bell Northern Research, Ottawa

11.1 B.C. Kirk — "Satellite Communications Study for the Atmospheric Environment Service" — Kirk Satellite Communications Ltd., Kanata, Ontario

11.2 H.B. Kruger — "Satellite Communications in Weather Service Operations" — Environment Canada

11.3 Dr. X.T. Vuong, R.J. Forsey — "C/N Degradation Due to Sun Transit in an Operational Communication Satellite System" — Telesat Canada, Ottawa, Ontario

11.4 S. Yousuf — "A Program to Calculate the Tropospheric Range Corrections and Residuals for Satellite Navigation" — Ames, Iowa, U.S.A.

11.5 I. Sasase, M. Shinriki, S. Mori — "Signal-to-Noise Ratio of the Power Law Nonlinear Envelope Detector" — Keio University, Japan

11.6 R. Pokuls, Dr. T.J.F. Pavilasek — "Computation ofNear and Far Fields Radiation Patterns of Distorted Reflector Antennas" — McGill University, Montreal

11.7 Dr. E. Shaw — "Communications Aspects of the Radarsat Mission" — Director, Energy, Mines and Resources Canada, Ottawa, Ontario
12. TDMA SYSTEMS

ORGANIZER/CHAIRMAN: M.J. Morris, Manager, Communications Engineering, SPAR Aerospace Limited, Ste-Anne-de-Bellevue, Quebec

12.1 E. Farell — "Transversal Equalizers for the TDMA Intelsat Services" — Raytheon Canada Limited


12.3 J.M. Keelty, S. Hatzigeorgiou — "DSI Architectures for Present and Future Domestic and International Digital Satellite Communications" — Development Engineering SPAR Aerospace Limited

12.4 L. Chen, Z. Lei, Dr. K. Feher, Dr. T.J. Healy — "TDMA Burst Interference Reduction Strategies" — University of Ottawa and University of Santa Clara, California

12.5 R.L. Wallace — "Design Features and Performance of a High Speed TDMA Demodulator" — Aydin Microwave Division

12.6 B.A. Mazur, R.G. Lyons — "Frequency Response Measurements and Equalization of In-Service QPSK/TDMA Link" — Miller Communications Systems Ltd.

12.7 Dr. C. Bantin, J. Lainevel, B. Hanson — "Development of a Light Route TDMA Earth Station" — Digital Communications Ltd.

12.8 Dr. B.A. Pontano, R. Colby, T. Mitani, G. Hodge — "The Intelsat TDMA Control and Monitor System," — INTELSAT/NEC/COMSAT.

13. TELEGLOBE / INTELSAT AND INMARSAT PROGRAMS

ORGANIZER: A. Karahisar, Teleglobe Canada, Montreal
CHAIRMAN: Dr. M. Fournier, Vice-President, Teleglobe Canada, Montreal

13.1 P. Tan — "Technical Considerations for International Business Services" — Teleglobe Canada, Montreal, Quebec

13.2 Dr. P.M. Nadkarni — "Intelsat System Planning and Integrated Approach" — Intelsat, Washington, D.C.


13.4 Dr. R. Khadem — "Planning the Inmarsat System" — Inmarsat, London, England

13.5 J.W. Johnson — "An International Hybrid Videoconferencing Service" — Teleglobe Canada, Montreal, Quebec

13.6 J.W. Johnson, D.B. Falle — "Commercial Developments in International Systems" — Teleglobe Canada, Montreal, Quebec

13.7 B. Carrier — "INMARSAT, A Global Satellite System Serving Canadian Maritime Communications" — Teleglobe, Canada, Montreal, Quebec

14. SCPC: SINGLE-CHANNEL PER-CARRIER DEVELOPMENTS

ORGANIZER/CHAIRMAN: R. Douville, Chief, RF Circuits, Communications Research Centre, DOC, Ottawa


14.2 R.A. Piemel, J. Rothery, L. James — "Design of a 14/12 GHz SCPC Earth Station Network for Nation-Wide Remote Telephony" — Communications Systems Department, SED Systems Inc.

14.3 Dr. X.T. Vuong, R.J. Forsey, G. Fraser — "Prediction of Earth Station Intermodulation Products in Telesat's Thin Route Network" — Communication Systems Engineering, Telesat Canada Inc.

14.4 W.S. Corless — "Design Highlights of a Low Cost Earth Station" — Manager, Communications Systems Division, SPAR Aerospace Ltd.

