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HEARINGS

During the 100th Congress, the Committee's Subcommittee on Telecommunications and Finance has held a series of hearings focusing on the public policy implications of the scrambling of satellite-delivered video programming On July 1, 1987 and June 13, 1988 the Subcommittee held hearings on H R 1885, legislation designed, among other purposes, to ensure the continued availability of satellite-delivered video programming Witnesses at those hearings included the Honorable Dennis R Patrick, Chairman, Federal Communications Commission, the Honorable Alfred Sikes, Assistant Secretary for Communications and Information Policy, National Telecommunications and Information Administration, Mr Larry Carlson, Senior Vice President for Cinemax and New Business Development, Home Box Office, Mr Ronald Lightstone, Senior Vice President, VIACOM International, Inc , Mr James P Mooney, President and Chief Executive Officer, National Cable Television Association, Mr B R Phillips, II, Chief Executive Officer, National Rural Telecommunications Cooperative, Mr David G Wolford, Chief Executive Officer, Home Satellite Services, Mr Marty Lafferty, Vice Presdient, Direct Broadcast Sales, Turner Broadcasting Systems, Mr Federick W Finn, Esq , Brown and Finn, Mr Charles C Hewitt, President, Satellite Broadcasting and Communications Association, Mr Larry Dunham, VideoCipher Division, General Instruments Corporation, Mr Donald Berg, Vice President Sales and Marketing, Channel Master, Ms Millie Fontenot, Owner, Satellite Earth Stations East, Inc , Mr George Kocian, Owner Tiverton Dish Farm, Mr Michael J Fuchs, Chairman and Chief Executive Officer, Home Box Office, Inc , Mr Michael Hobbs, Senior Vice President for Policy and Planning, Public Broadcasting Service, Mr Winston H Cox, Chairman and Chief Executive Officer, Showtime/ The Movie Channel, Mr Robert L Schmidt, President, Wireless Cable Association, Mr Timothy Robertson, President, Christian Broadcasting Network, and Mr Sid Swartz, President, West, Inc

The Subcommittee on Telecommunnications and Finance held a hearing on H R 2848 on Friday, September 23, 1988 Testimony was received from Mr Preston R Padden, President, Association of Independent Television Stations, Inc , Mr Mark C Ellison, Vice President, Government Affairs & General Counsel, Satellite Broadcasting and Communications Association, Mr Timothy A Boggs, Vice President Public Affairs, Warner Communications Inc , and Mr Steven Effros, President, Community Antenna Television Association

COMMITTEE CONSIDERATION

On September 23, 1988, the Subcommittee on Telecommunications and Finance met in open session and ordered reported the bill H R 2848, as amended, by a voice vote, a quorum being present During the markup, the Subcommittee adopted an amendment in the nature of a substitute offered by Representative Billy Tauzin The Subcommittee substitute, creates a new Section 712 of the Communications Act, requires the FCC to institute a proceeding to determine the feasibility of imposing syndicated exclusivity rules for satellite carriage of broadcast signals, and clarifies that viola-

tions of any such rules would be violations of the Communications Act The Subcommittee Substitute also added an anti-theft or "piracy" provision that clarifies and strenghthens current law concerning unauthorized descrambling of satellite cable programming The Substitute also contained a requirement that the FCC initiate an Inquiry into the need for a universal decryption standard for home satellite antenna users

On September 27, 1988, the Committee met in open session and ordered reported the bill H R 2848, as amended, by a voice vote, a quorum being present During Conimittee markup a technical amendment was adopted

COMMITTEE OVERSIGHT FINDINGS

Pursuant to clause 2(1)(3)(A) of Rule XI of the Rules of the House of Representatives, the Subcommittee held oversight hearings and made findings that are reflected in the legislative report

COMMITTEE ON GOVERNMENT OPERATIONS

Pursuant to clause 2(1)(3)(D) of rule XI of the Rules of the House of Representatives, no oversight findings have been submitted to the Committee by the Committee on Government Operations

COMMITTEE COST ESTIMATE

In compliance with clause 7(a) of rule XIII of the Rules of the House of Representatives, the Committee believes that the cost incurred in carrying out H R 2848 would be $300,000 over the next two fiscal years

U S CONGRESS,
CONGRESSIONAL BUDGET OFFICE,
Washington, DC, September 28, 1988

Hon JOHN D DINGELL,
Chairman, Committee on Energy and Commerce,
U S House of Representatives, Washington, DC

DEAR MR CHAIRMAN The Congressional Budget Office has reviewed H R 4992, a bill to expand our national telecommunications system for the benefit of the hearing impaired and speech impaired populations, and for other purposes, as ordered reported by the House Committee on Energy and Commerce, September 27, 1988

The bill would direct the Federal Communications Commission (FCC), in consultation with the Architectural and Transportation Barriers Compliance Board, to issue regulations requiring federal departments and agencies to be equipped with telecommunications devices for the deaf (TDDs) The FCC also would be required to publish the TDD access numbers In addition, the bill would require congressional offices to be equipped with TDDs

It is uncertain how many TDDs the federal government would have to purchase if H R 4992 were enacted because the bill only requires the FCC to "ensure that federal departments and agencies are equipped with TDDs" The bill does not define federal departments and agencies, so it is difficult to determine how many TDDs would be required

If, for example, only the head office of each federal agency needed a TDD, then TDDs (at about $250 each) for approximately 500 offices would cost a total of $125,000 in 1990 If, on the other hand, federal departments and agencies were required to have a TDD in each location, then TDDs for about 7,000 buildings would cost a total of $1 8 million. The cost of this requirement ultimately would depend on the number and type of TDDs purchased The cost of acquiring TDDs for congressional offices would depend on the same factors, and would range from $100,000 to $200,000

Other costs of this bill are not expected to be significant Enactment of H R 4992 would not affect the budgets of state or local governments

If you wish further details on this estimate, we will be pleased to provide them The CBO staff contact is Marta Morgan, who can be reached at 226-2860

Sincerely,

JAMES L BLUM,
Acting Director

INFLATIONARY IMPACT STATEMENT

Pursuant to clause 2(1)(4) of rule XI of the Rules of the House of Representatives, the Committee makes the following statement with regard to the inflationary impact of the reported bill H R 2848 would have no inflationary impact

SECTION-BY-SECTION ANALYSIS

SECTION 1 SHORT TITLE

The short title of the proposed legislation is the "Satellite Home Viewer Act of 1988"

SECTION 2 AMENDMENTS TO TITLE 17, UNITED STATES CODE

Section 2 of the proposed legislation contains amendments to the Copyright Act of 1976 a new section 119 is added to the Act, creating an interim statutory license for the secondary transmission by satellite carriers of superstations and network stations for private home viewing, only necessary technical and cross-referencing amendments are made to section 111 of the Act, regarding the cable television compulsory license

Amendments to section 111(a) Cross-references to the cable television compulsory license

The bill amends section 111(a) by inserting a new clause (4) to clarify that, notwithstanding the carrier exemption to the cable compulsory licensing provisions in section 111(a)(3), a satellite carrier that retransmits superstations and network stations for private home viewing by earth station owners is exempted from copyright liability for such retransmission only if it secures a statutory license under section 119 Section 111(a)(3) remains in effect to exempt from copyright liability passive common carriers that retransmit broadcast signals to cable systems

Amendment to section 111(d)(2)(A) Relationship between the cable compulsory license and the statutory license for satellite carriers

The bill amends section 111(d)(2)(A) to clarify the obligations of both the satellite carrier and the cable system in instances in which a cable system engages in such distributorship activities on behalf of a satellite carrier In such cases, the satellite carrier has the responsibility for filing statements of account and paying royalties for publicly performing copyrighted programming under the new section 119 statutory license Under this scheme, a cable system/distributor would segregate the subscription fees collected on behalf of the satellite carrier from those collected from cable subscribers pursuant to the section 111 cable compulsory license The cable system would only report in its section 111 statements of account the number of cable subscribers served and the amount of gross receipts collected pursuant to section 111, and would pay royalties to section 111

New section 119 The interim statutory license for satellite carriers

Section 119(a) The scope of the license —Sections 119(a) (1) and (2) establish a statutory license for satellite carriers generally A license is available where a secondary transmission of the signal of a superstation or a network station is made available by a satellite carrier to the public for private home viewing, and the carrier makes a direct charge for such retransmission service from each subscriber receiving the secondary transmission, or from a distributor (such as a cable system) that has contracted with the carrier to deliver the retransmission directly or indirectly to the viewing public

The bill contains special provisions in sections 119(a) (2) and (5) relating to network stations in recognition of the fact that a small percentage of television households cannot now receive clear signals of the three national television networks The bill confines the license to the so-called "white areas," that is, households not capable of receiving the signal of a particular network by conventional rooftop antennas, and which have not subscribed, within the 90 days preceding the date on which they subscribe to the satellite carrier's service, to a cable system that provides the signal of a primary network station affiliated with that network

Utilizing the existing definition in Section 111(f), the new statutory license for retransmission of network stations applies, at the present time, exclusively to those stations owned by or affiliated with the three major commercial networks (ABC, CBS, and NBC) and the stations associated with the Public Broadcasting Service This distinction is based upon the testimony and written materials supplied by the three commercial networks, which assert that their stations continue to occupy a special role in the television industry

Under the bill, satellite carriers are provided a limited interim compulsory license for the sole purpose of facilitating the transmission of each network's programming to "white areas' which are unserved by that network The Committee believes that this approach will satisfy the public interest in making available network programming in these (typically rural) areas, while also respecting the

public interest in protecting the network-affiliate distribution system

This television network-affiliate distribution system involves a unique combination of national and local elements, which has evolved over a period of decades The network provides the advantages of program acquisition or production and the sale of advertising on a national scale, as well as the special advantages flowing from the fact that its service covers a wide range of programs throughout the broadcast day, which can be scheduled so as to maximize the attractiveness of the overall product But while the network is typiclly the largest single supplier of nationally produced programming for its affiliates, the affiliate also decides which network programs are locally broadcast, produces local news and other programs of special interest to its local audience, and creates an overall program schedule containing network, local and syndicated programming

The Committee believes that historically and currently the network-affiliate partnership serves the broad public interest It combines the efficiencies of national production, distribution and selling with a significant decentralization of control over the ultimate service to the public It also provides a highly effective means whereby the special strengths of national and local program service support each other This method of reconciling the values served by both centralization and decentralization in television broadcast service has served the country well

The networks and their affiliates contend that the exclusivity provided an affiliate as the outlet for its network in its own market is an essential element of the overall system They assert that by enhancing the economic value of the network service to the affiliate, exclusivity increases the affiliate's resources and incentive to support and promote the network in its competition with the other broadcast networks and the other nationally distributed broadcast and nonbroadcast program services

The Committee intends by this provision to satisfy both aspects of the public interest—bringing network programming to unserved areas while preserving the exclusivity that is an integral part of today's network-affiliate relationship

Section 119 requires the satellite carrier to notify the network of the retransmission of its signal by submitting to the network a list identifying the names and addresses of all subscribers to that service In addition, on the 15th of each month the satellite carriers must submit to the network a list identifying the names and addresses of the subscribers added or dropped since the last report These notifications are only required if the network has filed information with the Copyright Office concerning the name and address of the person who shall receive the notification Special penalties are provided for violations by service outside the "white areas" Willful or repeated individual violations of the "white area" restrictions are subject to ordinary remedies for copyright infringement, except that no damages may be awarded if the satellite carrier took corrective action by promptly withdrawing service from ineligible subscribers, and statutory damages are limited to a maximum of $5 00 per month for each ineligible subscriber

If the satellite carrier engages in a willful or repeated pattern or practice of violations, the court shall issue a permanent injunction barring the secondary transmission by the satellite carrier of the primary transmission of any network station affiliated with the same network The injunction would be applicable within the geographical area within which the violation took place—whether local, regional, or national If the satellite carier engages in a pattern of violations, the statutory damages maximum is $250,000 for each six month period, but only with regard to persons who suscribed on or after July 7, 1988

By amendment of section 501 of title 17, United States Code, a network station holding a license to perform a particular version of a work is treated as a legal or beneficial owner of the work if the secondary transmission by satellite carrier occurs within the local service area of the station, for purposes of infringement under section 119(a)(5)

Noncompliance with Reporting and Payment Requirements —Section 119(a)(3) provides that a satellite carrier is also subject to full copyright liability if the carrier does not deposit the statement of account or pay the royalty required by Subsection (b) or has failed to make the submissions to the networks required by paragraph 2(c)

Discrimination by a satellite carrier —Section 119(a)(6) provides a cause of action against a satellite carrier's "willful or repeated" retransmission of the signals of superstations and network stations to the public for private home viewing (under sections 502 through 506 and section 509 of the Copyright Act) if the satellite carrier unlawfully discriminates against any distributor

This section is intended primarily to protect against misconduct by a satellite carrier exercising the statutory license granted by the Act The Committee wishes to stress that this subsection, along with subsections 119(a)(3) and 119(a)(4), establish limitations on the scope of the license granted by this Act In each case, copyright infringement remedies are provided as recourse against abuse of the license by a satellite carrier

The Committee agrees with the assessment of the Judiciary Committee, expressed in its report on H R 2848, that the regulatory status under the Communications Act of the sale of superstations or network stations for private home viewing by dish owners is largely unresolved

Some of the superstation signals will be provided under the statutory license granted by this Act by certain resale carriers that were licensed by the FCC under Title II of the Communications Act The Commission licensed these carriers to provide common carrier transmission service of these stations to cable headends for their retransmission to cable subscribers These transmissions are common carrier services subject to Title II of the Communications Act and the passive carrier exemption of the Copyright Act The situation changes, however, when these carriers engage in the sale of the programming they transmit The Commission's current rules do not address the regulatory status of these carriers when they sell the programming directly to the public

The matter is further complicated by the fact that deregulatory initiatives over the last several years at the Commission have led

to a situation in which there is unlicensed, open entry for what amounts to a C-Band direct broadcast satellite service Some entities, such as Netlink, have entered the market as unregulated service providers, not as common carriers They are not licensed under Title II of the Communications Act, but they will qualify for the statutory license under this Act and will provide superstation and network stations in the same home earth station market as their competitors, the Title II carriers

The resolution of these issues must rest with the Commission The Committee does not wish to prejudge or direct the FCC's resolution of these questions with the enactment of this legislation However, the Committee is aware that neither the Communications Act nor the FCC's current rules currently bar discrimination against distributors of superstation or network station signals for private viewing

Nothing in this Act affects the authority of the Commission to promulgate rules to address such discrimination and, in fact, this legislation amends the Communications Act with a new Section 713 directing the FCC to examine whether and to what extent such discrimination actually occurs If the Commission finds regulations on discrimination against distributors of superstations and network stations to home earth stations to be necessary and in the public interest, it may establish such rules

The Committee notes that the term "discrimination" as it is used in section 119(a)(6) of the Copyright Act is expressly limited to discrimination within the jurisdiction of the Commission pursuant to the Communications Act The purpose of section 119(a)(6) is to make certain discriminatory acts involving particular parties actionable under the Copyright Act In adopting this language, the Committee does not intend the Commission to address issues and concerns that are outside its jurisdiction and expertise

Geographic limitation —Section 119(a)(7) provides that the statutory license created in section 119 applies only to secondary transmissions to households located in the United States, or any of its territories, trust possessions, or possessions This section parallels section 111(f) or title 17, United States Code, which applies to cable television

Section 119(b) Operation of the statutory license for satellite carriers

Requirements for a license —The statutory license provided for in section 119(a) is contingent upon fulfillment of the administrative requirements set forth in section 119(b)(1) That provision directs satellite carriers whose retransmissions are subject to licensing under section 119(a) to deposit with the Register of Copyrights a semiannual statement of account and royalty fee payment The dates for filing such statements of account and royalty fee payments and the six-month period which they are to cover are to be determined by the Register of Copyrights

The statutory royalty fees set forth in section 119(b)(1)(B) are twelve cents per subscriber per superstation signal retransmitted and three cents for each subscriber for each network station retransmitted These fees approximate the same royalty fees paid by cable households for receipt of similar copyrighted signals and are modeled on those contained in the 1976 Copyright Act Royalty fees

for retransmission of a network station would be 1/4 those of an independent station, since "the viewing of non-network programs on network stations is considered to approximate 25 percent" H Rept 94-1476, 94th Congress, 2d Session (1976) The copyright owners of these non-network programs would be entitled to receive compensation for the retransmission of the programs to "white areas" Owners of copyright in network programs would not be entitled to compensations for such retransmissions, since those copyright owners are compensated for national distribution by the networks when the programming is acquired The statutory fees set forth in this section apply only in the limited circumstances described in section 119(c)

Collection and distibution of royalty fees —Section 119(b)(2) provides that royalty fees paid by satellite carriers under the statutory license shall be received by the Register of Copyrights and, after the Register deducts the reasonable cost incurred by the Copyright Office in administering the license, deposited in the Treasury of the United States The fees are distributed subsequently, pursuant to the determination of the Copyright Royalty Tribunal under chapter 8 of the Copyright Act of 1976

Persons to whom fees are distributed —The copyright owners entitled to participate in the distribution of the royalty fees paid by satellite carriers under the license are specified in section 119(b)(3)

Procedures for distribution —Section 119(b)(4) sets forth the procedure for the distribution of the royalty fees paid by satellite carriers, which parallels the distribution procedure under the section III cable compulsory license During the month of July of each year, every person claiming to be entitled to license fees must file a claim with the Copyright Royalty Tribunal, in accordance with such provisions as the Tribunal shall establish The claimants may agree among themselves as to the division and distribution of such fees

After the first day of August of each year, the Copyright Royalty Tribunal shall determine whether a controversy exists concerning the distribution of royalty fees If no controversy exists, the Tribunal—after deducting reasonable administrative costs—shall distribute the fees to the copyright owners entitled or their agents If the Tribunal finds the existence of a controversy, it shall, pursuant to the provisions of chapter 8, conduct a proceeding to determine the distribution of royalty fees

The bill does not include specific provisions to guide the Copyright Royalty Tribunal in determining the appropriate division among competing copyright owners of the royalty fees collected from satellite carriers under section 119

Secion 119(c) Alternative methods for determining royalty fees applicable during two phases of the statutory license for satellite carriers

The bill establishes a four-year phase and a two-year phase for the statutory license for satellite carriers, in each phase the royalty fee is determined in a different manner In the first (four year) phase, pursuant to section 119(c)(1), the statutory fees established in section 119(b)(1)(B) (twelve cents per subscriber per superstation signal retransmitted and three cents per subscriber per network

signal retransmitted) shall apply The first phase shall be in effect from January 1, 1989, until December 31, 1992 In the second phase, the fee shall be set by the voluntary negotiation or compulsory arbitration procedures established in section 119(c)(2) and 119(c)(3)

Section 119(c)(2) requires the Copyright Royalty Tribunal to initiate voluntary negotiation proceedings betwen satellite carriers, distributors, and copyright owners, eighteen months before the bill's first phase runs out, to encourage the parties to negotiate a fee for the second phase before the statutory fee expires The parties may designate common agents to negotiate, agree to, or pay the relevant fees, if the parties fail to do so, the Copyright Royalty Tribunal shall do so, after requesting recommendations from the parties The costs of the negotiation proceeding shall be paid by the parties If the parties reach a voluntary agreement, copies of the agreement must be filed in a timely manner with the Copyright Office, and the negotiated fee will remain in effect from the date specified in the agreement until December 31, 1994

If some or all of the parties have not voluntarily negotiated a fee for the second phase by December 31, 1991, twelve months before the expiration of the first phase, section 119(c))3) provides that the Copyright Royalty Tribunal shall initiate a compulsory arbitration proceeding for the purpose of determining a reasonable royalty fee to be paid under section 119 for the second phase The Tribunal shall publish notice of the initiation of the proceeding as well as a list of potential arbitrators Within ten days of the publication of this notice, one arbitrator must be chosen by the copyright owners and one by the satellite carriers and their distributors The two arbitrators must choose a third arbitrator from the same list within ten days

The three arbitrators (Arbitration Panel) shall have sixty days from the publication of the initial notice to conduct an arbitration proceeding and to determine a royalty fee, using guidelines specified in the bill All costs involved in this proceeding must be paid for by the parties The Arbitration Panel shall submit its determination in the form of a report, along with the written record, to the Copyright Royalty Tribunal The Tribunal shall have sixty days to review the report and either accept or reject the Panel's determination and publish the action in the Federal Register If the Tribunal rejects the determination, the Tribunal shall, within the same sixty day period, issue an order setting the royalty fee Thus, within 120 days of the publication of the initial notice, a new royalty fee shall be determined through a compulsory arbitration procedure, to be effective from January 1, 1993, until December 31, 1994, or until modified by the United States Court of Appeals for the District of Columbia Circuit pursuant to section 199(c)(4) The fee shall apply to all copyright owners, satellite carriers, and distributors not party to a voluntary agreement

Section 119(c)(3)(D) provides guidelines by which the Arbitration Panel shall determine royalty fees In particular, the Panel must consider the approximate average cost to a cable system for the right to secondarily transmit to the public a primary transmission made by a broadcast station

Section 199(c)(4) provides that the rate adopted or determined by the Copyright Royalty Tribunal pursuant to the compulsory arbitration proceeding may be appealed to the District of Columbia Circuit Court of Appeals within thirty days of publication However, while appeal of the rate is pending, satellite carriers would still be required to deposit statements of account and royalties and to pay royalty fees calculated under the rate that is at issue on appeal The bill gives the court jurisdiction to enter its own determination with respect to the royalty rate, to order the repayment of any excess fees deposited under section 119(b)(1)(B), and to order the payment of any underpaid fees with interest, in accordance with its final judgement The court may also vacate the Tribunal's decision and remand the case for further arbitration proceedings

Section 119(d) Definitions

A "distributor" is defined as any entity which contracts with a carrier to distribute secondary transmissions received from the carrier either as a single channel, or in a package with other programming, to individual subscribers for a private home viewing, either directly or indirectly through other program distribution entities

The term "primary transmission" and secondary transmission" are defined so as to have the same meaning under section 119 as they have under section 111

The term "private home viewing" is defined as viewing, for private use in an individual's household by means of equipment which is operated by such individual and which serves only such individual's household, of a secondary transmission delivered by satellite of a primay transmission of a television broadcast station licensed by the FCC

A "satellite carrier" is broadly defined as an entity that uses the facilities of a domestic satellite service licensed by the FCC and that owns or leases a capacity or service on a satellite in order to provide the point-to-multipoint relay of television station signals to numerous receive-only earth stations, except to the extent the entity provides such distribution pursuant to tariff that is not restricted to private home viewing

The term "network station" has the same meaning as the term in section 111(f) and includes a translator station or terrestrial satellite station that rebroadcasts the network station

A "primary network station" is a network station that broadcasts the basic programming service of one particular national network

The term "subscriber" is defined as an individual who receives a secondary transmission service for private home viewing by means of a satellite transmission under section 119, and pays a fee for the service, directly or indirectly, to the satellite carrier or to a distributor

A "superstation" is defined as a television broadcast station, other than a network station, that is licensed by the Federal Communications Commission and that is retransmitted by a satellite carrier

The term "unserved household" means a household that with respect to a particular television network, (A) cannot receive, through use of a conventional outdoor antenna, a signal of Grade B

intensity (as defined by the FCC, currently in 47 C F R section 73 683(a)) of a primary network station affiliated with that network, and (B) has not, within 90 days before the date on which the household subscribes (initially or upon renewal) to receive by satellite a network station affiliated with tht network subscribed to a cable system that provides the signal of a primary network station affiliated with that network

Because the household must be able to receive the signal of a "primary" network station to fall outside the definition of unserved household, a household that is able to receive only the signal of a secondary network station, which would be defined as "unserved" if it is a station affiliated with two or more networks that does not broadcast or rebroadcast the basic programming service of any single national network

Section 119(e) Exclusivity of the statutory license

The bill explicitly provides that neither the cable compulsory license, nor the exemptions of section 111 (such as the passive carrier exemption) can be construed during the six-year statutory license period to apply to secondary transmissions by satellite carrier for private home viewing of programming contained in a superstation or network station transmission Unless the statutory license of section 119 is obtained, during the six-year interim period the secondary transmission by satellite carrier for private home viewing can take place only with consent of the copyright owner

SECTION 3 SYNDICATED EXCLUSIVITY, REPORT ON DISCRIMINATION

Section 3 amends Title VII of the Communications Act by adding several new sections as follows

Section 712(1) Syndicated Exclusivity

The bill directs the Federal Communications Commission (FCC), within 120 days after the date of enactment, to undertake a combined inquiry and rulemaking proceeding regarding the feasibility of imposing syndicated exclusivity rules for private home viewing The Committee believes strongly that it is necessary and appropriate that the Commission undertake this Inquiry pursuant to its authority under the Communications Act The FCC has had sole responsibility for addressing and administering the syndicated exclusivity rules in the past, and will continue to have sole responsibility under this legislation

Free local over-the-air television stations continue to play an important role in providing the American people information and entertainment The Committee is concerned that changes in technology, and accomplaying changes in law and regulation, do not undermine the base of free local television service upon which the American people continue to rely The Committee is concerned that retransmissions of broadcast television programming to home earth stations could violate the exclusive program contracts that have been purchased by local television stations Depriving local stations of the ability to enforce their program contracts could cause an erosion of audiences for such local stations because their programming would no longer be unique and distinctive

Accordingly, the Committee directs the Federal Communications Commission to consider the feasibility of imposing syndicated exclusivity rules with respect to satellite retransmission of television broadcast programming In the Committee's view, it is reasonable to premise a grant of a statutory license on the existence of appropriate safeguards to protect the rights of other parties who might be affected by the grant of such statutory licenses

The Committee also believes that while some adjustments may be necessary or appropriate to reflect the differences between cable and satellite technologies, the cable television syndicated exclusivity rules could serve as a model for rules governing the satellite industry

The Committee directs the Commission to undertake a comprehensive assessment of the feasibility of imposing syndicated exclusivity The Inquiry should be broadbased and balanced The mere fact that imposition of, or compliance with, syndicated exclusivity rules might be incrementally more costly for satellite carriers shall not be deemed to render such rules as not "feasible" as that term is used in this section

Section 712(2)

In the event the Commission adopts rules imposing syndicated exclusivity for private home viewing, the bill provides that violations of such rules shall be subject to the remedies, sanctions and penalties under Title V and Section 705 of the Communications Act

The Committee amendment clarifies that violations of the syndicated exclusivity rules are to be enforced by the sanctions and penalties provided in the Communications Act

Section 713 Discrimination

The bill directs the FCC within a year of the enactment of this Act, to prepare and submit a report to the Senate Committee on Commerce, Science and Transportation and the House Committee on Energy and Commerce on whether, and the extent to which, there exists unlawful discrimination against distributors of secondary transmissions from satellite carriers

The Committee notes that the term "discrimination" as it is used in new Section 713 of the Communications Act and new Section 119(a)(6) of the Copyright Act is expressly limited to discrimination within the jurisdiction of the Commission pursuant to the Communications Act The purpose of Section 119(a)(6) is to make certain discriminatory acts involving particular parties actionable under the Copyright Act In adopting this language, the Committee does not intend the Commission to address issues and concerns that are outside its jurisdiction and expertise

SECTION 4 INQUIRY ON ENCRYPTION STANDARD

This section amends section 705 of the Communications Act to require the FCC, within six months after the date of enactment of this legislation, to initiate an inquiry concerning the need for a universal encryption standard that permits the decryption of satel-

lite cable programming intended for private viewing by home satellite antenna users

The FCC currently has no such standards To date, this situation has not created a significant problem because, to the Committee's knowledge, all satellite cable programming networks that have scrambled have done so using the VideoCipher II technology developed by General Instrument Corp Any home satellite earth station owner presently need only purchase a single descrambling unit, either as a stand-alone module or built into their satellite systems, in order to descramble any programming service they might wish to purchase

Recently, however technological and market developments raise the possibility that this situation may change Manufacturers are developing new decryption technologies for the market General Instrument Corp and other companies are working on decryption systems that mnay provide programmers with greater signal security and home earth station owners with greater descrambling capacity

The Committee believes that more information is needed to determine whether a universal, decryption standard is needed or would be helpful Accordingly, the Commission is instructed to begin an Inquiry that will take into account consumer costs and benefits, the incorporation of technological enhancements, including advanced television formats, whether such standard would be effective in preventing present and future unauthorized decryption of satellite programming, the costs and benefits of such standard on other authorized users of encrypted satellite cable programming, including cable and Satellite Master Antenna Television (SMATV) systems, the impact of any market disruption that would occur because of the time delays necessary for the establishment of such standard by the Commission, and the effect of such standard on competition in the manufacture of decryption equipment

If the Commission finds, as a result of the information gathered from the Inquiry and from other information before the Commission, that a universal encryption standard is in the public interest, the Committee intends for the Commission to move immediately to initiate a rulemaking to establish such a standard

SECTION 5 PIRACY OF SATELLITE CABLE PROGRAMMING

Section 5 of the Act amends Section 705 of the Communications Act pertaining to the piracy of satellite cable programming The Committee's amendment is intended to deter piracy practices by (1) stiffening applicable civil and criminal penalties, (2) expanding standing to sue, and (3) making the manufacture, sale, modification, importation, exportation, sale or distribution of devices or equipment with knowledge that its primary purpose is to assist in unauthorized decryption of satellite cable programming expressly actionable as a criminal act

The Committee believes these changes are essential to preserve the longterm viability of the TVRO industry It has been estimated than more than one-third of the one million VideoCipher III descramblers (the industry's *de factor* standard) sold by manufacturer General Instrument have been compromised by black market de-

coding chips Unquestionably, piracy is costing those who hold rights in satellite-delivered cable programming tens of millions of dollars in revenues

The piracy problem is rampant both among commercial users of the VideoCipher II (hotels, lounges, and other establishments) and among private home users The depth of the problem is such that there has been a steady increase in the number of new prosecutions and civil suits brought against alleged "pirates"

The Committee wants to give both prosecutors and civil plaintiffs the legal tools they need to bring piracy under control The Committee commends and encourages inter-industry effort to deal with piracy, and believes the new remedies and increased penalties adopted through this provision will contribute to these important efforts

The Committee has noted reports that the Federal Bureau of Investigation has notified FBI field offices, through its Manual of Investigative and Operational Guidelines (MIOG), that investigating satellite signal theft is "not a top priority" The Committee admonishes relevant authorities and government entities, including the FBI, to expend the resources necessary to attack massive and increasing levels of piracy

CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3 of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic existing law in which no change is proposed is shown in roman)

TITLE 17, UNITED STATES CODE

CHAPTER 1—SUBJECT MATTER AND SCOPE OF COPYRIGHT

Sec
101 Definitions

* * * * * * * *

119 Limitations on exclusive rights Secondary transmissions of superstations and network stations for private home viewing

* * * * * * * *

§ 111 Limitations on exclusive rights Secondary transmissions

(a) CERTAIN SECONDARY TRANSMISSIONS EXEMPTED —The secondary transmission of a primary transmission embodying a performance or display of a work is not an infringement of copyright if—

(1) * * *

* * * * * * * *

(3) the secondary transmission is made by any carrier who has no direct or indirect control over the content or selection of the primary transmission or over the particular recipients of the secondary transmission, and whose activities with respect to the secondary transmission consist solely of providing wires, cables, or other communications channels for the use of others *Provided* That the provisions of this clause extend only to the

activities of said carrier with respect to secondary transmission and do not exempt from liability the activities of others respect to their own primary or secondary transmissions [or]

(4) the secondary transmission is made by a satellite carrier for private home viewing purusant to a statutory license under section 119, or

[(4)(5)] the secondary transmission is not made by a cable system but is made by a governmental body, or other nonprofit organization, without any purpose of direct or indirect commercial advantage, and without charge to the recipients of the secondary transmission other than assessments necessary to defray the actual and reasonable costs of maintaining and operating the secondary transmission service

* * * * * * *

(d) COMPULSORY LICENSE FOR SECONDARY TRANSMISSIONS BY CABLE SYSTEMS.—(1) A cable system whose secondary transmissions have been subject to compulsory licensing under subsection (c) shall, on a semiannual basis, deposit with the Register of Copyrights, in accordance with requirements that the Register shall, after consultation with the Copyright Royalty Tribunal (if and when the Tribunal has been constituted), prescribe by regulation—

(A) a statement of account, covering the six months next preceding, specifying the number of channels on which the cable system made secondary transmissions to its subscribers, the names and locations of all primary transmitters whose transmissions were further transmitted by the cable system, the total number of subscribers, the gross amounts paid to the cable system for the basic service of providing secondary transmissions of primary broadcast transmitters, and such other data as the Register of Copyrights may after consultation with the Copyright Royalty Tribunal (if and when the Tribunal has been constituted), from time to time prescribe by regulation *In determining the total number of subscribers and the gross amounts paid to the cable system for the basic service of providing secondary transmissions of primary broadcast transmitters, the system shall not include subscribers and amounts collected from subscribers receiving secondary transmissions for private home viewing pusuant to section 119* Such statement shall also include a special statement of account covering any non-network television programming that was carried by the cable system in whole or in part beyond the local service area of the primary transmitter, under rules, regulations, or authorizations of the Federal Communications Commission permitting the substitution or addition of signals under certain circumstances, together with logs showing the times, dates, stations, and programs involved in such substituted or added carriage, and

§ 119. Limitations on exclusive rights: Secondary transmissions of superstations and network stations for private home viewing

(a) SECONDARY TRANSMISSIONS BY SATELLITE CARRIERS.—

(1) SUPERSTATIONS.—Subject to the provisions of paragraphs (3), (4), and (6) of this subsection, secondary transmissions of a primary transmission made by a superstation and embodying a performance or display of a work shall be subject to statutory licensing under this section if the secondary transmission is made by a satellite carrier to the public for private home viewing, and the carrier makes a direct or indirect charge for each retransmission service to each household receiving the secondary transmission or to a distributor that has contracted with the carrier for direct or indirect delivery of the secondary transmission to the public for private home viewing

(2) NETWORK STATIONS.—

(A) IN GENERAL.—Subject to the provisions of subparagraphs (B) and (C) of this paragraph and paragraphs (3), (4), (5), and (6) of this subsection, secondary transmission of programming contained in a primary transmission made by a network station and embodying a performance or display of a work shall be subject to statutory licensing under this section if the secondary transmission is made by a satellite carrier to the public for private home viewing, and the carrier makes a direct charge for such retransmission service to each subscriber receiving the secondary transmission.

(B) SECONDARY TRANSMISSION TO UNSERVED HOUSEHOLDS.—The statutory license provided for in subparagraph (A) shall be limited to secondary transmissions to persons who reside in unserved households.

(C) NOTIFICATION TO NETWORKS.—A satellite carrier that makes secondary transmissions of a primary transmission by a network station pursuant to subparagraph (A) shall, 90 days after the effective date of the Satellite Home Viewer Act of 1988, or 90 days after commencing such secondary transmission, whichever is later, submit to the network that owns or is affiliated with the network station a list identifying (by street address, including county and zip code) all subscribers to which the satellite carrier currently makes secondary transmissions of that primary transmission. Thereafter, on the 15th day of each month, the satellite carrier shall submit to the network a list identifying (by street address, including county and zip code) any person who have been added or dropped as such subscribers since the last submission under this subparagraph. Such subscriber information submitted by a satellite carrier may be used only for purposes of monitoring compliance by the satellite carrier with this subsection. The submission requirements of this subparagraph shall apply to a satellite carrier only if the network to whom the submissions are to be made places on file with the Register of Copyrights, on or after the effective date of the Satellite Home Viewer Act of 1988, a document identifying the name and address of the person to whom such submissions are to be made. The Register shall maintain for public inspection a file of all such documents.

(3) NONCOMPLIANCE WITH REPORTING AND PAYMENT REQUIREMENTS.—Notwithstanding the provisions of paragraphs (1) and

(2), the willful or repeated secondary transmission to the public by a satellite carrier of a primary transmission made by a superstation or a network station and embodying a performance or display of a work is actionable as an act of infringement under section 501, and is fully subject to the remedies provided by sections 502 through 506 and 509, where the satellite carrier has not deposited the statement of account and royalty fee required by subsection (b), or has failed to make the submissions to networks required by paragraph (2)(C).

(4) WILLFUL ALTERATIONS.—Notwithstanding the provisions of paragraphs (1) and (2), the secondary transmission to the public by a satellite carrier of a primary transmission made by a superstation or a network station and embodying a performance or display of a work is actionable as an act of infringement under section 501, and is fully subject to the remedies provided by sections 502 through 506 and sections 509 and 510, if the content of the particular program in which the performance or display is embodied, or any commercial advertising or station announcement transmitted by the primary transmitter during, or immediately before or after, the transmission of such program, is in any way willfully altered by the satellite carrier through changes, deletions, or additions, or is combined with programming from any other broadcast signal.

(5) VIOLATION OF TERRITORIAL RESTRICTIONS ON STATUTORY LICENSE FOR NETWORK STATIONS.—

(A) INDIVIDUAL VIOLATIONS.—The willful or repeated secondary transmission by a satellite carrier of a primary transmission made by a network station and embodying a performance or display of a work to a subscriber who does not reside in an unserved household is actionable as an act of infringement under section 501 and is fully subject to the remedies provided by sections 502 through 506 and 509, except that—

(i) no damages shall be awarded for such act of infringement if the satellite carrier took corrective action by promptly withdrawing service from the ineligible subscriber, and

(ii) any statutory damages shall not exceed $5 for such subscriber for each month during which the violation occurred.

(B) PATTERN OF VIOLATIONS.—If a satellite carrier engages in a willful or repeated pattern or practice of delivering a primary transmission made by a network station and embodying a performance or display of a work to subscribers who do not reside in unserved households, then in addition to the remedies set forth in subparagraph (A)—

(i) if the pattern or practice has been carried out on a substantially nationwide basis, the court shall order a permanent injunction barring the secondary transmission by the satellite carrier, for private home viewing, or the primary transmissions of any primary network station affiliated with the same network, and the court may order statutory damages of not to exceed $250,000

for each 6-month period during which the pattern or practice was carried out, and

(ii) if the pattern or practice has been carried out on a local or regional basis, the court shall order a permanent injunction barring the secondary transmission, for private home viewing in that locality or region, by the satellite carrier of the primary transmissions of any primary network station affiliated with the same network, and the court may order statutory damages of not to exceed $250,000 for each 6-month period during which the pattern or practice was carried out

(C) PREVIOUS SUBSCRIBERS EXCLUDED —Subparagraphs (A) and (B) do not apply to secondary transmissions by a satellite carrier to persons who subscribed to receive such secondary transmissions from the satellite carrier or a distributor before July 7, 1988

(6) DISCRIMINATION BY A SATELLITE CARRIER —Notwithstanding the provisions of paragraph (1), the willful or repeated secondary transmission to the public by a satellite carrier of a primary transmission made by a superstation or a network station and embodying a performance or display of a work is actionable as an act of infringement under section 501, and is fully subject to the remedies provided by sections 502 through 506 and 509, if the satellite carrier unlawfully discriminates against a distributor

(7) GEOGRAPHIC LIMITATION ON SECONDARY TRANSMISSIONS — The statutory license created by this section shall apply only to secondary transmissions to households located in the United States, or any of its territories, trust territories, or possessions

(b) STATUTORY LICENSE FOR SECONDARY TRANSMISSIONS FOR PRIVATE HOME VIEWING —

(1) DEPOSITS WITH THE REGISTER OF COPYRIGHTS —A satellite carrier whose secondary transmissions are subject to statutory licensing under subsection (a) shall, on a semiannual basis, deposit with the Register of Copyrights, in accordance with requirements that the Register shall, after consultation with the Copyright Royalty Tribunal, prescribe by regulation—

(A) a statement of account, covering the preceding 6-month period, specifying the names and locations of all superstations and network stations whose signals were transmitted, at any time during that period, to subscribers for private home viewing as described in subsections (a)(1) and (a)(2), the total number of subscribers that received such transmissions, and such other data as the Register of Copyrights may, after consultation with the Copyright Royalty Tribunal, from time to time prescribe by regulation, and

(B) a royalty fee for that 6-month period, computed by—

(i) multiplying the total number of subscribers receiving each secondary transmission of a superstation during each calendar month by 12 cents,

(ii) multiplying the number of subscribers receiving each secondary transmission of a network station during each calendar month by 3 cents, and

(iii) adding together the totals from clauses (i) and (ii)

(2) INVESTMENT OF FEES —The Register of Copyrights shall receive all fees deposited under this section and, after deducting the reasonable costs incurred by the Copyright Office under this section (other than the costs deducted under paragraph (4)), shall deposit the balance in the Treasury of the United States, in such manner as the Secretary of the Treasury directs All funds held by the Secretary of the Treasury shall be invested in interest-bearing United States securities for later distribution with interest by the Copyright Royalty Tribunal as provided by this title

(3) PERSONS TO WHOM FEES ARE DISTRIBUTED —The royalty fees deposited under paragraph (2) shall, in accordance with the procedures provided by paragraph (4), be distributed to those copyright owners whose works were included in a secondary transmission for private home viewing made by a satellite carrier during the applicable 6-month accounting period and who file a claim with the Copyright Royalty Tribunal under paragraph (4)

(4) PROCEDURES FOR DISTRIBUTION —The royalty fees deposited under paragraph (2) shall be distributed in accordance with the following procedures

(A) FILING OF CLAIMS FOR FEES —During the month of July in each year, each person claiming to be entitled to statutory license fees for secondary transmissions for private home viewing shall file a claim with the Copyright Royalty Tribunal, in accordance with requirements that the Tribunal shall prescribe by regulation. For purposes of this paragraph, any claimants may agree among themselves as to the proportionate division of statutory license fees among them, may lump their claims together and file them jointly or as a single claim, or may designate a common agent to receive payment on their behalf

(B) DETERMINATION OF CONTROVERSY, DISTRIBUTIONS.— After the first day of August of each year, the Copyright Royalty Tribunal shall determine whether there exists a controversy concerning the distribution of royalty fees If the Tribunal determines that no such controversy exists, the Tribunal shall, after deducting reasonable administrataive costs under this paragraph, distribute such fees to the copyright owners entitled to receive them, or to their designated agents If the Tribunal finds the existence of a controversy, the Tribunal shall, pursuant to chapter 8 of this title, conduct a proceding to determine the distribution of royalty fees

(C) WITHHOLDING OF FEES DURING CONTROVERSY — During the pendency of any proceeding under this subsection, the Copyright Royalty Tribunal shall withhold from distribution an amount sufficient to satisfy all claims with respect to which a controversy exists, but shall have discretion to proceed to distribute any amounts that are not in controversy

(c) DETERMINATION OF ROYALTY FEES —

(1) APPLICABILITY AND DETERMINATION OF ROYALTY FEES — The rate of the royalty fees payable under subsection (b)(1)(B) shall be effective until December 31, 1992, unless a royalty fee is established under paragraph (2), (3), or (4) of this subsection. After that date, the fee shall be determined either in accordance with the voluntary negotiation procedure specified in paragraph (2) or in accordance with the compulsory arbitration procedure specified in paragarphs (3) and (4)

(2) FEE SET BY VOLUNTARY NEGOTIATION —

(A) NOTICE OF INITIATION OF PROCEEDINGS —On or before July 1, 1991, the Copyright Royalty Tribunal shall cause notice to be published in the Federal Register of the initiation of voluntary negotiation proceedings for the purpose of determining the royalty fee to be paid by satellite carriers sunder subsection (b)(1)(B)

(B) NEGOTIATIONS —Satellite carriers, distributors, and copyright owners entitled to royalty fees under this section shall negotiate in good faith in an effort to reach a voluntary agreement or voluntary agreements for the payment of royalty fees Any such satellite carriers, distributors, and copyright owners may at any time negotiate and agree to the royalty fee, and may designate common agents to negotiate, agree to, or pay such fees If the parties fail to identify common agents, the Copyright Royalty Tribunal shall do so, after requesting recommendations from the parties to the negotiation proceeding The parties to each negotiation proceeding shall bear the entire cost thereof

(C) AGREEMENTS BINDING ON PARTIES, FILING OF AGREEMENTS —Voluntary agreements negotiated at any time in accordance with this paragraph shall be bindiang upon all satellite carriers, distributors, and copyright owners that are parties thereto Copies of such agreements shall be filed with the Copyright Office within 30 days after execution in accordance with regulations that the Register of Copyrights shall prescribe

(D) PERIOD AGREEMENT IS IN EFFECT —The obligation to pay the royalty fees established under a voluntary agreement which has been filed with the Copyright Office in accordance with this paragraph shall become effective on the date specified in the agreement, and shall remain in effect until December 31, 1994

(3) FEE SET BY COMPULSORY ARBITRATION —

(A) NOTICE OF INITIATION OF PROCEEDINGS —On or before December 31, 1991, the Copyright Royalty Tribunal shall cause notice to be published in the Federal Register of the initiation of arbitration proceedings for the purpose of determining a reasonable royalty fee to be paid under subsection (b)(1)(B) by satellite carriers who are not parties to a voluntary agreement filed with the Copyright Office in accordance with paragraph (2) Such notice shall include the names and qualifications of potential arbitrators chosen by the Tribunal from a list of available arbitrators obtained from the American Arbitration Association or such similar organization as the Tribunal shall select.