14.5 R. Datta — "A New Approach to a Maintenance Free Telephony Terminal" — Assistant Vice-President, Satellite Communications Division, MITEL Corporation

14.6 H. Girard — "Digital Modem Techniques for Cost Reduction of Domestic SCPC Earth Stations" — Space & Electronics Group, SPAR Aerospace Limited

14.7 H. Pham Van, Dr. K. Feher — "STS-OQPSK for Multiple Carrier Satellite Systems" — SPAR Aerospace Limited/University of Ottawa
15. TV AND PROGRAM RECEPTION

ORGANIZER/CHAIRMAN: D. Wohlberg, Manager Development, SED Systems Inc., Saskatoon, Saskatchewan

15.1 Dr. D.C. Coll, J.N. Barry, K.E. Hancock — "Synchronization Problems in the Delivery of TV Via Direct Broadcast Satellites" — Philipp A. Lapp Ltd.

15.2 Dr. P. Groumpos, B. Dimitriadis, W. White — "The Effect of Motion on the Subjective Determination of Impairment in Direct TV Satellite Pictures" — Director, Communications Research Laboratory, Cleveland State University

15.3 M. Bouchard, G. Chouinard — "FM Television Protection Ratio Requirements for NTSC Signals" — Staff Scientists, Communications Research Centre, Ottawa

15.4 Dr. P. Groumpos, B. Dimitriadis, W. White — "The Effect of Variable S/N on the Evaluation of Protection Ratios for Direct TV Satellite Services" — Director, Communications Research Laboratory, Cleveland State University


15.8 K. Poirier — "Design and Operating Requirements for TVRO Receivers in Near Future" — Triple Crown Electronics, Inc., Mississauga, Ontario

16. EARTH STATION COMPONENTS

ORGANIZER/CHAIRMAN: S. Shek, Engineering Supervisor, SPAR Aerospace Limited, Ste-Anne-de-Bellevue, Quebec

16.1 Dr. R. Shafai, A. Ittipiboon, E. Bridges — "Single Band High Performance Low Cost Earth Station Antennas" — University of Manitoba

16.2 Dr. R. Shafai, E. Bridges, A. Ittipiboon, F. Hyjazie — "Dual Band High Performance Earth Station Antennas" — University of Manitoba

16.3 Dr. W.J.R. Hoefer — "Planar Circuit Technology for Millimeter-Wave Communications" — University of Ottawa

16.4 R.J. Katulski — "The Antenna System for a Medium Class Ship Terminal of the Satellite Communications" — Technical University of Gdańsk, Poland

16.5 S. Kumar, H. Chou, R. McConell — "A DRO Based Phase Locked Oscillator" — SED Systems, Inc., Saskatoon, Saskatchewan

16.6 R. Strother-Stewart — "Microwave Oscillators for Satellite Earth Stations" — SED Systems, Inc., Saskatoon, Saskatchewan

16.7 R. Benca — "Microprocessor Control of an IF Variable Equalizer Unit" — SPAR Aerospace Limited

16.8 V. Uzunoglu — "Synchronous Oscillators as Carrier and Clock Recovery Networks" — Research Scientist, COMSAT Laboratories

17. EUROPEAN SATCOM SYSTEMS

ORGANIZER/CHAIRMAN: D. Lombard, Chief Engineer, CNET/PTT, France

17.1 S.E. Dinwiddie — "Communications Experiments and Demonstrations at 20/30 GHZ Using L-Sat." — ESA/ESTEC, Noordwijk, Holland

17.2 S. Tirro — "Flexible Communications by Satellite and the Italsat Example" — Telespazio, Rome, Italy

17.3 T.M. Galante — "The Services and Operational Characteristics of the Eutelsat System" — Interim Eutelsat, Paris, France

17.4 D. Lombard, F. Rancy, D. Roufett — "Telecom 1 — A National Satellite Communication System" — CNET, Issy, Paris, France

17.5 A.G. Reed — "Unisat UK Direct TV Broadcasting Satellite" — British Telecom, London, England

17.6 J. Georgy — "The Direct Broadcasting Satellite Project TDF 1" — TDF, Montrouge, France

17.7 R. Bonhomme, H. Fromm — "THE L-SAT Broadcast Payload and its Applications" — ESA/ESTEC, Holland

*Paper not received at date of printing
18. BANQUET

ORGANIZER: Dr. Kamilo Feher, SCC-1983 General Chairman

COCKTAILS AND RECEPTION START AT 6:30 P.M. (18:30) — BALLROOM (2nd FLOOR)

BANQUET STARTS AROUND 7:30 P.M. (19:30)
The Banquet Speaker Will Be Introduced by Mr. David A. Golden Chairman of the Board Telesat Canada

BANQUET SPEAKER: HIS EXCELLENCY THE RIGHT HONORABLE EDWARD SCHREYER, C.C., C.M.M., C.D. GOVERNOR GENERAL OF CANADA

19. TCTS/CNCP SATELLITE COMMUNICATIONS SERVICES

ORGANIZER: J. Gaumond, Assistant Director, TransCanada Telephone System, Ottawa
CHAIRMAN: R.H. Montgomery, Director, TransCanada Telephone System
C.G. Webster, Vice-President, Engineering, CNCP