(B) SELECTION OF ARBITRATION PANEL.—Not later than 10 days after publication of the notice initiating an arbitration proceeding, and in accordance with procedures to be specified by the Copyright Royalty Tribunal, one arbitrator shall be selected from the published list by copyright owners who claim to be entitled to royalty fees under subsection (b)(4) and who are not party to a voluntary agreement filed with the Copyright Office in accordance with paragraph (2), and one arbitrator shall be selected from the published list by satellite carriers and distributors who are not parties to such a voluntary agreement The two arbitrators so selected shall, within 10 days after their selection, choose a third arbitrator from the same list, who shall serve as chairperson of the arbitrators If either group fails to agree upon the selection of an arbitrator, or if the arbitrators selected by such groups fail to agree upon the selection of a chairperson, the Copyright Royalty Tribunal shall promptly select the arbitrator or chairperson, respectively The arbitrators selected under this paragraph shall constitute an Arbitration Panel.

(C) ARBITRATION PROCEEDING —The Arbitration Panel shall conduct an arbitration proceeding in accordance with such procedures as it may adopt The Panel shall act on the basis of a fully documented written record. Any copyright owner who claims to be entitled to royalty fees under subsection (b)(4), any satellite carrier, and any distributor, who is not party to a voluntary agreement filed with the Copyright Office in accordance with paragraph (2), may submit relevant information and proposals to the Panel The parties to the proceeding shall bear the entire cost thereof in such manner and proportion as the Panel shall direct

(D) FACTORS FOR DETERMINING ROYALTY FEES —In determining royalty fees under this paragraph, the Arbitration Panel shall consider the approximate average cost to a cable system for the right to secondarily transmit to the public a primary transmission made by a broadcast station, the fee established under any voluntary agreement filed with the Copyright Office in accordance with paragraph (2), and the last fee proposed by the parties, before proceedings under this paragraph, for the secondary transmission of superstations or network stations for private home viewing The fee shall also be calculated to achieve the following objectives

(i) To maximize the availability of creative works to the public

(ii) To afford the copyright owner a fair return for his or her creative work and the copyright user a fair income under existing economic conditions

(iii) To reflect the relative roles of the copyright owner and the copyright user in the product made available to the public with respect to relative creative contribution, technological contribution, capital investment, cost, risk, and contribution to the opening of new

markets for creative expression and media for their communication.

(iv) To minimize any disruptive impact on the structure of the industries involved and on generally prevailing industry practices

(E) REPORT TO COPYRIGHT ROYALTY TRIBUNAL.—Not later than 60 days after publication of the notice initiating an arbitration proceeding, the Arbitration Panel shall report to the Copyright Royalty Tribunal its determination concerning the royalty fee Such report shall be accompanied by the written record, and shall set forth the facts that the Panel found relevant to its determination and the reasons why its determination is consistent with the criteria set forth in subparagraph (D)

(F) ACTION BY COPYRIGHT ROYALTY TRIBUNAL.—Within 60 days after receiving the report of the Arbitration Panel under subparagraph (E), the Copyright Royalty Tribunal shall adopt or reject the determination of the Panel The Tribunal shall adopt the determination of the Panel unless the Tribunal finds that the determination is clearly inconsistent with the criteria set forth in subparagraph (D) If the Tribunal rejects the determination of the Panel, the Tribunal shall, before the end of that 60-day period, and after full examination of the record created in the arbitration proceeding, issue an order, consistent with the criteria set forth in subparagraph (D), setting the royalty fee under this paragraph The Tribunal shall cause to be published in the Federal Register the determination of the Panel, and the decision of the Tribunal with respect to the determination (including any order issued under the preceding sentence) The Tribunal shall also publicize such determination and decision in such other manner as the Tribunal considers appropriate The Tribunal shall also make the report of the Arbitration Panel and the accompanying record available for public inspection and copying

(G) PERIOD DURING WHICH DECISION OF PANEL OR ORDER OF TRIBUNAL EFFECTIVE —The obligation to pay the royalty fee established under a determination of the Arbitration Panel which is confirmed by the Copyright Royalty Tribunal in accordance with this paragraph, or established by any order issued under subparagraph (F), shall become effective on the date when the decision of the Tribunal is published in the Federal Register under subparagraph (F), and shall remain in effect until modified in accordance with paragraph (4), or until December 31, 1994

(H) PERSONS SUBJECT TO ROYALTY FEE —The royalty fee adopted or ordered under subparagraph (F) shall be binding on all satellite carriers, distributors, and copyright owners, who are not party to a voluntary agreement filed with the Copyright Office under paragraph (2)

(4) JUDICIAL REVIEW —Any decision of the Copyright Royalty Tribunal under paragraph (3) with respect to a determination of the Arbitration Panel may be appealed, by any aggrieved party who would be bound by the determination, to the United

States Court of Appeals for the District of Columbia Circuit, within 30 days after the publication of the decision in the Federal Register The pendency of an appeal under this paragraph shall not relieve satellite carriers of the obligation under subsection (b)(1) to deposit the statement of account and royalty fees specified in that subsection. The court shall have jurisdiction to modify or vacate a decision of the Tribunal only if it finds, on the basis of the record before the Tribunal and the statutory criteria set forth in paragraph (3)(D), that the Arbitration Panel or the Tribunal acted in an arbitrary manner If the court modifies the decision of the Tribunal, the court shall have jurisdiction to enter its own determination with respect to royalty fees, to order the repayment of any excess fees deposited under subsection (b)(1)(B), and to order the payment of any underpaid fees, and the interest pertaining respectively thereto, in accordance with its final judgment The court may further vacate the decision of the Tribunal and remand the case for arbitration proceedings in accordance with paragraph (3)

(d) DEFINITIONS —As used in this section—

(1) DISTRIBUTOR —The term "distributor" means an entity which contracts to distribute secondary transmissions from a satellite carrier and, either as a single channel or in a package with other programming, provides the secondary transmission either directly to individual subscribers for private home viewing or indirectly through other program distribution entities

(2) NETWORK STATION —The term "network station" has the meaning given that term in section 111(f) of this title, and includes any translator station or terrestrial satellite station that rebroadcasts all or substantially all of the programming broadcast by a network station.

(3) PRIMARY NETWORK STATION —The term "primary network station" means a network station that broadcasts or rebroadcasts the basic programming service of a particular national network

(4) PRIMARY TRANSMISSION —The term 'primary transmission' has the meaning given that term in section 111(f) of this title.

(5) PRIVATE HOME VIEWING —The term "private home viewing" means the viewing, for private use in a household by means of satellite reception equipment which is operated by an individual in that household and which serves only such household, of a secondary transmission delivered by a satellite carrier of a primary transmission of a television station licensed by the Federal Communications Commission.

(6) SATELLITE CARRIER —The term "satellite carrier" means an entity that uses the facilities of a satellite or satellite service licensed by the Federal Communications Commission, to establish and operate a channel of communications for point-to-multipoint distribution of television station signals, and that owns or leases a capacity or service on a satellite in order to provide such point-to-multipoint distribution, except to the extent that such entity provides such distribution pursuant to tariff under the Communications Act of 1934, other than for private home viewing

(7) SECONDARY TRANSMISSION.—The term "secondary transmission" has the meaning given that term in section 111(f) of this title.

(8) SUBSCRIBER.—The term "subscriber" means an individual who receives a secondary transmission service for private home viewing by means of a secondary transmission from a satellite carrier and pays a fee for the service, directly or indirectly, to the satellite carrier or to a distributor.

(9) SUPERSTATION.—The term "superstation" means a television broadcast station, other than a network station, licensed by the Federal Communications Commission that is secondarily transmitted by a satellite carrier.

(10) UNSERVED HOUSEHOLD.—The term "unserved household", with respect to a particular television network, means a household that—

(A) cannot receive, through the use of a conventional outdoor rooftop receiving antenna, an over-the-air signal of grade B intensity (as defined by the Federal Communications Commission) of a primary network station affiliated with that network, and

(B) has not, within 90 days before the date on which that household subscribes, either initially or on renewal, to receive secondary transmissions by a satellite carrier of a network station affiliated with that network, subscribed to a cable system that provides the signal of a primary network station affiliated with that network.

(e) EXCLUSIVITY OF THIS SECTION WITH RESPECT TO SECONDARY TRANSMISSIONS OF BROADCAST STATIONS BY SATELLITE TO MEMBERS OF THE PUBLIC.—No provision of section 111 of this title or any other law (other than this section) shall be construed to contain any authorization, exemption, or license through which secondary transmissions by satellite carrier for private home viewing of programming contained in a primary transmission made by a superstation or a network station may be made without obtaining the consent of the copyright owner.

CHAPTER 5—COPYRIGHT INFRINGEMENT AND REMEDIES

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§ 501. Infringement of copyright

(a) * * *

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(e) With respect to any secondary transmission that is made by a satellite carrier of a primary transmission embodying the performance or display of a work and is actionable as an act of infringement under section 119(a)(5), a network station holding a copyright or other license to transmit or perform the same version of that work shall, for purposes of subsection (b) of this section, be treated as a legal or beneficial owner if such secondary transmission occurs within the local service area of that station.

* * * * * * *

CHAPTER 8—COPYRIGHT ROYALITY TRIBUNAL

§ 801. Copyright Royalty Tribunal: Establishment and purpose

(a) There is hereby created an independent Copyright Royalty Tribunal in the legislative branch

(b) Subject to the provisions of this chapter, the purposes of the Tribunal shall be—

(1) * * *

* * * * * * *

(3) to distribute royalty fees deposited with the Register of Copyrights under sections 111 [and 116], *116, and 119(b),* and to determine, in cases where controversy exists, the distribution of such fees

* * * * * * *

§ 804 Institution and conclusion of proceedings

(a) * * *

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(d) With respect to proceedings under section 801(b)(3), concerning the distribution of royalty fees in certain circumstances under [sections 111 or 116], *section 111, 116, or 119,* the Chairman of the Tribunal shall, upon determination by the Tribunal that a controversy exists concerning such distribution, cause to be published in the Federal Register notice of commencement of proceedings under this chapter

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COMMUNICATIONS ACT OF 1934

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TITLE VII—MISCELLANEOUS PROVISIONS

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UNAUTHORIZED PUBLICATION OF COMMUNICATIONS

SEC 705 (a) * * *

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(c)(1) For purposes of this section—

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(4) the term "private vewing" means the viewing for private use in an individual's dwelling unit by means of equipment, owned or operated by such individual, capable of receiving satellite cable programming directly from a satellite, [and]

(5) the term "private financial gain" shall not include the gain resulting to any individual for the private use of such individual's dwelling unit of any programming for which the individual has not obtained authorization for that use[ ] , *and*

(6) term "any person aggrieved" shall include any person with proprietary rights in the intercepted communication by wire or

radio including wholesale or retail distributors of satellite cable programming, and, in the case of a violation of paragraph (4) of subsection (d), shall also include any person engaged in the lawful manufacture, distribution, or sale of equipment necessary to authorize or receive satellite cable programming

(d)(1) Any person who willfully violates subsection (a) shall be fined not more than [$1,000] *$2,000* or imprisoned for not more than 6 months, or both

(2) Any person who violates subsection (a) willfully and for purposes of direct or indirect commercial advantage or private financial gain shall be fined not more than [$25,000 or imprisoned for not more than 1 year, or both, for the first such conviction and shall be fined not more than $50,000 or imprisoned for not more than 2 years, or both, for any subsequent conviction] *$50,000 or imprisoned for not more than 2 years, or both, for the first such conviction and shall be fined not more than $100,000 or imprisoned for not more than 5 years, or both, for any subsequent conviction.*

(3)(A) Any person aggrieved by any violation of subsection (a) *or paragraph (4) of subsection (d)* may bring a civil action in a United States district court or in any other court of competent jurisdiction

(B)The court [may]—

(i) *may* grant temporary and final injunctions on such terms as it may deem reasonable to prevent or restrain violations of subsection (a),

(ii) *may* award damages as described in subparagraph (C), and

(iii) *shall* direct the recovery of full costs, including awarding reasonable attorneys' fees to an aggrieved party who prevails

(C)(i) Damages awarded by any court under this section shall be computed, at the election of the aggrieved party, in accordance with either of the following subclauses,

(I) the party aggrieved may recover the actual damages suffered by him as a result of the violation and any profits of the violator that are attributable to the violation which are not taken into account in computing the actual damages, in determining the violator's profits, the party aggrieved shall be required to prove only the violator's gross revenue, and the violator shall be required to prove his deductible expenses and the elements of profit attributable to factors other than the violation, or

(II) the party aggrieved may recover an award of statutory damages for each violation *of subsection (a)* involved in the action in a sum of not less than [$250] *$1,000* or more than $100,000, as the court considers just, *and for each violation of paragraph (4) of this subsection (d) involved in the action an aggrieved party may recover statutory damages in a sum not less than $10,000, or more than $100,000, as the court considers just.*

(ii) In any case in which the court finds that the violation was committed willfully and for purposes of direct or indirect commercial advantage or private financial gain, the court in its discretion may increase the award of damages, whether actual or statutory, by an amount of not more than [$50,000] *$100,000 for each violation of subsection (a)*—

(iii) In any case where the courts finds that the violator was not aware and had no reason to believe that his acts constituted a violation of this section, the court in its discretion may reduce the award of damages to a sum of not less than [$100] *$250*

[(4) The importation, manufacture, sale, or distribution of equipment by any person with the intent of its use to assist in any activity prohibited by subsection (a) shall be subject to penalties and remedies under this subsection to the same extent and in the same manner as a person who has engaged in such prohibited activity]

(4) Any person who manufactures, assembles, modifies imports, exports, sells, or distributes any electronic, mechanical, or other device or equipment, knowing or having reason to know that the device or equipment is primarily of assistance in the unauthorized decryption of satellite cable programming, or is intended for any other activity prohibited by subsection (a), shall be fined not more than $500,000 for each violation, or imprisoned for not more than 5 years for each violation, or both For purposes of all penalties and remedies established for violations of this paragraph, the prohibited activity established herein as it applies to each such device shall be deemed a separate violation.

* * * * * * *

(f) Within 6 months after the date of enactment of the Satellite Home Viewer Act of 1988, the Federal Communications Commission shall initiate an inquiry concerning the need for a universal encryption standard that permits decryption of satellite cable programming intended for private viewing In conducting such inquiry, the Commission shall take into acount—

(1) consumer costs and benefits of any such standard, including consumer investment in equipment in operation,

(2) incorporation of technological enhancements, including advanced television formats,

(3) whether any such standard would effectively prevent present and future unauthorized decryption of satellite cable programming,

(4) the costs and benefits of any such standard on other authorized users of encrypted satellite cable programming, including cable systems and satellite master antenna television systems,

(5) the effect of any such standard on competition in the manufacture of decryption equipment, and

(6) the impact of the time delay associated with the Commission procedures necessary for establishment of such standards.

(g) If the Commission finds, based on the information gathered from the inquiry required by subsection (f) that a universal encryption standard is necessary in the public interest, the Commission shall initiate a rulemaking to establish such a standard.

* * * * * * *

SYNDICATED EXCLUSIVITY

SEC. 712. (a) The Federal Communications Commission shall, within 120 days after the effective date of the Satellite Home

Viewer Act of 1988, initiate a combined inquiry and rulemaking proceeding for the purpose of—

(1) determining the feasibility of imposing syndicated exclusivity rules with respect to the delivery of snydicated programming (as defined by the Commission) for private viewing (as defined in section 705 of this Act) similar to the rules issued by the Commission with respect to syndicated exclusivity and cable television, and

(2) adopting such rules if the Commission considers the imposition of such rules to be feasible

(b) In the event that the Commission adopts such rules, any willful and repeated secondary transmission made by a satellite carrier to the public of a primary transmission embodying the performance or display of a work which violates such Commission rules shall be subject to the remedies, sanctions, and penalties provided by title V and section 705 of this Act.

DISCRIMINATION

SEC 713 The Federal Communications Commission shall, within 1 year after the effective date of the Satellite Home Viewer Act of 1988, prepare and submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives a report on whether, and the extent to which, there exists discrimination described in section 119(a)(6) of title 17, United States Code

ADDITIONAL VIEWS ON H R 2848 BY MR TAUZIN

I applaud the Committee for taking this vital step to insure the availability of broadcast signals to the more than two million dish owners in America Because many of those dishes are located in rural areas where access to broadcast signals is limited, this legislation will make available for the first time, a luxury most of us take for granted—network news

Competition in the sale of home satellite dish programming has been a concern of mine and many members of the Committee since the first signal was scrambled Without it, there is little incentive for cable programmers to provide dish owners with the same consumer choices of program packages at fair and reasonable prices that cable subscribers now enjoy H R 1885, the Satellite Television Fair Marketing Act, which I introduced and 124 Members cosponsored this Congress, sought to encourage the sale of programming to third party packagers While we have not been successful in its enactment, its existence has served as a catalyst to encourage cable programmers to negotiate and sign contracts with third party program packagers The National Rural Telecommunications Cooperative (NRTC) signed programming agreements the day of H R 1885 Subcommittee markup, making it the first third-party program packager to establish long-term contractual relationships with major programming services The development of this package is a positive event in the evolution of the home dish market and has hopefully let the "Genie of competition" out of the bottle and into the marketplace

We will be monitoring the Genie to see whether he flourishes in the marketplace or withers and retreats to the bottle

BILLY TAUZIN

S. 1883

One Hundredth Congress of the United States of America

AT THE SECOND SESSION

Begun and held at the City of Washington on Monday, the twenty-fifth day of January, one thousand nine hundred and eighty-eight

An Act

To amend the Act entitled "An Act to provide for the registration and protection of trade-marks used in commerce, to carry out the provisions of certain international conventions, and for other purposes"

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

TITLE I—TRADEMARK LAW REVISION

SEC. 101 SHORT TITLE.

This title may be cited as the "Trademark Law Revision Act of 1988"

SEC. 102. REFERENCE TO THE TRADEMARK ACT OF 1946.

Except as otherwise expressly provided, whenever in this title an amendment is expressed in terms of an amendment to a section or other provision, the reference shall be considered to be made to a section or other provision of the Act entitled "An Act to provide for the registration and protection of trademarks used in commerce to carry out the provisions of certain international conventions, and for other purposes" approved July 5, 1946 (15 U.S.C. 1051 and following) (commonly referred to as the "Trademark Act of 1946").

SEC. 103. APPLICATION TO REGISTER TRADEMARKS.

Section 1 (15 U.S.C. 1051) is amended—

(1) in the matter before subsection (a) by striking out "may register his" and inserting in lieu thereof "may apply to register his or her",

(2) by redesignating paragraphs (1), (2), and (3) of subsection (a) as subparagraphs (A), (B), and (C), respectively,

(3) by redesignating subsections (a), (b), and (c) as paragraphs (1), (2), and (3) respectively,

(4) by inserting "(a)" after "SECTION 1.",

(5) in subsection (a)(1)(A) as redesignated by this section—

(A) by striking out "applied to" and inserting in lieu thereof "used on or in connection with", and

(B) by striking out "goods in connection" and inserting in lieu thereof "goods on or in connection",

(6) in subsection (a)(1)(C), as redesignated by this section, by striking out "actually",

(7) in subsection (a)(2), as redesignated by this section by striking out "filing" and inserting in lieu thereof "prescribed", and

(8) by redesignating subsection (d) as subsection (e), and

(9) by inserting before subsection (e), as redesignated by paragraph (8) of this section the following:

"(b) A person who has a bona fide intention, under circumstances showing the good faith of such person, to use a trademark in

commerce may apply to register the trademark under this Act on the principal register hereby established

"(1) By filing in the Patent and Trademark Office—

"(A) a written application, in such form as may be prescribed by the Commissioner, verified by the applicant, or by a member of the firm or an officer of the corporation or association applying, specifying applicant's domicile and citizenship, applicant's bona fide intention to use the mark in commerce, the goods on or in connection with which the applicant has a bona fide intention to use the mark and the mode or manner in which the mark is intended to be used on or in connection with such goods, including a statement to the effect that the person making the verification believes himself or herself, or the firm, corporation, or association in whose behalf he or she makes the verification, to be entitled to use the mark in commerce, and that no other person, firm, corporation, or association, to the best of his or her knowledge and belief, has the right to use such mark in commerce either in the identical form of the mark or in such near resemblance to the mark as to be likely, when used on or in connection with the goods of such other person, to cause confusion, or to cause mistake, or to deceive, however, except for applications filed pursuant to section 44, no mark shall be registered until the applicant has met the requirements of subsection (d) of this section, and

"(B) a drawing of the mark.

"(2) By paying in the Patent and Trademark Office the prescribed fee

"(3) By complying with such rules or regulations, not inconsistent with law, as may be prescribed by the Commissioner

"(c) At any time during examination of an application filed under subsection (b), an applicant who has made use of the mark in commerce may claim the benefits of such use for purposes of this Act, by amending his or her application to bring it into conformity with the requirements of subsection (a)

"(d)(1) Within six months after the date on which the notice of allowance with respect to a mark is issued under section 13(b)(2) to an applicant under subsection (b) of this section, the applicant shall file in the Patent and Trademark Office, together with such number of specimens or facsimiles of the mark as used in commerce as may be required by the Commissioner and payment of the prescribed fee, a verified statement that the mark is in use in commerce and specifying the date of the applicant's first use of the mark in commerce, those goods or services specified in the notice of allowance on or in connection with which the mark is used in commerce, and the mode or manner in which the mark is used on or in connection with such goods or services Subject to examination and acceptance of the statement of use, the mark shall be registered in the Patent and Trademark Office, a certificate of registration shall be issued for those goods or services recited in the statement of use for which the mark is entitled to registration, and notice of registration shall be published in the Official Gazette of the Patent and Trademark Office Such examination may include an examination of the factors set forth in subsections (a) through (e) of section 2 The

notice of registration shall specify the goods or services for which the mark is registered

"(2) The Commissioner shall extend, for one additional 6-month period, the time for filing the statement of use under paragraph (1), upon written request of the applicant before the expiration of the 6-month period provided in paragraph (1) In addition to an extension under the preceding sentence, the Commissioner may, upon a showing of good cause by the applicant, further extend the time for filing the statement of use under paragraph (1) for periods aggregating not more than 24 months, pursuant to written request of the applicant made before the expiration of the last extension granted under this paragraph Any request for an extension under this paragraph shall be accompanied by a verified statement that the applicant has a continued bona fide intention to use the mark in commerce and specifying those goods or services identified in the notice of allowance on or in connection with which the applicant has a continued bona fide intention to use the mark in commerce Any request for an extension under this paragraph shall be accompanied by payment of the prescribed fee The Commissioner shall issue regulations setting forth guidelines for determining what constitutes good cause for purposes of this paragraph

"(3) The Commissioner shall notify any applicant who files a statement of use of the acceptance or refusal thereof and, if the statement of use is refused, the reasons for the refusal An applicant may amend the statement of use

"(4) The failure to timely file a verified statement of use under this subsection shall result in abandonment of the application"

SEC 104 TRADEMARKS REGISTRABLE ON PRINCIPAL REGISTER.

Section 2 (15 U S C 1052) is amended—

(1) by amending subsection (d) to read as follows

"(d) Consists of or comprises a mark which so resembles a mark registered in the Patent and Trademark Office, or a mark or trade name previously used in the United States by another and not abandoned, as to be likely, when used on or in connection with the goods of the applicant, to cause confusion, or to cause mistake, or to deceive *Provided,* That if the Commissioner determines that confusion, mistake, or deception is not likely to result from the continued use by more than one person of the same or similar marks under conditions and limitations as to the mode or place of use of the marks or the goods on or in connection with which such marks are used, concurrent registrations may be issued to such persons when they have become entitled to use such marks as a result of their concurrent lawful use in commerce prior to (1) the earliest of the filing dates of the applications pending or of any registration issued under this Act, (2) July 5, 1947, in the case of registrations previously issued under the Act of March 3, 1881, or February 20, 1905, and continuing in full force and effect on that date, or (3) July 5, 1947, in the case of applications filed under the Act of February 20, 1905, and registered after July 5, 1947 Use prior to the filing date of any pending application or a registration shall not be required when the owner of such application or registration consents to the grant of a concurrent registration to the applicant Concurrent registrations may also be issued by the Commissioner when a court of competent jurisdiction has finally determined that more than one person is entitled to use the same or similar marks in commerce In issuing concurrent registrations, the Commissioner shall prescribe condi-

tions and limitations as to the mode or place of use of the mark or the goods on or in connection with which such mark is registered to the respective persons",

(2) in subsection (e) by striking out "applied to" each place it appears and inserting in lieu thereof "used on or in connection with", and

(3) in subsection (f)—

(A) by striking out "applied to" and inserting in lieu thereof "used on or in connection with", and

(B) by striking out "five years" and all that follows through the end of the subsection and inserting in lieu thereof "five years before the date on which the claim of distinctiveness is made"

SEC 105 SERVICE MARKS REGISTRABLE

Section 3 (15 U S C 1053) is amended—

(1) in the first sentence—

(A) by striking out "used in commerce", and

(B) by striking out ", except when" and all that follows through "mark is used", and

(2) by striking out the second sentence

SEC 106 COLLECTIVE AND CERTIFICATION MARKS REGISTRABLE.

Section 4 (15 U S C 1054) is amended—

(1) in the first sentence—

(A) by striking out "origin used in commerce," and inserting in lieu thereof "origin,", and

(B) by striking out "except when" and inserting in lieu thereof "except in the case of certification marks when", and

(2) by striking out the second sentence

SEC. 107 USE BY RELATED COMPANIES.

Section 5 (15 U S C 1055) is amended by adding at the end thereof the following "If first use of a mark by a person is controlled by the registrant or applicant for registration of the mark with respect to the nature and quality of the goods or services, such first use shall inure to the benefit of the registrant or applicant, as the case may be"

SEC 108 DISCLAIMER OF UNREGISTRABLE MATTER.

Section 6(b) (15 U S C 1056(b)) is amended by striking out "paragraph (d)" and inserting in lieu thereof "subsection (e)"

SEC 109 CERTIFICATE OF REGISTRATION ON THE PRINCIPAL REGISTER.

Section 7 (15 U S C 1057) is amended—

(1) by amending subsection (b) to read as follows

"(b) A certificate of registration of a mark upon the principal register provided by this Act shall be prima facie evidence of the validity of the registered mark and of the registration of the mark, of the registrant's ownership of the mark, and of the registrant's exclusive right to use the registered mark in commerce on or in connection with the goods or services specified in the certificate, subject to any conditions or limitations stated in the certificate",

(2) by redesignating subsections (c), (d), (e), (f), and (g) as subsections (d), (e), (f), (g), and (h), respectively,

(3) by inserting after subsection (b) the following

"(c) Contingent on the registration of a mark on the principal register provided by this Act, the filing of the application to register such mark shall constitute constructive use of the mark, conferring a right of priority, nationwide in effect, on or in connection with the goods or services specified in the registration against any other person except for a person whose mark has not been abandoned and who, prior to such filing—

"(1) has used the mark,

"(2) has filed an application to register the mark which is pending or has resulted in registration of the mark, or

"(3) has filed a foreign application to register the mark on the basis of which he or she has acquired a right of priority, and timely files an application under section 44(d) to register the mark which is pending or has resulted in registration of the mark ",

(4) in subsection (d), as redesignated by paragraph (2) of this section, by striking out "fee herein provided" and inserting in lieu thereof "prescribed fee",

(5) in subsection (f), as redesignated by paragraph (2) of this section, by striking out "fee required by law" and inserting in lieu thereof "prescribed fee", and

(6) in subsection (h), as redesignated by paragraph (2) of this section, by striking out "required fee" and inserting in lieu thereof "prescribed fee"

SEC. 110 DURATION OF REGISTRATION

Section 8(a) (15 U S C 1058(a)) is amended—

(1) by striking out "twenty" and inserting in lieu thereof "ten", and

(2) by striking out "showing that said mark is in use in commerce or showing that its" and inserting in lieu thereof "setting forth those goods or services recited in the registration on or in connection with which the mark is in use in commerce and attaching to the affidavit a specimen or facsimile showing current use of the mark, or showing that any"

SEC. 111 RENEWAL OF REGISTRATION

Section 9 (15 U S C 1059) is amended—

(1) in subsection (a) by striking out "twenty" and inserting in lieu thereof "ten", and

(2) in subsection (c) by striking out "1(d) hereof" and inserting in lieu thereof "1(e) of this Act"

SEC. 112. ASSIGNMENT

Section 10 (15 U S C 1060) is amended—

(1) in the first sentence by striking out "and in any such assignment" and inserting in lieu thereof the following: " However, no application to register a mark under section 1(b) shall be assignable prior to the filing of the verified statement of use under section 1(d), except to a successor to the business of the applicant, or portion thereof, to which the mark pertains, if that business is ongoing and existing In any assignment authorized by this section", and

(2) in the last paragraph by striking out "1(d) hereof" and inserting in lieu thereof "1(e) of this Act"

SEC. 113. EXAMINATION OF APPLICATION

Section 12(a) (15 U S C 1062(a)) is amended—

(1) by striking out "fee herein provided" and inserting in lieu thereof "prescribed fee", and

(2) by striking out "to registration, the" and inserting in lieu thereof "to registration, or would be entitled to registration upon the acceptance of the statement of use required by section 1(d) of this Act, the"

SEC 114 OPPOSITION TO MARKS

Section 13 (15 U S C 1063) is amended—

(1) by inserting "(a)" before "Any person",

(2) by striking out "required fee" and inserting in lieu thereof "prescribed fee", and

(3) by adding at the end thereof the following

"(b) Unless registration is successfully opposed—

"(1) a mark entitled to registration on the principal register based on an application filed under section 1(a) or pursuant to section 44 shall be registered in the Patent and Trademark Office, a certificate of registration shall be issued, and notice of the registration shall be published in the Official Gazette of the Patent and Trademark Office, or

"(2) a notice of allowance shall be issued to the applicant if the applicant applied for registration under section 1(b)"

SEC 115 CANCELLATION OF REGISTRATIONS.

Section 14 (15 U S C 1064) is amended—

(1) in the matter preceding subsection (a)—

(A) by inserting "as follows" after "be filed", and

(B) by striking out "1905-" and inserting in lieu thereof "1905",

(2) in subsection (a)—

(A) by striking out "(a) within" and inserting in lieu thereof "(1) Within", and

(B) by striking out ", or" and inserting in lieu thereof a period,

(3) in subsection (b)—

(A) by striking out "(b) within" and inserting in lieu thereof "(2) Within", and

(B) by striking out ", or" and inserting in lieu thereof a period,

(4) by amending subsection (c) to read as follows

"(3) At any time if the registered mark becomes the generic name for the goods or services, or a portion thereof, for which it is registered, or has been abandoned, or its registration was obtained fraudulently or contrary to the provisions of section 4 or of subsection (a), (b), or (c) of section 2 for a registration under this Act, or contrary to similar prohibitory provisions of such prior Acts for a registration under such Acts, or if the registered mark is being used by, or with the permission of, the registrant so as to misrepresent the source of the goods or services on or in connection with which the mark is used If the registered mark becomes the generic name for less than all of the goods or services for which it is registered, a petition to cancel the registration for only those goods or services may be filed A registered mark shall not be deemed to be the generic name of goods or services solely because such mark is also used as a

name of or to identify a unique product or service The primary significance of the registered mark to the relevant public rather than purchaser motivation shall be the test for determining whether the registered mark has become the generic name of goods or services on or in connection with which it has been used ",

(5) in subsection (d)—

(A) by striking out "(d) at" and inserting in lieu thereof "(4) At", and

(B) by striking out ", or" and inserting in lieu thereof a period,

(6) in subsection (e)—

(A) by striking out "(e) at" and inserting in lieu thereof "(5) At", and

(B) by striking out "(1)", "(2)", "(3)", and "(4)" and inserting in lieu thereof "(A)", "(B)", "(C)", and "(D)", respectively, and

(7) in the proviso at the end of the section by striking out "subsections (c) and (e)" and inserting in lieu thereof "paragraphs (3) and (5)"

SEC. 116. INCONTESTABILITY OF RIGHT TO USE MARK.

Section 15 (15 U S C 1065) is amended—

(1) by striking out "subsections (c) and (e)" and inserting in lieu thereof "paragraphs (3) and (5)",

(2) in paragraph (3) by striking out "subsections (1) and (2) hereof" and inserting in lieu thereof "paragraphs (1) and (2) of this section", and

(3) in paragraph (4) by striking out "the common descriptive name of any article or substance, patented or otherwise" and inserting in lieu thereof "the generic name for the goods or services or a portion thereof, for which it is registered"

SEC. 117 INTERFERENCE.

Section 16 (15 U S C 1066) is amended by striking out "applied to the goods or when used in connection with the services" and inserting in lieu thereof "used on or in connection with the goods or services"

SEC. 118. ACTION OF COMMISSIONER IN PROCEEDINGS.

Section 18 (15 U S C 1068) is amended—

(1) by striking out "or restrict" and inserting in lieu thereof "the registration, in whole or in part, may modify the application or registration by limiting the goods or services specified therein, may otherwise restrict or rectify with respect to the register",

(2) by striking out "or may refuse" and inserting in lieu thereof "may refuse", and

(3) adding at the end thereof the following: "However, no final judgment shall be entered in favor of an applicant under section 1(b) before the mark is registered, if such applicant cannot prevail without establishing constructive use pursuant to section 7(c) "

SEC. 119. APPLICATION OF EQUITABLE PRINCIPLES.

Section 19 (15 U.S C. 1069) is amended by striking out the second sentence.

SEC 120 APPEALS

Section 21 (15 U S C 1071) is amended—

(1) in subsection (a)(1)—

(A) by striking out "section 21(b) hereof" each place it appears and inserting in lieu thereof "subsection (b) of this section",

(B) by striking out "section 21(a)(2) hereof" and inserting in lieu thereof "paragraph (2) of this subsection", and

(C) by striking out "said section 21(b)" and inserting in lieu thereof "subsection (b) of this section",

(2) in subsection (a)(4), by adding at the end thereof the following: "However, no final judgment shall be entered in favor of an applicant under section 1(b) before the mark is registered, if such applicant cannot prevail without establishing constructive use pursuant to section 7(c) ",

(3) in subsection (b)(1)—

(A) by striking out "section 21(a) hereof" and inserting in lieu thereof "subsection (a) of this section",

(B) by striking out "section 21(a)" and inserting in lieu thereof "subsection (a) of this section", and

(C) by adding at the end thereof the following "However, no final judgment shall be entered in favor of an applicant under section 1(b) before the mark is registered, if such applicant cannot prevail without establishing constructive use pursuant to section 7(c) ", and

(4) in subsection (b)(3), by striking out "(3)" and all that follows through the end of the first sentence and inserting in lieu thereof the following:

"(3) In any case where there is no adverse party, a copy of the complaint shall be served on the Commissioner, and, unless the court finds the expenses to be unreasonable, all the expenses of the proceeding shall be paid by the party bringing the case, whether the final decision is in favor of such party or not "

SEC 121 SUPPLEMENTAL REGISTER.

Section 23 (15 U S C 1091) is amended—

(1) by inserting "(a)" before "In addition" in the first paragraph,

(2) by inserting "(b)" before "Upon the" in the second paragraph,

(3) by inserting "(c)" before "For the purposes" in the third paragraph,

(4) in subsection (a), as designated by paragraph (1) of this section—

(A) by striking out "paragraphs (a)," and inserting in lieu thereof "subsections (a),",

(B) by striking out "have been in lawful use in commerce by the proprietor thereof, upon" and inserting in lieu thereof "are in lawful use in commerce by the owner thereof, on",

(C) by striking out "for the year preceding the filing of the application", and

(D) by inserting before "section 1" the following: "subsections (a) and (e) of",

(5) in subsection (b), as designated by paragraph (2) of this section, by striking out "fee herein provided" and inserting in lieu thereof "prescribed fee", and

(6) by striking out the last paragraph

SEC 122 CANCELLATION ON SUPPLEMENTAL REGISTER.

Section 24 (15 U S C 1092) is amended—

(1) by striking out "verified" in the second sentence,

(2) by striking out "was not entitled to register the mark at the time of his application for registration thereof," and inserting in lieu thereof "is not entitled to registration,",

(3) by striking out "is not used by the registrant or", and

(4) by adding at the end thereof the following "However, no final judgment shall be entered in favor of an applicant under section 1(b) before the mark is registered, if such applicant cannot prevail without establishing constructive use pursuant to section 7(c) "

SEC 123 PROVISIONS OF ACT APPLICABLE TO SUPPLEMENTAL REGISTER.

Section 26 (15 U S C 1094) is amended—

(1) by inserting "1(b)," after "sections", and

(2) by inserting "7(c)," after "7(b)"

SEC. 124 REGISTRATION ON PRINCIPAL REGISTER NOT PRECLUDED

Section 27 (15 U S C 1095) is amended by adding at the end thereof the following "Registration of a mark on the supplemental register shall not constitute an admission that the mark has not acquired distinctiveness "

SEC 125 NOTICE OF REGISTRATION

Section 29 (15 U S C 1111) is amended by striking out "as used"

SEC. 126. CLASSIFICATION OF GOODS AND SERVICES.

Section 30 (15 U S C 1112) is amended—

(1) by inserting "or registrant's" after "applicant's",

(2) by striking out "may file an application" and inserting in lieu thereof "may apply",

(3) by striking out "goods and services upon or in connection with which he is actually using the mark " and inserting in lieu thereof "goods or services on or in connection with which he or she is using or has a bona fide intention to use the mark in commerce ", and

(4) by amending the proviso to read as follows *"Provided,* That if the Commissioner by regulation permits the filing of an application for the registration of a mark for goods or services which fall within a plurality of classes, a fee equaling the sum of the fees for filing an application in each class shall be paid, and the Commissioner may issue a single certificate of registration for such mark."

SEC. 127 INNOCENT INFRINGEMENT AND VIOLATIONS OF SECTION 43(a)

Section 32(2) (15 U S C 1114(2)) is amended to read as follows "(2) Notwithstanding any other provision of this Act, the remedies given to the owner of a right infringed under this Act or to a person bringing an action under section 43(a) shall be limited as follows.

"(A) Where an infringer or violator is engaged solely in the business of printing the mark or violating matter for others and establishes that he or she was an innocent infringer or innocent violator, the owner of the right infringed or person bringing the action under section 43(a) shall be entitled as against such

(C) The following provisions of the 1986 Code are each amended by striking out "(F) or (J)" each place it appears and inserting in lieu thereof "(F), (J), or (M)"

(i) Section 3121(b)(19)

(ii) Section 3231(e)(1)

(iii) Section 3306(c)(19)

(D) Clause (i)(I) of section 7701(b)(5)(D) of the 1986 Code is amended by striking out "subparagraph (F)" and inserting in lieu thereof "subparagraph (F) or (M)"

(E) Section 210(a)(19) of the Social Security Act is amended by striking out "(F) or (J)" each place it appears and inserting in lieu thereof "(F), (J), or (M)"

(e) AMENDMENT RELATED TO SECTION 131 OF THE REFORM ACT — Subsection (f) of section 86 of the 1986 Code is amended by inserting "and" at the end of paragraph (3), by striking out paragraph (4), and by redesignating paragraph (5) as paragraph (4)

(f) AMENDMENTS RELATED TO SECTION 132 OF THE REFORM ACT —

(1) Section 67 of the 1986 Code is amended by adding at the end thereof the following new subsection

"(f) COORDINATION WITH OTHER LIMITATION —This section shall be applied before the application of the dollar limitation of the last sentence of section 162(a) (relating to trade or business expenses)"

(2) Paragraph (4) of section 67(b) of the 1986 Code is amended—

(A) by striking out "deduction" and inserting in lieu thereof "deductions", and

(B) by inserting before the comma at the end thereof "and section 642(c) (relating to deduction for amounts paid or permanently set aside for a charitable purpose)"

(3) Subsection (e) of section 67 of the 1986 Code is amended to read as follows

"(e) DETERMINATION OF ADJUSTED GROSS INCOME IN CASE OF ESTATES AND TRUSTS —For purposes of this section, the adjusted gross income of an estate or trust shall be computed in the same manner as in the case of an individual, except that—

"(1) the deductions for costs which are paid or incurred in connection with the administration of the estate or trust and which would not have been incurred if the property were not held in such trust or estate, and

"(2) the deductions allowable under sections 642(b), 651, and 661,

shall be treated as allowable in arriving at adjusted gross income Under regulations, appropriate adjustments shall be made in the application of part I of subchapter J of this chapter to take into account the provisions of this section "

(4) Subsection (c) of section 67 of the 1986 Code is amended by striking out the last sentence and inserting in lieu thereof the following "The preceding sentence shall not apply—

"(1) with respect to cooperatives and real estate investment trusts, and

"(2) except as provided in regulations, with respect to estates and trusts "

(g) AMENDMENTS RELATED TO SECTION 142 OF THE REFORM ACT —

(1) Subparagraph (A) of section 274(n)(2) of the 1986 Code is amended to read as follows

"(A) such expense is described in paragraph (2), (3), (4), (7), (8), or (9) of subsection (e),"

registration of the mark, of the registrant's ownership of the mark, and of the registrant's exclusive right to use the registered mark in commerce Such conclusive evidence shall relate to the exclusive right to use the mark on or in connection with the goods or services specified in the affidavit filed under the provisions of section 15, or in the renewal application filed under the provisions of section 9 if the goods or services specified in the renewal are fewer in number, subject to any conditions or limitations in the registration or in such affidavit or renewal application Such conclusive evidence of the right to use the registered mark shall be subject to proof of infringement as defined in section 32, and shall be subject to the following defenses or defects ",

(2) in paragraph (3) by inserting "on or" after "goods or services",

(3) in paragraph (4)—

(A) by striking out "trade or service", and

(B) by striking out "to users",

(4) in paragraph (5) by striking out "registration of the mark under this Act or" and inserting in lieu thereof "(A) the date of constructive use of the mark established pursuant to section 7(c), (B) the registration of the mark under this Act if the application for registration is filed before the effective date of the Trademark Law Revision Act of 1988, or (C)",

(5) in paragraph (7) by striking out the period and inserting in lieu thereof ", or", and

(6) by adding at the end of the subsection the following "(8) That equitable principles, including laches, estoppel, and acquiescence, are applicable "

(c) INJUNCTIONS —Section 34(a) (15 U S C 1116(a)) is amended in the first sentence by inserting "or to prevent a violation under section 43(a)" after "Office"

(d) NOTICE OF SUIT TO COMMISSIONER —Section 34(c) (15 U S C 1116(c)) is amended—

(1) by striking out "proceeding arising" and inserting in lieu thereof "proceeding involving a mark registered", and

(2) by striking out "decision is rendered, appeal taken or a decree issued" and inserting in lieu thereof "judgment is entered or an appeal is taken"

(e) CIVIL ACTIONS ARISING FROM USE OF COUNTERFEIT MARKS — Section 34(d)(1)(B) (15 U S C 1116(d)(1)(B)) is amended by inserting "on or" after "designation used"

SEC 129 RECOVERY FOR VIOLATION OF RIGHTS

Section 35(a) (15 U S C 1117(a)) is amended in the first sentence by inserting ", or a violation under section 43(a)," after "Office"

SEC. 130 DESTRUCTION OF INFRINGING ARTICLES.

Section 36 (15 U S C 1118) is amended in the first sentence—

(1) by inserting ", or a violation under section 43(a)," after "Office", and

(2) by inserting after "registered mark" the following "or, in the case of a violation of section 43(a), the word, term, name, symbol, device, combination thereof, designation, description, or representation that is the subject of the violation,"

SEC. 131 JURISDICTION

(a) JURISDICTION OF COURTS.—Section 39 (15 U S C 1121) is amended by inserting "(a)" after "SEC 39."

(b) CERTAIN ACTIONS BY STATES PRECLUDED.—Section 39a (15 U S C 1121a) is amended—

(1) by striking out "SEC 39a." and inserting in lieu thereof "(b)", and

(2) by striking out "servicemarks" each place it appears and inserting in lieu thereof "service marks"

SEC 132 UNREGISTERED MARKS, DESCRIPTIONS, AND REPRESENTATIONS

Section 43(a) (15 U S C 1125(a)) is amended to read as follows

"(a) Any person who, on or in connection with any goods or services, or any container for goods, uses in commerce any word, term, name, symbol, or device, or any combination thereof, or any false designation of origin, false or misleading description of fact, or false or misleading representation of fact, which—

"(1) is likely to cause confusion, or to cause mistake, or to deceive as to the affiliation, connection, or association of such person with another person, or as to the origin, sponsorship, or approval of his or her goods, services, or commercial activities by another person, or

"(2) in commercial advertising or promotion, misrepresents the nature, characteristics, qualities, or geographic origin of his or her or another person's goods, services, or commercial activities,

shall be liable in a civil action by any person who believes that he or she is or is likely to be damaged by such act."

SEC 133 INTERNATIONAL MATTERS

Section 44 (15 U S C 1126) is amended—

(1) in subsections (c), (d), (f), (g), and (h) by striking out "paragraph (b)" each place it appears and inserting in lieu thereof "subsection (b)",

(2) in subsection (a) by striking out "herein prescribed" and inserting in lieu thereof "required in this Act",

(3) in subsection (d) by striking out "sections 1, 2, 3, 4, or 23" and inserting in lieu thereof "section 1, 3, 4, 23, or 44(e)",

(4) in subsection (d)(2) by striking out "but use in commerce need not be alleged" and inserting in lieu thereof "including a statement that the applicant has a bona fide intention to use the mark in commerce",

(5) in subsection (d)(3) by striking out "foreing" and inserting in lieu thereof "foreign",

(6) in subsection (e) by adding at the end thereof the following: "The application must state the applicant's bona fide intention to use the mark in commerce, but use in commerce shall not be required prior to registration",

(7) in subsection (f) by striking out "paragraphs (c), (d)," and inserting in lieu thereof "subsections (c), (d),", and

(8) in subsection (i) by striking out "paragraph (b) hereof" and inserting in lieu thereof "subsection (b) of this section"

SEC. 134 CONSTRUCTION AND DEFINITIONS

Section 45 (15 U S C 1127) is amended—

(1) by amending the paragraph defining "related company" to read as follows

"The term 'related company' means any person whose use of a mark is controlled by the owner of the mark with respect to the nature and quality of the goods or services on or in connection with which the mark is used ",

(2) by amending the paragraph defining "trade name" and "commercial name" to read as follows

"The terms 'trade name' and 'commercial name' mean any name used by a person to identify his or her business or vocation ",

(3) by amending the paragraph defining "trademark" to read as follows

"The term 'trademark' includes any word, name, symbol, or device, or any combination thereof—

"(1) used by a person, or

"(2) which a person has a bona fide intention to use in commerce and applies to register on the principal register established by this Act,

to identify and distinguish his or her goods, including a unique product, from those manufactured or sold by others and to indicate the source of the goods, even if that source is unknown ",

(4) by amending the paragraph defining "service mark" to read as follows

"The term 'service mark' means any word, name, symbol, or device, or any combination thereof—

"(1) used by a person, or

"(2) which a person has a bona fide intention to use in commerce and applies to register on the principal register established by this Act,

to identify and distinguish the services of one person, including a unique service, from the services of others and to indicate the source of the services, even if that source is unknown Titles, character names, and other distinctive features of radio or television programs may be registered as service marks notwithstanding that they, or the programs, may advertise the goods of the sponsor ",

(5) by amending the paragraph defining "certification mark" to read as follows

"The term 'certification mark' means any word, name, symbol, or device, or any combination thereof—

"(1) used by a person other than its owner, or

"(2) which its owner has a bona fide intention to permit a person other than the owner to use in commerce and files an application to register on the principal register established by this Act,

to certify regional or other origin, material, mode of manufacture, quality, accuracy, or other characteristics of such person's goods or services or that the work or labor on the goods or services was performed by members of a union or other organization ",

(6) by amending the paragraph defining "collective mark" to read as follows

"The term 'collective mark' means a trademark or service mark—

"(1) used by the members of a cooperative, an association, or other collective group or organization, or

"(2) which such cooperative, association, or other collective group or organization has a bona fide intention to use in commerce and applies to register on the principal register established by this Act,

and includes marks indicating membership in a union, an association, or other organization ",

(7) by amending the paragraph defining "mark" to read as follows

"The term 'mark' includes any trademark, service mark, collective mark, or certification mark ",

(8) by amending the matter which appears between the paragraph defining "mark", and the paragraph defining "colorable imitation" to read as follows

"The term 'use in commerce' means the bona fide use of a mark in the ordinary course of trade, and not made merely to reserve a right in a mark For purposes of this Act, a mark shall be deemed to be in use in commerce—

"(1) on goods when—

"(A) it is placed in any manner on the goods or their containers or the displays associated therewith or on the tags or labels affixed thereto, or if the nature of the goods makes such placement impracticable, then on documents associated with the goods or their sale, and

"(B) the goods are sold or transported in commerce, and

"(2) on services when it is used or displayed in the sale or advertising of services and the services are rendered in commerce, or the services are rendered in more than one State or in the United States and a foreign country and the person rendering the services is engaged in commerce in connection with the services

"A mark shall be deemed to be 'abandoned' when either of the following occurs

"(1) When its use has been discontinued with intent not to resume such use Intent not to resume may be inferred from circumstances Nonuse for two consecutive years shall be prima facie evidence of abandonment 'Use' of a mark means the bona fide use of that mark made in the ordinary course of trade, and not made merely to reserve a right in a mark

"(2) When any course of conduct of the owner, including acts of omission as well as commission, causes the mark to become the generic name for the goods or services on or in connection with which it is used or otherwise to lose its significance as a mark Purchaser motivation shall not be a test for determining abandonment under this paragraph "

SEC 135 PENDING APPLICATIONS

The Trademark Act of 1946 is amended by adding at the end thereof the following

"SEC 51 All certificates of registration based upon applications for registration pending in the Patent and Trademark Office on the effective date of the Trademark Law Revision Act of 1988 shall remain in force for a period of 10 years "

SEC 136 EFFECTIVE DATE.

This title and the amendments made by this title shall become effective on the date which is one year after the date of enactment of this Act

TITLE II—SATELLITE HOME VIEWER ACT

SEC 201 SHORT TITLE.

This title may be cited as the "Satellite Home Viewer Act of 1988"

SEC 202 AMENDMENTS TO TITLE 17, UNITED STATES CODE

Title 17, United States Code, is amended as follows

(1) Section 111 of title 17, United States Code, is amended—

(A) in subsection (a)—

(i) in paragraph (3) by striking "or" at the end,

(ii) by redesignating paragraph (4) as paragraph (5), and

(iii) by inserting the following after paragraph (3)

"(4) the secondary transmission is made by a satellite carrier for private home viewing pursuant to a statutory license under section 119, or", and

(B) in subsection (d)(1)(A) by inserting before "Such statement" the following:

"In determining the total number of subscribers and the gross amounts paid to the cable system for the basic service of providing secondary transmissions of primary broadcast transmitters, the system shall not include subscribers and amounts collected from subscribers receiving secondary transmissions for private home viewing pursuant to section 119"

(2) Chapter 1 of title 17, United States Code, is amended by adding at the end the following new section

"§ 119. Limitations on exclusive rights Secondary transmissions of superstations and network stations for private home viewing

"(a) SECONDARY TRANSMISSIONS BY SATELLITE CARRIERS —

"(1) SUPERSTATIONS —Subject to the provisions of paragraphs (3), (4), and (6) of this subsection, secondary transmissions of a primary transmission made by a superstation and embodying a performance or display of a work shall be subject to statutory licensing under this section if the secondary transmission is made by a satellite carrier to the public for private home viewing, and the carrier makes a direct or indirect charge for each retransmission service to each household receiving the secondary transmission or to a distributor that has contracted with the carrier for direct or indirect delivery of the secondary transmission to the public for private home viewing

"(2) NETWORK STATIONS —

"(A) IN GENERAL.—Subject to the provisions of subparagraphs (B) and (C) of this paragraph and paragraphs (3), (4), (5), and (6) of this subsection, secondary transmissions of programming contained in a primary transmission made by a network station and embodying a performance or display of a work shall be subject to statutory licensing under this section if the secondary transmission is made by a satellite carrier to the public for private home viewing, and the carrier makes a direct or indirect charge for such retransmission service to each subscriber receiving the secondary transmission

"(B) SECONDARY TRANSMISSIONS TO UNSERVED HOUSEHOLDS —The statutory license provided for in subparagraph (A) shall be limited to secondary transmissions to persons who reside in unserved households

"(C) SUBMISSION OF SUBSCRIBER LISTS TO NETWORKS —A satellite carrier that makes secondary transmissions of a primary transmission made by a network station pursuant to subparagraph (A) shall, 90 days after the effective date of the Satellite Home Viewer Act of 1988, or 90 days after commencing such secondary transmissions, whichever is later, submit to the network that owns or is affiliated with the network station a list identifying (by street address, including county and zip code) all subscribers to which the satellite carrier currently makes secondary transmissions of that primary transmission Thereafter, on the 15th of each month, the satellite carrier shall submit to the network a list identifying (by street address, including county and zip code) any persons who have been added or dropped as such subscribers since the last submission under this subparagraph Such subscriber information submitted by a satellite carrier may be used only for purposes of monitoring compliance by the satellite carrier with this subsection The submission requirements of this subparagraph shall apply to a satellite carrier only if the network to whom the submissions are to be made places on file with the Register of Copyrights, on or after the effective date of the Satellite Home Viewer Act of 1988, a document identifying the name and address of the person to whom such submissions are to be made The Register shall maintain for public inspection a file of all such documents

"(3) NONCOMPLIANCE WITH REPORTING AND PAYMENT REQUIREMENTS —Notwithstanding the provisions of paragraphs (1) and (2), the willful or repeated secondary transmission to the public by a satellite carrier of a primary transmission made by a superstation or a network station and embodying a performance or display of a work is actionable as an act of infringement under section 501, and is fully subject to the remedies provided by sections 502 through 506 and 509, where the satellite carrier has not deposited the statement of account and royalty fee required by subsection (b), or has failed to make the submissions to networks required by paragraph (2)(C)

"(4) WILLFUL ALTERATIONS —Notwithstanding the provisions of paragraphs (1) and (2), the secondary transmission to the public by a satellite carrier of a primary transmission made by a superstation or a network station and embodying a performance or display of a work is actionable as an act of infringement under section 501, and is fully subject to the remedies provided by sections 502 through 506 and sections 509 and 510, if the content of the particular program in which the performance or display is embodied, or any commercial advertising or station announcement transmitted by the primary transmitter during, or immediately before or after, the transmission of such program, is in any way willfully altered by the satellite carrier through changes, deletions, or additions, or is combined with programming from any other broadcast signal

"(5) VIOLATION OF TERRITORIAL RESTRICTIONS ON STATUTORY LICENSE FOR NETWORK STATIONS —

"(A) INDIVIDUAL VIOLATIONS —The willful or repeated secondary transmission by a satellite carrier of a primary transmission made by a network station and embodying a performance or display of a work to a subscriber who does not reside in an unserved household is actionable as an act of infringement under section 501 and is fully subject to the remedies provided by sections 502 through 506 and 509, except that—

"(i) no damages shall be awarded for such act of infringement if the satellite carrier took corrective action by promptly withdrawing service from the ineligible subscriber, and

"(ii) any statutory damages shall not exceed $5 for such subscriber for each month during which the violation occurred

"(B) PATTERN OF VIOLATIONS —If a satellite carrier engages in a willful or repeated pattern or practice of delivering a primary transmission made by a network station and embodying a performance or display of a work to subscribers who do not reside in unserved households, then in addition to the remedies set forth in subparagraph (A)—

"(i) if the pattern or practice has been carried out on a substantially nationwide basis, the court shall order a permanent injunction barring the secondary transmission by the satellite carrier, for private home viewing, of the primary transmissions of any primary network station affiliated with the same network, and the court may order statutory damages of not to exceed $250,000 for each 6-month period during which the pattern or practice was carried out, and

"(ii) if the pattern or practice has been carried out on a local or regional basis, the court shall order a permanent injunction barring the secondary transmission, for private home viewing in that locality or region, by the satellite carrier of the primary transmissions of any primary network station affiliated with the same network, and the court may order statutory damages of not to exceed $250,000 for each 6-month period during which the pattern or practice was carried out

"(C) PREVIOUS SUBSCRIBERS EXCLUDED —Subparagraphs (A) and (B) do not apply to secondary transmissions by a satellite carrier to persons who subscribed to receive such secondary transmissions from the satellite carrier or a distributor before the date of the enactment of the Satellite Home Viewer Act of 1988

"(6) DISCRIMINATION BY A SATELLITE CARRIER —Notwithstanding the provisions of paragraph (1), the willful or repeated secondary transmission to the public by a satellite carrier of a primary transmission made by a superstation or a network station and embodying a performance or display of a work is actionable as an act of infringement under section 501, and is fully subject to the remedies provided by sections 502 through 506 and 509, if the satellite carrier unlawfully discriminates against a distributor

"(7) GEOGRAPHIC LIMITATION ON SECONDARY TRANSMISSIONS — The statutory license created by this section shall apply only to

secondary transmissions to households located in the United States

"(b) STATUTORY LICENSE FOR SECONDARY TRANSMISSIONS FOR PRIVATE HOME VIEWING —

"(1) DEPOSITS WITH THE REGISTER OF COPYRIGHTS —A satellite carrier whose secondary transmissions are subject to statutory licensing under subsection (a) shall, on a semiannual basis, deposit with the Register of Copyrights, in accordance with requirements that the Register shall, after consultation with the Copyright Royalty Tribunal, prescribe by regulation—

"(A) a statement of account, covering the preceding 6-month period, specifying the names and locations of all superstations and network stations whose signals were transmitted, at any time during that period, to subscribers for private home viewing as described in subsections (a)(1) and (a)(2), the total number of subscribers that received such transmissions, and such other data as the Register of Copyrights may, after consultation with the Copyright Royalty Tribunal, from time to time prescribe by regulation, and

"(B) a royalty fee for that 6-month period, computed by—

"(i) multiplying the total number of subscribers receiving each secondary transmission of a superstation during each calendar month by 12 cents,

"(ii) multiplying the number of subscribers receiving each secondary transmission of a network station during each calendar month by 3 cents, and

"(iii) adding together the totals computed under clauses (i) and (ii)

"(2) INVESTMENT OF FEES —The Register of Copyrights shall receive all fees deposited under this section and, after deducting the reasonable costs incurred by the Copyright Office under this section (other than the costs deducted under paragraph (4)), shall deposit the balance in the Treasury of the United States, in such manner as the Secretary of the Treasury directs All funds held by the Secretary of the Treasury shall be invested in interest-bearing securities of the United States for later distribution with interest by the Copyright Royalty Tribunal as provided by this title

"(3) PERSONS TO WHOM FEES ARE DISTRIBUTED —The royalty fees deposited under paragraph (2) shall, in accordance with the procedures provided by paragraph (4), be distributed to those copyright owners whose works were included in a secondary transmission for private home viewing made by a satellite carrier during the applicable 6-month accounting period and who file a claim with the Copyright Royalty Tribunal under paragraph (4)

"(4) PROCEDURES FOR DISTRIBUTION —The royalty fees deposited under paragraph (2) shall be distributed in accordance with the following procedures

"(A) FILING OF CLAIMS FOR FEES —During the month of July in each year, each person claiming to be entitled to statutory license fees for secondary transmissions for private home viewing shall file a claim with the Copyright Royalty Tribunal, in accordance with requirements that the Tribunal shall prescribe by regulation For purposes of this paragraph, any claimants may agree among themselves as

to the proportionate division of statutory license fees among them, may lump their claims together and file them jointly or as a single claim, or may designate a common agent to receive payment on their behalf

"(B) DETERMINATION OF CONTROVERSY, DISTRIBUTIONS — After the first day of August of each year, the Copyright Royalty Tribunal shall determine whether there exists a controversy concerning the distribution of royalty fees If the Tribunal determines that no such controversy exists, the Tribunal shall, after deducting reasonable administrative costs under this paragraph, distribute such fees to the copyright owners entitled to receive them, or to their designated agents If the Tribunal finds the existence of a controversy, the Tribunal shall, pursuant to chapter 8 of this title, conduct a proceeding to determine the distribution of royalty fees

"(C) WITHHOLDING OF FEES DURING CONTROVERSY —During the pendency of any proceeding under this subsection, the Copyright Royalty Tribunal shall withhold from distribution an amount sufficient to satisfy all claims with respect to which a controversy exists, but shall have discretion to proceed to distribute any amounts that are not in controversy

"(c) DETERMINATION OF ROYALTY FEES —

"(1) APPLICABILITY AND DETERMINATION OF ROYALTY FEES — The rate of the royalty fee payable under subsection (b)(1)(B) shall be effective until December 31, 1992, unless a royalty fee is established under paragraph (2), (3), or (4) of this subsection After that date, the fee shall be determined either in accordance with the voluntary negotiation procedure specified in paragraph (2) or in accordance with the compulsory arbitration procedure specified in paragraphs (3) and (4)

"(2) FEE SET BY VOLUNTARY NEGOTIATION —

"(A) NOTICE OF INITIATION OF PROCEEDINGS —On or before July 1, 1991, the Copyright Royalty Tribunal shall cause notice to be published in the Federal Register of the initiation of voluntary negotiation proceedings for the purpose of determining the royalty fee to be paid by satellite carriers under subsection (b)(1)(B)

"(B) NEGOTIATIONS —Satellite carriers, distributors, and copyright owners entitled to royalty fees under this section shall negotiate in good faith in an effort to reach a voluntary agreement or voluntary agreements for the payment of royalty fees Any such satellite carriers, distributors, and copyright owners may at any time negotiate and agree to the royalty fee, and may designate common agents to negotiate, agree to, or pay such fees If the parties fail to identify common agents, the Copyright Royalty Tribunal shall do so, after requesting recommendations from the parties to the negotiation proceeding The parties to each negotiation proceeding shall bear the entire cost thereof

"(C) AGREEMENTS BINDING ON PARTIES, FILING OF AGREEMENTS —Voluntary agreements negotiated at any time in accordance with this paragraph shall be binding upon all satellite carriers, distributors, and copyright owners that are parties thereto Copies of such agreements shall be filed with the Copyright Office within 30 days after execution in

(A) by striking out "Kansas, Florida, Georgia, or Texas" in subparagraph (A) and inserting in lieu thereof "the United States",

(B) by striking out "the purchase" in subparagraph (C) and inserting in lieu thereof "the purchaser", and

(C) by striking out the last sentence

(13) Paragraph (14) of section 204(a) of the Reform Act is amended by striking out the period at the end of subparagraph (E) and inserting in lieu thereof a comma, and by inserting after subparagraph (E) the following

"(F) the project has a planned scheduled capacity of approximately 38,000 kilowatts, the project property is placed in service before January 1, 1991, and the project is operated, established, or constructed pursuant to certain agreements, the negotiation of which began before 1986, with public or municipal utilities conducting business in Massachusetts, or

"(G) the Board of Regents of Oklahoma State University took official action on July 25, 1986, with respect to the project

In the case of the project described in subparagraph (F), section 203(b)(2)(A) shall be applied by substituting 'January 1, 1991' for 'January 1, 1989' "

(14) Paragraph (15) of section 204(a) of the Reform Act is amended—

(A) by adding "located in New Mexico" after "to a project",

(B) by striking out "$72,000" and inserting in lieu thereof "$72,000,000", and

(C) by striking out the last sentence and inserting in lieu thereof the following

"For purposes of this paragraph, section 203(b)(2) shall be applied by substituting 'January 1, 1996' for 'January 1, 1991' each place it appears "

(15) Paragraph (24) of section 204(a) of the Reform Act is amended by adding at the end thereof the following new subparagraphs

"(E) The amendments made by section 201 shall not apply to the Muskegon, Michigan, Cross-Lake Ferry project having a projected cost of approximately $7,200,000

"(F) The amendments made by section 201 shall not apply to a new automobile carrier vessel, the contract price for which is no greater than $28,000,000, and which will be constructed for and placed in service by OSG Car Carriers, Inc , to transport, under the United States flag and with an American crew, foreign automobiles to North America in a case where negotiations for such transportation arrangements commenced in 1985, and definitive transportation contracts were awarded before June 1986 "

(16) Paragraph (25) of section 204(a) of the Reform Act is amended by striking out "wood energy products" and inserting in lieu thereof "wood energy projects"

(17) Paragraph (27) of section 204(a) of the Reform Act is amended—

(A) in subparagraph (B), by striking out "525,000" and inserting in lieu thereof "540,000",

(B) in subparagraph (C)—

public a primary transmission made by a broadcast station the fee established under any voluntary agreement filed with the Copyright Office in accordance with paragraph (2) and the last fee proposed by the parties, before proceedings under this paragraph, for the secondary transmission of superstations or network stations for private home viewing The fee shall also be calculated to achieve the following objectives

"(i) To maximize the availability of creative works to the public

"(ii) To afford the copyright owner a fair return for his or her creative work and the copyright user a fair income under existing economic conditions

"(iii) To reflect the relative roles of the copyright owner and the copyright user in the product made available to the public with respect to relative creative contribution, technological contribution, capital investment, cost, risk, and contribution to the opening of new markets for creative expression and media for their communication

"(iv) To minimize any disruptive impact on the structure of the industries involved and on generally prevailing industry practices

"(E) REPORT TO COPYRIGHT ROYALTY TRIBUNAL.—Not later than 60 days after publication of the notice initiating an arbitration proceeding, the Arbitration Panel shall report to the Copyright Royalty Tribunal its determination concerning the royalty fee Such report shall be accompanied by the written record, and shall set forth the facts that the Panel found relevant to its determination and the reasons why its determination is consistent with the criteria set forth in subparagraph (D)

"(F) ACTION BY COPYRIGHT ROYALTY TRIBUNAL —Within 60 days after receiving the report of the Arbitration Panel under subparagraph (E), the Copyright Royalty Tribunal shall adopt or reject the determination of the Panel The Tribunal shall adopt the determination of the Panel unless the Tribunal finds that the determination is clearly inconsistent with the criteria set forth in subparagraph (D) If the Tribunal rejects the determination of the Panel, the Tribunal shall, before the end of that 60-day period, and after full examination of the record created in the arbitration proceeding, issue an order, consistent with the criteria set forth in subparagraph (D), setting the royalty fee under this paragraph The Tribunal shall cause to be published in the Federal Register the determination of the Panel, and the decision of the Tribunal with respect to the determination (including any order issued under the preceding sentence) The Tribunal shall also publicize such determination and decision in such other manner as the Tribunal considers appropriate The Tribunal shall also make the report of the Arbitration Panel and the accompanying record available for public inspection and copying

"(G) PERIOD DURING WHICH DECISION OF PANEL OR ORDER OF TRIBUNAL EFFECTIVE.—The obligation to pay the royalty fee established under a determination of the Arbitration Panel which is confirmed by the Copyright Royalty Tribu-

nal in accordance with this paragraph, or established by any order issued under subparagraph (F), shall become effective on the date when the decision of the Tribunal is published in the Federal Register under subparagraph (F), and shall remain in effect until modified in accordance with paragraph (4), or until December 31, 1994

"(H) PERSONS SUBJECT TO ROYALTY FEE —The royalty fee adopted or ordered under subparagraph (F) shall be binding on all satellite carriers, distributors, and copyright owners, who are not party to a voluntary agreement filed with the Copyright Office under paragraph (2).

"(4) JUDICIAL REVIEW —Any decision of the Copyright Royalty Tribunal under paragraph (3) with respect to a determination of the Arbitration Panel may be appealed, by any aggrieved party who would be bound by the determination, to the United States Court of Appeals for the District of Columbia Circuit, within 30 days after the publication of the decision in the Federal Register The pendency of an appeal under this paragraph shall not relieve satellite carriers of the obligation under subsection (b)(1) to deposit the statement of account and royalty fees specified in that subsection The court shall have jurisdiction to modify or vacate a decision of the Tribunal only if it finds, on the basis of the record before the Tribunal and the statutory criteria set forth in paragraph (3)(D), that the Arbitration Panel or the Tribunal acted in an arbitrary manner If the court modifies the decision of the Tribunal, the court shall have jurisdiction to enter its own determination with respect to royalty fees, to order the repayment of any excess fees deposited under subsection (b)(1)(B), and to order the payment of any underpaid fees, and the interest pertaining respectively thereto, in accordance with its final judgment The court may further vacate the decision of the Tribunal and remand the case for arbitration proceedings in accordance with paragraph (3)

"(d) DEFINITIONS —As used in this section—

"(1) DISTRIBUTOR —The term 'distributor' means an entity which contracts to distribute secondary transmissions from a satellite carrier and, either as a single channel or in a package with other programming, provides the secondary transmission either directly to individual subscribers for private home viewing or indirectly through other program distribution entities

"(2) NETWORK STATION —The term 'network station' has the meaning given that term in section 111(f) of this title, and includes any translator station or terrestrial satellite station that rebroadcasts all or substantially all of the programming broadcast by a network station

"(3) PRIMARY NETWORK STATION —The term 'primary network station' means a network station that broadcasts or rebroadcasts the basic programming service of a particular national network

"(4) PRIMARY TRANSMISSION —The term 'primary transmission' has the meaning given that term in section 111(f) of this title

"(5) PRIVATE HOME VIEWING —The term 'private home viewing' means the viewing, for private use in a household by means of satellite reception equipment which is operated by an individual in that household and which serves only such household, of a secondary transmission delivered by a satellite carrier of a

primary transmission of a television station licensed by the Federal Communications Commission

"(6) SATELLITE CARRIER —The term 'satellite carrier' means an entity that uses the facilities of a satellite or satellite service licensed by the Federal Communications Commission, to establish and operate a channel of communications for point-to-multipoint distribution of television station signals, and that owns or leases a capacity or service on a satellite in order to provide such point-to-multipoint distribution, except to the extent that such entity provides such distribution pursuant to tariff under the Communications Act of 1934, other than for private home viewing

"(7) SECONDARY TRANSMISSION —The term 'secondary transmission' has the meaning given that term in section 111(f) of this title

"(8) SUBSCRIBER —The term 'subscriber' means an individual who receives a secondary transmission service for private home viewing by means of a secondary transmission from a satellite carrier and pays a fee for the service, directly or indirectly, to the satellite carrier or to a distributor

"(9) SUPERSTATION —The term 'superstation' means a television broadcast station, other than a network station, licensed by the Federal Communications Commission that is secondarily transmitted by a satellite carrier

"(10) UNSERVED HOUSEHOLD —The term 'unserved household', with respect to a particular television network, means a household that—

"(A) cannot receive, through the use of a conventional outdoor rooftop receiving antenna, an over-the-air signal of grade B intensity (as defined by the Federal Communications Commission) of a primary network station affiliated with that network, and

"(B) has not, within 90 days before the date on which that household subscribes, either initially or on renewal, to receive secondary transmissions by a satellite carrier of a network station affiliated with that network, subscribed to a cable system that provides the signal of a primary network station affiliated with that network

"(e) EXCLUSIVITY OF THIS SECTION WITH RESPECT TO SECONDARY TRANSMISSIONS OF BROADCAST STATIONS BY SATELLITE TO MEMBERS OF THE PUBLIC —No provision of section 111 of this title or any other law (other than this section) shall be construed to contain any authorization, exemption, or license through which secondary transmissions by satellite carrier for private home viewing of programming contained in a primary transmission made by a superstation or a network station may be made without obtaining the consent of the copyright owner "

(3) Section 501 of title 17, United States Code, is amended by adding at the end the following

"(e) With respect to any secondary transmission that is made by a satellite carrier of a primary transmission embodying the performance or display of a work and is actionable as an act of infringement under section 119(a)(5), a network station holding a copyright or other license to transmit or perform the same version of that work shall, for purposes of subsection (b) of this section, be treated as a legal or beneficial owner if such secondary transmission occurs within the local service area of that station "

(4) Section 801(b)(3) of title 17, United States Code, is amended by striking "and 116" and inserting ", 116, and 119(b)"

(5) Section 804(d) of title 17, United States Code, is amended by striking "sections 111 or 116" and inserting "section 111, 116, or 119"

(6) The table of sections at the beginning of chapter 1 of title 17, United States Code, is amended by adding at the end the following new item

"119 Limitations on exclusive rights Secondary transmissions of superstations and network stations for private home viewing"

SEC 203 SYNDICATED EXCLUSIVITY, REPORT ON DISCRIMINATION

Title VII of The Communications Act of 1934 (47 U S C 601 et seq) is amended by adding at the end the following

"SYNDICATED EXCLUSIVITY

"SEC 712 (a) The Federal Communications Commission shall, within 120 days after the effective date of the Satellite Home Viewer Act of 1988, initiate a combined inquiry and rulemaking proceeding for the purpose of—

"(1) determining the feasibility of imposing syndicated exclusivity rules with respect to the delivery of syndicated programming (as defined by the Commission) for private home viewing of secondary transmissions by satellite of broadcast station signals similar to the rules issued by the Commission with respect to syndicated exclusivity and cable television, and

"(2) adopting such rules if the Commission considers the imposition of such rules to be feasible

"(b) In the event that the Commission adopts such rules, any willful and repeated secondary transmission made by a satellite carrier to the public of a primary transmission embodying the performance or display of a work which violates such Commission rules shall be subject to the remedies, sanctions, and penalties provided by title V and section 705 of this Act

"DISCRIMINATION

"SEC 713 The Federal Communications Commission shall, within 1 year after the effective date of the Satellite Home Viewer Act of 1988, prepare and submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Energy and Commerce of the House of Representatives a report on whether, and the extent to which, there exists discrimination described in section 119(a)(6) of title 17, United States Code"

SEC. 204 INQUIRY ON ENCRYPTION STANDARD

Section 705 of the Communications Act of 1934 (47 U S C 605) is amended by adding at the end thereof the following

"(f) Within 6 months after the date of enactment of the Satellite Home Viewer Act of 1988, the Federal Communications Commission shall initiate an inquiry concerning the need for a universal encryption standard that permits decryption of satellite cable programming intended for private viewing In conducting such inquiry, the Commission shall take into account—

"(1) consumer costs and benefits of any such standard, including consumer investment in equipment in operation,

"(2) incorporation of technological enhancements, including advanced television formats,

"(3) whether any such standard would effectively prevent present and future unauthorized decryption of satellite cable programming,

"(4) the costs and benefits of any such standard on other authorized users of encrypted satellite cable programming, including cable systems and satellite master antenna television systems,

"(5) the effect of any such standard on competition in the manufacture of decryption equipment, and

"(6) the impact of the time delay associated with the Commission procedures necessary for establishment of such standards

"(g) If the Commission finds, based on the information gathered from the inquiry required by subsection (f), that a universal encryption standard is necessary and in the public interest, the Commission shall initiate a rulemaking to establish such a standard."

SEC 205 PIRACY OF SATELLITE CABLE PROGRAMMING

Section 705 of the Communications Act of 1934 (47 U S C 605) is amended—

(1) in subsection (c)—

(A) by striking "and" at the end of paragraph (4),

(B) by striking the period at the end of paragraph (5) and inserting ", and", and

(C) by adding at the end the following:

"(6) the term 'any person aggrieved' shall include any person with proprietary rights in the intercepted communication by wire or radio, including wholesale or retail distributors of satellite cable programming, and, in the case of a violation of paragraph (4) of subsection (d), shall also include any person engaged in the lawful manufacture, distribution, or sale of equipment necessary to authorize or receive satellite cable programming",

(2) in subsection (d)(1), by striking "$1,000" and inserting "$2,000",

(3) in paragraph (2) of subsection (d), by striking "$25,000" and all that follows through the end of that paragraph and inserting "$50,000 or imprisoned for not more than 2 years, or both, for the first such conviction and shall be fined not more than $100,000 or imprisoned for not more than 5 years, or both, for any subsequent conviction",

(4) in subsection (d)(3)(A), by inserting "or paragraph (4) of subsection (d)" immediately after "subsection (a)",

(5) in subsection (d)(3)(B) by striking "may" the first time it appears,

(6) in subsection (d)(3)(B)(i), by inserting "may" immediately before "grant",

(7) in subsection (d)(3)(B)(ii), by inserting "may" immediately before "award",

(8) in subsection (d)(3)(B)(iii), by inserting "shall" immediately before "direct",

(9) in subsection (d)(3)(C)(i)(II)—

(A) by inserting "of subsection (a)" immediately after "violation",

(B) by striking "$250" and inserting "$1,000", and

(C) by inserting immediately before the period the following: ", and for each violation of paragraph (4) of this subsection involved in the action an aggrieved party may recover statutory damages in a sum not less than $10,000, or more than $100,000, as the court considers just",

(10) in subsection (d)(3)(C)(ii), by striking "$50,000" and inserting "$100,000 for each violation of subsection (a)",

(11) in subsection (d)(3)(C)(iii), by striking "$100" and inserting "$250", and

(12) by striking paragraph (4) of subsection (d) and inserting the following

"(4) Any person who manufactures, assembles, modifies, imports, exports, sells, or distributes any electronic, mechanical, or other device or equipment, knowing or having reason to know that the device or equipment is primarily of assistance in the unauthorized decryption of satellite cable programming, or is intended for any other activity prohibited by subsection (a), shall be fined not more than $500,000 for each violation, or imprisoned for not more than 5 years for each violation, or both For purposes of all penalties and remedies established for violations of this paragraph, the prohibited activity established herein as it applies to each such device shall be deemed a separate violation "

SEC 206 EFFECTIVE DATE

This title and the amendments made by this title take effect on January 1, 1989, except that the authority of the Register of Copyrights to issue regulations pursuant to section 119(b)(1) of title 17, United States Code, as added by section 202 of this Act, takes effect on the date of the enactment of this Act

SEC 207 TERMINATION

This title and the amendments made by this title (other than the amendments made by section 205) cease to be effective on December 31, 1994

Speaker of the House of Representatives

Vice President of the United States and
President of the Senate.

APPENDIX II —FURTHER MATERIALS BY WITNESSES

A HISTORY OF GENERAL INSTRUMENT CORPORATION

Founded in 1923 General Instrument Corporation started as a components manufacturer for the emerging radio electronics industry In the years prior to World War II as radio components became more sophisticated product lines were broadened and General Instrument became a major producer of electronic components for the radio phonograph and television markets

Defense Efforts Spawn New Businesses

During World War II much of the Company's production capacity was used to manufacture components for the government. In 1946, in a rapidly expanding post-war economy, General Instrument took a major growth step with the acquisition of the F W Sickles Company, a leading manufacturer of radio components

A dominant position in the entertainment electronics business was achieved in 1955 with the acquisition of Automatic Manufacturing Company a producer of condensers transformers and tuners As a consequence the Company became a major independent supplier of UHF tuners to the domestic television industry, as well as a major supplier of automobile radio tuners and tuning coils Although no longer in these businesses, General Instrument, through its Computer Products division used these technologies to specialize in computer-related products such as coils and transformers for computer monitors switching power supplies keyboards and digital displays

Semiconductor Leadership

During the late fifties and early sixties, General Instrument embarked on a plan of strong internal growth Management concentrated on the development of components which were to revolutionize electronics solid state devices In 1957 the Company acquired the Radio Receptor Company, a supplier of defense communications systems and a developer of selenium diodes and rectifiers The defense-related portion was later merged with an acquisition from the Harris Transducer Corporation in 1961 Today it is the Government Systems Division which specializes in high technology electronic defense systems for the United States and other governments Advanced concepts are used in designing high power microwave and digital/analog circuitry and software Major products include sophisticated signal detection systems for radar warning and electronic surveillance and targeting, anti-radiation decoy systems, multi-beam ocean-bottom mapping systems, sonar communications and automated electronic support systems

In 1960 Radio Receptor's diode and rectifier segment was merged with the acquired operations of another company, the General Transistor Corporation With this merger we became one of the largest domestic producers of discrete semiconductor devices including transistors diodes and rectifiers Although integrated circuits largely have replaced transistors and diodes rectifiers are still a major element of circuit design Our Power Semiconductor division has worldwide market share leadership in low-to-medium power rectifiers and rectifier bridge assemblies General Instrument is a market leader in surface mounted rectifier designs

During the early sixties research and development efforts concentrated on the development of solid state devices with special emphasis on the manufacture of metal-oxide-semiconductor (MOS) integrated circuits This activity included the first research and development laboratory exclusively dedicated to MOS technology Thus began General Instrument's microelectronics business which became a leader in the manufacture of large-scale and very-large-scale integration circuits When video games were popular, General Instrument was the leading supplier of VLSI circuits to this market. Today, it is a specialist in non-volatile memory products utilizing state-of-the-art CMOS small geometry designs These designs are directed toward fast, high density EPROM and EEPROM products

Pioneering Off-shore Manufacturing

In 1964 General Instrument recognized the need to lower manufacturing costs At the same time, the Republic of China needed foreign investment for industrialization new technology and employment. The result was the first modern electronics manufacturing plant in Taiwan, and the birth of a national industry Hundreds of electronics firms from the U S , Japan and other nations have followed General Instrument's lead and built plants in Taiwan General Instrument of Taiwan has one of the largest facilities in the country The Company also has off-shore manufacturing facilities in Mexico, Malaysia, Europe and the U K.

Entry into Electro-Optical Field

In 1966, we broadened our product lines with the acquisition of Signalite, Inc a manufacturer of neon glow lamps This marked the company's entry into the electro-optical field followed by the acquisition of Chicago Miniature Lamp Works in 1969 During the same period we expanded our involvement in subminiature incandescent and neon lamps with the acquisition of three English firms Hivac Ltd Vitality Bulbs Ltd and NORE electric Ltd

In 1979, General Instrument acquired Monsanto's optoelectronics business

Telecommunications Components

A major acquisition in 1967 was Universal Controls, Inc One of Universal's subsidiaries was C P Clare and Company a major manufacturer of relays and other electromechanical switching devices Now a division, Clare is a leader in signal power switching technology, manufacturing mercury-wetted and dry reed miniature relays for sophisticated switching applications such as voice and data telecommunications

Wagering Systems Pioneer

A second subsidiary of Universal Controls, the American Totalisator Company Inc (AmTote) pioneered use of electromechanical totalisator systems for parimutuel wagering at racetracks In 1967 it was the first company to introduce computerized systems to wagering Today AmTote is the leading supplier of on-track wagering systems, with installations in more than 200 racetracks worldwide including all 14 majortracks in California.

AmTote also pioneered off-track betting systems and currently operates the New York City off-track betting system and the state-wide off-track betting system in Connecticut.

Another AmTote innovation is Teletrack®, the world's first theatre of racing, located in New Haven, Connecticut Racing events transmitted live by microwave link from New York area thoroughbred and trotting tracks are displayed on a giant 24' x 32 screen The Teletrack facility seats 2200 people has a clubhouse lounge and restaurant and the very latest in wagering systems

In 1975, AmTote was the first company to successfully implement computerized transaction processing technology for on-line state-run lottery systems Since then AmTote has provided systems for nine state-run lotteries, including Missouri and Connecticut and for the national lottery of Israel AmTote recently introduced Galaxy®, a lottery system with the fastest transaction processing time and highest capacity of any system available today

Computerized Payment Processing

AmTote applied its transaction processing technology to point-of sale registers that were designed to meet the increasingly sophisticated needs of large retail chains Emanating from this technology was the development of a computerized benefits delivery system for the New York City Department of Social Services Social Services clients may obtain public assistance and food stamps at designated locations through the use of computer identification cards This system reduces the cost of benefits administration by eliminating benefit check printing and mailing costs and by eliminating loss of benefit checks through mailbox theft.