19.1 M. Savas, G.M. Gerbis — "Overview of TCTS Satellite Service Applications" — TransCanada Telephone System, Ottawa, Ontario


19.3 M.J. Rodrigues, J. Kirouac — "User Features and Benefits of Conference 800 — Two Way Video Conferencing" — TransCanada Telephone System, Ottawa, Ontario

19.4 G. Gothe, S.A. Baker — "The Anik B Slim TDMA Field Trial" — CNCP Telecommunications, Toronto

19.5 E. Psoyra, P. Wong, L. Krawczyk, D. Ayles — "Network Management and Control System of the TCTS Satellite TDMA Trial" — TransCanada Telephone System, Telesat, BNR

20. SATELLITE DESIGNS: CANADIAN/INTERNATIONAL

ORGANIZER/CHAIRMAN: C.M. Hinds, Director, Business Development, SPAR Aerospace Limited, Ste-Anne-de-Bellevue, Quebec

20.1 N.M.F. Wong — "INTELSAT VI — A 50-Channel Spacecraft with Satellite Switched TDMA" — Manager, Communication Systems, Hughes Aircraft, U.S.A.

20.2 Dr. K. Schneider — "The Design of the TV-SAT/TDF-1 Communications Satellite" — TV-SAT/TDF-1 Program Manager, Eurosatellite GmbH, MBB Space Division, Munich, Germany

20.3 B. Eddleston — "The Multi-Mission Capability of L-SAT" — L-SAT Program Manager, British Aerospace, England


20.5 B. Berridge — "The Design of the Brazilian Domestic Satellite System — SBTS" — BRASILSAT Program Manager, SPAR Aerospace Limited

20.6 C. Morgan — "The Design Operations for the Canadian Mobile Communications Satellite — M-SAT" — M-SAT Program Manager, SPAR Aerospace Limited

20.7 M. Duligon — "The Design of the ARABSAT Communications Satellite" — ARABSAT Program Manager, Aerospatiale, France

20.8 J. Germain — "Le Programme Tele-X" — Program Manager, Aerospatiale, France
21. CODING TECHNIQUES

ORGANIZER/CHAIRMAN: Dr. D. Haccoun, Professor, Ecole Polytechnique, Montreal, Quebec

21.1 Dr. B. Wu — "Overview of Coding for Satellite and Space Channels" — Senior Research Eng., INTELSAT, Washington

21.2 G.S. Garrison, V.C. Wong — "Convolutional FEC Design Consideration for Data Transmission over PSK Satellite Channels" —Mirocelt Pacific Research Ltd., Burnaby, B.C.

* 21.3 C. Tsai, L. Kurz — "Yiterbi Decoding over Impulsive Interference Satellite Channels" — RCA American Communications Inc., Princeton, N.J.

21.4 Dr. D. Haccoun, Chen Nayiune — "Variants of the Stack Algorithm for the Decoding of High Rate Codes by Sequential Decoding" — Professor, Ecole Polytechnique, Montreal

21.5 Dr. S. Lin — "A Selective Repeat ARO Scheme with Finite Receiver Buffer" — Professor, University of Hawaii at Manoa, Honolulu, Hawaii

21.6 G. Stuber, Dr. J. Mark, Dr. I. Blake — "Errors and Erasures Coding for Interference Channels" — Professor, University of Waterloo

21.7 M.E. Spencer, Dr. S. Tavares — "A Layered Broadcast Crypto-System" — Professor, Queen’s University, Kingston

22. JAPANESE SATELLITE SYSTEMS

ORGANIZER/CHAIRMAN: M. Shinji, Deputy Director, Nippon Telegraph Telephone Corporation, Tokyo, Japan


22.2 H. Kato, S. Okasaka, K. Kondoh — "Multi-beam Satellite Communication System for Japanese Domestic Communications" —Same as above

22.3 H. Shimayama, K. Kosugawaga, G. Oshima, S. Fukuda — "Earth Stations Equipment Development on 30/20 GHz Japanese CS System" — Nippon Electric Co. Ltd., Japan

22.4 T. Saruwatari, M. Iguchi, H. Ohashi, S. Isobe — "SCPC Communications Experiments Using Small Earth Stations in 30/20 GHz Band" — Ministry of Posts and Telecommunications, Japan

22.5 S. Sonoda, M. Kajikawa, T. Ohtake, M. Veno — "BS-Z Spacecraft Design with Emphasis on Shaped Beam Antenna" — National Space Japan, Toshiba Corp.