Leadership in the CATV Business

A major event for the Company in 1967 was the acquisition of Jerrold Corporation the pioneer of cable television technology Jerrold now has grown into the world's largest supplier of cable TV equipment. Products range from addressable head-end signal processing equipment distribution amplifiers addressable subscriber terminals impulse pay-per view systems and stereo TV sound decoders to satellite signal reception equipment. Jerrold's STARCOM VI family of CATV converters is the most complete line of subscriber products available in the industry

In 1983 General Instrument added to the CATV product base by acquiring Tocom Inc , a leader in low-cost baseband addressable converters Tocom manufactures the 5503-VIP converter which has the most features and lowest cost of any baseband subscriber product on the market.

Another major event in 1983 was the company's development of technologies that made possible the first consumer direct braodcast satellite television service

Venture Investments

The growth experienced during the 1970 s helped General Instrument pursue a strategy of growth by venture investment in emerging technologies during the early 1980 s One of the most important venture investments in Sytek Inc a leader in the market for open-access large scale broadband local area networks

In addition the Company has had interests in a variety of technology companies, including those engaged in speech synthesis and recognition, private satellite video and data networks, hand-held computer terminals real-time interactive graphics systems and others Some of these technologies have provided the basis for several new products for the Company

Restructuring

During the mid-1980 s difficult market conditions dictated that General Instrument undergo a restructuring of operations The aim of the restructuring was to transform the Company into a more sharply focused business entity As a result, certain operations were divested and/or discontinued and others were acquired and/or consolidated A major component of the restructuring program was the acquisition of the Cable/Home Communication business of M/A-COM, Inc This included Comm/Scope division the leading manufacturer of coaxial cable for the cable TV and business LAN markets and VideoCipher division - producer of the market standard VideoCipher®II encryption/decryption system for the TVRO market.

General Instrument Today

Over the years market conditions have changed and so has General Instrument Today the Company is composed of three major product groups They are

Broadband Communications Comm/Scope division Jerrold Distribution Systems division Jerrold Subscriber Systems division, Tocom division and VideoCipher division

Data Systems - AmTote division, Lottery division, Government Systems division and Worldwide Wagering,

Component Products - Clare division Computer Products division, Lamp division and Power Semiconductor division

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8/87

GENERAL
INSTRUMENT

VIDEOCIPHER DIVISION

The VideoCipher Division of General Instrument Corp is the world's largest supplier of encryption systems for satellite television distribution

They design and manufacture satellite television encryption systems for cable television (CATV) programmers, commercial descramblers for CATV headends, and consumer descramblers for home TVRO They are also a major supplier of complete home TVRO systems, including satellite dishes and receivers, cable, antennas and related accessories

Their San Diego headquarters houses the only DBS subscriber program authorization center in the United States which is used by programmers for selectively authorizing home TVRO owners to receive encrypted satellite programming via the VIDEOCIPHER® II consumer descrambler

The VIDEOCIPHER technology received the 1986 Emmy Award from the National Academy of Television Arts & Sciences for outstanding achievement in the science of television engineering

General Instrument is the industry leader in cable television electronics, coaxial cable and satellite television encryption systems, and specializes in communications systems

May 1987

BACKGROUND INFORMATION ON THE VIDEOCIPHER® II SATELLITE TELEVISION SCRAMBLING SYSTEM

VIDEOCIPHER® II technology is currently designed and manufactured by the VideoCipher Division of General Instrument Corp

VIDEOCIPHER® II scrambling technology was originally developed by M/A-COM's Video Products Group to secure the signals of satellite-delivered programming services The technology was designed to be an extremely high security, high signal quality scrambling system for satellite television distribution

M/A-COM's Video Products Group in San Diego, California, began the development of VIDEOCIPHER® systems in 1981 In early 1983, M/A-COM was awarded a contract by Home Box Office to provide VIDEOCIPHER® II equipment for the scrambling of programming signals being sent by HBO to its cable television affiliates In 1984, Showtime/The Movie Channel also selected the VIDEOCIPHER® II scrambling system to protect its satellite transmitted programming for CATV affiliates Since then, more than twenty other major program providers have announced their plans to use this same encryption system

In September 1986, the Video Products Group was sold to General Instrument Corportation

The VIDEOCIPHER® II system is comprised not only of hardware (scramblers, descramblers and control computers), but also extensive software for addressing and control of descramblers for authorization and billing purposes Additionally, the VIDEOCIPHER® scrambling system employs the Data Encryption Standard (DES) algorithm of the National Bureau of Standards, an all digital system

This system works in the following fashion

A computer in the satellite uplink site takes a standard video signal and processes it with addressing and control data to produce a scrambled signal The signal is then transmitted over C-band or Ku-band satellite At the downlink receiving location, an authorized descrambler reverses the steps performed at the scrambling site to produce a clear video signal Only descramblers that have been individually authorized over the satellite for particular channels will be able to successfully process these signals

In order to provide extremely high quality and security, VIDEOCIPHER® II transmits two audio channels--along with addressing and control information--as digital data This digital data is encrypted (using the DES algorithm) for the highest possible security The scrambled video is completely unintelligible The encrypted audio appears as totally random data and can be decrypted only by a descrambler that is properly authorized over the satellite channel

The security of DES is based on a 56-bit "key" which is analogous to a password Without knowing the key, a DES encrypted message cannot be decrypted unless all 72 quadrillion possible keys are tested by trial and error Each descrambler has a unique secret DES key contained in a secure microprocessor To descramble a particular transmission, the descrambler must have the DES key used to scramble that program at the uplink The program key is transmitted over the control channel to each authorized descrambler, after first encrypting it in that descrambler's unique unit key Only the intended descrambler will be able to decrypt the program key and obtain the program

General Instrument develops and manufactures two VIDEOCIPHER® II descramblers the commercial descrambler, VIDEOCIPHER® IIC, for use at broadcast and cable system headends, and the consumer descrambler, VIDEOCIPHER® II Series 2000E, for use by home TVRO owners

The consumer descrambler connects to an existing satellite receiver, via a VCR-type connection, and provides for the authorized reception of scrambled program services A single descrambler can receive all VIDEOCIPHER® II-scrambled channels to which the home owner has subscribed The Series 2000E descrambler has been successfully tested with over one hundred satellite receivers for proper operation

The VIDEOCIPHER® II Series 2500R satellite receiver represents the next generation of consumer satellite receivers The unit incorporates VIDEOCIPHER® II descrambling capability into a high quality, multi-feature receiver

Both the Series 2000E and the Series 2500R make use of a common descrambling "module" which is available under license to other satellite equipment manufacturers to incorporate into receivers of their own design In addition to their descrambling capability, all VIDEOCIPHER® II consumer descramblers and integrated receiver/ descramblers have ancillary consumer features such as digital stereo audio, reception of text and message services, improved picture clarity and parental control of rated programming

In September 1986, the National Academy of Television Arts and Sciences presented the Video Products Group with an Emmy award for Outstanding Achievement in the Science of Television Engineering

Media are requested to contact the Marketing Department at (619) 535-2436 The VideoCipher Division consumer hotline number is (800) 344-6754

May 1987

DBS AUTHORIZATION CENTER

SAN DIEGO, CALIFORNIA

General Instrument Corporation operates the direct broadcast by satellite (DBS) Authorization Center which provides satellite television programmers, using General Instrument s VideoCipher ® II scrambling technology, with a program delivery service that is controlled by authorizing and deauthorizing consumer descramblers based upon information generated by the programmer to the Center

The major advantage of a common authorization center is that it allows programs from a number of suppliers to be received by the same consumer descrambler, and eliminates the need for a separate descrambler for each service

General Instrument operates the DBS Authorization Center on a cost reimbursement basis, with costs allocated equitably among the program distributors using its services Located at General Instrument s VideoCipher Division facility in San Diego, California, the Center reports to Mr Kenneth Kinsman vice president.

HOW IT WORKS

A master computer at the Authorization Center translates authorization data received from clients DBS business system computers into a composite authorization/deauathorization message stream There are no restrictions on the business systems other than that they provide authorization data in the accepted format (X 25) and at an acceptable rate (4 8 or 9 6 kpbs)

-more-

The business systems can interface to the Center by leased lines Data enters the Center through an X 25 packet switch The switch routes data to a computer containing the Network Management System (NMS) This software system sorts out the overlapping authorization data coming from the business systems and maintains the authorization status for each DBS subscriber Each time the NMS detects a change in status for a subscriber, it sends an authorization update to the DBS Control System. These messages are then distributed by the Center to the Programmers' uplinks

At the programmer's facility, the control messages are combined with the television programs before they are uplinked to the satellite Since the different program channels all carry the same DBS authorization information an authorized descrambler will receive its status messages no matter which scrambled channel is being watched. Consequently, subscribers can switch between independently operated program services without loss of descrambler authorization

In addition to controlling descrambler authorizations the Center generates transaction summary and descrambler status reports reflecting each user s DBS activity Subscriber data is partitioned in the Center s computer so that information about subscribers of one service cannot be accessed by another

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Since its opening in early 1986, the DBS Authorization Center has authorized over 160,000 consumer descramblers

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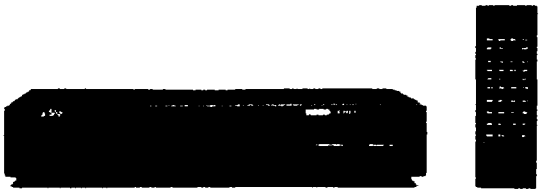
5/87

GENERAL INSTRUMENT

VIDEOCIPHER II 2500R SATELLITE RECEIVER



FEATURES

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General Instrument has combined the winning performance of its satellite receivers with the advanced technology of the VideoCipher II descrambler. The VideoCipher II 2500R satellite receiver uses advanced circuitry to increase picture quality and reduce sparkles. The 2500R is also available with an antenna positioner power supply that can store up to 21 satellite locations and program it to memory 10 of your favorite channels on any satellite. The wireless remote control operates receiver, antenna positioner and VideoCipher features and is standard with all 2500R units.

GENERAL INSTRUMENT VIDEOCIPHER® II 2500R SATELLITE RECEIVER



FEATURES

Integrated Receiver and Descrambler — Only 1 Box	The VideoCipher® II 2500R satellite receiver combines an advanced General Instrument satellite receiver with the latest in VideoCipher® descrambler technology The 2500R positions the antenna tunes in every channel available and descrambles all authorized subscription channels. (Small optional power supply required for antenna positioning control)
Enhanced Threshold Performance	The 2500R delivers maximum picture quality with advanced circuitry providing up to 2 dB threshold improvement over most satellite receivers. By using the latest in threshold extension designs, General Instrument s 2500R reduces sparklies and provides crisper images.
Automatic Descrambling of Authorized Signals	After receiving authorization for scrambled programming from the program supplier of your choice, you are ready to enjoy satellite television With one component—the 2500R—you'll be able to subscribe to all of the channels that are scrambled with the VideoCipher® II scrambling system and offered to the home TVRO market
Parental Supervision— Two Methods	The 2500R lets you supervise the programs your children watch by blocking out selected channels and setting a password-controlled program rating limit on VideoCipher® scrambled channels
Built In TI Filter	The 2500R features a built in Terrestrial Interference (TI) filter optimized for use with a VideoCipher® descrambler The filter rejects local TI and is easily operated by the remote control or front panel keys The 2500R also features a 70 MHz IF loop-thru for extremely difficult TI site problems
Wireless Remote Control	All antenna positioning and VideoCipher® descrambler features are accessible with the 2500R wireless infrared remote control unit. Channel selection volume level audio subcarrier tuning and system fine tune adjustments can be controlled with the single remote unit
C-Band and Ku Band Ready	The 2500R is programmed for 24 C-Band and 32 Ku Band channels with digital tuning for drift free operation.
Stereo Sound— Digital Audio	With the 2500R you may enjoy digital stereo sound on VideoCipher® channels, when offered by the programmer Play the audio through your stereo-equipped TV or home stereo system for maximum enjoyment Monaural, discrete and matrix stereo subcarrier audio are also available. Two different audio bandwidth filters are included to maximize audio quality
Complete Antenna Controller	With the optional antenna positioner power supply you ll be able to program up to 21 satellites into the 2500R s memory Once stored in memory the antenna controller will direct your antenna system with pin point accuracy to each satellite location
Spectra-Sat Recall	The optional antenna positioner power supply allows you to program 10 of your favorite channels on any satellite. With a single key on the remote control, you'll be able to recall the satellite channel and all fine tuning adjustments including video AFC audio format, and subcarrier frequency skew polarity TI filter and satellite choice.

SPECIFICATIONS

Tuning	Digitally synthesized
Input Frequency	950-1450 MHz
Input Sensitivity	65 dBm to – 20 dBm
Channel	24 C-Band/32 Ku Band
IF Bandwidth	27 MHz
70 MHz Loop Thru	70 MHz ± 15 MHz
Video Output (VCR/Monitor)	1 volt p-p baseband video, (filtered, clamped, AC coupled)
(Note All video connections require 75 ohms impedance connectors)	
Audio Output	2 1 volt max, baseband audio, stereo left and right
Audio Tunable Subcarriers	5 0-8 5 MHz/20 kHz step
Audio Bandwidth	150 kHz or 330 kHz
Audio Format	Mono, Matrix and Discrete Stereo, 6.8 MHz
Audio Response	30 Hz to 15 kHz ± 1dB
Audio Dynamic Range (VideoCipher)	75 dB min
Subcarrier Output	Composite video (unfiltered unclamped)

TV RF Output	Local VHF in, or channel 3/4 remodulated (switchable)
IPPV Output	For future use, (serial data)
Data Output	For future use, (serial data)
Drive to Rotor Polarizer	+ 5 VDC ± .5V 500 mA max.
Pulse to Rotor Polarizer	0 to 5V ± .5V 800 to 2200 microsec.
External H/V Switch Control	± 8VDC 28 mA min
Positioner Pulse	0 to 5V TTL Level Reed or Hall Effect
External Power Supply Housing (Connection with Receiver via one cable.)	
Isolated Motor Drive	(M1) 36 VDC (M2) – 36 VDC
Circuit Breaker	120 VAC 2 0 Amp
Convenience Outlet	Unfused, unswitched 117 VAC
Size (Receiver)	17 12 x 2 95 x 11 98
Size (Ext. Power Supply)	5 43 x 2 95 x 12 52
Approvals and Certification	UL CSA FCC

GENERAL INSTRUMENT P.O. Box 1729 Hickory NC 28603—Phone. (800) 438-3331

PN 5002-069 REV A

GENERAL INSTRUMENT

VIDEOCIPHER ®

SECURE TELEVISION SCRAMBLING SYSTEMS

NOVEMBER 15, 1987

5200-1

GENERAL INSTRUMENT

VIDEOCIPHER PRODUCTS

- VIDEOCIPHER I (PRODUCTION JANUARY 1984)
  - VIDEO ENCRYPTION BY LINE SEGMENT DISPLACEMENT
  - DIGITAL STEREO AUDIO ENCRYPTION
  - FOR SECURE SATELLITE DISTRIBUTION TO BROADCASTERS AND CABLE HEADENDS
- VIDEOCIPHER II (PRODUCTION NOVEMBER 1984)
  - VIDEO SCRAMBLING BY SYNC ELIMINATION AND VIDEO INVERSION
  - DIGITAL STEREO AUDIO ENCRYPTION
  - COMPATIBLE CABLE HEADEND AND DBS VERSIONS
  - LOW COST THROUGH CUSTOM LSI

5200 2

GENERAL INSTRUMENT

VIDEOCIPHER PRODUCT STATUS (11/15/87)

- VIDEOCIPHER I
  - ORDERED BY CBS TO SECURE ITS SATELLITE FEEDS TO BROADCAST AFFILIATES, ROLLOUT OF 450 DESCRAMBLERS COMPLETE
- VIDEOCIPHER II
  - SELECTED BY OVER 40 CABLE PROGRAMMERS TO SECURE THEIR SATELLITE FEEDS TO CABLE AND SMATV AFFILIATES, AND TO DBS SUBSCRIBERS.
  - 92 UPLINK SCRAMBLERS SUCCESSFULLY INSTALLED, 44 SERVICES FULLY SCRAMBLED
  - ROLLOUTS IN PROCESS FOR DISNEY, MTV, VH1, NICKELODEON, LIFETIME, AMERICAN MOVIE CLASSICS
  - OVER 170,000 COMMERCIAL DESCRAMBLERS PRODUCED AND SHIPPED TO CABLE AND SMATV AFFILIATES
  - DBS AUTHORIZATION CENTER OPERATIONAL WITH 12 PROGRAMMER BILLING SYSTEMS
  - OVER 268,000 CONSUMER DESCRAMBLERS AUTHORIZED FOR SERVICE

5200-3

GENERAL INSTRUMENT

VIDEOCIPHER II

- PROVIDES HIGH SECURITY FOR SATELLITE TRANSMISSION OF TELEVISIONS SIGNALS

- DESIGNED TO SECURE SIMULTANEOUS TRANSMISSION.
  - TO COMMERCIAL AFFILIATE HEADENDS AND
  - DIRECT TO TVRO SUBSCRIBERS' HOMES (DBS – C BAND AND/OR Ku BAND)

GENERAL INSTRUMENT

VIDEOCIPHER II ADVANTAGES

- BETTER RECEPTION THAN CLEAR TRANSMISSION
  - CLEARER, MORE STABLE VIDEO
  - COMPACT DISK QUALITY STEREO AUDIO
- ADDITIONAL CONSUMER FEATURES
  - TEXT SERVICE FOR PROGRAM GUIDES, HEADLINES, ETC
  - PERSONAL MESSAGES FOR ELECTRONIC MAIL
  - PARENTAL CONTROL (PROGRAM BY PROGRAM)

GENERAL INSTRUMENT

PROGRAMMERS THAT HAVE SELECTED THE VIDEOCIPHER II SYSTEM

PAY PROGRAMMERS

* HBO
* CINEMAX
* FESTIVAL
* SHOWTIME
* THE MOVIE CHANNEL
* THE DISNEY CHANNEL
* SELECTV
* AMERICAN EXXXSTASY
* PLAYBOY
* FIRST CHOICE (CANADA)

PAY-PER-VIEW PROGRAMMERS

* VIEWER'S CHOICE (2)
* REQUEST TV
* TELSTAR (3)
* CABLE VIDEO STORE

*CURRENTLY SCRAMBLED (11/15/87)

BASIC PROGRAMMERS

* CNN
* HEADLINE NEWS
* WTBS
* TEMPO
* MTV
* VH1
* NICKELODEON
* ESPN
* WOR
* WGN
* WPIX
* KTVT
* CBN CABLE NETWORK
* USA NETWORK
* PRIMETIME 24 (SBN 3)
* NETLINK USA (6)
* ARTS & ENTERTAINMENT
* LIFETIME
* AMERICAN MOVIE CLASSICS
* BRAVO
* NASHVILLE NETWORK

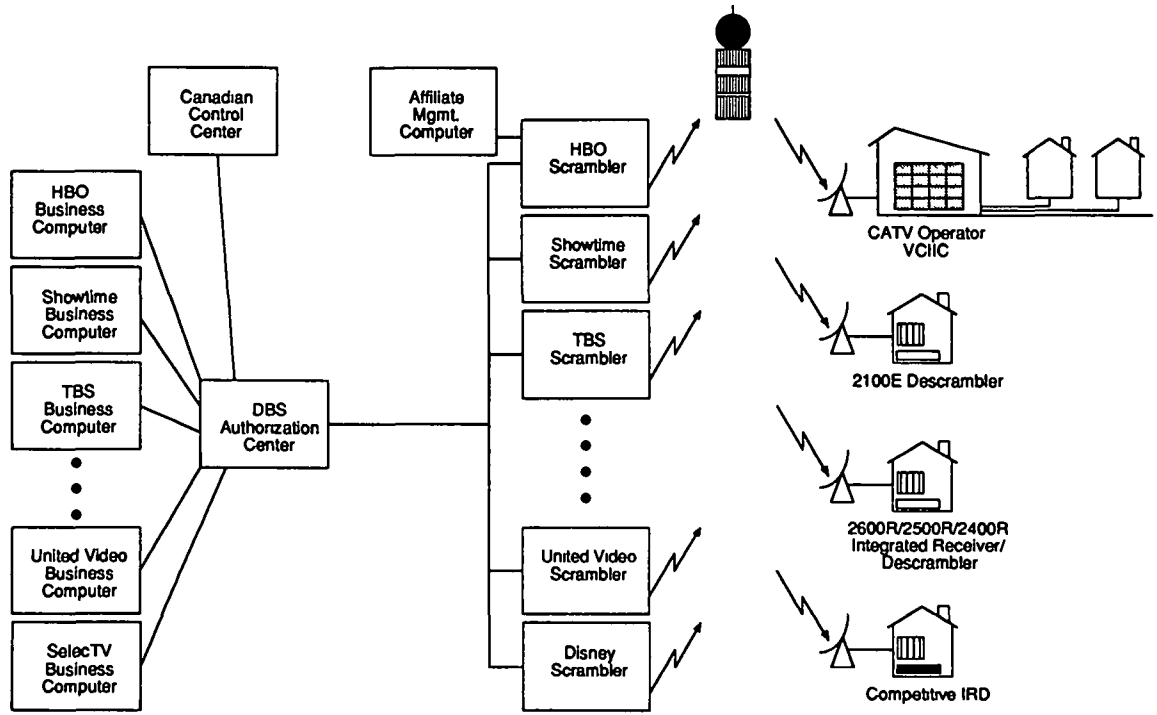
BROADCASTERS

PUBLIC BROADCASTING SERVICE[1]

1 FOR HIGH QUALITY STEREO AUDIO DISTRIBUTION

5200-4

Integrated VideoCipher® II CATV/DBS Scrambling System



GENERAL INSTRUMENT

GENERAL INSTRUMENT

VIDEOCIPHER II EQUIPMENT MANUFACTURERS

- SCRAMBLERS AND COMMERCIAL DESCRAMBLERS
  - GENERAL INSTRUMENT
- CONSUMER DESCRAMBLER MODULES
  - GENERAL INSTRUMENT
  - CHANNEL MASTER
- CONSUMER STAND-ALONE DESCRAMBLERS
  - GENERAL INSTRUMENT
  - (CHANNEL MASTER VIA PRIVATE LABEL)
- CONSUMER INTEGRATED RECEIVER/DESCRAMBLERS
  - GENERAL INSTRUMENT
  - BIRDVIEW
  - CHANNEL MASTER
  - CHAPARRAL
  - COMMAND PERFORMANCE
  - R. L. DRAKE
  - DX COMMUNICATIONS
  - ECHOSPHERE
  - HOUSTON TRACKER
  - NORSAT
  - PANASONIC
  - PLATINUM COMMUNICATIONS
  - PROSAT
  - STS
  - STANDARD COMMUNICATIONS
  - TEE-COMM
  - TEKNIKA
  - TOSHIBA
  - UNIDEN
  - WINEGARD
  - ZENITH

5200-5

GENERAL INSTRUMENT

VIDEOCIPHER II SYSTEM FEATURES

- HIGH QUALITY VIDEO AND STEREO DIGITAL AUDIO
- FLEXIBLE ADDRESSING FOR MILLIONS OF SUBSCRIBERS
- TIERED SUBSCRIPTION SERVICE AS WELL AS IMPULSE PAY-PER-VIEW (IPPV)
- MULTI-LEVEL PROGRAM LOCK-OUT CAPABILITY (PARENTAL CONTROL)
- PROVISION FOR DBS BLACKOUT BY GEOGRAPHICAL AREA, WITH SWITCHING TO A BLACKOUT FEED
- VERSATILE MESSAGE AND DATABASE ACCESS SERVICES
- SUBSCRIBER INTERACTION VIA KEYPAD AND ON-SCREEN DISPLAY FOR IPPV SELECTION, PROMPTING, PROGRAM GUIDE, MESSAGES, AND OTHER PURPOSES
- AUXILIARY DATA CHANNEL
- ALL ASPECTS OF SYSTEM OPERATION DESIGNED TO OPERATE RELIABLY, EVEN AT LOW CHANNEL SIGNAL-TO-NOISE RATIOS

5200 8

GENERAL INSTRUMENT

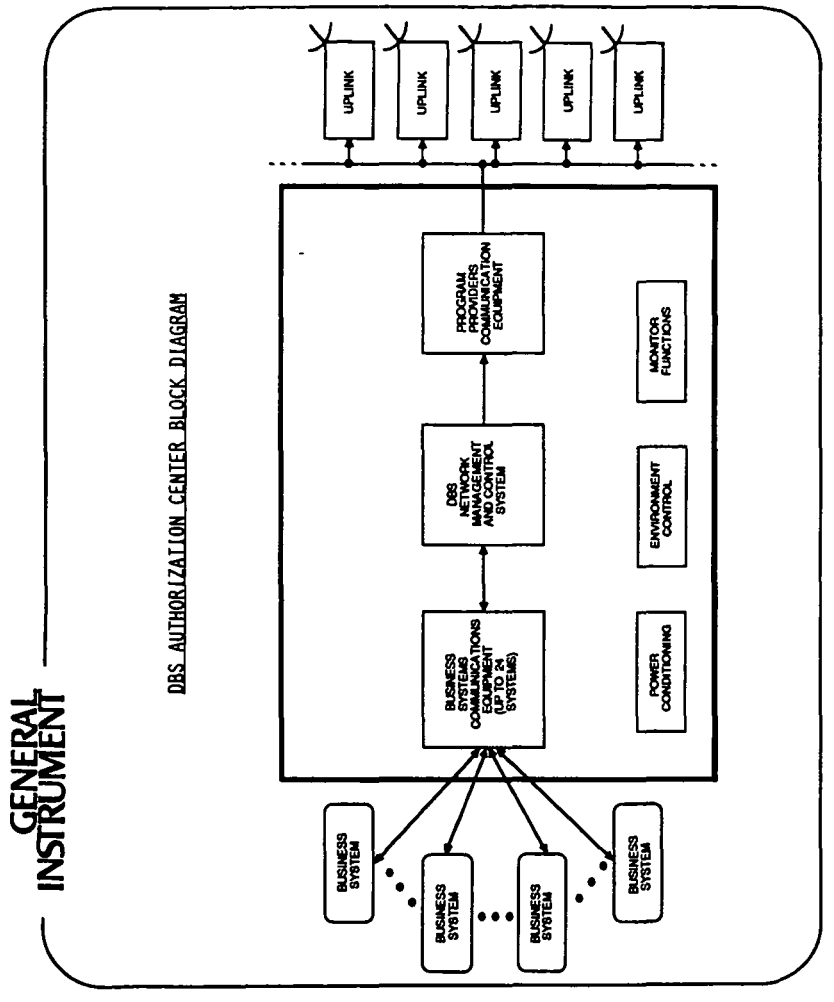
VIDEOCIPHER II SIGNAL SECURITY

- VIDEO IS SCRAMBLED BY REMOVING ALL SYNC INFORMATION AND INVERTING THE SIGNAL
- DIGITAL AUDIO IS COMPLETELY ENCRYPTED WITH THE DES ALGORITHM
- BREAKING THE ENCRYPTION REQUIRES DISCOVERING THE DES "KEY"
  - TRIAL AND ERROR IS THE ONLY POSSIBLE ATTACK
  - 72 QUADRILLION KEYS MUST BE TRIED
  - THE ENCRYPTION KEY CHANGES FREQUENTLY

GENERAL INSTRUMENT

VIDEOCIPHER II AUTHORIZATION

- EACH DESCRAMBLER CONTAINS UNIQUE, SECRET IDENTITY DATA
- EACH DESCRAMBLER MUST BE INDIVIDUALLY AUTHORIZED OVER THE SATELLITE TO RECEIVE SCRAMBLED SERVICES
- AUTHORIZATION MESSAGES ARE INDIVIDUALLY ENCRYPTED WITH DESCRAMBLER UNIQUE DATA, USING THE DES ALGORITHM


GENERAL INSTRUMENT
DBS AUTHORIZATION CENTER BLOCK DIAGRAM
UPLINK
UPLINK
UPLINK
UPLINK
UPLINK
PROGRAM PROCESS COMMUNICATION EQUIPMENT
DBS NETWORK MANAGEMENT AND CONTROL SYSTEM
BUSINESS SYSTEMS COMMUNICATIONS EQUIPMENT (UP TO 24 SYSTEMS)
MONITOR FUNCTIONS
ENVIRONMENT CONTROL
POWER CONDITIONING
BUSINESS SYSTEM
BUSINESS SYSTEM
BUSINESS SYSTEM
BUSINESS SYSTEM

GENERAL INSTRUMENT

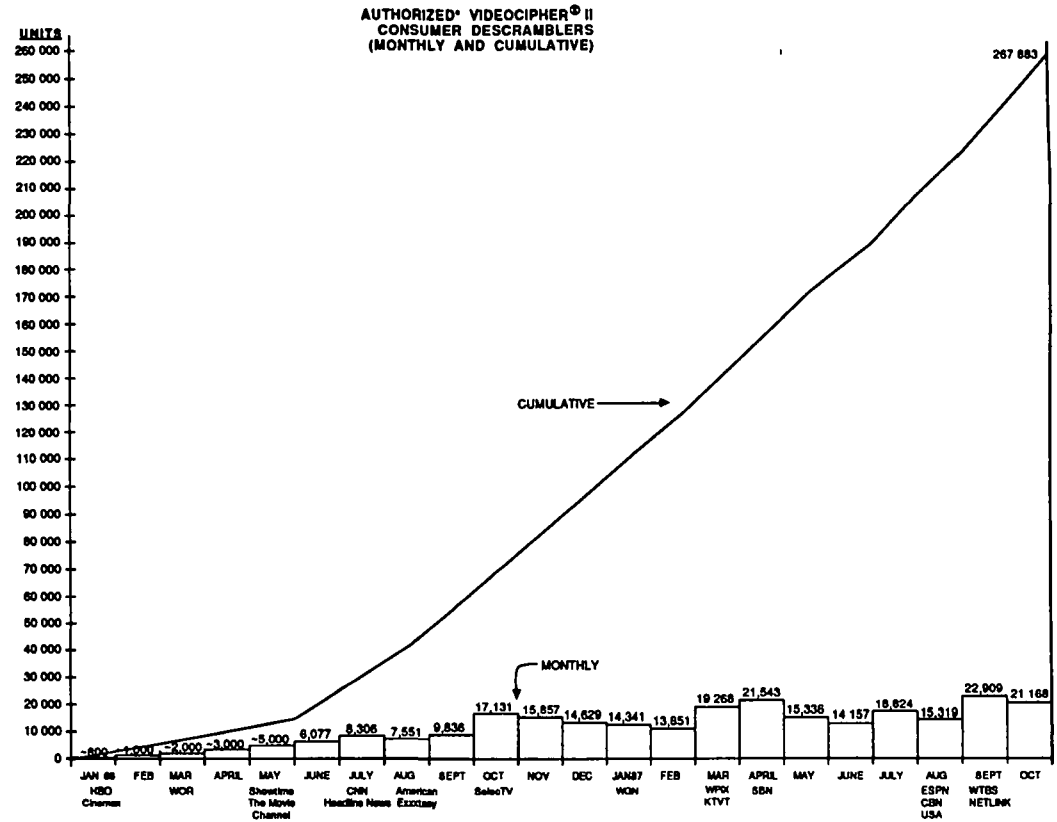
DBS AUTHORIZATION CENTER

- RECEIVES AUTHORIZATION REQUESTS FROM MULTIPLE INDEPENDENT DBS OPERATORS
- CREATES A COMPOSITE STREAM OF DBS AUTHORIZATION MESSAGES FOR TVRO OWNERS
- DISTRIBUTES DBS AUTHORIZATION STREAM TO ALL PARTICIPATING PROGRAMMERS FOR INSERTION INTO THEIR SCRAMBLED SIGNALS
- EACH SCRAMBLED SIGNAL THUS CONTAINS DBS AUTHORIZATION MESSAGES
  - FOR ALL TVRO OWNERS
  - FOR ALL SCRAMBLED CHANNELS

GENERAL INSTRUMENT

DBS OPERATION FOR TVRO OWNERS

- ONLY ONE CONSUMER DESCRAMBLER IS NEEDED FOR ALL VIDEOCIPHER II SCRAMBLED CHANNELS
- CONSUMER DESCRAMBLERS RECEIVE THEIR AUTHORIZATION MESSAGES NO MATTER WHICH SCRAMBLED CHANNEL IS BEING WATCHED
- TVRO OWNERS CAN ORDER SERVICES FROM MULTIPLE, COMPETING DBS OPERATORS
- EACH SCRAMBLED CHANNEL CAN BE OFFERED BY MULTIPLE, COMPETING DBS OPERATORS
- PROVIDES
  - MAXIMUM AUTHORIZATION EFFICIENCY
  - FULL COMPETITION



Authorized* means a VIDEOCIPHER® II descrambler has been installed at the consumer's home and authorized at the San Diego DBS Authorization Center to receive programming the consumer elects to purchase

GENERAL INSTRUMENT

SUBSCRIBER INTERACTION IN VIDEOCIPHER II

USING KEYPAD AND ON-SCREEN DISPLAY, SUBSCRIBER MAY

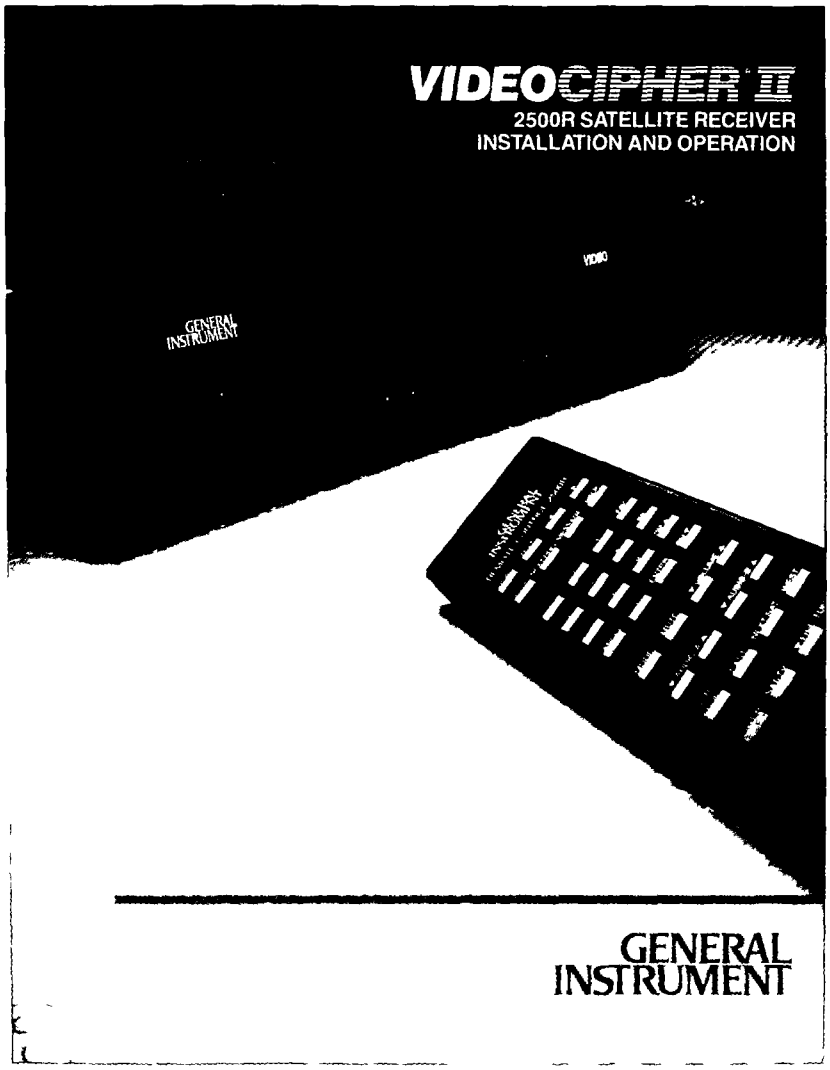
- SELECT CHANNEL
- CONTROL VOLUME
- SELECT A PAY-PER-VIEW PROGRAM
- PERUSE PROGRAM GUIDE AND OTHER AVAILABLE DATA BASES
- RECEIVE PERSONAL MESSAGES
- OBTAIN CREDIT AVAILABLE INFORMATION
- EXAMINE IPPV VIEWING HISTORY
- SELECT MULTI-LEVEL LOCK OUT OF PAY-PER-VIEW OR OTHER PROGRAMMING
- CHANGE PASSWORDS
- SELECT SECOND LANGUAGE
- VIEW "HELP" SCREENS
- OBSERVE HOME TERMINAL DIAGNOSTIC SCREEN

5200-6

GENERAL INSTRUMENT

VIDEOCIPHER II SUMMARY

- DES ENCRYPTION FOR HIGHEST SECURITY
- SIGNAL QUALITY ACTUALLY IMPROVED BY SCRAMBLING
- ATTRACTIVE CONSUMER FEATURES FOR ENHANCED DBS SERVICES
- ONLY ONE CONSUMER DESCRAMBLER FOR ALL VIDEOCIPHER II SCRAMBLED CHANNELS
- CONSOLIDATED DBS AUTHORIZATION CENTER FOR
  - FULL COMPETITION IN PROGRAM SELLING
  - COMMON AUTHORIZATION FOR EFFICIENT MULTICHANNEL OPERATION


VIDEOCIPHER II
2500R SATELLITE RECEIVER
INSTALLATION AND OPERATION
GENERAL INSTRUMENT
GENERAL INSTRUMENT

NOTE Please fill out and return the Warranty Card to General Instrument. This will simplify the processing of any necessary warranty repairs.

Authorization Number

Please write your 2500R Authorization Number below. You will need it to receive authorization for viewing VideoCipher II channels. Your Authorization Number can be read on your TV using the on-screen display feature of the 2500R. (See page 16.)

Authorization Number_____

Please write your 2500R's serial number (found on the back panel) in the space below. You will need it if you call General Instrument for service.

Serial Number_____

OPERATION PRECAUTIONS

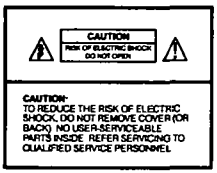
WARNING
To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture. Do not open the cabinet. Refer servicing to qualified personnel only.

CAUTION
To prevent electric shock, do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.



ATTENTION:
This consumer unit is intended for the authorized descrambling for personal use of those satellite television signals which have been scrambled using the VIDEOCIPHER® II scrambling format. Ownership or possession of the integrated receiver/descrambler does not entitle (nor enable) the owner or possessor hereof to receive descrambled VIDEOCIPHER® II television signals. To obtain proper authorization for this consumer integrated receiver/descrambler, the owner or possessor must separately contact with the appropriate programming provider(s) or his (their) agent(s).

U.S. government restrictions may prohibit the export of this product outside the United States, its territories or possessions without a validated export license.

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VideoCipher® is a registered trademark of General Instrument Corporation.

U.S. Patent Nos. 4 608 456 and 4 613 901 and patents pending.

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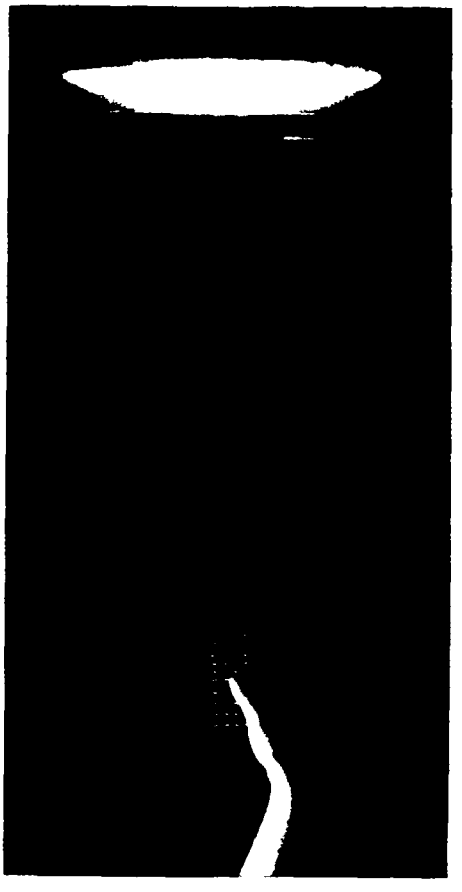
General Instrument Corporation purchased the VideoCipher Division of M/A-Com Inc. in September 1986.

A New Era in Home Entertainment

Congratulations! You're about to experience a whole new world of home entertainment. With your TVRO (TV Receive Only) satellite system, you have access to over a hundred channels 24 hours a day.

Thank you for selecting our VideoCipher® II 2500R satellite receiver. General Instrument designed it to give you the ultimate in convenience and quality for satellite TV viewing.

If this is your first experience with a TVRO system, you'll find that you can now watch an incredible variety of broadcast programs. If you are an old hand at satellite watching, you'll find that your new 2500R will provide you with the features that you've been looking for.



Using This Manual

This Manual contains the detailed instructions for installing and using your new 2500R. Use the Manual when you install the system, and use it as a reference later on, when you are modifying your program entries or trying out new features.

We've also provided you with a ***Pre-Installation Checklist*** which will help you or your installer prepare your satellite system for the 2500R. Please complete it *before* you install the receiver. Finally, we've enclosed a brief ***User's Guide*** which we hope you'll place near your receiver. It contains all of the directions you'll need for daily use.

VIDEOCIPHER® II 2500R FEATURES

Your 2500R offers a collection of features that provide both convenience and high quality channel reception.

Integrated System

The 2500R combines the receiver, descrambler and positioner circuitry in a single system.

Remote Control Access

Program viewing can be controlled through the Remote Control, including satellite selection, channel tuning and VideoCipher II features.

Digital Stereo Sound

The 2500R provides two digital audio channels for VideoCipher II programs. You also have the option of turning mono, discrete or matrix stereo subcarriers.

Channel and Program Lockout

Your 2500R provides you with two methods for restricting program viewing. You can lock out selected channels completely, or you can set program rating ceilings for VideoCipher II channels.

C and Ku-Band Ready

The 2500R can tune both C-band and the growing number of Ku-band programs. The receiver can select up to 24 C-band and 32 Ku-band channels on 21 different satellites.

TI Filter

Your 2500R has a built in TI Filter (Terrestrial Interference) as well as a 70 MHz loop-through for attaching an optional external TI filter. You can rely on the receiver's built-in filter to reduce signal interference from the ground, or you can attach additional TI filters on the loop- through circuit.

Record While Watching

The 2500R is designed for installation with your VCR. You can tape a satellite program while watching local VHF or cable TV. Your options depend on how you wire the system.

Some VideoCipher features described in this manual may not be offered by all programmers on all channels.

Your Satellite Entertainment System

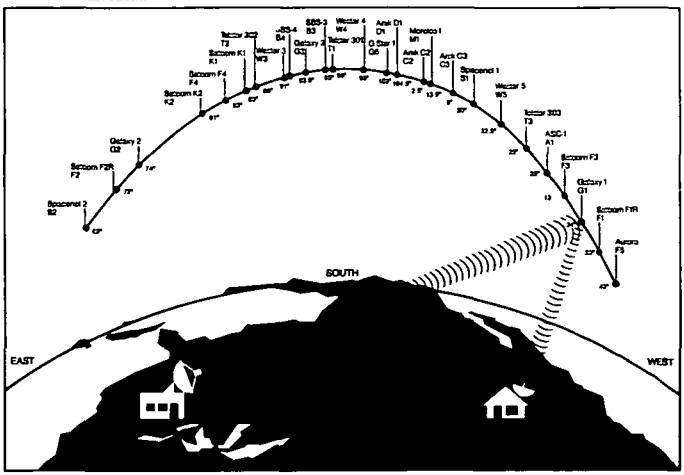
The TVRO World

A satellite TV signal originates in a TV studio. The signal is sent to a transmitter (called an *uplink*) which beams it to a satellite orbiting 22 000 miles above the earth. The satellite receives the signal, amplifies it and transmits it back to earth.

Communications satellites are "parked" in an orbital arc called the Clarke Belt that circles the globe at the Equator. Because of their orbital height, speed and position, the satellites in the Clarke Belt appear to be fixed in space. In reality, they are simply moving at the same rate as the earth revolves. Since the satellites stay in the same location relative to the earth, you can locate them and store their positions in your 2500R's memory.

Most US broadcast satellites are in orbit over the equator south of our country and aim their signals at the Midwestern United States. The signal sent from the satellite to earth is like a flashlight beam. It is most concentrated at the center, and is less concentrated as you move outward in the *footprint* of the satellite signal. That's why you may need a 12 foot dish in Florida to get the same signal strength as a 6-foot dish in Nebraska.

Satellites in Orbital Positions



Your Home TVRO System

A typical TVRO system using the 2500R will consist of the following components

Dish Antenna

Your *dish* antenna collects and concentrates the signal from the satellite.

Actuator Arm

An *actuator arm* retracts and extends to move the dish along the orbital arc. The Actuator can be controlled by the optional 2500R Antenna Positioner Power Supply.

Feedhorn and Polarizer

The *feedhorn* mounted above the center of the dish accepts the concentrated satellite signal. It also contains the *polarizer* to select the polarity of the signal that will be sent to the LNB

LNB

By the time the TV signal travels 22 000 miles to your dish antenna it is very weak. The *LNB* (Low Noise Block DownConverter) amplifies the signal over 100 000 times so that it can be used by your 2500R receiver.

You may use single or dual feed LNBs, depending on the feedhorn that you install. *Single Feed* LNBs will accept the horizontal or vertical signals from the polarizer, depending on which channel you want to watch. *Dual Feed* LNB systems accept both horizontal and vertical signals at the same time. They are used in multiple receiver systems.

Your 2500R will *not* function with an *LNA* (Low Norse Amplifier) or *LNC* (LNA with standard downconverter) but may be installed using an LNA connected to a *block downconverter (BDC)*

Receiver

Your *2500R Receiver* processes the signal from the LNB and allows you to tune the channel that you want to watch. The receiver can store the location and tuning information for up to 21 satellites along with specific entries for your favorite channels.

Antenna Positioner Power Supply

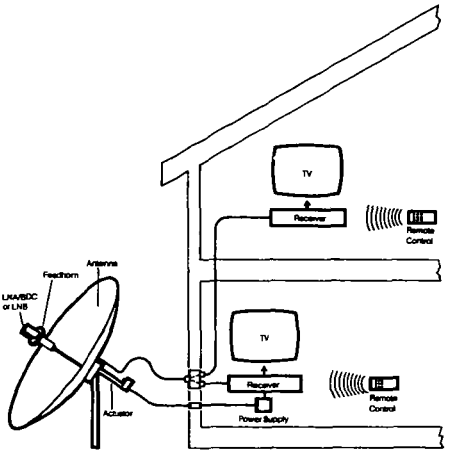
When you install your 2500R with the optional Antenna Positioner Power Supply your system will be able to automatically aim the dish towards any of your pre-programmed satellites.

TV Set

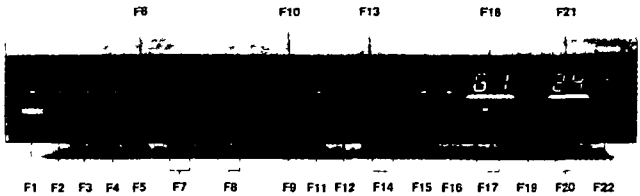
The final destination of the satellite signal is your *TV* which can be a monitor or standard TV set. You can have multiple receivers and multiple TV sets in the same satellite system. You can receive stereo sound by connecting your 2500R to your home stereo system.

Remote Control Unit

The 2500R *Remote Control Unit* allows you to select channels and control all of the functions you'll need for daily viewing and operation.



Your 2500R System



FRONT PANEL KEYS AND INDICATORS

The front panel of your 2500R contains the indicators or (LEDs) and control keys that will help you tune and adjust your reception.

NOTE. All 2500R keys (except [SAT/TV]) are for tuning *satellite channels only*. They have *no effect* on VHF UHF or Cable programming.

Many of the 2500R front panel keys can also be found on the Remote Control.

F = Front Panel

R = Remote Control

F1 or R1 POWER

This key turns on the main power to the 2500R. When power is ON several LEDs on the receiver will light.

When power is OFF (with the receiver plugged in) only the STDBY LED will be on.

F2 or R2 SAT/TV

Use this key to switch the receiver's output to your TV between an attached VHF/Cable TV input and the input from your satellite system.

When your 2500R is in the satellite mode, the SAT LED will light.

F3 POLARITY

Use this key to select the proper polarity (Normal or Reverse) for each satellite.

The REVERSE LED indicates that you have selected the REVERSE (Galaxy) format.

F4 LOCK

This key selects the MEMORY LOCK ON or OFF mode of the 2500R.

[LOCK] ON (MEMORY LOCK LED lit) is used for normal daily use. [LOCK] OFF mode is used for entering satellites in the memory.

The key must be pressed for 3 seconds to go from [LOCK] ON to [LOCK] OFF. [LOCK] OFF to [LOCK] ON is instantaneous.

F5 STORE

Use this key to store satellite location and tuning information in the 2500R's memory.

F6 REMOTE CONTROL TARGET

This is the target point for the Infrared Remote Control signal. The LED below the target will blink when it is receiving a signal from the Remote Control.

F7 ALPHA/NUM

Use these keys to name the satellites that you store in the 2500R memory. You can choose any letter from A Z (except L) and any number from 1-9.

These keys, along with the [STORE] key, are also used for MASTER RESET.

F8 SKEW ▲ ▼

Use these keys to adjust the angle of your system's polarizer for each satellite.

F9 or R4 SUB AUDIO

This key selects the additional subcarrier audio service that is broadcast with most VideoCipher II programs.

F10 VIDEOCIPHER SIGNAL

This LED will glow when you are tuned to a VideoCipher II channel.

F11 AUDIO BW

Use this key to select the proper bandwidth for audio subcarriers.

The WIDE LED will light when you select a wide bandwidth.

F12 or R5 MODE

Press this key to select the proper audio subcarrier format. Mono, Discrete Stereo, Matrix Stereo or Mono 6.8. Each mode has an LED that will light when it is selected.

When you choose DISC (Discrete) the 2500R will automatically select a narrow bandwidth. You can override this selection with the [AUDIO BW] key.

F13 SIGNAL STRENGTH

These LEDs indicate the relative strength of the satellite signal.

F14 or R3 FINE TUNE ▲ ▼

Use these keys to fine tune the video signal for a selected channel.

F15 AFC

When the AFC is ON (LED lit) the 2500R will automatically track and adjust the video frequency for the channel.

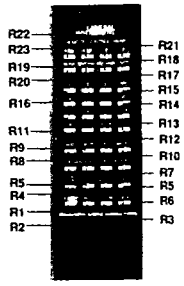
F16 TI FILTER

The 2500R has a built-in Terrestrial Interference (TI) filter. This key turns the Filter ON or OFF for each channel you select. The LED will light when the TI Filter is ON.

F17 or R5 EAST/WEST

These keys can be used for continuous dish movement when the 2500R is in [LOCK] OFF mode.

When the 2500R is in the [LOCK] ON mode, use the [EAST] [WEST] keys *on the front panel* to select the next stored satellite.



In [LOCK] ON mode, the [EAST] and [WEST] keys on the *Remote Control* provide dish position adjustment in 10 steps.

When the dish is moving East, the EAST LED will light. When the dish is moving West the WEST LED will light.

F18 SATELLITE DISPLAY

This 2-digit indicator displays the "name" you select for each satellite. It also displays error codes for some system problems as well as prompts for storing and recalling Favorite Channels.

The Satellite Display is also used with the Channel Display [F21] to show subcarrier audio frequency.

F19 SCAN

This key turns the automatic scanning feature ON and OFF for satellite location in the [LOCK] OFF mode.

F20 or R13 CHANNEL ▲ ▼

Use these keys to change channel up or down.

F21 CHANNEL DISPLAY

This 2-digit LED will display the channel that your receiver is currently tuned to. When you are using Parental Supervision, a dot will appear in this display.

The Channel Display is used with the Satellite Display [F18] to show subcarrier audio frequency.

F22 C/Ku

This key selects the correct satellite frequency band in the [LOCK] OFF mode. LEDs will indicate which band you have selected.

REMOTE CONTROL

The Remote Control contains additional keys that are not also found on the front panel. The Remote Control keys are organized in 3 groups.

1 The 2 gray areas at the top are for VideoCipher II control.
2 The blue area keys are for Audio tuning
3 The gray area keys at the bottom are for satellite selection and fine tuning

NOTE: All Remote Control keys (except SAT/TV) are for tuning *satellite channels only*. They have *no* effect on VHF UHF or Cable programming.

The back of the Remote Control has space for you to write the satellite and channel for your Favorite Channel entries. The back panel also has a compartment for installing 2 AAA alkaline batteries. The Remote Control is effective at a range of 20 feet, but *will not* operate through walls.

Channel Selection and Tuning Keys

R16 NUMBER KEYS

These keys, 0-9 are used for direct channel access. They are also used to enter passwords and other selections to set up your VideoCipher II services.

R15 FAV

[FAV] and the number keys are used to store and recall up to 10 favorite channels.

R14 PS

This key is used to lock out access to a specific channel for Parental Supervision. A dot will appear in the channel display when Parental Supervision is ON

R10 VOLUME ▲ ▼

These keys can be used to adjust the channel volume.

R9 MUTE

This key will turn off the satellite channel audio.

R7 AUDIO A/AUDIO B ▲ ▼

Use these keys to tune the subcarrier audio frequency.

R8 NEXT SAT

Use this key to move the dish to the next programmed satellite in the [LOCK] ON mode.

VideoCipher® II Control Keys

R23 VIEW

Use this key to check the title, running time and other information about the program you are watching.

R22 TEXT

VideoCipher II channels provide text information to their users. These messages can include news bulletins, program promotions and other special notes. Use this key to view channel and service related text on your TV screen.

R21 ◄ ►

Use these keys to move back and forth in the VideoCipher II text files or to change program rating limits.

R20 SETUP

Use this key along with the number keys to customize your VideoCipher II channel services.

R19 NEXT PRG

This key allows you to read information on your TV about the next scheduled program on a VideoCipher II channel.

R18 MESSAGE

Every so often, your program supplier will have a personal message for you about your subscription. If there is a message for you, you will see a flashing asterisk (*) on your TV screen. Press the [MESSAGE] key to read messages on your TV screen.

R17 HELP

Press this key to read HELP messages related to VideoCipher II controls.

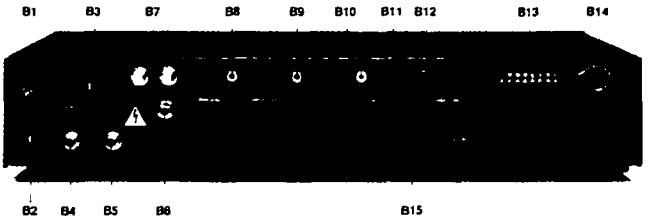
R11 CANCEL

Press the [CANCEL] key to clear any numbers that you enter incorrectly.

R12 ENTER

Use this key to confirm selections and password entries for VideoCipher II channel setup.

Your 2500R System



BACK PANEL

Your 2500R can be connected to a variety of accessories. Please refer to the wiring diagrams on pages 25 and 28 or have your installer verify that you have made the proper connections.

B1 FUSE

This screw cover holds the 125V 2Amp main fuse for the 2500R

B2 AC POWER

115 VAC, 60Hz, 50W AC power cord.

B3 CH3-CH4

This switch sets the channel for the out put to a standard TV. It should be set to the weaker of these two local VHF channels in your area. This switch setting should be the same as the channel set ting on your TV

B4 VHF IN FROM ANT

Connect your VHF antenna or cable system lead wire to this connector.

B5 VHF OUT TO TV

This connector should be attached to the VHF input on your television set.

B6 950-1450 MHz IF IN

This connector will accept the 950-1450 MHz signal from the LNB. It will carry a +18 volt power output to the LNB.

B7 70MHz IN AND OUT

This is the 70MHz loop-through for attaching an external TI filter. Your 2500R comes with a 6-inch loop cable attached to these connectors.

This cable must remain attached if you are not using an external filter.

B8 SUBCARRIER OUT

Provides undamped, unfiltered baseband video up to 8 MHz for external stereo processors, data demodulators, or external descramblers.

B9 VIDEO OUT

Connect your monitor or VCR to this output if it accepts a baseband (RCA-type) video connector. If your TV has both RF and baseband inputs, we recommend using baseband.

B10 R-AUDIO-L

Connect these RCA-type outputs to your stereo system or VCR if you want to tune or record stereo audio.

B11 DATA

This RCA-type connector is for future applications.

B12 IPPV

This RCA-type connector is for future applications.

B13 TERMINAL BLOCK

The terminal block is used to connect accessories and system components to the 2500R

R1 and R2

These terminals are for Remote Eye attachment.

+ 5V/PULSE/GND

Connect your mechanical polarizer to these terminals.

H/V

Use these terminals to attach a coaxial relay for dual LNB and multiple receiver installations.

C/Ku

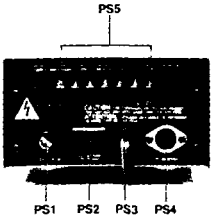
Use this terminal to attach a coaxial relay for dual band installations.

B14 ANT POSITIONER

This 5-pin DIN connector is used to attach the optional Antenna Positioner Power Supply to the 2500R. The required cable is packed with the Antenna Positioner Power Supply.

B15 AUTHORIZATION NUMBER

You can read the first 8 numbers of your Authorization (Address) Number through this window. See page 16 for the directions for reading your full 12-digit number.



ANTENNA POSITIONER POWER SUPPLY (Optional)

The Antenna Positioner Power Supply is used to provide dish position control to the 2500R

PS1 FUSE

This screw cover holds the 125V 3Amp main fuse for the Antenna Positioner Power Supply.

PS2 UNSWITCHED AC

This output provides continuous 115V 1Amp unswitched AC power for the receiver

PS3 AC 115V 2A

AC line cord.

PS4 TO RECEIVER

Attach the 6-foot DIN cable to the 2500R here

PS5 TERMINAL BLOCK

Power and signal wires for the dish should be connected to the Antenna Positioner Power Supply terminal block. Actuators with Hall Effect sensors will use +5 PULSE and GND. Actuators with a Reed Switch will use only PULSE and GND.

+5

Attach the +5 volt lead from actuators with Hall Effect sensors to this terminal.

PULSE

Attach the Pulse lead from the actuator to *this terminal.*

GND

Attach the Ground lead from the actuator to this terminal.

SH

Attach the uninsulated shield wire from the actuator to this terminal.

MOTOR M1

Attach one of the motor leads from the actuator to this terminal.

MOTOR M2

Attach the other motor lead from the actuator to this terminal.

Programming Your 2500R

About Programming

Programming involves "teaching" your 2500R to remember your satellite and channel selections. Use the control keys on the front panel and the Remote Control to enter information in the receiver's memory.

Remember: To locate satellites and enter them in the 2500R memory, the receiver *must* be in [LOCK] OFF mode.

Later, when you store Favorite Channels and perform other channel setup functions, you will set [LOCK] ON.

The following chart indicates how each key functions in the [LOCK] OFF mode.

[LOCK] OFF Key Functions	
Front Panel	
[EAST]	Move Dish East (continuous)
[WEST]	Move Dish West (continuous)
Remote Control	
[EAST]	Move Dish East (continuous)
[WEST]	Move Dish West (continuous)
[NEXT SAT]	No Function

Your System

Most 2500Rs will be used in single feed, single receiver installations. Please refer to the system diagrams on page 25 to see how your installation has been wired.

Limits

Limits are programmed into the 2500R to help prevent damage to your satellite dish. The limits will prevent the dish from moving past the points that you set.

Your limits *must* be programmed *before* you can enter satellite locations into the 2500R memory.

Setting the Limits

1 Set the 2500R in [LOCK] OFF mode by pressing and holding the [LOCK] key for 3 seconds.

2 Move the dish to the *fully retracted* position by pressing the [EAST] or [WEST] key. The satellite display will show [2] when the dish is fully retracted, then change to [ ]

If you are West of the Rockies, this will be the East limit.
If you are East of the Rockies, this will be the West limit.

2a. Use the [EAST] or [WEST] key to jog the dish back from the limit. The EAST or WEST LED will flash, and an [ ] will appear in the display.

2b. Press [STORE] *and* the [EAST] or [WEST] key *together* (whichever one you used to move the dish to its fully retracted position). The display should now read [EL] or [WL] then blink twice to verify that the limit is stored.

3 Use [EAST] or [WEST] to move the dish to the *fully extended* position. When you reach the limit, the satellite display will show [2]

If you are now setting the *East* limit [ ] will appear in the display

If you are now setting the *West* limit, [ ] will appear in the display

3a. Press [STORE] *and* the [EAST] or [WEST] key *together* (whichever one you used to move the dish to its fully extended position). The display should now read [EL] or [WL] The display will blink twice to verify that the limit is stored.

4 To check that you have set the limits, use the [EAST] and [WEST] keys to move the dish. The [EAST] or [WEST] LEDs will light and the display will show [ ] Check to see that the dish stops at the limits and [EL] or [WL] shows in the display at each limit.

ACTION	DISPLAY
[LOCK] OFF 3 Seconds	LED OFF
[EAST] Or [WEST]	[2] [ ] (Steady)
[EAST] Or [WEST]	[ ]
[STORE] And [EAST] Or [WEST]	[EL] Or [WL]
[EAST] Or [WEST]	[2] [EAST] LED and [ ] Or [WEST] LED And [ ]
[STORE] And [EAST] Or [WEST]	[EL] Or [WL]

Changing the Limits

If you have set the limits too far towards the center of the arc to receive certain satellites, you can reset them as follows.

	ACTION	DISPLAY
1 Set the 2500R in [LOCK] OFF mode.	**[LOCK]** OFF 3 Seconds	LED OFF
2 Use the [EAST] and [WEST] keys to move the dish to the limit that you want to change. [EL] or [WL] will show in the display.	**[EAST]** Or **[WEST]**	**[EL]** Or **[WL]**
3 Press and hold the [STORE] *and* [ALPHA] keys together for 3 seconds, until you see [↗--] or [-↙-] in the display	**[STORE]** And **[ALPHA]** 3 Seconds	**[↗--]** Or **[-↙-]**
4 Use the [EAST] and [WEST] keys to jog the dish to the new limit position	**[EAST]** Or **[WEST]**	
5 Press [Store] *and* the [East] or [West] key *together*. The display should now ready [EL] or [WL] then blink twice to verify that the limit is stored.	**[STORE]** And **[EAST]** Or **[WEST]**	**[EL]** Or **[WL]**

If You Don't Have the Optional Antenna Positioner Power Supply

You can use your 2500R as a receiver only and use your existing positioner to locate satellites. However you will still need to store [EL] and [WL] in the receiver's memory

1 Set [LOCK] OFF	**[LOCK]** OFF	LED OFF
2 Press [STORE] [ALPHA] [NUM] *at the same time* and hold them for 3 seconds. This clears the 2500R's memory.	**[STORE]** Plus **[ALPHA]** Plus **[NUM]** 3 Seconds	
3 Press [STORE] and [EAST]. The satellite display will blink twice and display [EL]	**[STORE]** And **[EAST]**	**[EL]**
4 Press [STORE] and [WEST]. The satellite display will blink twice and display [WL]. The satellite display will then display [TO] [TO] indicates that your 2500R is in the Tracker Off state.	**[STORE]** And **[WEST]**	**[WL]** **[TO]**

If you are using the 2500R as a receiver only, you can still store satellite names for easy recall of Polarization, C/Ku selection, and Skew parameters.

Programming Your 2500R

Programming Satellites Introduction

Programming satellites is a simple step-by-step process. First you'll locate the satellites and store their locations in the 2500R memory. You'll also store their features, including polarity, skew angle and frequency band.

It's best to start with C-band satellites. Once you have the satellite locations stored, you can begin to tune the channels. Then, you can store your favorite channels for 2 key remote control access. You can also lock out specific channels for Parental Supervision. Finally, you'll locate and tune Ku band satellites and channels that you want to receive.

A Word About Polarization

Satellites broadcast channels in both horizontal and vertical polarity. Most polarizers will shift from horizontal to vertical upon command from your receiver. Other systems provide reception of both polarizations at the same time by using *dual feed* polarizers. This eliminates the need to shift back and forth, and is very useful for multiple receiver systems.

Some satellites will transmit Channel 1 (and all odd-numbered channels) in vertical polarity. For setup of the 2500R, this will be called ***Normal (SatCom)*** format. Others will transmit Channel 1 as horizontal. These satellites are called ***Reverse (Westar or Galaxy)*** format.

Satellite Chart

Satellite	Abbrev.	Location	Format	C	Ku
Spacenet 2	C2	67°	R	X	X
Satcom F2R	F2	72°	N	X	
Galaxy 2	G2	74°	R	X	
Satcom K2	K2	81	R		X
Satcom F4	F4	82°	N	X	
Satcom K1	K1	85°	R		X
Telstar 302	T2	86°	N	X	
Westar 5	W5	91	R	X	
GStar-4	S4	91	R		X
Galaxy 3	G3	93.5°	R	X	
GStar-3	S3	95°	R		X
Telstar 301	T1	96°	N	X	
Westar 4	W4	97°	R	X	
GStar 1	G1	103°	R		X
Arch D1	D1	104.5°	R	X	
Arch C2	C2	112.5°	N		X
Marisat1	M1	113.5°	R	X	X
Arch C3	C3	117.5°	N		X
Spacenet 1	S1	120°	R	X	X
Westar 6	W6	122.5°	R	X	
Telstar 303	T3	125°	N	X	
ASC-1	A1	128°	R	X	X
Satcom F3	F3	131	N	X	
Galaxy 1	G1	134°	R	X	
Satcom F1R	F1	139°	N	X	
Aurora	F6	143°	N	X	

Programming Your Satellites Procedure

Be sure to have a satellite program guide available before you begin to locate and store your satellites. It will be difficult to tell one satellite from another without one.

The following activities should be completed using the *front panel* keys.

1 Set [LOCK] ON

2 Turn your TV on. Set the 2500R to the TV mode using the [SAT/TV] switch and tune the TV to a local VHF station. This will verify that your TV is properly hooked up to the 2500R.

3 Press [SAT/TV] to return to satellite mode. The TV should then be set to the same channel as the [CH3/CH4] switch on the back of the 2500R.

4 Set [LOCK] OFF. (Hold for 3 seconds.)

5 Move the dish to [WL]. It's best to start at the West end of the orbital arc and move towards the East.

6 Use the satellite chart at the left to locate your satellites.

6a. Start *at the bottom* (West) and work up (East).

6b. Using the [POLARITY] key, set the satellite format according to the chart for each satellite that you try to locate.

7 Press [SCAN]. The 2500R uses a rapid scan mechanism that will *not* lock onto a channel when it locates one. It is a rapid scan that is used only for locating satellites.

8 Using the [EAST] key move the dish away from the limit. The East or West LED should light as the dish moves. A [ ] will appear in the display.

9 Watch the TV screen. Your 2500R will be scanning for channels in order to locate each satellite. When your dish is pointed at a satellite, you will see a quick blink of video on the screen. Release the [EAST] key to stop the dish movement. Your 2500R will continue to scan the channels.

ACTION	DISPLAY
[LOCK] ON	LED ON
[SAT/TV]	LED OFF
VHF	
[SAT/TV]	LED ON
[LOCK] OFF 3 seconds	
[EAST] Or [WEST]	[WL]
[POLARITY]	LED ON/OFF
[SCAN]	
[EAST]	[- -]
	Video Blink
[EAST]	

9a. Press [SCAN] when you see the video signal again. This will stop the scanning activity and lock the 2500R on a channel. Using the [CHANNEL ▲ ▼] keys, locate an *odd* numbered channel on the satellite

9b. Use [EAST] and [WEST] to get the best picture. Don't worry about the audio yet. Audio will be tuned later

9c. Use the [SKEW ▲ ▼] keys to improve the picture

9d. Try to identify the satellite using the program guide.

10 Move to an *even* numbered channel. Use the [SKEW ▲ ▼] keys to adjust the picture. Use the program guide to identify the channel.

Your 2500R stores skew information for both odd and even polarity for each satellite.

11 By checking several channels, you should be able to identify the satellite. If you guessed wrong on the satellite polarity, use the [POLARITY] key to change it.

11a If the Polarity setting is not correct, you will have to readjust the skew settings for both odd and even channels.

12 Use the [ALPHA/NUM] keys to name the satellite. Standard abbreviations are listed in the chart.

13 Press [STORE]. The display will blink twice. You have just stored the satellite location, polarity, name and skew adjustments in the 2500R memory.

14 Press [SCAN] again. Using the [EAST] key, look for the next satellite in the orbital arc. Repeat steps 6 through 13 for each satellite. Your 2500R can store up to 21 satellite locations.

ACTION	DISPLAY
[SCAN]	Stop Scanning
[CHANNEL ▲ ▼]	Odd Channel
[EAST] or [WEST]	Best Picture
[SKEW ▲ ▼]	Best Picture
[CHANNEL ▲ ▼] [SKEW ▲ ▼]	Even Channel
[POLARITY]	LED ON/OFF
[SKEW ▼ ▲]	Best Picture
[ALPHA] [NUM]	Satellite Name
[STORE]	2 Blinks
[SCAN]	

Programming Your 2500R

Satellite Recall

Once you have stored a satellite location, you can return to it by pressing a few buttons.

1 Set [LOCK] ON

2. If you are using the Remote Control, press [NEXT SAT] until you see the identifying initials of the satellite that you want to locate.

   NOTE. The 2500R will wait for 3 seconds before moving the dish. This prevents unnecessary movement of the dish until you have selected a satellite.

3 If you are using the front panel keys, press [EAST] or [WEST] (depending on the direction of the new satellite) until you see the identifying initials of the satellite that you are moving to.

4 When the 2500R locates the satellite, make any necessary adjustments to the picture using the [EAST] or [WEST] keys on the Remote Control.

Cancelling a Satellite

You can remove a satellite location and its tuning parameters from the receiver's memory.

1 Recall the satellite.

2 Set [LOCK] OFF (Press key 3 seconds)

3 Press [STORE] and [ALPHA] at the same time and hold them for 3 seconds. The display will blink twice, and the satellite will be erased.

Master Reset

If your unit is returned from service or you want to completely reenter your satellite locations and channel tuning use the Master Reset:

1 Set [LOCK] OFF (Press key 3 seconds.)

2 Press the [ALPHA] [NUM] and [STORE] keys at the same time. Hold them for 3 seconds.

Your 2500R memory will be cleared.

Power Outages

If AC power is lost during dish movement, you may need to realign the satellite positions in your 2500R memory.

It is important that you check the dish position carefully while you are doing the realignment.

1 Set [LOCK] ON

2. Recall a satellite that you are familiar with, such as G1. At this point, the dish will *not* be pointed in the right direction to receive G1. The dish may even have moved beyond your programmed limits.

3 Press the [STORE] and [NUM] keys *at the same time* for 3 seconds. The display should flash between [RA] (ReAlign) and [G1]

4 Use the [EAST] and [WEST] keys to locate G1. The display will continue to flash [RA] and [G1]

5 Press [STORE] and [NUM] for 3 seconds. The 2500R will realign all the satellite positions that were stored before the power outage. [G1] will now show on the satellite display.

ACTION	DISPLAY
[LOCK] ON	LED ON
[ALPHA] [NUM]	Satellite Name [Gn]
[STORE] And [NUM] 3 Seconds	[RA] Flash [G1] Flash
[EAST] Or [WEST]	[RA] Flash [G1] Flash
[STORE] And [NUM] 3 Seconds	2 Blinks [G1]

Ku-Band Satellite Location

We recommend that you store C-band satellites *before* attempting to store Ku-band satellites.

Remember: You can't locate a Ku band satellite unless your system is properly equipped for Ku-band reception

1 Set [LOCK] OFF (Press key 3 seconds)

2. Set the Ku LED ON with the [C/Ku] key on the front panel.

3 Follow the same procedures as for C-band tuning, using [SCAN] [EAST] [WEST] and [SKEW ▲ ▼] to locate, optimize and identify the satellite.

4 Name the satellite using [ALPHA] and [NUM]

5 Press [STORE] to enter the satellite location in the 2500R memory

NOTE Some satellites (Spacenet, Morelos) have both C and Ku transponders. Your 2500R *cannot* store both C and Ku parameters for the same satellite under the same name. Therefore you should store these satellites as ***separate entries*** under different names.

For example, you can store Spacenet 1's C-band programming parameters as [S1] You can store Spacenet 1's Ku-band parameters as [S2]

ACTION	DISPLAY
[LOCK] OFF 3 Seconds	LED OFF
[C/KU]	LED ON
[SCAN] **[EAST]** Or **[WEST]** **[SKEW▲▼]**	
[ALPHA] And **[NUM]**	
[STORE]	2 Blinks

Ku-Band Channels

Channels for Ku broadcasting have not been standardized as C-band channels have. In fact, several different Ku channel standards exist Your 2500R has been designed to follow the format currently used by most services that are broadcasting in Ku-band.

If the satellite that you are tuning uses a different channel plan, you will still be able to receive its Ku channels However the channel numbers displayed on the 2500R may be different from those in your guide

Channel Tuning

Tuning Your Channels

Once you have stored the location, skew and polarity for each satellite, you're ready to fine tune your channels and set up your VideoCipher II services.

Channel tuning activities should be done with your 2500R in the [LOCK] ON mode. In this mode, the front panel keys are used as follows:

[LOCK] ON Key Functions	
Front Panel	
[EAST]	Next Satellite East
[WEST]	Next Satellite West
Remote Control	
[EAST]	Move Dish East (10 Steps)
[WEST]	Move Dish West (10 Steps)
[NEXT SAT]	Next Programmed Satellite

NOTE. If you have set Parental Supervision ON (See page 19) the [EAST] and [WEST] keys *on the front panel will not* function. All dish movement is blocked under PS channel lockout.

VideoCipher® II Authorization

Here's how the VideoCipher II system works. A program supplier (premium movies, superstations, sports, news, pay per view) sends a scrambled signal from their uplink transmitter to the satellite. This same signal will contain coded authorization messages that are addressed *to individual receivers*. These messages will allow your 2500R to receive the VideoCipher II programming and descramble it.

When you subscribe to VideoCipher II programming, your supplier sends authorization messages over VideoCipher II channels to your 2500R receiver. If you discontinue a VideoCipher II service, the messages will not be sent, and you won't be able to view the programming.

The presence of VideoCipher II circuitry in your 2500R is *not* sufficient for program viewing. You will need to receive authorization from your local program supplier or contact the program distributors directly. They will set up an account for you and authorize your unit to descramble selected channels.

You can check the program distributor's number by tuning your 2500R to the channel that you want authorization for. Most services broadcast subscription information to unauthorized receivers.

The program distributor will need your Authorization Number, which can be read off your TV screen by pressing a few keys on your 2500R Remote Control.

VideoCipher® II Tuning

1 Turn your TV on and set the 2500R in [LOCK] ON

2 Move the dish to a satellite that has VideoCipher II programming, and select a VideoCipher II channel. The VideoCipher Signal LED will light, but you will see only a black screen (with text) until you subscribe to the channel and receive authorization.

3 Press [SETUP] [1] on the Remote Control.

3a. Your Authorization (Address) Number will appear on the screen. The first 8 digits of this number should be the same as those in the window on the back of your 2500R. The last 4 digits on the screen are for Program Distributor use. Write *all* 12 numbers in the front of this Manual.

3b. Your TV should also show 2 signal strength numbers. For optimum system performance, both numbers should be between 45 and 50. For example, 46/48 is good, but 43/41 is not. Maximum strength is 50. Dish alignment and weather conditions can affect the VideoCipher II signal strength.

4 Call the VideoCipher II service that you want to subscribe to. They will ask for your Authorization Number and other billing information.

5 Leave the 2500R tuned to a VideoCipher II channel until you receive authorization. This may take a few minutes or longer, depending on the service.

Video Fine Tuning Adjustment

Fine tuning is usually not needed for C-band satellites, since they all use a standard channel numbering and frequency plan. However you may be able to improve the picture quality on weak signals by adjusting the Fine Tuning. Fine tuning may be necessary for Ku-band satellites

You have two options for fine tuning the video.

AFC OFF

With [AFC] OFF you can alter the picture to suit your own preference and the tuning that you select will be stored for that channel in the 2500R memory

Use the [Fine Tune ▲ ▼] keys to adjust the picture.

Using the 2500R with the [AFC] OFF will allow faster channel changes and also allows you to customize the tuning for each channel.

If you want to return to the factory preset for all channels press *both* [FINE TUNE ▲ ▼] keys at the same time for 3 seconds with the [AFC] OFF

AFC ON

With [AFC] ON the 2500R will automatically compensate for any channel drift according to factory preset guidelines

Ku-Band Video Fine Tuning

Since Ku-band channel frequencies have not been standardized, we suggest that you allow the 2500R to fine tune your Ku band channels with [AFC] ON If you are not satisfied with the picture, set [AFC] OFF Use the [FINE TUNE ▲ ▼] keys to adjust the picture

ACTION	DISPLAY
[AFC] OFF	LED OFF
[FINE TUNE ▲ ▼]	Best Picture

A Note About Channel and Audio Tuning

Your 2500R can store up to 21 C-band and 32 Ku-band satellites in memory However you cannot store channel-specific information (such as subcarrier audio selection) for each channel on every satellite. This would require a huge system memory The system can store one set of parameters for each unique channel number (1 2 19 22 etc.) in C-band and another set of parameters for each unique channel number in Ku-band.

When you change a parameter for a channel, it will be changed for *all* of the satellites in that band. For example if you change the tuning for Channel 19 in C-band, *all* C-band channel 19s will use this new setting.

However the 2500R has a Favorite Channel memory that can store audio and other channel specific information for up to 10 entries. You could, for example store a C-band channel 19 on F4 and a C-band channel 19 on G1 as separate Favorite Channel entries.

Favorite channel, audio subcarrier tuning, and other daily use activities are covered in the next section of this manual.

Daily Use of Your Receiver

Using Your Receiver

Your receiver has been installed and you've programmed satellites into the memory. You have probably received authorization for VideoCipher II programming. It's time to sit back, pick up your remote control, and enjoy the world of satellite TV. In these next few pages, we'll review the procedures that you'll follow for everyday viewing.

Power

We recommend that you leave your 2500R plugged in with the STDBY LED ON at all times. The STDBY LED indicates that the 2500R can receive authorization messages from VideoCipher II channel services.

If 2500R is Unplugged

If your 2500R is unplugged for a period of time, you may need to get re-authorized by your VideoCipher II services. A lack of power may also cause condensation in the LNB, which can shorten LNB life.

Channel Selection

Channel selection begins with satellite selection. You can move directly to a Favorite Channel using the Remote Control keypad, or you can switch to a specific satellite and then tune the channel that you want to watch.

You can access all normal viewing functions through the Remote Control.

Set [LOCK] ON *(LED lit)* for all channel selections and tuning activities.

Storing a Favorite Channel

1 Locate the channel that you want to watch by selecting the satellite, turning the channel and tuning the audio.

If the satellite initials don't appear in the display, you have not programmed it into the 2500R. The satellite location must be programmed and stored in order for it to be entered as a Favorite Channel.

2 Press and hold [FAV] for 3 seconds, until [S –] appears in the display.

3 When the satellite display reads [S –] press a number key. This number will now appear in the satellite display [S #].

3 The display will blink twice, and the new channel will be stored in memory.

4 Write the satellite and channel on the back of the Remote Control.

Recalling Favorite Channels

1 Press [FAV] [#] for the desired channel.

2 The 2500R will automatically position the dish on the satellite and select the proper channel, skew, and subcarrier audio tuning.

Changing a Favorite Channel

To change a Favorite Channel setting, just repeat the steps for Setting a Favorite Channel. Your new entry will replace the old one in the Favorite Channel memory.

ACTION	DISPLAY
[LOCK] ON	LED ON
[NEXT SAT]	Satellite Name
[CHANNEL ▼ ▲]	Channel Number
Tune Audio	
Fine Tune Video	
[FAV] 3 seconds	[FV] Then [S–]
Number Key [#]	[S#]
	2 Blinks
	Satellite Name
[LOCK] ON	LED ON
[FAV] [#]	[FV]
	Satellite Name
	Channel Number

RECALLING SATELLITES
Not Favorite Channel

You can view programming on any satellite as long as you store that satellite's location in memory.

See Programming Your Satellites (page 12) for details on programming satellites into memory.

Satellite Recall

1 If you are using the Remote Control, press [NEXT SAT] until you see the initials of the satellite that you want to watch.

1a. If you are using the front panel keys on the 2500R press the [EAST] or [WEST] keys until you see the initials of the satellite that you want to watch.

Channel Tuning

1 To select a specific channel on the satellite, use the [CHANNEL ▲ ▼] keys.

2 Fine tune the channel (if necessary) using the [FINE TUNE ▲ ▼] keys.

As long as you are in [LOCK] ON mode with [AFC] OFF the 2500R will store any fine tuning changes that you make for that channel.

Parental Supervision

Your 2500R provides you with two methods for locking channels and restricting viewing.

For VideoCipher® II Channels

The Rating Ceiling method applies only to VideoCipher II channels. You can prevent viewing all rated VideoCipher II channel programs above the level that you set.

For example, if you set the level at PG-13 your system will allow only G, PG and PG-13 rated programs. Both R and X-rated programs will be locked out.

This method is described on page 21

For Other Channels and VideoCipher® II Channels

The second method (Parental Supervision) provides complete channel lockout, and may be used on both VideoCipher II and unscrambled channels.

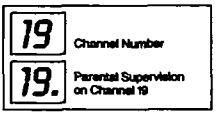
This method requires you to completely lock out access to a channel. ***This method also locks the dish and prevents any satellite or channel reprogramming.***

1 Set [LOCK] ON

2 Tune to the channel that you want to restrict.

3 Press the [PS] key for 3 seconds. The display will blink and a [●] will appear on the channel number.

4 Switch to a different channel on this satellite.



NOTE. This channel can still be selected by entering the channel number through the Direct Access number pad on the Remote Control. To completely restrict viewing of this channel, you will need to take the Remote Control with you.

Changing Parental Supervision

It's simple to remove the restriction from a locked channel.

1 Using the Remote Control number key pad, enter the channel number.

2 Press and hold the [PS] key until the channel display blinks once and the [●] disappears.

Audio Tuning

Check your program guide to see which subcarrier frequency and for mat the channel is using. Most unscrambled channels use the 6 8 MHz subcarrier to broadcast a mono audio signal. If you don't find audio on 6 8MHz, the channel may be using another mono frequency (5 0-8 5 MHz) Discrete Stereo or Matrix Stereo. Your 2500R can tune any of these signals and store them in memory for automatic recall.

Remember: To hear the stereo mode on a channel, your 2500R must be attached to a stereo amplifier or receiver.

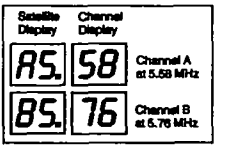
Use the [MODE] key to select the audio format. Check the front panel LEDs to confirm your selection.

For VideoCipher II channels, you will not normally need to tune the audio. Two digital audio channels are combined with the video signal. However you can select subcarrier audio for these channels by pressing the [SUB AUDIO] key.

While you are pressing the keys to tune the audio, the Channel and Satellite displays will show the audio subcarrier frequency.

The Satellite display shows which channel you are tuning (A or B) and the first number in the audio frequency. The Channel display shows the last two numbers of the frequency. The 2500R has 10 KHz resolution on audio subcarriers.

Audio Subcarrier Display



Daily Use of Your Receiver

Tuning Discrete Stereo

When you select DISC, the 2500R will automatically select a NARROW bandwidth. You can override this with the [AUDIO BW] key if it improves your reception.

1 Press the [MODE] key to set the 2500R to DISC.

2 Turn the BALANCE control *on your stereo* to the LEFT channel.

2a. Use the [AUDIO A ▲ ▼] keys on the Remote Control to tune the left channel.

3 Turn your stereo BALANCE control to the RIGHT channel.

3a. Use the [AUDIO B ▲ ▼] keys on the Remote Control to tune the right channel.

4 Set the BALANCE control on your stereo back to the center.

Tuning Matrix Stereo

Matrix stereo usually sounds best when the 2500R is placed in the WIDE [AUDIO BW] mode. If you cannot get good reception on WIDE switch to narrow.

1 Press the [MODE] key to set the 2500R to MTRX.

2 Follow steps 2-4 as described for Stereo Discrete.

Tuning Mono

1 Press the [MODE] key to set the 2500R to MONO.

2 Use the [AUDIO A ▲ ▼] keys on the Remote Control to tune the audio channel.

3 The Channel and Satellite Displays will show the frequency.

4 Change the Audio Bandwidth using the [AUDIO BW] key if it improves the sound quality.

ACTION	DISPLAY
[LOCK] ON	LED ON
[MODE]	[DISC]
Stereo Balance Left	
[AUDIO A▲▼]	e.g. A5.58
Stereo Balance Right	
[AUDIO B▲▼]	e.g. B6.76
Stereo Balance Center	

VideoCipher® II Programs

Once you have received authorization, you can tune and view a VideoCipher II channel just as you would an unscrambled channel. However VideoCipher II channels provide additional features and services. Here's how to use them.

The following features can be used only on VideoCipher II channels.

[VIEW]

Press the [VIEW] key to see information about the current program being broadcast on the channel. This will include program title, running time and rating.

After 5 seconds, this program information will disappear from the screen.

The [VIEW] key is also used when you want to exit from a VideoCipher II setup routine without completing it.

[HELP]

Press [HELP] when you are using VideoCipher II features if you need an explanation of the procedure. You will be able to read HELP messages on the TV. If you still cannot understand the procedure, press [VIEW] and consult the Manual.

[SETUP]

The [SETUP] key is used with the number keys to customize your VideoCipher II features.

If you press [SETUP] you will see the following menu on your TV:

1 Installation
2 Unit Settings
3 Rating Ceiling
4 Rating Password

You can choose one of these VideoCipher II setup activities by pressing the correct choice.

1 Installation

Press [SET UP] [1] *to see your Authorization Number* and Signal Strength displayed on the screen. Your program supplier will need these numbers to authorize you for VideoCipher II program reception.