23. TV AND RADIO DISTRIBUTION

ORGANIZER: S. Quinn, Director of Engineering, CBC, Montreal
CHAIRMAN: P. Burgess, Assistant Director, CBC, Montreal

23.1 B. O’Lima, P. Freddy — "Evolution and Development of Video Transportable Services in 2.3/4 and 2.6 GHz Band" — Sales Manager, Telesat Canada, Ottawa, Ontario


23.3 R. O'Reilly — "1990 — The Electronic Jungle" — Assistant Vice-President Corporate Affairs, CBC

* 23.4 R. Knowles — "Audio Transmission Via Satellite — An Overview" — Senior Technical Officer, CBC, Montreal

3.5 R. Myre — "LaSette Program Distribution Service" — General Manager, Société d’Edition et de Transcodage Ltée, Brossard, Québec

23.6 G. Young — "Subscription Television on Canadian Satellites — Canccom and Pay Television" — Vice-President, Engineering, Allarcom Ltd., Edmonton, Alberta

23.7 W.E. Jarmain — "Optimizing TV Delivery with Ku Band Direct-to-Home" — President, North Star Home Theater, Inc., Toronto

* Paper not received at date of printing
24. NETWORK DEVELOPMENTS

ORGANIZER/CHAIRMAN: D. Prendergast, Gandalf, Ottawa

24.1 Dr. N.D. Georganas, K. Wong — "Strategies for Optimal Satellite Capacity Allocations" — University of Ottawa


24.3 Dr. J.B. Farrel, Dr. L.L. Campbell — "Satellite Link Augmentation of a DATAPAC Type Packet Switched Data Network" — Defense Research Establishment, Dartmouth, Nova Scotia


24.5 F. Wattier, B. Bousquet, G. Maral — "SS/TDMA Time Slot Assignment Algorithm with Minimum Number of Connections Time Slots" — Ecole Nationale Superieure de l'aeronaute et de l'espace, Toulouse, France

24.6 Dr. D.E. Dodds, L.R. Button — "Digital Framing Techniques for Satellite Channels" — University of Saskatchewan

24.7 R. Abe, I. Sasase, S. Mori — "Bandwidth Efficient Quadrature Overlapped Squared-Raised Cosine Modulation" — Keio University, Yokohama, Japan

24.8 C.A. King — "Burst Time Plan Development in the Intelsat System" — Technical Staff Member, COMSAT Laboratories

24.9 H.R. Johnson: "Technology Breakthrough in Satellite Networking" — Senior Vice-President, VITALINK, California

25. REGULATORY ISSUES: PRESENTATIONS AND PANEL

ORGANIZER: R.M. Smythe, Manager, Communications Facilities Systems, Bank of Montreal
CHAIRMAN: R.M. Smythe, Manager, Communications Facilities Systems, Bank of Montreal, L.A. Martin, Manager, CRTC


25.2 E.D. DuCharme, J.R. Irwin, R. Tritt — "Current Development in International Regulations of the Geostationary-Satellite Orbit and the Associated Frequency Bands" — Director, Department of Communications

25.3 M. Kelch — "Beyond the Limits of Feasible Control: An Evaluation of Canadian Satellite Policy" — Executive Director, Communications Division, Ontario Ministry of Transport

25.4 T.G. Kane — "Regulatory Issues of Canadian and International Satellite Systems" — Stikeman, Elliott, Barristers & Solicitors, Ottawa, Ontario

25.5 B. Segal — "The Geopolitics of Satellite Communications" — President, Ryerson Polytechnical Institute

25.6 L.A. Martin — "Some Regulatory Issues To Be Considered in Relation to a Canadian DBS System" — Manager, Policy, CRTC

PANEL
REGULATORY ISSUES RELATED TO CANADIAN AND INTERNATIONAL SATCOM SYSTEMS WILL BE DISCUSSED

SATCOM REGULATIONS

26. ANIK USER WORKSHOP

ORGANIZER/CHAIRMAN: D. Weese, Director, Communications Engineering, Telesat Canada, Ottawa

Workshops organized by Telesat to brief attendees and provide a discussion forum on the following Anik services:

- Anik C TV and Radio Networks;
- Anik D TV and Radio Networks; and
- Partial Channel Message and Date Networks.

Each presentation will commence with a technical briefing by experienced Telesat engineers on key aspects of system design, followed by a question and answer discussion period.

Hand-outs on system design examples will be provided to the workshop attendees.
27. INDUSTRIAL / BUSINESS SYSTEMS

ORGANIZER/CHAIRMAN: E.K. Tsang, Department of Communications, CRC and J. Tovar, Manager, Instituto Investigaciones Electricas, Cuernavaca, Mexico

*27.1 Dr. H. Moody — "An Overview of the Design of a Geostationary Satellite for Mobile Communications" — Staff Engineer, SPAR Aerospace Limited

*27.2 M. Malka — "Integrated Satellite Business Services — User's Applications and Needs" — President, Telecomsystem Services, Inc.

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