2 Unit Settings

Personal Messages

VideoCipher II program suppliers may send you messages about your service subscription. These may concern your account balance, new services, or other information. Messages can be read on your TV.

1 A flashing asterisk [*] will appear on the screen to inform you that a message is stored for you.

2 To read the message, press [MESSAGE].

You can set your system so that the [*] does not show on the screen.

1 Press [SETUP] [2].

2 The display will read: MESSAGE PROMPT ENABLED (ON) or MESSAGE PROMPT DISABLED (OFF).

3 Press [2] to switch back and forth and set the prompt ON or OFF.

We recommend that you turn the (*) prompt OFF when you are going to record a VideoCipher II program on your VCR. However, if you turn the prompt OFF, you may not know when a message has been sent to your receiver. The best approach is to leave it ON and turn it OFF when you record.

Second Language Audio

Some VideoCipher II channels offer second languages on their programs.

1 To listen to an ALTERNATE language press [SETUP] [2]

2 Press [1] to switch between PRIMARY (usually English) and ALTERNATE (the second language)

3 Rating Ceilings

1 Press [SETUP] [3]

2 Enter your password if one has been set. If no password has been set, proceed to the next step.

3 Use the [◄ ►] keys to change the *rating ceiling.*

4 Rating Passwords

Passwords are used to control access to the rating ceiling. VideoCipher II ratings are based on standard motion picture rating guidelines.

We suggest that you pick a number that is easy to remember: your zip code, date of birth, phone number, street address, etc. ***If you forget your password,*** you will need to contact your program distributor to have it reprogrammed.

To set or change a password

1 Press [SETUP] [4]

1a. If you don't need password control, press [ENTER] ***twice*** when the screen prompts you to enter a *new* password. This ends the procedure

2 Key in your new password (up to 8 digits) and press [ENTER]

2a. If the system has a password stored, you will need to key it in before the system will accept a new one.

3 Key in the new password, and press [ENTER]

4 The screen will ask you to enter the new password a second time to confirm it. The screen will tell you that the password has been changed and then return you to the main SETUP menu.

Program Messages

VideoCipher II program suppliers offer a wide variety of services, some of which may require pay per view or other restrictions on viewing. If this occurs, you will see one of the following messages on your TV screen when you are tuned to that channel.

No Subscription

This message indicates that your 2500R has not been authorized to receive this channel. Contact your program supplier to receive authorization.

Blackout

This message indicates that a program is not available in your geographic area.

Program Locked Out

This message will appear if the program currently being broadcast on that channel exceeds the rating ceiling that you have set. You can change the rating ceiling if you want to view the program. (See Rating Ceilings and Rating Passwords)

Next Available Program

This VideoCipher II feature allows you to quickly check upcoming programs

1 Tune to the VideoCipher II channel that you want to watch.

2 Press [NEXT PRG]

3 You will see a message listing the title, rating, start time and other information about the next program that will be shown on that channel.

4 You may also see one of the other VideoCipher II service messages (No Subscription, Blackout etc.)

Text Services

Some VideoCipher II channels may broadcast news bulletins, program information and other text over the channel.

To view these services.

1 Tune to a VideoCipher II channel.

2 Press [TEXT]

3 Use the [◄ ►] keys to move back and forth within the text.

4 You can move to a specific page by keying in a 3-digit page number. For example, page 6 would be 006. It will usually take several seconds before the page is displayed. If you request a page that is not in the file (for example page 006 in a 5-page file) the screen will stay as it is.

VCR Use

Your 2500R will allow you to record a satellite program while you are watching a VHF program. If you use A/B splitters, you can set your system to also record VHF while you watch satellite programming. Consult your video dealer or your VCR manual for other wiring options.

Remember- If you are recording a satellite program, you should not use the Remote Control to change the volume. It will affect the recording volume. Leave the 2500R volume set at maximum.

When You Are Not Watching

If you subscribe to a VideoCipher II service, we recommend that you position your dish on a satellite with a VideoCipher II channel when you are not watching satellite TV. Your 2500R will automatically tune to a VideoCipher II channel to receive Authorization updates when the power is turned off and the receiver is in the STANDBY mode (LED ON).

Installing Your 2500R

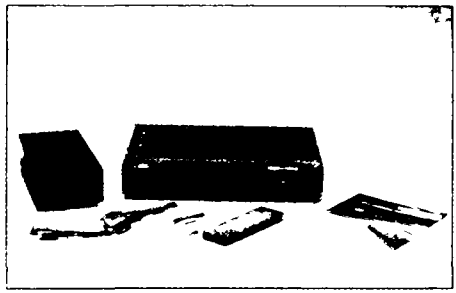
Complete the Pre-Installation Checklist.

The Pre-Installation Checklist items can affect the performance of the 2500R.

Please review the Checklist to make sure that you have completed each item that applies to the type of system that you are installing.

Preparing Your System

A satellite TV system has many sophisticated electronic and mechanical components in addition to the 2500R Receiver. Unless these components are installed and operating correctly, you will not get the best possible reception from the system.



SYSTEM COMPONENTS

Check that all of the following items have been packed with the 2500R. If any of the items are missing or appear damaged, contact your dealer.

70 MHz Loop Cable

A single 6" RF-type cable is packed with the receiver for 70MHz loop-through. *This cable must be connected if no external TI Filter is being used.*

Remote Control Unit

The Remote Control can be used to control most 2500R functions.

Manual

This Manual contains detailed installation and operating instructions.

User's Guide

Keep this Guide near your 2500R. It contains the information that you'll need for daily use.

Warranty Card

Please return the Warranty Card to General Instrument after you complete the installation.

Antenna Positioner Power Supply and Cable (Optional)

The optional power supply controls the position of the dish. The 6-foot DIN cable packed with the Antenna Positioner Power Supply is used to connect it to your 2500R.

Screwdriver

The small screwdriver can be used to make connections on the 2500R Terminal Block.

How To Use This Checklist

A satellite TV system has many sophisticated electronic and mechanical components in addition to the 2500R Receiver Unless these components are installed and operating *correctly you will not* get the best possible reception from the system.

Please keep this Checklist available for reference and provide it to any installer or service technician who is working on your satellite system.

1 Read ***"Important Safeguards"*** on the separate enclosed sheet.

2 Complete sections 1 and 2 ***before*** installing the 2500R

3 Complete sections 3 4 and 5 ***before*** turning the power ON

1 Electrical

__ Unit is disconnected
__ Unit is not located near water or moisture
__ Unit will be attached to a properly grounded receptacle
__ AC plug will be held securely in receptacle
__ Power cord is protected from pinching.
__ Circuit will not be overloaded.
__ Outdoor antenna is properly grounded.
__ Outdoor antenna is away from power lines.

2 Location

__ Unit will be adequately ventilated
__ Unit will not be installed near heat source
__ Unit will be on a stable surface

3 Wiring

__ All wiring corresponds to manufacturer's recommendations or equivalent.
__ Long cable runs have been fitted with line amplifiers
__ RG-6/RG 59 connectors have had their center wires trimmed.
__ All Splitters will pass DC voltage up to 20 volts.
__ Actuator is wired according to diagrams.
__ All F and N connectors have been weather proofed with coax seal.

4 Equipment

__ LNA/BDC or LNB meets minimum gain guidelines.

5 Dish Adjustments

__ Polar axis has been aligned.
__ Elevation has been set
__ Declination has been adjusted.

Installing Your 2500R

Dish Adjustments

Your dish antenna must be able to track the satellites in the orbital arc with no obstructions. In addition, the dish must track the *proper* arc or your reception will be degraded.

Your antenna should be adjusted according to the antenna manufacturer's instructions.

Replacement Systems

If you are *replacing* an existing receiver with the 2500R *do not disconnect your old system yet.*

We suggest that you move the cables from the old system to the 2500R cable by cable. If you don't have sufficient cable length to place your 2500R on the floor near your old system while you are transferring wires, label each wire that is attached to your old system. Then, remove your old system and attach the connectors to the 2500R

New Systems

If this is a *new* system installation, you may want to set the 2500R up at the dish. This allows you to see the effects of each dish or receiver adjustment immediately.

Wiring

Most satellite TV system wiring has standard color coding. Check the manuals for each device in your system to verify the proper coding for each wire. Wiring connections are listed on the foldout at the back of this manual.

DC Pass Splitters

All splitters used in your installation (for dual band, dual feed or multiple receivers) must be capable of passing a 1500 MHz signal and DC voltage even if the master receiver is turned OFF. If the splitters do not pass DC you may lose video, audio, descrambler authorization or be unable to select different polarities on second receivers.

Cabling

Several types of cables can be used in a standard installation. To get the best performance from your system, it is important to use the cable recommended in the chart. All system wiring should meet UL standards.



Connector Types

Coaxial cable can lose 10 dB or more of signal for every 100 foot of length (dB is a measure of signal strength). This loss is called attenuation. If there is too much loss, you may have to install line amplifiers. All coaxial cable used in your 2500R installation should be capable of a band pass of 950-1450 MHz as well as passing DC voltage up to 20 volts.

We recommend that you use wiring as large or larger than specified on this chart or the separate insert on Important Safeguards.

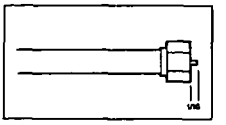
Cable Run Loss

3 GHz Loss	Loss Per 100 Feet	100'	200'	300'	400'	500'
RG-59	12 dB / 100FT	12db	24db			
RG-6	8.5db / 100FT	8.5db	17db	25.5db		
RG-	6.5db / 100FT	6.5db	13db	19.5db	26db	

Indicates next larger size cable or additional amplifiers should be inserted.

RG-6 and RG-59 Cable

When using RG-6 or RG-59 cable, avoid bending the center wire. To minimize damage, we suggest that you trim the center wire back so that it extends no more than 1/16" beyond the cable end connector.



RF Cable Trimming

LNA/Block DownConverter LNC or LNB

Your 2500R cannot function with a Low Noise Amplifier (LNA) alone. If you are using an LNA it will need a minimum gain of 50 dB and a *Block DownConverter* with a minimum gain of 20 dB.

If you are installing your 2500R with a Low Noise Block DownConverter (LNB) it must have a minimum gain of 55 dB.

Signal Strength and Line Amplifiers

If your cable runs are over 150 feet, or if terrain or other factors affect *your signal strength, you may need* to install a line amplifier.

Check the [SIGNAL STRENGTH] LEDs on the 2500R. If no LEDs are lit, install a 950-1450 MHz 20 dB Line Amplifier on the IF IN line to the 2500R. If one LED is lit, a line amplifier may improve your reception.

These tests should be run *after* your system is installed.

Installation Options

Your 2500R can be installed with single or multiple receivers, single or dual feeds, and with single or dual band reception. Refer to these diagrams to determine the best way to meet your personal viewing requirements.

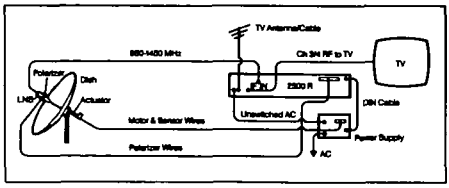
Make sure that you have the required parts, connectors and cables for the type of installation that you will be doing *before* you begin. Specific wiring diagrams and connection charts are provided on a foldout at the back of this manual.

Follow the *top* diagram when you are installing a standard 2500R setup with a single LNB (or LNA/BDC) and a single receiver.

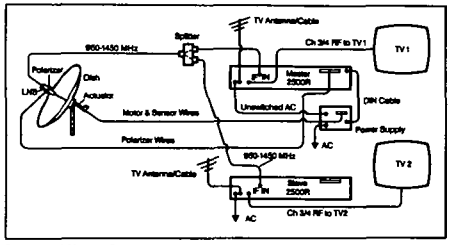
Follow the *center* diagram when you are installing multiple 2500Rs with a single LNB (or LNA/BDC). The slave (second) receiver will only be able to view 12 channels, since the master receiver will control the polarization.

Follow the *bottom* diagram when you are installing single or multiple 2500Rs with dual LNBs (or LNA/BDCs). In dual feed systems, the slave receiver can tune all 24 channels.

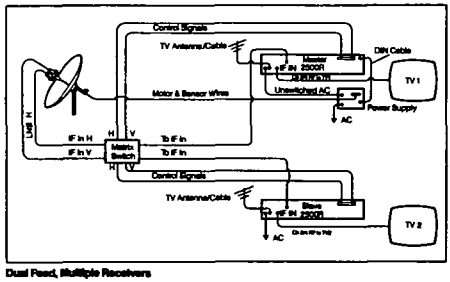
The 2500R can be used in dual feed/dual band/multiple receiver setups. This installation is complex, and we recommend that an experienced installer complete the setup.



Single Feed, Single Receiver



Single Feed, Multiple Receivers



Dual Feed, Multiple Receivers

Installing Your 2500R

Receiver Connections

1 Check that no power is on in the system. No LEDs should be lit.

2 Connect your VHF input to the VHF IN FROM ANT connector.

Your VHF input to the 2500R should be 75 ohm. If you have 300 ohm output from your antenna, you will need to purchase a 300-75 ohm adapter.

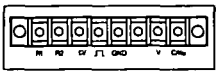
There is no connection for a UHF antenna on the 2500R. If you want to watch UHF programming, you will need to connect the UHF antenna directly to your TV set.

3 If you are using a standard TV set, attach it to the VHF OUT TO TV connector on the 2500R.

If you are using a TV monitor or VCR, connect the input to your monitor to the VIDEO OUT connector on the 2500R. This is an RCA-type connector. Attach the R(Right) and L(Left) audio connectors to your monitor or to a separate stereo receiver.

4 Connect the polarizer wires to the terminal block as follows:

GND	Black ground wire.
PULSE	White pulse wire.
+5V	Red 5-volt wire.



2500R Receiver Terminal Block

5 Attach the output cable from your LNB to the 950-1450 MHz IF IN connector on the 2500R.

The 950-1450 MHz IF IN connector is also used for installation of the General Instrument Matrix Switch or standard A/B splitters for dual feed and dual receiver installations. Check the appropriate installation diagram (pages 31-33) for details.

6 We recommend that you set up your system without an external TI filter and add one later if you need it for specific channels. The built-in TI filter will be adequate for most installations.

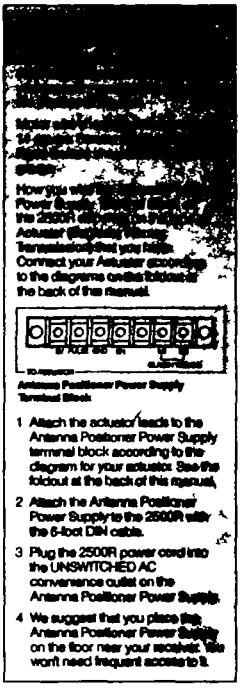
If you need to use an external TI Filter, attach it to the IN-70MHz-OUT connectors on the 2500R. If you are not using an external TI Filter make sure that you attach the 6-inch 70 MHz cable (supplied) to these connectors. *Both connectors on this loop through circuit must be attached.*

If you are using coaxial switches for dual feed or dual band installations, attach them to the H/V and C/Ku connectors on the terminal block.

If you are using a Remote Eye, connect these cables to the R1 and R2 connectors on the 2500R.

7 Check all your connections.

If you are using the optional Antenna Positioner Power Supply, follow the directions in the shaded box to connect it to your actuator.



Antenna Positioner Power Supply Terminal Block

1 Attach the actuator leads to the Antenna Positioner Power Supply terminal block according to the diagram for your actuator. See the foldout at the back of this manual.

2 Attach the Antenna Positioner Power Supply to the 2500R with the 6-foot DIN cable.

3 Plug the 2500R power cord into the UNSWITCHED AC convenience outlet on the Antenna Positioner Power Supply.

4 We suggest that you place the Antenna Positioner Power Supply on the floor near your receiver. You won't need frequent access to it.

8 Connect your 2500R to AC power.

8A. If you *are* using the optional Antenna Positioner Power Supply, plug it into an unswitched AC wall outlet.

8B. If you are *not* using the Antenna Positioner Power Supply, plug the 2500R into the wall outlet, the [STDBY] LED will light.

When the receiver is in STANDBY mode ([STDBY] LED lit) it can receive VideoCipher II authorization messages and will also supply constant power to the LNB.

9 Turn the 2500R [POWER] on. Several of the front panel LEDs and displays will light.

The Satellite Display should show [★ –]

The Channel Display should show [1]

10 *After* you complete the installation of the 2500R verify that your dish is moving in the right direction when you press the [EAST] and [WEST] keys. If not, disconnect the AC Power, reverse the M1 and M2 leads on the Antenna Positioner Power Supply and reconnect the AC power.

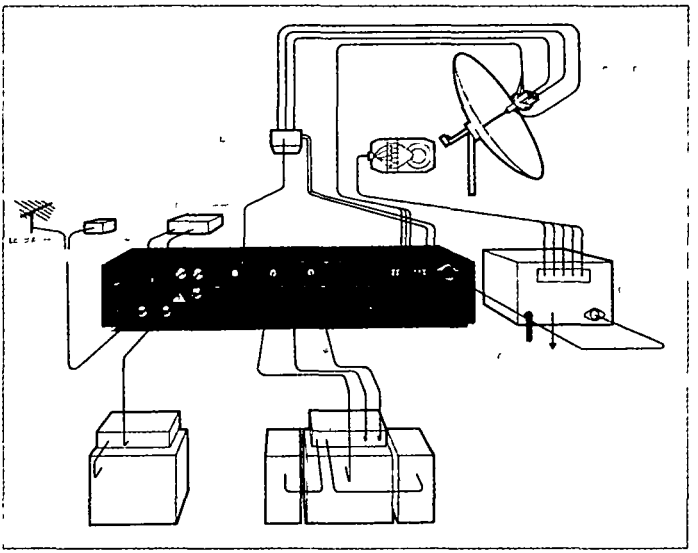
11 If the dish does not move when you press [EAST] or [WEST], use the Master Reset procedure. See page 14

Next Steps

Once you have wired the receiver and checked for proper dish movement, you're ready to begin programming your satellites.

Turn to page 10 and begin.

Installing Your 2500R



Accessory Connections

Attach VCRs, Cable converters, VHF and UHF antennas to the 2500R according to this diagram.

VCR Connection

Connect your VCR as shown. When your VCR is OFF the satellite signal will loop through the VCR and go to your TV. When the 2500R is in TV or STANDBY mode, the VHF/Cable signal will go to the VCR *and* your TV.

You can also connect your VCR by using the baseband (RCA type) Video and Audio R-L outputs. This method allows you to videotape satellite programs while watching local VHF or Cable channels.

VCR Audio Level

If you use the Remote Control to change the satellite program audio volume, you will also change the *audio volume output to your VCR (if* you are taping the same program that you are watching)

When you are taping a program, use the volume control on your TV to change the volume. In order to optimize your audio signal, set the volume of the 2500R to its maximum.

VHF/Cable Antenna Connections

Your 2500R has a connector for attaching an outside VHF antenna or cable system input. If you are using a *VCR you can add external A/B* switches to place these antenna inputs at other points in your system.

Check your VCR manual or consult your local video dealer for installation options.

Maintaining Your 2500R

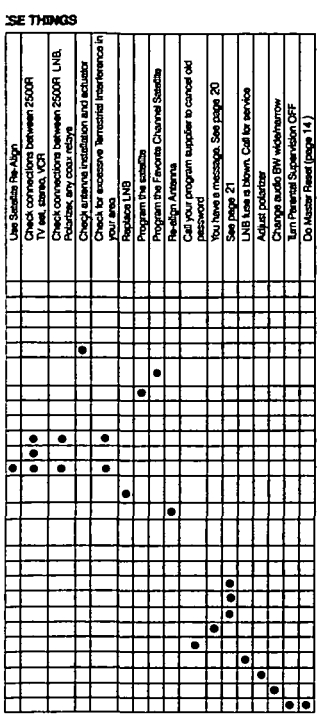
The only maintenance that your 2500R should require is an occasional dusting.

Troubleshooting guide

Before calling your General Instrument dealer or the General Instrument Customer Service Department, check the following chart for the possible cause of your problem. A minor adjustment by you may eliminate the trouble and restore your reception. To use this chart, simply identify the Error Message or the problem you are experiencing on the chart. Then look across for possible solutions.

CHECK THESE THINGS — **DO THE**

Error Message	PROBLEM	Check power on TV set, stereo	Check 2500R fuse	Verify that 2500R and your TV are on same channel (3 or 4)	Set memory LOCK ON	Enter satellite with memory LOCK OFF	Try East and West with Memory LOCK OFF	Try another channel	Try another satellite	Set Memory LOCK ON	Turn Volume up with Remote Control	Check Audio Mode	Check the program guide for stereo broadcast	With 2500R on, disconnect 950-1450 MHz IF in Cable	If signal level decreases 2500R is ok. Problem may be in LNB.	Verify that EL and WL are programmed.	Check tuning of channel	Verify that you are on a VideoCipher II channel	Verify that you are in correct mode (SAT/TV)	Check that your pointer moves	Check that 2500R Remote LED Blinks	Check that Parental Supervision is not ON		Replace batteries in Remote Control	Move antenna away from Limit. Re-set Limit	Program Limits EL and/or WL
⌘–	Limits are not programmed															●										●
)	West limit not set															●										●
–⌘	East limit not set															●										●
⌘ 4	Satellite memory is full (21 satellites)					●																				
⌘ 2	No return pulse from Actuator																								●	
⌘ 3	Satellite not in memory for Favorite Channel recalled																									
⌘ 6	Enter satellite before storing Favorite Channel																									
PS	Parental Supervision is in effect																									
	Remote Control not working				●					●												●		●		
	No picture and/or no sound	●	●	●			●	●	●					●												
	No stereo						●	●		●	●	●														
	Noisy picture/noisy sound						●	●	●					●												
	Signal strength maximum, but no picture and no sound on any satellite						●	●	●					●	●											
	No VideoCipher II LED																●	●								
	Number keys and other VideoCipher II keys do not work																	●								
	Cannot change channel																			●						
	Cannot watch VHF or Cable																			●						
	TV displays "NO SUBSCRIPTION"																									
	TV displays "NEEDS AUTHORIZATION"																									
	TV displays "PROGRAM BLACKED OUT																									
	* Blinks in corner of screen																									
	You forgot your rating password																									
	STANDBY LED is OFF																									
	Can't switch Normal to Reverse Polarity																				●					
	Poor Audio on Non-VideoCipher II Channels																									
	Dish does not move East or West															●						●				



Before You Call

If you can't solve your problem with the Troubleshooting Guide, try one more thing before you call.

1 Pull the Power Plug from the AC receptacle.

2 Wait 5 minutes.

3 Plug the 2500R back in and try your procedure again.

Getting Help

If you still can't correct an operating problem, contact your dealer. If your dealer is unable to solve your problem, contact General Instrument Customer Service. ***Please don't open the cabinet*** and attempt to repair the unit, as this will void your warranty.

Unplug the receiver and refer servicing to qualified service personnel when

- The power supply or plug is damaged.
- The receiver has been exposed to rain or water.
- A solid object or liquid has fallen into the receiver.
- The receiver exhibits a distinct change in performance or does not operate normally.
- The receiver has been dropped or the cabinet has been damaged.

To Service The Receiver

1 Customer Service may be reached at 1-800-344-6754 or 1 704-327-8021 Monday through Friday, 8 30 a.m.-6 00 p.m. Eastern Time.

2 Do not ship your unit to General Instrument until you are asked to do so. You will be given a Return Material Authorization (RMA) number that *must* be sent with your unit. We suggest you attach a piece of masking tape to the bottom of the unit and write the RMA number on it. Use this RMA number in all correspondence with General Instrument about your repair

3 Label each wire and connector ***before*** disconnecting the receiver.

4 Ship the unit to General Instrument in its original packing box or an equivalent padded container. Prepay the freight to send the unit to General Instrument. We pay the freight to return it to you. We suggest that you insure it for its full value

Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or those which have the same characteristics as the original part. Unauthorized substitutions may result in fire, electrical shock or other hazards

Safety Check

After completing any service or repairs to this receiver, ask the service technician to perform safety checks to determine that the receiver is in proper operating condition.

Wiring Diagrams

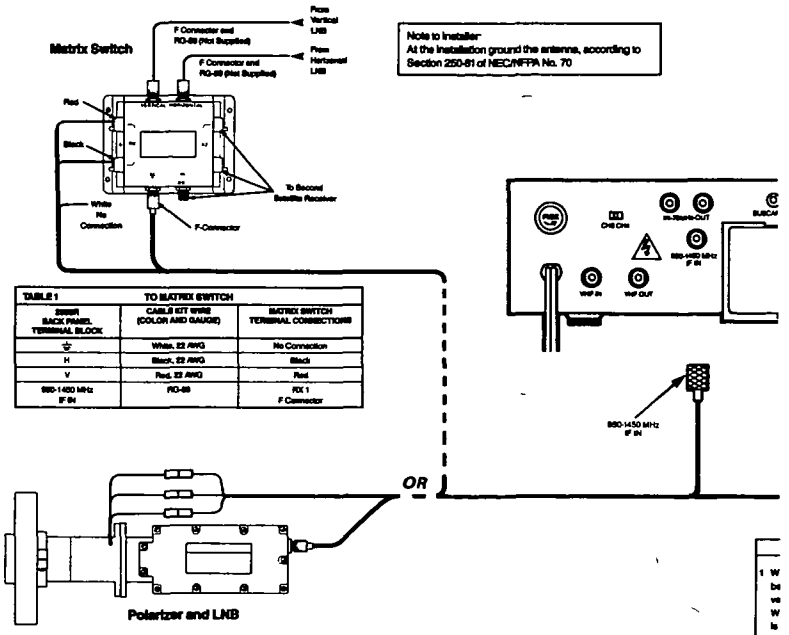
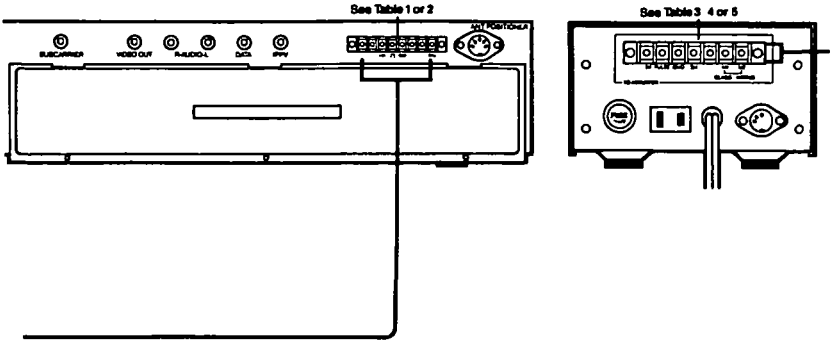


TABLE 1	TO MATRIX SWITCH	
2250R BACK PANEL TERMINAL BLOCK	CABLE KIT WIRE (COLOR AND GAUGE)	MATRIX SWITCH TERMINAL CONNECTIONS
⏚	White, 22 AWG	No Connection
H	Black, 22 AWG	Black
V	Red, 22 AWG	Red
950-1450 MHz IF IN	RG-59	RX 1 F Connector

TABLE 2.	TO POLARIZER AND LNB (MOTOR-TYPE POLARIZER)		
2250R BACK PANEL TERMINAL BLOCK	CABLE KIT WIRE (COLOR AND GAUGE)	POLARIZER (COLOR AND GAUGE)	LNB
⏚	Black, 18 AWG	Brown, 18 AWG	———
⎍	White, 18 AWG	Orange, 18 AWG	———
+5	Red, 18 AWG	Red, 18 AWG	———
Satellite Receiver In	RG-59	———	F-Connector

The circuit between M1 and M2 is capable of producing up to 50 volts and may result in severe electrical shock. The wiring should be installed by a qualified electrician and should conform to all Local codes.

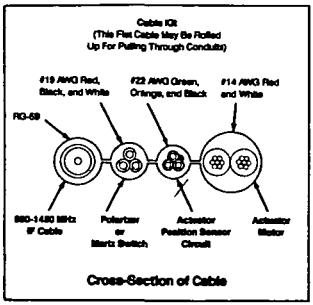
The 2500R must be unplugged during wiring and troubleshooting, or severe electrical shock may result.



MATRIX SWITCH NOTES

1. When Red (V) is + TV is being received from vertical LNB. When Black (H) is + TV is being received from horizontal LNB
2. The Matrix Switch is designed for indoor use only

Note to Satellite System Installer:
Please pay close attention to Article 810-20 of the National Electrical Code that provides guidelines for proper installation of antenna discharge units. In particular, this article specifies that each conductor of a "lead-in" from an outdoor antenna shall be provided with a listed antenna discharge unit except where the lead-in conductors are enclosed in a continuous metallic shield that is effectively grounded.



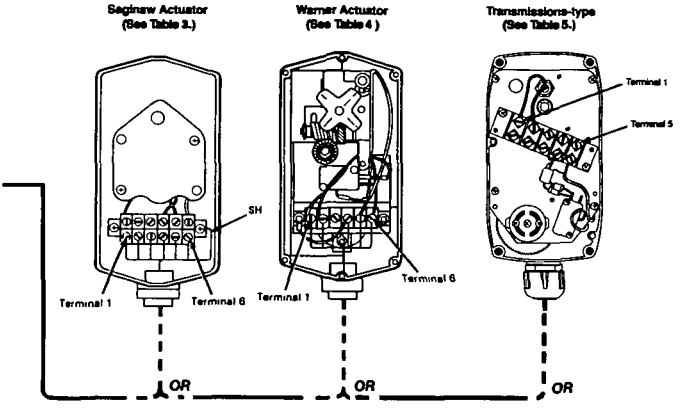


TABLE 3 TO SAGINAW ACTUATOR (ACTUATOR WITH MECHANICAL POSITION SENSOR)

ANTENNA POSITIONER TERMINAL BLOCK	CABLE KIT WIRE (COLOR AND GAUGE)	ACTUATOR CONNECTION (EASTERN)	ACTUATOR CONNECTION (WESTERN)
+5	Orange, 22 AWG	Terminal 4	Terminal 4
Pulse	Green, 22 AWG	Terminal 5	Terminal 5
⏚	Black, 22 AWG	Terminal 6	Terminal 6
SH	Uninsulated Drain Wire	As shown	As shown
M1	Red, 14 AWG	Terminal 2	Terminal 1
M2	White, 14 AWG	Terminal 1	Terminal 2

TABLE 4 TO WARNER ACTUATOR (ACTUATOR WITH REED SWITCH POSITION SENSOR)

ANTENNA POSITIONER TERMINAL BLOCK	CABLE KIT WIRE (COLOR AND GAUGE)	ACTUATOR CONNECTION (EASTERN)	ACTUATOR CONNECTION (WESTERN)
+5	Orange, 22 AWG	No Connection	No Connection
Pulse	Green, 22 AWG	Terminal 1	Terminal 1
⏚	Black, 22 AWG	Terminal 2	Terminal 2
SH	Uninsulated Drain Wire	Terminal 4	Terminal 4
M1	Red, 14 AWG	Terminal 6	Terminal 6
M2	White, 14 AWG	Terminal 5	Terminal 5

TABLE 5. TO TRANSMISSION-TYPE DRIVE (MOTOR WITH REED SWITCH POSITION SENSOR)

ANTENNA POSITIONER TERMINAL BLOCK	CABLE KIT WIRE (COLOR AND GAUGE)	ACTUATOR CONNECTION (EASTERN)	ACTUATOR CONNECTION (WESTERN)
+5	No Connection	No Connection	No Connection
Pulse	Green, 22 AWG	Terminal 1	Terminal 1
⏚	Black, 22 AWG	Terminal 2	Terminal 2
SH	Uninsulated Drain Wire	Terminal 3	Terminal 3
M1	White, 14 AWG	Terminal 4	Terminal 5
M2	Red, 14 AWG	Terminal 5	Terminal 4

NOTE. Eastern refers to the US east of 109° west longitude.
Western refers to the US west of 109° west longitude.

Specifications

IF

Input Frequency	950 to 1450 MHz
Input Impedance	75 ohm
Input Level	– 60 to – 20 dBm
Noise Figure	18dB maximum
Number of Channels	24 channels in C-band 32 channels in Ku-band
Second IF Frequency	70 MHz and 403 MHz
Bandwidth	27MHz at 3dB point
Threshold (static)	7.0 dB C/N maximum
Local Oscillator Radiation	Less than -80 dBm
AFC Characteristics	Pull-in and tracking range of ±5 MHz
Demodulator	Injection Locked Demodulator

Video

De-emphasis	525 line CCIR Rec. 405-1
Frequency Response	10 Hz to 4.2 MHz at – 3dB
DG and DP	10% and 5° maximum at 10 to 90 APL
Output Impedance	75 ohm
Clamping	Better than 40 dB
S/N	50 dB rms weighted at 16dB C/N (10.7 MHz peak dev.)
Output Level	1Vp-p

VHF Output

Impedance	75 ohm
Channel	CH 3 or 4
Level	6.5 dBm

Audio

Subcarrier	5.0 to 8.5 MHz
Bandwidth	180 KHz narrow at – 6 dB 280 KHz wide
Modes	Mono, Discrete, or Matrix Stereo
Frequency Response	±1.0 dB, 30 Hz to 15 KHz in VC mode. ±2.0 dB, 30 Hz to 15 Hz in non-VC mode.
De-emphasis	75 micro sec.
Harmonic Distortion	0.5% maximum in VC mode 1.5% maximum in non-VC mode
S/N	75 dB minimum in VC mode at 12 dB C/N 50 dB minimum in non-VC mode at 16dB C/N

Sub Carrier Output

Frequency Response	10 Hz to 8 MHz
Output Impedance	75 ohm
Output Level	1V p-p

Physical/Environmental

Temperature	0 to 40° C
Humidity	95% relative
Dimension	17.12 x 2.95 x 11.98
Weight	16 lb. 12 oz.
Power Input	115V ± 10% AC 50W Nominal

2 By Timothy A Boggs

WARNER COMMUNICATIONS INC.

Timothy A. Boggs
Vice President — Public Affairs

July 7, 1988

Honorable Robert W. Kastenmeier
Chairman
Subcommittee on Courts, Civil Liberties
and the Administration of Justice
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman Bob

I have reviewed the July 6th Amendment in the Nature of a Substitute to H R. 2848, the Satellite Home Viewer Copyright Act of 1988. As one who has actively worked on this legislative project with you and your counsel, I am pleased to inform you of our support for this substitute I believe that this bill is in the interest of both Warner Bros , a major motion picture company, and Warner Cable Communications, our cable television division Most importantly, the bill establishes a reasonable public policy to resolve several of the troublesome issues involved.

I look forward to working with you on unresolved matters as the bill moves forward.

Sincerely,

Jim Boggs

Timothy A. Boggs

cc Members of the Subcommittee

1133 21st Street, N W , Suite 400, Washington, D C. 20036 202/223-8855
75 Rockefeller Plaza New York, New York 10019 212 484 8000

MOTION PICTURE ASSOCIATION
OF AMERICA INC
1600 EYE STREET, NORTHWEST
WASHINGTON D C 20006
(202) 293-1967

KATHY ZEBROWSKI
VICE PRESIDENT
FOR CONGRESSIONAL AFFAIRS
AND SPECIAL COUNSEL

August 12, 1988

The Honorable Robert Kastenmeier
2328 Rayburn House Office Building
Washington, DC 20515

Dear Congressman Kastenmeier

The Telecommunications Subcommittee staff recently requested MPAA's comments on H R 2848, the "Satellite Home Viewer Copyright Act of 1988". The attached letter is the MPAA response to that request

We have not yet heard any specific plans for action on the bill by the Energy and Commerce Committee. If the MPAA is asked to present testimony, the Association's position will continue to be support for the bill and suggestions for certain changes

Sincerely,

Kathy

cc Mike Remington

KZ/sr
Enclosure



MOTION PICTURE ASSOCIATION
OF AMERICA INC.
1600 EYE STREET NORTHWEST
WASHINGTON, D C 20006
(202) 293-1966

August 12, 1988

The Honorable Edward Markey
2133 Rayburn House Office Building
Washington, DC 20515-2107

Dear Congressman Markey

This letter responds to a request from Larry Irving, Senior Counsel for the Subcommittee on Telecommunications and Finance, for information on the Motion Picture Association's specific concerns regarding H.R. 2848, the "Satellite Home Viewer Copyright Act of 1988," recently referred to the Energy and Commerce Committee

MPAA generally supports H.R 2848 as reported by the House Judiciary Committee. The bill eliminates certain ambiguities in the copyright law regarding the scrambling and distribution of satellite-delivered "superstation" signals to home satellite dish owners, and strikes a reasonable balance among the interests of all affected parties.

MPAA believes that a handful of additional changes would help to clarify the intent of the bill and would eliminate certain undesirable consequences

1. MPAA believes that the bill should be expressly limited to distribution of C-band satellite retransmissions. When direct broadcast satellite service begins, it will be on Ku-band. Congress should not presuppose the needs of that medium, and should instead encourage DBS to acquire the programming it desires in the free marketplace, not pursuant to a statutory license.

2. MPAA encourages the restoration of a fair cap on the number of "superstations" qualifying for carriage under this bill. Before it was amended in full committee, the bill defined "superstations" [in §119 (d) (10)] as those secondarily transmitted for nationwide distribution prior to April 1, 1988, or those which are retransmitted to not less than 10 percent of all cable subscribers. Without some sort of cap, we are likely to see the proliferation of superstations. That is not consistent with the purpose of the bill: to facilitate a transition to a free marketplace. A fair cap should be reinserted in the bill.

contd.

3. MPAA believes that "distributors" of satellite-delivered superstations should not have a role in the negotiation of royalty rates for the 1992-94 period. The true stakeholders in such negotiations are copyright owners, whose works are being used, and satellite carriers, who are responsible for complying with the royalty and other requirements of the bill. Distributors have no direct stake in the setting of royalty rates (indeed, the rates they actually pay to satellite carriers will be determined by contract or tariff, not by these negotiations) nor can they be held liable under the bill for failure to remit royalties. Moreover, the class of distributors is potentially so large as to render negotiations unworkable To make the bill more simple and more fair, all references to "distributors" should be stricken from §§119 (c) (2), (3) and (4) of the bill.

4. MPAA believes the directive to the FCC to examine the feasibility" of syndicated exclusivity rules for home satellite dishes should be clarified The Commission, pursuant to Section 3 of the bill, must "determin[e] the feasibility" of imposing syndex rules, and "adopt[] such rules if [found] feasible." Congress should clarify that by "feasibility" it means "technological feasibility" -- i e , can syndex be accomplished using current (or soon-to-be-available) satellite technology. No other factors should enter into the analysis of "feasibility." Also, should the Commission initially decline to adopt syndex rules, it should be directed to revisit the issue upon a new showing that syndex may be "feasible " Finally, the phrase "private viewing" in Section 3 should be changed to "private home viewing" to be consistent with the rest of the bill.

5 MPAA urges Congress to close the potential loophole created by the definition of "satellite carrier". Under §110 (d) (7), only those satellite carriers "that use[] the facilities of a domestic satellite service licensed by the Federal Communications Commission" appear to be responsible for complying with the requirements of the bill Thus, it is conceivable that a carrier who chooses to retransmit signals via a Canadian or other geostationary satellite which casts a footprint over all or part of the U.S. could evade the bill's royalty and other obligations. This definition should be amended to cover carriers using satellites licensed by any government entity, domestic or foreign.

6. MPAA believes the Copyright Office should be given express authority to audit satellite carriers filing for statutory licenses. Absent audit authority, it will be extremely difficult to verify or challenge the subscriber counts and other

contd.

data submitted by satellite carriers. Section 119 (b) should be amended to require the Copyright Office to establish reasonable standards for auditing satellite carriers where good cause is shown.

Sincerely,

Kathy Zbrowski

cc. Larry Irving

KZ/sr

Satellite Broadcasting and Communications Association of America

Officers

President
Chuck Hewitt

Chairman
Hal Haley
Davis Antenna, Inc.

1st Vice Chairman
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United Video, Inc.

Ralph Warren
Wilson Supply Co.

John Schweizer
Winegard Co.

Staff

Vice President
Government Affairs/
General Counsel
Mark C. Ellison

Vice President
of Operations
Jerry Fischetto

July 29, 1988

The Hon Peter W. Rodino
Chairman
Committee on the Judiciary
2137 Rayburn HOB
Washington, D C 20515-6216

Re H R 2848

Dear Mr. Chairman

On July 7, the Subcommittee on Courts, Civil Liberties, and the Administration of Justice unanimously voted out and recommended for approval by the full Judiciary Committee H R 2848, the Satellite Home Viewer Copyright Act of 1988, as amended The SBCA supports passage of this important bill

More than two million American households rely upon satellite television for the delivery of programming It is vitally important to them and to the members of our association that the issue of whether or not independent and network superstations can be legally delivered to home satellite owners be resolved

On behalf of the SBCA members, which includes all entities delivering superstation via satellite, I would respectfully urge that this legislation be brought before your Committee at the earliest possible date

Thank you for attention and consideration

Sincerely,

Mark C. Ellison
Vice President
Government Affairs
and General Counsel

cc The Hon. Robert Kastenmeier

300 North Washington Street • Suite 208 • Alexandria, Virginia 22314
Phone (703) 549-6990 FAX (703) 549-7640

Satellite Broadcasting and Communications Association of America

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United Video, Inc.

Ralph Warren
Warren Supply Co.

John Schweizer
Winegard Co.

Staff

Vice President
Government Affairs/
General Counsel
Mark C. Ellison

Vice President
of Operations
Jerry Fischetto

September 30, 1988

The Hon. Strom Thurmond
United States Senate
SR-218
Washington, D C. 20510

Dear Senator

The Satellite Home Viewer Act of 1988 (H.R 2848) is now pending before the House with a floor vote expected on October 3 or 4, 1988. This bill accomplishes two very important objectives First, it creates a mechanism whereby home satellite viewers will be assured of continued access to network and independent broadcast signals Second, the severe problem of satellite signal theft is addressed through the inclusion of increased penalties under the Communications Act.

The importance and urgency of that legislation has increased dramatically in recent weeks due to a decision in the U S District Court in Atlanta That case involved the retransmission, via satellite, of network affiliate signals to home satellite viewers. In it, the judge held that existing law does not permit such delivery and, hence, is an infringement of copyright

There are more than two million households in this nation which cannot receive network programming from local affiliates. A large number of those Americans rely upon home satellite systems to receive that programming All of the networks have announced plans to encrypt their feeds and backhauls using scrambling systems which are incompatible with the system used by satellite home viewers If the decision of the Atlanta Court is upheld, millions of Americans stand to be deprived of access to network signals. (For your information, I have attached a state-by-state breakdown of home satellite households and superstation subscribers)

H R. 2848 resolves this problem and, further, answers any questions which may exist with respect to the home satellite delivery of independent superstations By creating a limited compulsory license with a six year duration, home satellite viewers are assured of access to programming, while balancing the interests of copyright holders

89-491 509

300 North Washington Street • Suite 208 • Alexandria Virginia 22314
Phone (703) 549-6990 FAX (703) 549 7640

As noted above, this legislation would also have a significant impact in our industry's efforts to control the unlawful descrambling of satellite subscription television. This problem threatens the existence of our industry and the severe criminal and civil sanctions imposed by H.R. 2848 will provide an extremely valuable tool in our campaign to bring this problem under control.

I am enclosing for your reference a summary of the bill.

It should be noted that H.R. 2848 enjoys very broad support in the communications industry. The networks, the motion picture industry, the cable industry, and, of course the satellite television industry are unanimous in their support of this bill. Independent broadcasters, while not actively supporting the measure are, in their own words, "willing to live with it." I am unaware of any opposition to this bill.

After several very difficult years, it now appears that the home satellite television industry is on the verge of recovery. That recovery will be short-lived, however, if our viewers are deprived of access to network and independent programming or if signal theft is not brought under control. Passage of H.R. 2848 by the Senate and the House is of vital importance. Your support of this bill as it moves to the Senate would be greatly appreciated.

Thank you.

Sincerely,

Mark C. Ellison
Vice President
Government Affairs and
General Counsel

cc: Cindy Blackburn

STATE	TOTAL HOUSEHOLDS WITH SATELLITE RECEIVE SYSTEMS AS OF JANUARY 1, 1988	TOTAL SATELLITE NETWORK AND INDEPENDENT SUBSCRIPTIONS
AK	4,000	1,663
AL	57,500	9,093
AR	42,500	4,297
AZ	34,000	8,180
CA	130,000	32,485
CO	35,000	8,377
CT	6,500	1,427
DC	500	210
DE	4,000	1,388
FL	84,000	20,147
GA	77,500	13,225
HI	2,000	297
IA	31,000	8,164
ID	15,000	3,257
IL	68,000	12,198
IN	60,000	11,364
KS	44,500	7,196
KY	66,000	7,790
LA	59,000	7,144
MA	9,000	2,118
MD	16,500	4,258
ME	9,000	2,700
MI	80,000	16,372
MN	31,500	7,136
MO	60,000	10,238
MS	50,500	6,683
MT	19,000	4,535
NC	76,000	17,728
ND	10,500	2,754
NE	21,500	7,309
NH	21,500	2,879
NJ	16,000	2,665
NM	20,500	3,790
NV	13,500	4,330
NY	89,000	21,688
OH	101,000	12,284
OK	46,500	5,869
OR	26,000	7,287
PA	51,000	12,725
RI	19,000	527
SC	27,500	9,863
SD	9,000	1,708
TN	79,000	12,599
TX	186,500	24,988
UT	16,000	10,619
VA	51,000	13,253
VT	9,000	3,857
WA	29,000	6,944
WI	45,000	11,188
WV	44,000	5,889
WY	13,500	2,947

SUMMARY OF PROVISIONS

H.R. 2848

THE SATELLITE HOME VIEWER ACT OF 1988

- Creates compulsory license for the retransmission of network and independent broadcast stations to home satellite viewers under following terms:
  - Six year license
  - Four years at set rate and two years at negotiated or arbitrated rate
  - Protects network affiliates by limiting service to "white areas" and protects independents by providing for FCC study on feasibility of applying syndicated exclusivity in market.
- Increases penalties for signal theft under Sec. 705 of Communications Act.
- Calls for FCC study of encryption technology to determine appropriateness of standards.

PEPPER & CORAZZINI

ATTORNEYS AT LAW

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TELECOPIER (202) 296 5572

April 27, 1987

HAND DELIVERED

The Honorable Robert W Kastenmeier
2328 Rayburn House Office Building
Washington, D.C 20515-4902

Dear Congressman Kastenmeier

Owing to the rapidly changing technological and business climate surrounding the non-cable use of Southern Satellite Systems, Inc.'s WTBS signal it has become imperative that Southern Satellite Systems, Inc take steps to ensure the security of its satellite transmission of WTBS. To this end Southern Satellite Systems, Inc commenced full-time scrambling of its satellite transmission three weeks ago As a result, we have received numerous inquiries from TVRO users and their suppliers. The enclosed is our standard response which I thought might be of interest to you

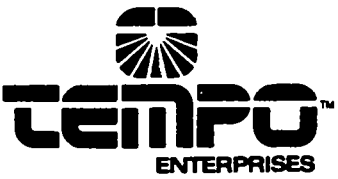
I would appreciate an opportunity to briefly discuss this matter with you at your convenience

Sincerely yours,

Robert F Corazzini
Counsel for Southern
Satellite Systems, Inc.

Enclosure

cc Michael J. Remmington, Esq.
Selman M Kremer



SELMAN M KREMER
EXECUTIVE VICE PRESIDENT
OPERATIONS

April 22, 1987

Mr Marty Lafferty
Turner Broadcasting Systems, Inc
1050 Techwood Drive, N W
Atlanta, GA 30318

Dear Marty

We are about to start the final stage in scrambling our WTBS, Channel 17 satellite transmission Address testing will commence in early May and is expected to develop into fulltime address scrambling by mid summer

Unfortunately, our intentions and desire to serve TVRO users can not be fullfilled at this time It is with great reluctance that I inform you of this fact and advise you that all TVRO users will experience an outage of WTBS reception during the test periods and a complete blackout when fulltime address scrambling is achieved

It has been TEMPO's intention to serve the non-cabled homes in the United States through the use of the TVRO backyard dish However TEMPO has consistently stated that in providing service to the TVRO user it would rely on Congress to clarify the Copyright Act in this regard It is now more than one year since we requested Congressional clarification and set our scrambling plans into motion and we are now in the fulltime fixed key mode of operation and must go on to test and complete the address mode This stage as you know is much more complex and will in itself, consume the next 3-4 months to complete

When we initiated our scrambling plans last Spring it was reasonable for us to assume that the copyright issue would have been satisfactorily dealt with by Congress The initial effort that gave us that hope failed to materialize in the last Congress

Although we are confident that a similar effort in the present Congress will meet with greater success, TEMPO has again decided not to expose itself to the constant threats of copyright suits by servicing the TVRO user without clarification on this issue from the Congress

Approximately 12,000 of our cable TV customers have scrambling units in place and our computer control system is nearly finished We and our customers have invested millions of dollars in this program, and we are thus now compelled to test out the system and complete our scrambling program

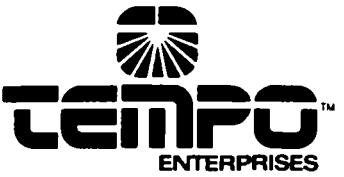
Please realize that our intentions were and still are to serve the TVRO user and that we are continuously evaluating the feasibility of that project However because of the presently threatened legal actions as regards potential liability under the Copyright Act we do not find ourselves in a position to service the TVRO user

Sincerely,

Selman M Kremer

rlg

cc Edward L Taylor
Robert F Corazzini
Terry McGuirk



April 18, 1988

The Honorable Robert Kastenmeier
2328 Rayburn HOB
Washington, D.C 20515

Re: Satellite Home Viewer
Copyright Act (H R 2848)

Dear Chairman Kastenmeier·

We have learned that the Subcommittee on Courts, Civil Liberties and the Administration of Justice of the House Committee on the Judiciary intends to hold a mark-up on the Satellite Home Viewer Copyright Act (H R 2848) on Wednesday of this week We are extremely delighted and pleased that this legislation will be moving forward

During the last two (2) months a great deal of the discussion has centered around the "fair price to TVRO subscribers" issue. To address this issue TEMPO proposes modifications to H R. 2848 as contained in the enclosed proposal

Under the enclosed proposal the superstation carriers must deal with all distributors and may not charge different TVRO subscriber distributors different prices This reflects our belief that when a cable operator is distributing the service to TVRO satellite home viewers that operator should be charged the same price as is charged the NRTC or any other TVRO distributor The proposal also requires the carrier to separately state the copyright royalty fee in billing its customers.

As you are aware the two governmental agencies that have recently studied this issue have both concluded that price regulation of service to home viewers per se is totally unnecessary in light of the competitive market-place that has

developed See FCC Second Report on access to scrambled services by home satellite dish owners, and Office of Management and Budget letter to Senator Ernest Hollings dated February 22, 1988 concerning S 889 These federal agencies after investigating the matter have concluded that home dish owners have access to satellite programming at fair prices comparable to or below those paid by cable subscribers

In closing, TEMPO urges the Subcommittee to preserve H R 2848 in its present form to the extent possible Specifically, it is respectfully requested that any anti-discrimination language be in the form and substance as reflected in the enclosed proposal

Respectfully submitted,

Robert F Corazzini
Director and Counsel to
TEMPO Enterprises Inc

cc The Hon. Rick Boucher
The Hon Benjamin Cardin
The Hon George Crockett
The Hon Henry J Hyde
The Hon Carlos J Moorhead
The Hon Patricia Schroeder
The Hon. Mike Synar
The Hon John Bryant
The Hon Howard Coble
The Hon Michael DeWine
The Hon Dan Lungren
The Hon Bruce Morrison
The Hon D. French Slaughter, Jr

Proposed §119. Limitations on exclusive rights. Secondary transmissions of superstations for private viewing

Subsection (4) should be amended as follows

"(4) Notwithstanding the provisions of clause (1) of this subsection, the willful or repeated secondary transmission to the public by a satellite carrier of a primary transmission made by a superstation and embodying a performance or display of a work is actionable as an act of infringement under section 501 and is fully subject to the remedies provided by sections 502 through 506, if the satellite carrier; (a) fails to make such superstation available to the public, including all distributors who qualify under reasonable financial and character criteria established by the satellite carrier, or (b) discriminates in the charges, other than by volume discounts, between distributors, including specifically cable systems when distributing the superstation to private viewing subscribers (but not when distributing the superstation to their cable subscribers) and other distributors to private viewing subscribers, or (c) willfully and deliberately fails to separately specify the copyright royalty fee required under this section in billing its customers for private viewing

Section 501 Infringement of Copyright should be amended as follows and new Subsection (e) added:

501(a) Anyone who violates any of the exclusive rights of the copyright owner as provided by sections 106 through 119, or who imports copies or phonorecords into the United States in violation of section 602, is an infringer of the copyright

501(e) For any secondary transmission of a superstation for private viewing that is actionable as an act of infringement pursuant to Section 119(a)(4) a qualified distributor to whom service has been refused or to whom a separate copyright charge has not been specified or against whom a discrimination has been made, or a member of the public to whom service has been refused or to whom a separate copyright charge has not been specified or against whom a discrimination has been made pursuant to Section 119(a)(4), shall have standing to sue

A New Section 511 is Added as Follows

511 Remedies for Refusal to Sell or Discrimination

Where an action is brought pursuant to section 119(a)(4) by a party identified in subsection (e) of section 501, the remedies provided by section 502 and 505, together with any actual damages suffered by such party as a result of the infringement, shall be available

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E. THEODORE MALLYCK
OF COUNSEL
FREDERICK W. FORD
1909 1986
TELECOPIER (202) 296 5572

July 23, 1987

The Hononrable R Kastenmeier
2328 Rayburn House Office Building
Washington, D C. 20515-4902

Dear Congressman Kastenmeier

As a follow up to our meeting with you this spring concerning Southern Satellite Systems' desire to make the WTBS carrier transmission available to satellite home viewers, Sel Kremer has asked me to forward to you the enclosed press release announcing Southern Satellite's plan for fully secured scrambling and service to the satellite home viewers. As indicated in the press release, service to home viewers will begin in early October. Tempo is still in the process of finalizing the details of the service offering.

As you know, all of the other superstations as well as a number of network affiliated stations have been available to the home viewer for a number of months. Southern has been subject to increasing demands by the home satellite market to make WTBS available, due in no small part to the availability of the other superstations. In order to maintain its competitive posture Southern Satellite has determined that it must go forward at the present time. However we wish to reiterate our complete and unqualified support for H.R. 2848 and continue to believe that only through the enactment of such legislation will the satellite home viewer market be able to develop fully. For this reason we sincerely appreciate all of your efforts in this regard and assure you that we will continue to work with your collegues in an effort to ensure broad support for that bill.

In the meantime should you have any questions concerning the enclosed announcement please feel free to call me.

Sincerely,

Bob Corazzini

Robert F. Corazzini
Counsel for Southern
Satellite Systems, Inc.

cc Mike Remmington
Selman M. Kremer

TEMPO ANNOUNCES ADDRESSABLE SCRAMBLING OF WTBS
AND SERVICE TO TVROs

Tulsa, Okla --- TEMPO Enterprises, Inc , (AMEX TPO), today announced that it will begin testing addressable scrambling of SuperStation WTBS this August TEMPO's addressable scrambling plans for this popular signal also include the initiation of service to the Television Receive Only (TVRO) market

According to Selman M Kremer, executive vice president of Operations for TEMPO, the Company has developed its scrambling plans slowly, as well as methodically, over the past two years Several key factors clearly indicate, however, that the time is now right for TEMPO to aggressively proceed with scrambling in the full addressable mode and implement its strategy for service to TVROs

"It has always been our intention to serve the TVRO marketplace with WTBS, however, from our standpoint it did not make sense until now Because General Instrument has taken positive measures to eliminate the tremendous backlog for both commercial and residential descrambling units, and because our own in-house data base is now fully loaded, tested and ready for operation, we can proceed, " Kremer explained

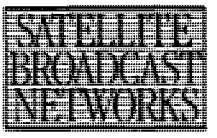
TEMPO also believes that Congress, through its recent TVRO hearings and the re-introduction of proposed copyright legislation, has strongly encouraged the delivery of cable programming, including superstation signals, to TVRO residential users.

TEMPO will commence testing its addressable scrambling system August 10 and plans to be in fully addressable scrambling mode October 5 Definitive schedules, outlining exact dates, times and the duration of each test will be forthcoming

TEMPO Enterprises, Inc , through its common carrier subsidiary Southern Satellite Systems, Inc (SSS), transmits SuperStation WTBS to approximately

15,000 cable systems serving more than 38 million cable subscribers throughout the United States SuperStation WTBS, the most widely used service of its kind, also reaches a potential 2 million additional subscribers who are home earth station users (TVROs)

Press Contact Sarina A Klaver 918/496-3200
Cable Operators with descrambling information/questions contact TEMPO Scrambling Department 918/496-0362



October 23, 1987

Honorable Robert Kastenmeier
2328 Rayburn House Office Building
South Capitol Street & Independence Avenue, SE
Washington, DC 20515

Dear Congressman Kastenmeier

We respectfully request that Satellite Broadcast Networks be allowed to testify at your November 12 hearings on H R 2848 for the reasons mentioned below

There are one million or more households in rural America that have no access to CBS, NBC or ABC other than from satellite They have no cable They have no acceptable signal over the air Like the rest of America, those households spend most of their viewing hours watching network news, sports and entertainment If H R 2848 fails, they could be without any source of news, educational and cultural programs their neighbors take for granted

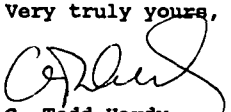
Despite the severity of that situation, not all members understand it yet Members on your subcommittee who have not yet chosen to support the Bill have told us that they want to hear more about the network situation before making up their minds They asked as recently as this week if my company would be represented at the November 12 hearings so that they could gain more insight into the most important element of the Bill - access to network programming in rural homes

We know that H R 2848 needs the support of your fellow subcommittee members now so that the Bill can begin to ride the wave of general acceptance into next year If the network issues are not discussed until next session, we respectfully submit that the Bill will linger in uncertainty until next year without widespread support, a possibly fatal circumstance

Secondly, resolution of the differences between the networks and SBN will be assisted by examination of the network element of the Bill this year. We stand ready to speak to each of the networks about an acceptable solution to their concerns now just as we have in the past Early examination of the network provision of the Bill in a public forum will mean that all concerned will have a chance to hear how Congress prefers to resolve this matter. That information can only help to bring the parties closer together. If that discussion does not take place until next year, talks may not have a chance to develop until very late in the process. Smooth passage of the Bill would again be in jeopardy.

We have but one goal in mind in asking to testify this year, to pass H R. 2848 as fast as possible. SBN has worked long and hard, probably more than any other, to pass the Bill. We will put the same energy behind our testimony in a positive and productive effort to highlight the need and support for your legislation We have confidence that the exchange of information that will flow from our appearance will bring more support to the Bill and a faster track for industry concensus

Very truly yours,



G. Todd Hardy
Executive Vice President

GTH:sc

CC: Mike Remington

NETLINK USA

Serving Americas Unserved Markets

March 16, 1988

Mr Robert Kastenmeier
Chairman
House Copyright Subcommittee
U S House of Representatives
House of Representatives
2328 Rayburn HOB
Washington, DC 20515

Dear Chairman Kastenmeier

Thank you for your sponsorship of the Satellite Home Viewer Copyright Act of 1987 As you know, H R 2848 is a finely tuned solution to a difficult problem In its present state, H R 2848 balances the interests of copyright owners, satellite carriers, cable operators, program packagers, MPAA, broadcasters, and most importantly, the rural home satellite television viewer This remarkable consensus demonstrates clearly that timely passage of the bill would serve the broad public interests

We deeply appreciate your efforts to support the Satellite Home Viewer Copyright Act of 1987, however, recent provisions regarding program pricing issues threaten the passage of H R 2848 Put simply, any program pricing language attached has the potential of killing the Satellite Home Viewer Copyright Act of 1987

H R 2848 was drafted with the simple objective of clarifying public policy that would allow for compliance with copyright law by carriers of satellite programming Program pricing provisions are divisive, are unrelated to the core of the bill, would raise questions of jurisdiction, and would introduce new opposition to this carefully crafted legislation

In his testimony, the Register of Copyright, Mr Ralph Oman recommended timely passage of the bill noting that, "A spirit of innovation tempered with caution has characterized the development of H R 2848 " I urge you to continue to use caution, and oppose any pricing amendments that would destroy the broad based support the bill currently has

Sincerely,

Brian McCauley

Brian McCauley
President

NETLINK USA

Serving America's Unserved Markets

October 20 1987

The Honorable Robert W Kastenmeier
2328 RHOB
Washington D C 20515

Dear Congressman Kastenmeier

Netlink USA deeply appreciates your sponsorship of H R 2848 As you know, Netlink is the only company that uplinks the 3 major networks, PBS, and 2 independent stations, one of which is a Fox Broadcasting affiliate You'll also recall we have an agreement with NBC to provide their signal to unserved homes as we announced at the press conference you hosted last summer To bring you up to date, we anticipate reaching a similar agreement with ABC prior to your hearing on H R 2848 and with CBS soon after

Because of these unique factors we would be happy to testify at the upcoming hearing in support of H R 2848 if you feel it would be desireable

I look forward to hearing from you

Sincerely,

Brian McCauley

Brian McCauley
Executive Vice President
and General Manager

BJM cl

The Register of Copyrights
of the
United States of America

Library of Congress
Department 100
Washington D C 20540

(202) 287-8350

September 30, 1988

The Honorable
Robert W Kastenmeier
Chairman
Subcommittee on Courts, Civil Liberties
and the Administration of Justice
Washington, D C 20515

Dear Chairman Kastenmeier

I welcome this opportunity to express Copyright Office support for H R 2848, the Satellite Home Viewer Copyright Act of 1988, as reported by the House Committee on the Judiciary on August 18, 1988, and as amended by the Subcommittee on Telecommunications and Finance of the House Committee on Energy and Commerce on September 23, 1988 This bill would create a temporary statutory license for satellite carriers that retransmit the signals of superstations and network stations for private home viewing by earth station owners

H R 2848 assures that copyright owners receive adequate compensation for public performance of their works by satellite carriers and also assures reasonable access to the programming for the benefit of home earth station owners The Copyright Office supports the public policy objectives of the bill Copyright law should grant authors and copyright claimants rights that assure compensation in order to encourage creation and dissemination of works The bill reflects balanced copyright policies satellite carriers pay royalties for their use of copyrighted programming, home dish owners gain access to such programming Without new copyright legislation, scrambling of signals may impede access The bill most importantly encourages the development of voluntary licensing structures

The bill, as reported by the House Committee on Energy and Commerce, would amend the Communications Act of 1934 to require that the Federal Communications Commission investigate whether use of a universal encryption standard should be required of satellite carriers, and to impose various remedies under the Communications Act upon individuals who intercept satellite cable programming in violation of that Act, or who knowingly manufacture or distribute equipment designed to assist such unauthorized interception of programming The Copyright Office has no objection to the amendments to H R 2848 reported by the Committee on Energy and Commerce

The Copyright Office concludes that passage of the bill would serve the public interest and resolve an important copyright policy issue the copyright liability of satellite carriers

Sincerely,

Ralph [illegible]man
Register of Copyrights



PRESTON R PADDEN
President

February 9, 1988

The Honorable Robert W. Kastenmeier
Chairman
Subcommittee on Courts, Civil Liberties
and Administration of Justice
Committee on the Judiciary
U.S. House of Representatives
2328 Rayburn Building
Washington, DC 20515

Re: H.R. 2848

Dear Mr. Chairman.

The attached letter from WTVZ-TV Norfolk, VA supplements the material that we have provided to the subcommittee regarding the injury suffered by local stations when their exclusive program contracts are violated by government conferred compulsory licenses. It is interesting to note that in the Norfolk example, both of the offending distant signals fully support the right of local stations to enforce their exclusive program contracts.

Obviously, we need to strengthen the recognition of our program contracts by reining in the cable compulsory license.

Best regards,

Preston R. Padden

PRP:g

Attachment

WTVZ-TV
NORFOLK
900 GRANBY STREET
NORFOLK VA 23510
804-622-3333
PENINSULA 804-245-3333

February 4, 1988

Mr Preston Padden
President, INTV
1200 Eighteenth Street
Washington, D C 20036

Dear Preston

I noted your promise to supply the House Committee with data that demonstrates the irreparable harm being done by the importation of super stations

It so happens that Norfolk is an ideal demonstration of the audiences ($) being siphoned away from Independents by the duplication of the same program by imported stations

Using the November 1987 ARB, we obtained an AID run on ADI kids 2-11 for the 3 00-5 00pm time period The following are the results

M-F			ADI		ADI
Time	Program	Station	Rating k 2-11	Station	Rating k 2-11
4 30p	Duck Tails	WTVZ	4 2	WTTG	1 7
4 00p	Real Ghostbusters	WTVZ	4 5	WTTG	1 9
3 30p	Smurfs	WTVZ	1 3	WDCA	0 4
4 30p	Jetsons	WYAH	3 5	WDCA	1 0
5 00p	Brady Bunch	WYAH	5 9	WDCA	1 6

WTTG Ducktails reduces WTVZ audience by 40 4%
WTTG Real Ghostbusters reduces WTVZ Audience by 42 2%
WDCA Smurfs reduces WTVZ audience by 30 7%
WDCA Jetsons reduces WYAH audience by 28 5%
WDCA Brady Bunch reduces WYAH audience by 27 1%

If you feel it appropriate, I will obtain a similar AID run on 7 30-8 00pm where WTBS and WTVZ both run Sanford and Son

Further, it is interesting to note that WTVZ airs a total of 25 half-hours of weekday syndicated programming (The only non-syndicated programming between 6 00am and 12 30am is paid religious from 10 00am-12 00noon, movie 12noon-2 00pm, and our prime movie 8 00-10 00pm)

Mr Preston Padden
Page Two

On an absolute basis 23 of the half hours we program are duplicated by cable imported superstations everyday in 58% of the households in our market That is 92% of our syndicated product Syndication represents 77% of WTVZ's investment in programming Program costs are 52% of our total operating budget in 1988 If Congress wants to see damage, we have it

Regards,

Charles A McFadden
Vice-President
General Manger

CAM/exh

cc Tim McDonald
John Trinder
Kathy Baske



NEW INDEPENDENT MARKETS

1981		1982		1983		1984		1985		1986		1987	
38	Raleigh	41	Grand Rapids	55	Little Rock	33	Columbus, OH	53	Shreveport	67	Syracuse	179	Biloxi-Gulfport
52	Tulsa	43	Charleston-Huntington	60	Knoxville	42	Providence	85	Flint-Saginaw	69	Portland, ME	186	Eureka-Arcata, CA
62	Albuquerque	47	Birmingham	66	Des Moines	48	Dayton	58	Scranton	70	Omaha	195	Hagerstown
63	Richmond	51	Albany-Schenectady-Troy	75	Paducah	59	Wichita	65	Toledo	73	Roanoke-Lynchburg (3 New Stations)	204	Ottumwa
87	Columbia, SC	56	West Palm Beach	79	Austin	85	Jackson, MS	74	Davenport	76	Lexington, KY		
110	Salinas	57	Mobile	83	Springfield, MO	90	Lincoln-Hastings	86	Tri Cities	106	Madison, WI		
125	Reno	78	Spokane	88	Evansville	187	Tuscaloosa	89	Huntsville	116	Monroe, LA		
136	Boise	100	Peoria	102	Fargo			99	Colorado Sprgs	134	LaCrosse, WI		
141	Lubbock	100	Lansing	115	Columbus, GA			106	Charleston, SC	143	Erie, PA		
		118	Amarillo	170	Gainsville			107	Fort Myers	143	Odessa, TX		
		150	Albany, GA	192	San Angelo			108	Savannah	153	Columbia-Jefferson City		
		171	Lake Charles	196	Bowling Green			126	Wichita Falls	158	Utica		
					Anchorage			190	Jackson, TN		Hilo, HI		
9	Markets	12	Markets	13	Markets	7	Markets	13	Markets	13	Markets	4	Markets

Note: Market Rankings - ADI's (1985-1986)



ASSOCIATION OF INDEPENDENT TELEVISION STATIONS INC 1200 EIGHTEENTH ST N W WASHINGTON D C 20036 [202] 887 1970

February 2, 1988

The Honorable Robert W Kastenmeier
Chairman
Subcommittee on Courts, Civil Liberties
and the Administration of Justice
Committee on the Judiciary
U S House of Representatives
2328 Rayburn House Office Building
Washington, DC 20515

Re H R 2848

Dear Mr Chairman

In 1976, Congress granted cable systems a compulsory license to exhibit distant television stations but, the FCC's network non-duplication and syndicated exclusivity rules prevented that license from superseding and abrogating the exclusive program contracts of local stations In 1980, the FCC repealed its syndicated program rule but retained its network rule As a result, today, cable systems are free to import distant signals that duplicate the syndicated programs -- but not the network programs -- of local television stations Correcting this indefensible regulatory discrimination is a high priority for our associatior

The FCC currently is conducting a rulemaking in which it is considering the reinstatement of its syndicated exclusivity rule INTV has submitted voluminous data in that proceeding documenting the damage suffered by local stations when their program contracts are abrogated by the cable compulsory license Portions of that data, labeled Appendix B, Appendix C and Appendix D are attached to this letter

Because all Independent stations purchase their programs from the same finite pool of available shows, extensive duplication occurs when an Independent is imported from its local market into a distant market Appendix B lists 682 instances where syndicated programs on 34 typical INTV member stations are duplicated on distant signals imported via the cable compulsory license In the absence of a syndicated exclusivity rule, the local Independent stations are powerless to enforce their exclusive license agreements for these programs As a result, the local Independent station loses audience

ratings to the distant station even though viewers are watching programs for which the local station has purchased exclusive licenses. The analysis in Appendix B shows that the ratings lost to the distant signal often represent a significant portion of the local station's audience

Appendix C consists of an attempt to estimate the financial impact of the audience losses due to distant signal importation on cable That analysis, conducted by the Butterfield Communications Group of Cambridge, MA, concludes that "independent television stations suffer substantial economic injury " This injury will be exacerbated by the loss of the FCC's must-carry rule Now, even though a local station purchases exclusive local rights to a program, cable operators can deny carriage of that local station and import the same program on a distant signal.

Appendix D (a Washington Post story entitled "No NFL for Channels 5 or 20"), demonstrates another perverse effect of compulsory licensing In Washington, DC, Channels 5 and 20 were denied the opportunity to bid for the local broadcast rights to a Redskins-Dolphins game because their signals are imported by cable into other markets -- a phenomenon over which the stations have no control and a phenomenon that they are powerless to stop The cable network, ESPN, complained that a local license to Channels 5 or 20 would undermine ESPN's exclusivity in the markets where those stations are imported by cable On many other occasions cable interests have expressed their recognition of the importance of program exclusivity -- at least insofar as the cable industry's proprietary programming is concerned

INTV, NAB, the networks and MPAA are all working hard to seek the re-adoption of the FCC's syndicated exclusivity rule and to secure improvements in the network non-duplication rule H.R 2848 moves in the opposite direction by expanding compulsory licensing to the satellite dish market without any mechanism to honor and respect the exclusive program licenses purchased by local stations

The tragedy is that it is not necessary to abrogate local station program agreements in order to bring television service to consumers not served by terrestrial broadcasting It is possible to craft a new statutory license applicable only to consumers who reside in so-called white areas (or even white pockets), and/or a statutory license that yields in the face of a conflict with licenses purchased in the marketplace The Independent stations would be happy to assist, in a flexible and constructive way, in the drafting of such a bill

Unfortunately, some or all of the three commercial television networks have chosen another course Some network representatives have proposed amendments that would recognize and honor local station contracts for network programs but not for syndicated programs The net effect of these amendments would be, (1) to discourage affiliate stations from choosing to pre-empt their network by exhibiting non-network programs, and, (2) to bestow a copyright preference on local network affiliate stations to the disadvantage of local Independent stations The network papers argue that this blatant discrimination is warranted because the networks allegedly are "special"

Simply stated, there is no copyright cognizable distinction that can or should be made between a local station contract for a network program and a local station contract for a program from some other source The Independent stations simply cannot sit by and acquiesce in legislation that stamps us as second class citizens for copyright purposes Moreover, from a Communications Act perspective, the amendments proposed by the networks would be grossly anti-competitive The FCC and the Congress have spent years attempting to encourage and stimulate non-network sources of television programming Granting a copyright preference to network program contracts would have the opposite effect

If any group of stations is to be accorded some special copyright accommodation, it should be the Independent stations The Independents face numerous "special" challenges compared to the relatively advantaged existence of network stations For the most part, the Independent stations struggle along on UHF channels, while the affiliates cruise through life in the VHF band Affiliates are fed a ready made program schedule by the network The Independent must purchase or produce every single minute of its daily program schedule For this reason, the Independents are the stations that have suffered the most from the recent dramatic increases in the cost of syndicated television programs Accordingly, the Independents are the stations most in need of having their program contracts honored and respected by our copyright laws

Despite these obvious grounds for seeking some "special" accommodation, the Independents seek only equal treatment INTV strongly supports the right of local network affiliates to have all of their program contracts honored and respected by our copyright laws We would hope that they would display the same attitude toward the local Independent stations in their markets

Before you vote for any language that discriminates against Independent stations, or which accords "special" treatment to network

programs, please think about the local stations that serve your Congressional District Do you really think that our copyright laws should honor and respect the program contracts of WISC-TV (Channel 3), WMTV (Channel 15) and WKOW-TV (Channel 27) but not the program contracts of WMSN-TV (Channel 47)? Wouldn't it be better to work together on a bill that recognized and accommodated the legitimate interests of all parties?

We support the goal of bringing television service to unserved households However, in our view, any statutory license for the satellite industry must

1) be limited to unserved areas with respect to both network and Independent stations, or

2) include syndicated exclusivity and network non-duplication provisions, or

3) include a provision requiring carriers to secure the affirmative consent of any station before its signal is taken and imported into other markets (the consenting station having first secured the rights necessary to grant such consent)

Mr Chairman, we respectfully request that this letter, and the attachments hereto, be made a part of the official record of the hearings on H R 2848

Very truly yours,

Preston R Padden
President

PRP g

Attachments

cc Mr Gary DeHaven, WISC-TV
Ms Laurie Leonard, WMTV
Mr Thomas Hartman, WKOW-TV
Mr Bill Schereck, WMSN-TV

APPENDIX B

ANALYSIS OF VIEWERSHIP TO PROGRAMMING DUPLICATED BY IMPORTED SIGNALS

Susan M Rynn
Director, Research
INTV

As the INTV Research Director, my goal with respect to the syndicated exclusivity issue has been to determine the extent to which locally owned programming that is duplicated by cable-imported distant signals is viewed on those distant signals, thus diminishing the potential audience of the home market station While it is necessary to analyze a specific point in time in order to quantify that viewership, it is also my intention to identify trends through this research which will help us determine probable future market conditions assuming the absence of syndicated exclusivity

Four slightly different approaches were used in my analysis based on February, 1987 Nielsen viewing data First, I traced programming airing on three superstations and one regionally carried independent station from approximately 3-8 PM to twenty-seven markets around the country ("Phase I") Second, focusing on the three markets singled out by NCTA in its May 1987 "Position Paper on Syndicated Exclusivity", I identified syndicated programs across dayparts duplicated by the two most widely carried superstations ("Phase II") Third, I analyzed numerous syndicated programs duplicated by any imported signal (superstation, regional independent or affiliate) in four varied markets ("Phase III") Finally, the fourth

phase of my analysis examined feature film title duplication ("Phase 4")

For each phase of this research, the ratings for the distant signal in both cable and total television households were obtained through special runs ordered from the A C. Nielsen Co The ratings reflect the percentage of all television households (or cable households) in the market that viewed the program on the imported signal It is important to consider ratings in cable households since those are the households in which local and imported signal program duplication occurs Also, assuming that cable penetration increases, that rating more nearly predicts the future total television household rating Ratings are expressed in the standard format used in the quarterly local market television rating books

Phase I 27-Market Audience Loss Profile

The 3-8 PM analysis included WGN (Chicago), WTBS (Atlanta), WOR (New York), WPIX (New York) and WSBK (Boston) Viewing levels for duplicated programs on these distant signals ranged from 1-4 rating points in total television households and 1-6 rating points in cable households In many cases, the duplicated program earned a one rating on the distant signal Even one rating point has a significant effect in light of the fact that average independent daypart ratings in several markets reach only the 1 to 3 rating point level In other

instances, the duplicate program distant signal rating was significantly higher than one rating point

For example, WGN's "Facts of Life" earned 2 rating points in all television households and 4 rating points in cable households in San Antonio Local independents in that market averaged a 5 total television household rating in early fringe The distant signal program rating, therefore, represented 40% of the home station's average time period rating In Amarillo, WGN's "Facts of Life" earned 3 and 4 rating points in total television and cable households, respectively This data clearly demonstrates that duplicate programs on distant signals have a significant impact in many small to medium-sized markets

WTBS presents an example of distant signal ratings' impact in a large market Cleveland is the 10th ranked Nielsen Designated Market Area and was 46% cabled in February, 1987 A local station carried "Scooby Doo", also brought into the market on WTBS Despite below average cable penetration and relatively mature independent stations, WTBS' "Scooby Doo" still siphoned one rating point in total TV households and 2 rating points in cable households away from the local stations WTBS had an even stronger impact in smaller markets like Tri-Cities (Bristol, VA-Kingsport-Johnson City, TN) and Lexington, Ky, where newer independents are struggling to carve out a market niche In Tri-Cities, duplicated airings of "Gilligan's Island" and "Andy Griffith" earned 4 and 5 rating points each in television and cable households In Lexington,

"The Flintstones" on WTBS averaged three rating points, one rating point higher than the local independent's average in the weekday afternoon children's programming daypart

WWOR and WPIX enjoy significant regional out-of-market carriage Their impact in nearby markets is considerable In Johnstown-Altoona ten programs were duplicated by the two superstations and each drew one or two rating points away from the local stations In Rochester, seven programs duplicated by WWOR and WTBS pulled ratings from the local station that also owns the programs WWOR's "Mama's Family" earned a 2 and 3 rating in Albany total television and cable households Home market independents averaged the same rating in the early fringe daypart

WSBK's "Mama's Family" also aired in Albany and pulled yet another rating point out of the market Here, two superstations and a regional independent are all in direct competition for viewers to programs for which an Albany station purchased "exclusive" rights in the market In Hartford, WSBK claimed one rating point for each of four programs likely to air in the early fringe daypart Four more programs were duplicated in Portland, ME Each drew a one rating in television households and two programs doubled that rating in cable households

Set forth below is a detailed listing of the duplicate program distant signal audience losses documented in Phase I of my research

SYNDEX
DUPLICATED PROGRAMMING
ANALYSIS

HOME MARKET	MARKET RANK	% CABLE PENE	IMPORTED SIGNAL	DUPLICATED PROGRAM	IMPORTED SIGNAL RTG IN HOME MKT CABLE HH	IMPORTED SIGNAL RTG IN HOME MKT TOTAL HH
Omaha	70	54 1	WGN	Facts of Life	2	1
			WGN	Transformers	1	1
			WGN	G I Joe	1	1
Rockford	I15	57 8	WGN	The Jeffersons	2	1
Champaign/ Springfield	75	62 4	WGN	Transformers	1	1
			WGN	G I Joe	2	1
Peoria	104	57 5	WGN	Transformers	I	1
			WGN	G I Joe	1	1
Rochester	69	54 2	WPIX	G I Joe	1	1
			WPIX	Transformers	1	1
			WOR	Magnum	2	1
			WOR	Entertainment Tonight	1	1
			WOR	The New Gidget	2	1
			WOR	It's A Living	1	1
			WOR	Mama's Family	2	I
Johnstown/ Altoona	85	70 7				
			WPIX	Smurfs	1	1
			WPIX	Ghostbusters	1	1
			WPIX	G I Joe	1	1
			WPIX	Transformers	1	1
			WPIX	What A Country	2	1
			WOR	Bosom Buddies	2	1
			WOR	The New Gidget	1	1
			WOR	Mama's Family	2	2
			WOR	It's A Living	1	1
Albany, NY	52	59 9	WPIX	Smurfs	1	1
			WPIX	G I Joe	1	1
			WPIX	Gimme A Break	3	2
			WOR	It's A Living	2	1
			WOR	Mama's Family	3	2
			WSBK	Hogan's Heroes	2	1
			WSBK	It's A Living	1	1
			SBK	Mama's Family	1	1

HOME MARKET	MARKET RANK	% CABLE PENE	IMPORTED SIGNAL	DUPLICATED PROGRAM	IMPORTED SIGNAL RTG IN HOME MKT CABLE HH	IMPORTED SIGNAL RTG IN HOME MKT TOTAL HH
Hartford	24	70 3	WSBK	MASH	1	1
			WSBK	Barney Miller	1	1
			WSBK	Hogan's Heroes	1	1
			WSBK	Mama's Family	1	1
Portland, ME	80	55 0	WSBK	She-RA	1	1
			WSBK	He Man	1	1
			WSBK	Ghostbusters	2	1
			WSBK	One Big Family	2	1
San Antonio	44	62 9	WGN	Facts of Life	4	2
			WGN	Transformers	2	1
			WGN	G I Joe	2	1
			WTBS	Scooby Doo	2	1
			WTBS	Andy Griffith	3	2
			WTBS	Honeymooners	3	2
Amarillo	120	65 5	WGN	Facts of Life	4	3
			WGN	Transformers	2	1
			WGN	WKRP In Cincinnati	2	2
			WGN	G I Joe	3	2
			WTBS	Scooby Doo	4	3
			WTBS	Flintstones	6	4
Odessa	139	68 6	WGN	Transformers	2	1
			WGN	G I Joe	1	1
			WTBS	Flintstones	2	2
Richmond	54	45 2	WTBS	Beverly Hillbillies	1	1
				Andy Griffith	1	1
				Sanford & Son	3	1
Tulsa	53	48 0	WTBS	Flintstones	1	1
Cleveland	10	46 0	WTBS	Tom & Jerry	1	*
			WTBS	Scooby Doo	2	1
Anchorage	157	36 2	WTBS	Gilligan's Island	2	1
			WTBS	Andy Griffith	3	1
			WTBS	Honeymooners	1	1

* Below one rating point

HOME MARKET	MARKET RANK	% CABLE PENE	IMPORTED SIGNAL	DUPLICATED PROGRAM	IMPORTED SIGNAL RTG IN HOME MKT CABLE HH	IMPORTED SIGNAL RTG IN HOME MKT TOTAL HH
Knoxville	60	48 6	WTBS	Scooby Doo	3	2
Mobile	59	53 6	WTBS	Andy Griffith	2	1
				Tom & Jerry	1	1
Grand Rapids	40	51 1	WTBS	Scooby	2	1
				Gilligan's Island	2	1
Oklahoma City	36	59 0	WTBS	Scooby Doo	1	1
				Flintstones	2	1
Albany, GA	153	53 5	WTBS	Scooby Doo	2	1
				Flintstones	2	1
				Andy Griffith	4	2
Tri-Cities (VA-TN)	87	55 5	WTBS	Scooby Doo	3	2
				Flintstones	3	2
				Gilligan's Island	5	4
				Andy Griffith	5	4
Chattanooga	82	50 7	WTBS	Flintstones	2	1
Gainesville	170	58 1	WTBS	Andy Griffith	4	2
Lexington, KY	79	60 7	WTBS	Flintstones	3	3
San Angelo	195	86 0	WTBS	Scooby Doo	5	4
Birmingham	39	49 0	WTBS	Flintstones	2	1
				Andy Griffith	3	1

Source A C Nielsen, February, 1987

Phase II Three-Market Superstation Profile

WTBS and WGN, the most widely carried superstations, warrant further investigation The second part of my analysis focused on programming duplicated by those stations in three additional markets To avoid any possible inference that I have selectively used unrepresentative markets, I chose three markets cited in the NCTA position paper on syndicated exclusivity, i e , Indianapolis, Cincinnati and Milwaukee

Indianapolis is the market for which the NCTA listed one cable system's 199 hours of duplicated programming in support of the theory that syndicated exclusivity would present tedious work for cable operators I examined 22 instances of programming duplicated by WTBS and WGN in order to measure the harmful impact on stations licensed to serve Indianapolis

Cincinnati and Milwaukee were cited by the NCTA as markets where local stations have "thrived" despite importation of distant signals both before and since the repeal of syndicated exclusivity Despite the fact that these markets have below average cable penetration and mature independents that have been on the air for well over twenty years, ratings were drawn out of the market by duplicative programming on WTBS and WGN While Phase I of my analysis indicates that smaller, heavily cabled markets are more strongly impacted by WGN and WTBS, it is important to note that harm is also done in markets such as Indianapolis, Cincinnati and Milwaukee

In Indianapolis, another example of dual duplication emerged "Andy Griffith" was duplicated by both WGN and WTBS Together the duplicative telecasts earned two rating points in total television households and three in cable households Most of the other duplicated programs each pulled a total television household rating point out of the market Half of those averaged two rating points in cable households In the area of children's programming, those ratings were 50% to 100% of the ratings earned by the local independents WGN's "WKRP in Cincinnati" did the most damage in the market, pulling a two rating in television households and a three in cable households WKRP's rating on WGN was about 30% of WTTV Indianapolis' average rating in early fringe. WTTV is an independent that went on the air in 1949.

WGN and WTBS duplicated at least twenty-nine programs owned by Cincinnati stations In most instances, the imported signal telecasts earned a one rating in television and/or cable households WXIX, the local independent which signed on in 1968, has strong daypart ratings. Even though WXIX's afternoon kids' block averaged a five rating, duplicated kids' shows pulled ratings out of the market. Again, WTBS and WGN both duplicate "Andy Griffith". Four of the programs duplicated by WTBS earned two rating points in cable households

The situation in Milwaukee is similar to that in Cincinnati I identified 23 programs duplicated by WGN and WTBS "Andy Griffith" is also owned by the local independent

Together, WTBS and WGN achieved two television household and three cable household ratings with the program. With relatively low cable penetration of 42 1%, some duplicated programs achieved less than a one rating in total television households, but did pull one rating in cable households where they compete with the local stations WGN's "Barney Miller" had quite an impact, drawing three rating points in cable households and two in television households Detail for Indianapolis, Cincinnati and Milwaukee follow

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HOME MARKET	MARKET RANK	% CABLE PENE	IMPORTED SIGNAL	DUPLICATED PROGRAM	IMPORTED SIGNAL RTG IN HOME MKT CABLE HH	IMPORTED SIGNAL RTG IN HOME MKT TOTAL HH
Indianapolis	23	51 8	WGN	Andy Griffith	1	*
				Barney Miller	2	1
				Dick Van Dyke	1	*
				Facts of Life	1	1
				GI Joe	1	1
				The Jeffersons	2	1
				Mask	1	*
				Smurfs	1	1
				Soul Train	2	1
				Transformers	1	1
				The Twilight Zone	1	*
				WKRP in Cincinnati	3	2
			WTBS	Andy Griffith	2	1
				Beverly Hillbillies	1	1
				Bewitched	1	1
				Flintstones	2	1
				Gilligan's Island	2	1
				Honeymooners	2	1
				I Love Lucy	1	1
				Perry Mason	1	1
				Sanford & Son	2	1
				Scooby Doo	2	1

*Below one Rating Point

Source A C Nielson, Feb '87

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HOME MARKET	MARKET RANK	% CABLE PENE	IMPORTED SIGNAL	DUPLICATED PROGRAM	IMPORTED SIGNAL RTG IN HOME MKT CABLE HH	IMPORTED SIGNAL RTG IN HOME MKT TOTAL HH
Cincinnati	30	47 4	WGN	Andy Griffith	1	*
				At The Movies	1	*
				Barney Miller	1	1
				Charles in Charge	1	1
				GI Joe	1	*
				It's A Living	1	*
				JEM	1	*
				Leave It To Beaver	1	*
				Lifestyles of the Rich & Famous	1	*
				Love Boat	1	1
				One Big Family	1	*
				Puttin' on the Hits	1	1
				Soul Train	1	1
				Tales from the Darkside	1	*
				The Jeffersons	1	1
				Transformers	1	1
				The Twilight Zone	1	*
				Wild Kingdom	1	*
			WTBS	Andy Griffith	2	1
				Beverly Hillbillies	2	1
				Bewitched	1	1
				I Dream of Jeannie	1	1
				The Flintstones	2	1
				The Honeymooners	2	1
				I Love Lucy	1	1
				Perry Mason	1	1
				Scooby Doo	1	1

*Below one rating point

Source A C Nielsen, Feb '87

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DUPLICATED PROGRAMMING
ANALYSIS

HOME MARKET	MARKET RANK	% CABLE PENE	IMPORTED SIGNAL	DUPLICATED PROGRAM	IMPORTED SIGNAL RTG IN HOME MKT CABLE HH	IMPORTED SIGNAL RTG IN HOME MKT TOTAL HH
Milwaukee	29	42 1	WGN	Andy Griffith	2	1
				Action Theatre	1	*
				Barney Miller	3	2
				Charles in Charge	1	1
				Dick Van Dyke	1	1
				Facts of Life	2	1
				Ghostbusters	1	*
				GI Joe	1	*
				Heathcliff	1	*
				Hogan's Heroes	1	*
				It's A Living	1	*
				Leave It To Beaver	2	1
				Lifestyles of Rich & Famous	1	1
				Odd Couple	1	1
				Rawhide	2	1
				Smurfs	1	*
				Twilight Zone	1	*
				Wild, Wild West	1	*
			WTBS	Andy Griffith	1	1
				Bewitched	1	*
				Flintstones	1	*
				Perry Mason	2	1
				Scooby Doo	1	*

*Below one rating point

Source A C Nielsen, '87

Phase III 4-Market Multi-Source Duplication Profile

The next phase of my analysis involved four markets -- San Diego, Reno, Roanoke (VA) and Fort Wayne (IN) -- from which I extracted syndicated programs duplicated by several sources including superstations and out-of-market independents and affiliates These markets illustrate the far-reaching effect of several sources chipping away at local market audiences for specific programs In San Diego, five distant signals duplicated locally owned programming; in Reno, four distant signals, in Roanoke six distant signals, and in Fort Wayne, three distant signals

San Diego-owned programming is duplicated by one superstation (WTBS), three out-of-market independents (KTTV, KTLA, and KCOP) and an out-of-market affiliate (KNBC) Generally, most duplicated programs drew one rating point in television and cable households A number of individual programs earned considerably higher ratings In fact, with the exception of KNBC, each of the distant signals duplicated at least one program that earned two or more rating points in television households and even more in cable households One of KTTV's telecasts of "MASH" drained four full rating points out of television households and six rating points out of cable households San Diego's two more mature independents averaged only three rating points in the important early fringe daypart WTBS' "Gunsmoke" earned three cable and two total television rating points; KTLA's "Magnum" earned four and three ratings

Three of KCOP's duplicative programs drew two ratings in each household category "Wheel of Fortune", the number one rated syndicated program is duplicated by KCOP which draws three television and four cable rating points out of the market KNBC's duplicative programming illustrates that syndicated fare duplicated by imported affiliates can also have an impact In total, all of the duplicated programs add up to 69 total television household and 90 cable household rating points in San Diego Those figures do not even take into account the fact that many of those programs run stripped and earn up to twenty times their average rating over an audience measurement sweep period.

Local stations in Reno compete for program specific audience with one superstation (WTBS), two distant independents (KTVU and KTXL) and one distant affiliate KCRA. Of the twenty-seven duplicated programs analyzed, more than half achieved one rating point in total television households and often achieved a two rating in cable households In this market, dual duplication of "Andy Griffith" pulled three and five ratings in television and cable households, or one half of the early fringe average for KAME, the local independent KCRA's 'Mama's Family" also drew a three television household rating Six of the programs duplicated by KTXL earned two ratings in television households "Facts of Life" earned a four in cable households, KTXL's highest cable rating for a duplicated

program Reno's total for duplicated program averages was 34 television household and 50 cable household ratings

Roanoke's local stations face audience competition for programs they own from two superstations (WTBS and WGN), one imported independent (WTTG, Washington, D C) and three imported affiliates (WFMY, WXII and WGHP) The least significantly viewed duplicated programs aired on WGN All 12 of those I found did achieve at least one rating point in cable homes Roanoke's independents signed on in 1986 and each earned a one rating in important kids' dayparts and in early fringe in February, 1987 Clearly, severe program duplication increases the difficulty of establishing strong ratings Some programs are repeatedly duplicated and viewed on all stations "Andy Griffith" aired on three imported signals for a total of five television household and eight cable household rating points "Bewitched", "The Flintstones" and "Three's Company' were each duplicated twice WTTG's "MASH" received two television household and three cable household rating points Five WTBS duplicated programs each earned two rating points in television households Four of them doubled that rating in cable households, and the fifth pulled a three cable household rating Each of the three imported affiliate stations drew one to two television and one to three cable household ratings out of the market The grand total for average duplicated program ratings in Roanoke was 50 television household and 86 cable household rating points

Fort Wayne is a small market with relatively low cable penetration and an independent that has been on the air for ten years and maintains healthy rating levels Duplicated programs on WTBS, WGN and WTTV, an imported independent, all siphon ratings away from the local independent and from WANE, a local affiliate In my analysis, fifteen programs duplicated by distant signals earned a combined average rating of nine total household and 25 cable household points Several programs in this market were twice duplicated -- "Andy Griffith", "Facts of Life", "G I. Joe" and "Leave It To Beaver" "Facts of Life" on WGN and WTTV siphoned two total television household and three cable household rating points away from the local station carrying the program. Dual duplication of "G I Joe" pulled one television household and four cable household rating points out of the market The most viewed program duplicated by WTTV was "Mama's Family", which drew one and two rating points in television and cable households Attached is market detail for each of four markets included in the third stage of my analysis

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HOME MARKET	MARKET RANK	% CABLE PENE	IMPORTED SIGNAL	DUPLICATED PROGRAM	IMPORTED SIGNAL RTG IN HOME MKT CABLE HH	IMPORTED SIGNAL RTG IN HOME MKT TOTAL HH
San Diego	26	67 1	WTBS	Beverly Hillbillies	1	1
				Flintstones	1	1
				Gilligan's Island	1	1
				Gunsmoke	3	2
				Hogan's Heroes	1	1
				Sanford & Son	1	1
				World of Animals	1	*
			KTTV	Dance Fever	1	1
				Dennis - Animated	1	1
				Facts of Life	4	3
				Flintstones	1	1
				Gobots	1	1
				Hour Magazine	1	1
				Late Show - Joan Rivers	1	1
				MASH	6	4
				MASH	1	1
				Soul Train	1	1
				Swat	1	1
				Three's Company	3	2
				Three's Company	3	2
				Thundercats	1	1
				Too Close for Comfort	4	3
				9 to 5	1	*
			KTLA	Chips	1	*
				Charles in Charge	1	1
				Emergency	1	1
				Fame	1	1
				Fame	1	1
				Happy Days Again	1	*
				Jem	1	1
				Laverne & Shirley	1	*
				Little House on the Prairie	2	1
				Magnum	4	3
				Puttin' on the Hits	1	1
				Put on Kids	1	1
				What's Happening Now	1	1

*Below one rating point

Source A C Nielsen, Feb '87

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HOME MARKET	MARKET RANK	% CABLE PENE	IMPORTED SIGNAL	DUPLICATED PROGRAM	IMPORTED SIGNAL RTG IN HOME MKT CABLE HH	IMPORTED SIGNAL RTG IN HOME MKT TOTAL HH
San Diego	26	67 1	KCOP	Bewitched	1	1
				Buck Rogers	2	2
				Different Strokes	1	1
				GI Joe	1	*
				Gimme A Break	2	2
				I Dream of Jeannie	1	1
				Inspector Gadget	2	2
				Jeopardy	4	3
				Jetsons	1	1
				Lifestyles of the Rich & Famous	2	1
				My Little Pony	1	*
				She-Ra	1	1
				Smurfs	1	1
				Star Trek	1	1
				Transformers	1	*
				Wheel of Fortune	4	3
			KNBC	Donahue	1	1
				Entertainment This Week	1	1
				Entertainment Tonight	1	1
				Mama's Family	1	1
				Throb	1	1

*Below one rating point

Source A C Nielsen, Feb '87

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ANALYSIS

HOME MARKET	MARKET RANK	% CABLE PENE	IMPORTED SIGNAL	DUPLICATED PROGRAM	IMPORTED SIGNAL RTG IN HOME MKT CABLE HH	IMPORTED SIGNAL RTG IN HOME MKT TOTAL HH
Reno	131	60 8	WTBS	Andy Griffith	3	2
				The Flintstones	2	1
				Scooby Doo	1	1
			KTVU	Gobots	1	*
				Lifestyles of the Rich & Famous	1	1
				Late Show - Joan Rivers	1	*
				Magnum	2	1
				MASH	2	1
				Three's Company	1	1
				WKRP in Cincinnati	2	1
				9 to 5	2	1
			KTXL	Andy Griffith	2	1
				Funtastic	1	1
				INN USA Tonight	1	1
				Love Boat	1	1
				Star Trek	3	2
				Vegas	3	2
				Facts of Life	4	2
				Fall Guy	3	2
				Ghostbusters	3	2
				Gilligan's Island	1	1
				Gimme A Break	2	1
				Taxi	3	2
			KCRA	Donahue	1	1
				Mama's Family	3	2
				One Big Family	1	1
				Small Wonder	1	1

*Below one rating point

Source A C Nielsen, Feb '87

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HOME MARKET	MARKET RANK	% CABLE PENE	IMPORTED SIGNAL	DUPLICATED PROGRAM	IMPORTED SIGNAL RTG IN HOME MKT CABLE HH	IMPORTED SIGNAL RTG IN HOME MKT TOTAL HH
Roanoke	71	52 6	WTBS	Andy Griffith	5	3
				Bewitched	1	1
				I Dream of Jeannie	1	1
				Flintstones	4	2
				Gilligan's Island	4	2
				Honeymooners	4	2
				Scooby Doo	4	2
				Tom & Jerry	3	2
			WGN	Barney Miller	1	1
				Ghostbusters	1	*
				Heathcliff	1	*
				Leave It To Beaver	1	*
				Mask	1	*
				One Big Family	1	1
				Soul Train	2	1
				Tales From the Darkside	1	*
				The Jeffersons	1	1
				Transformers	1	*
				Twilight Zone	1	1
				WKRP In Cincinnati	1	1
			WTTG	Andy Griffith	1	*
				Bewitched	1	*
				Fame	2	1
				Fat Albert	1	*
				G I Joe	1	*
				Inhumanoids	1	1
				Inspector Gadget	1	*
				MASH	3	2
				She-Ra	1	*
				Silverhawks	1	1
				Taxi	2	1
				Three's Company	2	1
				Three's Company	3	1
				Thundercats	1	1
				WWF Wrestling	1	1

*Below one rating point

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HOME MARKET	MARKET RANK	% CABLE PENE	IMPORTED SIGNAL	DUPLICATED PROGRAM	IMPORTED SIGNAL RTG IN HOME MKT CABLE HH	IMPORTED SIGNAL RTG IN HOME MKT TOTAL HH
			WXII	Entertainment Tonight	1	1
				People's Court	2	2
				The Judge	1	1
			WGHP	Dallas	2	1
				Divorce Court	3	2
				Fame	1	1
				Jeopardy	2	1
				Oprah Winfrey	2	2
				Small Wonder	1	1
				Three's Company	3	2
				Throb	1	1
				Wheel of Fortune	2	1

*Below one rating

Source A C Nielsen, February, 1987

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DUPLICATED PROGRAMMING
ANALYSIS

HOME MARKET	MARKET RANK	% CABLE PENE	IMPORTED SIGNAL	DUPLICATED PROGRAM	IMPORTED SIGNAL RTG IN HOME MKT CABLE HH	IMPORTED SIGNAL RTG IN HOME MKT TOTAL HH
Fort Wayne	102	41 2	WTBS	Andy Griffith	1	1
				Beverly Hillbillies	1	1
			WGN	Andy Griffith	1	*
				Cisco Kid	2	1
				Facts of Life	4	2
				Falcon Crest	1	*
				G I Joe	3	1
				JEM	2	1
				Leave It To Beaver	1	*
				Puttin' on the Hits	3	1
			WTTV	Different Strokes	1	*
				Facts of Life	1	*
				G I Joe	1	*
				Leave It To Beaver	1	*
				Mama's Family	2	1

*Below one rating point

Source A C Nielsen, February, 1987

Phase IV Movie Title Duplication

Another important aspect of the syndicated exclusivity issue is the duplication of movie titles by imported signals Distant signal duplication of exclusive movie titles is very harmful to local stations The effect with respect to big movie titles is particularly harmful Considerable time and money is spent scheduling and promoting popular movie titles I am aware of several situations in which local stations were unaware that a distant signal was to air a movie for which the local station had purchased market exclusivity Some duplicative movie titles air the same night as the local station's telecast and begin an hour earlier

Logistically, it is difficult to trace numerous movie titles and determine their ratings on imported signals I was, however, able to uncover two recent examples In May, 1987 KRIV Houston aired "A Fistfull of Dollars" one evening from 8-10 PM According to Nielsen, KRIV achieved a rounded eight rating with the movie "A Fistfull of Dollars" also came into the market on WGN on the same night and drew two cable household and one television household rating point away from KRIV Had KRIV earned that additional television household rating point, it would have out-performed the ABC affiliate, a powerful marketing statement for an independent

KBHK San Francisco, the number five ranked television market, had a similar problem in May KTXL, an adjacent market independent, duplicated two popular movie titles on the same

night that KBHK aired them The titles were "The Woman In Red" and "Conan, The Destroyer," both premium movies KTXL's telecasts of each movie earned two cable household and one television household rating points Audience diversion of that magnitude is extremely detrimental in a major market like San Francisco From a financial standpoint, it is important to remember that even one rating point in San Francisco represents considerable revenue The duplicative movie title problem is compounded by the fact that many premium titles are sold in packages which must air on the same night in each market that purchases them

CONCLUSION

In summary, the preceding analyses unquestionably present evidence that in many markets, programming duplicated by cable imported signals does draw viewership to those programs out of the market The extent to which local stations are harmed is dependent upon several factors including cable penetration, number of systems carrying an imported signal and the number of homes subscribing to those systems, maturity of local stations, popularity of the duplicated program, etc More important than categorizing and measuring each effect is the understanding that based on the variety of markets analyzed, the lack of syndicated exclusivity is harmful in many market situations Financially, a single rating point is very valuable in a large market In the case of many smaller markets, newer independents

in particular cannot afford to lose program audience to imported signals Some examples cited revealed higher program ratings for shows duplicated by imported signals than the independent's average, even in key dayparts

Cable household ratings for duplicated programming achieved by imported signals are essential to an insight into the future of local market television unprotected by syndicated exclusivity As cable penetration increases, duplicated programs can be expected to achieve the same rating levels achieved in currently cabled homes More viewers to duplicative imported signal programming means more harm to local stations that have purchased the programming Station advertising sales are obviously based on total television households (or persons), but when cable penetration reaches high levels, the gap between cable and all television households is almost insignificant Such duplication of a television's "exclusive" programming, and the consequent diversion of viewers of that programming from the local station make the local station's marketing, promotion and advertising sales decisions very difficult

Thirty-four INTV member stations have catalogued 682 examples of locally owned programs and 181 movie titles and/or packages duplicated by imported signals A detailed list is attached All indications are that most of those 34 stations suffer damage similar to that described in this study

DISTANT SIGNAL PROGRAM DUPLICATION SURVEY

MARKET	STATION	DUPLICATED PROGRAMMING
Phoenix	KUTP	Superman At the Movies Merrill's Marauders Road to Singapore Jem Bewitched Ghostbusters Smurfs Jeannie Dial M For Murder Sanford & Sons Welcome Back Kotter Scooby Doo Yor, Hunter From the Future Rio Bravo Killer By Night Dirty Dingus Magee Band of Angels Rafferty & the Gold Dust Twins
Tampa	WFTS	Mask Beverly Hillbillies Odd Couple Hogan's Heroes Facts of Life Jeannie Bewitched I Love Lucy Sanford & Sons Honeymooners Carol Burnett
Columbus, Ohio	WTTE	Andy Griffith Show Barney Miller Black Sheep Squadron Carol Burnett and Friends The Brady Bunch GI Joe Galaxy Rangers Hawaii Five-O Hogan's Heroes Honeymooners I Love Lucy My Little Pony The Odd Couple Smurf's Adventures Star Trek

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MARKET	STATION	DUPLICATED PROGRAMMING
Columbus, Ohio (cont'd)	WTTE	Transformers Twilight Zone INN News Movies Continental Divide Come Back to the 5 and Dime Captain Blood Conan the Destroyer
Milwaukee	WVTV	Andy Griffith Benny Hill Show Bugs Bunny Charles In Charge Defenders of the Universe Diff'rent Strokes Flintstones Funtastic World of Hanna Barbera Gimme A Break Gobots Hogan's Heroes I Dream of Jeannie JEM Leave It To Beaver Lifestyles of the Rich & Famous Love Boat Mama's Family Munsters One Big Family Star Search Superman Three's Company Tom & Jerry Woody Woodpecker Movie Packages Abbott & Costello MGM-1 Universal Horror Greats Paramount Portfolio IV Embassy Night at Movie Warner TV-1 Century 11 Century 9 Tarzan Universal 100 NTA Fries Frame 1 Columbia 21 Prime One (MGM)

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MARKET	STATION	DUPLICATED PROGRAMMING
Jefferson City, MO (Columbia)	KNLJ	Little House On the Prairie
Houston	KTXH	Tales From the Darkside Transformers Leave It To Beaver Ghostbusters Heathcliff What A Country Puttin' On the Hits Fame Beverly Hillbillies The Honeymooners Gimme Me A Break [plus "exclusive movie contracts" sometimes broadcast the exact movie at exact time]
Roanoke/Lynchburg	WJPR	Flintstones Silverhawks Defenders of the Earth My Little Pony Bewitched I Dream of Jeannie He-Man GI Joe Thundercats Taxi Mission Impossible The Flintstones Scooby Doo My Little Pony Disney Movie Showcase Lifestyles of the Rich & Famous Defenders Dennis the Menace Ghostbusters She-Ra He-Man Galaxy Rangers WKRP in Cincinnati The Jeffersons America's Top Ten LaVerne & Shirley Transformers What's Happening Now Ask Dr Ruth

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MARKET	STATION	DUPLICATED PROGRAMMING
Seattle	KTZZ	I Dream of Jeannie Gunsmoke Chips He-Man Check It Out Perry Mason Wanted--Dead or Alive Father Knows Best Dennis the Menace Flintstones Burns & Allen My Three Sons Best of Groucho The Honeymooners The Jack Benny Program Beverly Hillbillies
Tulsa	KOKI (Programs duplicated in six years since repeal of syndicated exclusivity)	Perry Mason Dukes of Hazzard Chips Patrol Charlies Angels Big Valley Trapper John Little House On The Prairie Carol Burnett The Real McCoys Superfriends At the Movies Star Search Lifestyles of the Rich & Famous Munsters Sha-na-na He Man She-Ra GI Joe Saturday Night Live Soul Train Smurfs Silverhawks JEM America's Top Ten Grizzly Adams Tarzan Honeymooners Solid Gold Bewitched Viacom TV Net 20th Century Fox Net Orbis Net Flying Nun

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MARKET	STATION	DUPLICATED PROGRAMMING
Tulsa (cont'd)	KOKI	What A Country Twilight Zone Galaxy Rangers Tom & Jerry My Little Pony Buck Rogers Battlestar Galactica Hogan's Heroes Benny Hill 20 Minute Workout Dream Girl USA Gilligan's Island Pink Panther Flintstones Rawhide Independent Network News
Atlanta	WATL	Hawaii Five-O Cannon Abbott & Costello Bosom Buddies New Gidget The Insiders The Saint & Return of the Saint Zoobilee Zoo My Favorite Martian 700 Club Oral Roberts WWF Vegas Bugs Bunny Porky Pig Cannon Wild, Wild West Superman Lone Rangers Kung Fu [Feature packages duplicated-movies Story of Jacob & Joseph Fantastic Voyage Legend of Hell House Les Miserables Lost World Angel & The Badman Little Miss Marker Battle of Britain Ben Hur

MARKET	STATION	DUPLICATED PROGRAMMING
Atlanta (cont'd)	WATL	Holocaust 2000 El Dorado Bad News Bears Brkg Training Big Fisherman/Bundle of Joy The Bees All Tarzan Features Porky's II Merrill's Marauders Who Was That Lady The Betsy Captain America 1&2 Advance To The Rear Man-Eaters Are Loose Martin Chronicles Hell Night Just Before Dawn The Paleface
Minneapolis	KITN	Charles In Charge It's A Living Porky Pig Bugs Bunny Beverly Hillbillies Hogan's Heroes Dick Van Dyke Leave It To Beaver Ghostbusters WKRP In Cincinnati Barney Miller Honeymooners Perry Mason
Philadelphia	WPHL	One Big Family Jeffersons Munsters Sanford & Sons Galaxy Rangers Ghostbusters Alice It's A Living Mama's Family Return of the Saint Popeye 9 to 5 Flintstones Brady Bunch Leave It To Beaver Facts of Life WKRP In Cincinnati Hogan's Heroes Barney Miller

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MARKET	STATION	DUPLICATED PROGRAMMING
Oklahoma City	KGMC	Gunsmoke Charles In Charge Bugs Bunny Cisco Kid Jerry Falwell Hawaii 5-O Ask Dr Ruth Muppets Galaxy Rangers My Little Pony Ghostbusters Scooby Doo Flintstones Transformers Sanford & Sons Bizarre Benny Hill Movies The Gun and The Nun Secrets of Three Hungry Wives Adios Sabata The Brain The Desert Fox Come Back to the 5 and Dime Jimmy Dean, Jimmy Dean Return of the Pink Panther Conan The Destroyer The African Queen The Robe The Death of Ritchie All That Heaven Allows Golden Moment An Olympic Love Story They Shoot Horses, Don't They? Bend Of The River The Detective Le Mans Five Masters of Death Spinout Against a Crooked Sky Charlie Varrick Little Miss Marker
Madison, WI	WMSN	Gobots Scooby Doo Smurfs I Dream of Jeannie Jetsons Leave It To Beaver Three's Company

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MARKET	STATION	DUPLICATED PROGRAMMING
Madison, WI (cont'd)	WMSN	It's Your Business Munsters Addams Family Andy Griffith Dance Fever Solid Gold Star Search Puttin' On The Hits JEM Transformers Benny Hill Fame Tales Darkside At the Movies Mask Heathctiff Odd Couple Twilight Zone Dick Van Dyke
Grand Rapids, MI	WXMI	Hold That Dream Halloween II Sgt Pepper's Lonely Hearts Club Band The Man Who Knew Too Much War Games Road Games Blues Brothers Ford The Man & The Machine Conan The Destroyer Missing In Action Revenge Of The Nerds Red Dawn Losin' It Sea Hawk Gunsmoke I Dream of Jeannie Scooby Doo Gilligan's Island It's Your Business Lady Lovelylocks (anim) Popples Get Along Gang Star Search Chips Thundercats My Little Pony Little House On The Prairie I Love Lucy

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MARKET	STATION	DUPLICATED PROGRAMMING
Grand Rapids, MI (cont'd)	WXMI	Brady Bunch Ghostbusters Silverhawks GI Joe Charles In Charge MASK Jeffersons
Davenport, Iowa (Quad Cities)	KLJB	The Honeymooners GI Joe Embassy Nite At The Movies Operation Prime Time Ask Dr Ruth
Baltimore	WNUV	Bewitched Jeannie Flintstones 100,000 Pyramid 1,000,000 Chance of A Lifetime New Gidget Mask Charles In Charge At The Movies
Kansas City, MO	KZKC	Sanford & Sons Honeymooners Mask Heathcliff The Odd Couple Transformers GI Joe Welcome Back Kotter INN News Thundercats Charles In Charge JEM
San Antonio, TX	KRRT	Mask Scooby Doo Bewitched I Dream of Jeannie Bugs Bunny & Friends Smurfs GI Joe Facts of Life

MARKET	STATION	DUPLICATED PROGRAMMING
San Antonio, TX (cont'd)	KRRT	Gunsmoke The Honeymooners JEM Andy Griffith Laredo Rawhide Bonanza Six Gun Theatre The New Gidget Saturday Night Shocker Abbott & Costello
Fort Wayne, IN	WFFT	Brady Bunch Dennis The Menace - Cartoon Geraldo Rivera Specials GI Joe - Strip and Movie Specials Inhumanoids It's A Living It's Your Business JEM Little House On The Prairie Mama's Family One Big Family 700 Club Silverhawks Smurf's Adventures Telepictures Animated Holiday Specials Andy Griffith Charles In Charge Cisco Kid Leave It To Beaver Muppet Show Bewitched Scooby Doo Transformers Twilight Zone Lorimar I - Movie Package MGM Eleven - Movie Package MGM/UA #2 - Movie Package SFM Holiday Network - Movie Packa Viacom TV Net - Movie Package Warner Brothers Volume 23 - Movie Embassy Night At the Movies MGM/UA Premiere Network Orbis Platinum 193 - Movie pkg Twentieth Century Fox- Super 66 Movie Package

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MARKET	STATION	DUPLICATED PROGRAMMING
Fort Wayne, IN (cont'd)	WFFT	Lorimar Deja Views - Movie Package Paramount Portfolio VI - Movie pkg Viacom Features II - Movie Package
Kansas City, MO	KSHB	Beverly Hillbillies Twilight Zone Dick Van Dyke Andy Griffith Leave It To Beaver Bugs Bunny Smurfs Adventures Facts of Life WKRP in Cincinnati Barney Miller Alfred Hitchcock My Three Sons Innocence Lost One Day At A Time The Lucy Show Tom & Jerry One Big Family Bosom Buddies Solid Gold Explorer Eight Is Enough It's A Living Laverne & Shirley Cisco Kid Puttin' On The Hits Throb Tales From The Darkside Lou Grant Movies Crash Blood Alley Here Comes Mr Jordan Butch & Sundance The Early Years Little Miss Marker Wake Island The Iron Mistress Young Man With A Horn Tom Sawyer Bend of the River Just Tell Me You Love Me

MARKET	STATION	DUPLICATED PROGRAMMING
Greensboro, NC	WGGT	Monday-Friday - 10 programs dup Weekends - 6 programs duplicated
St Louis	KDNL	Benson Fantasy Island Leave It to Beaver Addams Family Munsters Good Times Sanford & Sons American Ceasar Andy Griffith Gomer Pyle I Love Lucy Perry Mason UWF Wrestling World Class Championship Wrestling Check It Out One Big Family It's A Living Soul Train Charles In Charge Flintstones Danger Mouse Mask Heathcliff Ghostbusters Transformers Movie Packages New World I Warner Vol 20 & 22 Universal 123 Columbia Gems Columbia Vol 4 MCA Debut Network Hal Roach Colorization Network Viacom Vol 7, 8 Most Wanted List Deja Views Vintage I Warner Vol 18 MGM/UA Premier Network
Cleveland	WUAB	Tom & Jerry Scooby Doo Flintstones Leave It To Beaver Sanford & Son

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MARKET	STATION	DUPLICATED PROGRAMMING
Cleveland (cont'd)	WUAB	Mama's Family Benny Hill Oral Roberts Buck Rogers Romper Room Magnum P I
Anchorage, AK	KTBY	Abbott & Costello Andy Griffith Cannon Flintstones GI Joe Gilligan's Island Gunsmoke Hawaii 5-0 Hogan's Heroes Honeymooners House Calls I Dream of Jeannie Lassie Lone Ranger MTV Video Countdown Paramount Portfolio II Partridge Family Rawhide Rifleman Transformers Twilight Zone
Hartford, CT	WHCT	Children's Cinema Classics Carson Anniversay Specials Carson's Comedy Classics Police Story Blue Knight Bomba Movies Dallas Deja Views (Lorimar) Sci-Fi Movies (Lorimar) 22 Karat (Lorimar) Greatest American Hero Cowboys and Indians (Lorimar) Record Guide Charles In Charge Banacek Name of the Game MCA Movies (Various) It Takes A Thief

MARKET	STATION	DUPLICATED PROGRAMMING
Hartford, CT (cont'd)	WHCT	Mystery Movies (MCA) War Chronicles Best of Saturday Night Twenty-Minute Workout Cagney & Lacey Brady Bunch Odd Couple Mission Impossible Untouchables Avengers Portfolio III & IV & V Goldwyn Gold (Samuel Goldwyn) Treasure Chest (Samuel Goldwyn) Dimension (Satori) My Favorite Martian Chiefs Spider-Man Movies Teleworld Features Dempsey & Makepeace CNN Headline News Josie & The Pussycats Tales of the Unexpected Zoobilee Zoo Cover Story Ghost Story Tennessee Tuxedo Essence NWA Southern Professional Wrestling NWA Pro Wrestling International Championship Wrestling Four Star Movies (Various) Kingworld Features (Various) NTA Films (Various) The New Hot Tracks Space 1999 Fox I, II, & III
Syracuse, NY	WSYT	Beaver Bewitched Bosom Buddies Buck Rogers Charles In Charge Favorite Martian Flintstones Ford Special GI Joe G L O W Gobots

MARKET	STATION	DUPLICATED PROGRAMMING
Syracuse, NY (cont'd)	WSYT	Heathcliff I Dream of Jeannie Lifestyles of The Rich & Famous Mama's Family Runaway With the Rich & Famous Scooby Doo Smurfs Star Trek Tales of the Unexpected Transformers Twilight Zone Zoobilee Zoo
Indianapolis	WXIN	Porky Pig Flintstones Bewitched Gilligan's Island Beverly Hillbillies I Love Lucy Dick Van Dyke Bugs Bunny Twilight Zone Charles In Charge Ghostbusters Transformers Andy Griffith Pro Wrestling Puttin On The Hits Hogan's Heroes Tales of the Darkside
Greenville, SC	WHNS	Muppets Tom & Jerry Leave It To Beaver Ghostbusters Scooby Doo Hillbillies Facts of Life Cartoon Express Barney Miller
Hilton Head, SC	WTGS	Movies Syndicated Programs

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MARKET	STATION	DUPLICATED PROGRAMMING
St Petersburg, FL	WTOG	Porky Pig Bugs Bunny Jem Cisco Kid Lone Ranger Barney Miller Jeffersons Transformers WKRP Night Court Cheers Laurel & Hardy It's A Living Mama's Family Silver Spoons Kate & Allie Tom & Jerry I Dream of Jeannie Bewitched Perry Mason Flintstones Adams Family
Nampa, ID	KTRV	Wide World of Animals Bewitched I Love Lucy Beverly Hillbillies Hogan's Heroes Leave It To Beaver Smurfs GI Joe Transformers Facts of Life Big Valley WKRP In Cincinnati Honeymooners Jeffersons Wild, Wild, West Gunsmoke
St Louis	KPLR	Facts of Life WKRP In Cincinnati SOAP Little House On The Prairie Love Boat Private Benjamin Honeymooners (old & new) Twilight Zone

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MARKET	STATION	DUPLICATED PROGRAMMING
St Louis (cont'd)	KPLR	Bob Newhart Beverly Hillbillies Muppets Fame Puttin' On The Hits Tales From the Darkside Lifestyles of the Rich & Famous Superman Lone Ranger Hogan's Heroes Gilligan's Island Scooby Doo Porky Pig Bugs Bunny Tom & Jerry Feature Film Packages duplicated MCA World Premieres MCA Grand 50 MCA Hitlist MCA Universal 33 MGM Warner Pre '48s MGM RKO Features MGM MGM Pre '48s MGM Lion I & II MGM That's Entertainment MGM Family Fair MGM II Paramount Portfolio III, V, X, X TCF Century X TCF Porky'S Trilogy Viacom Explitables Viacom Volume XI, II, XI Warner Tarzan Features Warner Vol 20, 21A, 22, 25, 26 Warner Statlight 6 ITC Vol III & IV Operation Prime Time Specials Embassy Night at the Movies Spec Viacom TV Net Premieres
Miami-Ft Lauderdale	WDZL	Gunsmoke Wild Wild West Father Murphy It's A Living One Big Family Mama's Family 700 Club Tales From the Darkside Shalom Show

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MARKET	STATION	DUPLICATED PROGRAMMING
Miami-Ft Lauderdale (cont'd)	WDZL	Inside Fla Golf Monkees Value TV Thundercats Silverhawks I Dream of Jeannie Zoobilee Zoo Partridge Family Perry Mason Twilight Zone Flintstones Gilligan's Island Night Gallery

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APPENDIX C



THE ECONOMIC IMPACT ON HOME-MARKET TELEVISION STATIONS OF THE DUPLICATION OF SYNDICATED PROGRAMS BY CABLE TELEVISION SYSTEMS

At the request of the Association of Independent Television Stations, Inc , Butterfield Communications Group, a management consulting firm specializing in broadcast industry assignments, has prepared the following analysis of the economic impact on home-market television stations of duplication of their programs on cable-delivered distant signals The analysis develops a considerable body of evidence that duplication of home-market signals generates significant economic harm to home-market television stations, particularly independent stations in middle and smaller markets

Viewership plays a crucial role in the income of commercial television stations The prices of commercial announcements are directly related to the number of potential customers who view those spots Larger audiences bring in more advertising revenues, and any factor which reduces audience size necessarily causes the stations financial harm

Audience research indicates that the audience for a home-market station's program is reduced when the same program, broadcast by a station in a distant market, is imported and made available to viewers by cable television operators The result is a loss of audience and revenues for the home-market station, which has purchased exclusive rights to the program in the expectation that it will attract the largest possible audiences and generate saleable ratings

Assessing the economic damage suffered by home-market stations due to this duplication is not a simple undertaking However, based on market-by-market audience viewing data, national ratings data for syndicated programs, and prevailing commercial rates in the markets affected by importation, we can project the extent to which such damage occurs

An INTV Research Department report, prepared by Susan Rynn, has quantified the rating points lost by a large selection of home-market broadcasters to the same programs imported from outside the market by cable operators Our efforts take these conclusions one step further by assessing the actual economic losses suffered as a result of these lower ratings

In Chart 1, we have selected approximately 40 examples of cable-duplicated programming where the duplication has a significant impact on home-market stations In these examples, the imported program runs either head-to-head with the home-market broadcast or in the time slot immediately preceding it Frequently, identical episodes of the same program run on both cable and

home-market channels each day Also, the majority of the markets examined are characterized by a fairly high degree of cable penetration

While we might expect these examples to show a significant audience loss by the home-market program to the imported program, it is not a certainty that every viewer gained by the imported program would represent a loss to the home-market program That is to say, not every rating point of the imported program would necessarily be added to the home-market program were the import not available Some viewers might choose to watch another program shown in place of the imported duplicate In other cases, where the programs are not competing head-to-head, some viewers may already be watching both shows, and the removal of the import would not add viewers to the home-market broadcast

Without additional audience research, it is difficult to precisely estimate the proportion of viewers of the imported signal who would watch the home-market broadcast in the absence of the import The comparison of ratings for duplicated programs to national averages for those programs which follows suggests the proportion is quite high, approaching 100 percent For the purposes of this analysis we have assumed that 80 percent of the viewers of the import would switch to the home-market broadcast were the import unavailable

The charts begin with estimates of viewers lost to imported duplicate programming (drawn from the earlier IMTV research), and then translates those ratings losses into dollar losses resulting from this duplication

Chart 1 contains selected program duplications The chart contains the following information:

Columns 1-3: Identify the market, program, and the home-market station

Column 4: Lists the days and times at which the program is broadcast by the home-market station

Column 5 HM HH RTG -- Provides the household rating earned by the broadcast

Column 6: CABLE PENETR -- lists the percentage of TV households with cable

The next four columns describe the source, timing, and audience impact of the imported duplicate program

Columns 7-8 IMPORTED SIGNAL DAY & TIME -- Lists the call letters of the imported station which carries the show, and the show's time period

Columns 9-10 IMPORT RTG:CAB HH/TOT HH -- List the ratings the show earns among cable households and total market households respectively

Column 11: CPP -- Lists the prevailing price paid per household rating point for a 30-second commercial in the affected market



These prices vary by market size, location, and time of broadcast

Column 12 — TOT 30s -- The number of 30-second commercials likely to be contained in the home-market station's broadcast of the program

Column 13 — BRTR 30s -- The number of commercials held back by syndicators for sale to national advertisers, and thus unavailable for sale by local stations About half the programs examined have two or more commercials held back for sale to national advertisers

Column 14 — SHOWS/YEAR -- The number of times the home-market station broadcasts the show each year

Column 15 — DSCNT FCTR -- The discount factor of 80% applied to the calculation to reflect the likelihood that not all viewers of the import are necessarily losses to the home-market program

Column 16 — DOLLAR IMPACT -- Gives our estimate of the annual loss a home-market station suffers due to the cable system's carriage of the duplicate program It is the product of the number of revenue producing spots (TOT 30's less BARTER :30's) times the imported program's ratings points (IMPORT RTG TOT HH), times the cost per ratings point (CPP), times the number of shows per year (SHOWS/YEAR)

Thus, DOLLAR IMPACT is equal to

(TOT 30'S - BARTER 30's) x (CPP) x (RTG TOT HH) x (SHOWS/YEAR) x (DSCNT FCTR)

or

(NET AVAILABLE SPOTS) x (DOLLARS/POINT) x (POINTS) x (SHOWINGS/YEAR) x (80%)

The example on the first line of Chart 1, *G I Joe* in Albany, shows an annual loss for WXXA of $43,680 per year, calculated in the following manner

(12 total spots - 5 barter) x ($30/point) x (1 point) x (260 shows/year) x (8)

An additional analysis was conducted to determine the relative audience losses to home-market stations caused by imported program duplication Chart 2 compares the ratings performance of a selection of the home-market broadcasts listed in Chart 1 with the <u>average</u> national rating reported by Arbitron for the program when aired in the same daypart in the same month and year in markets with the same number of stations Of the chart's 22 cases where a home-market program is duplicated by an imported program, there are only four occurrences where the home-market broadcast performs as well as or better than the national average of broadcasts of the same program at the same time in similar markets (i e , where the "LOCAL SHORTFALL" is zero)

In 18 cases, the home-market broadcast underperforms when compared to the national average In every one of the 18 cases, the ratings of the imported duplicate program were equal to or less than the shortfall of the home-market broadcast relative to average performance In effect, if the ratings of the imported duplicate program are added to those of the home-market broadcast, the result is equal to or slightly below the expected performance based on the national averages The data imply strongly that there has occurred a one-for-one loss of viewing by the home-market station to the imported duplicate program

Several points should be highlighted with respect to the outcome of the analysis First, only a limited selection of programs, chosen from the INTV Research Department report, is examined in this paper The aggregate dollar impact of program duplication on any station in the sample is far greater than the total resulting from the one or two instances noted The aggregate dollar impact on the markets is also far higher than that suggested by the several cases of duplication discussed in our limited sample of markets In addition, of course, the aggregate dollar impact of duplication on a national basis is several orders of magnitude greater than the amounts suggested here for any individual station or market

Second, the economic impact of program duplication will increase over time as cable penetration rises In the examples noted in Chart 2, the largest home-market program ratings shortfalls generally occur in the markets with the highest cable penetration, and the smallest shortfalls are clustered in the markets with lower penetration There is no mathematical reason to expect this pattern to reverse itself

Third, the dollar impact of program duplication is not limited only to the duplicated program Exhaustive audience research has shown that viewers' channel selections effect not simply the program they tune to, but the programs which they view at later time periods If a given program has large audiences, then the program which follows it (its "lead-out") will have a considerable competitive advantage because of the audience delivered, as it were, to its "front door " Competing programs will face the problem of diverting those viewers to themselves The implication of the "lead-out" effect is that home-market stations which lose audience because their programs are duplicated on cable-imported stations will face additional audience and dollar shortfalls for programs later in their schedule

Finally, it is useful to examine the dollar impact of program duplication in terms of the sales revenues, program budgets, and pre-tax profits of independent television stations Independent stations provide the most appropriate comparison because the majority of the program duplication occurs between home-market independents and imported distant independents

The annual dollar impacts estimated in Chart 1 range from $4,992 for a bartered weekly children's show, *The New Gidget*, in a moderately cabled market, Rochester, to $936,000 for a highly-rated non-bartered daily situation comedy, *Facts of Life*, in a highly-cabled market, San Diego The average projected dollar impact is $135,477

This figure can be compared to the sales revenues, program budgets, and pre-tax profits reported by independent stations in the National Association of Broadcasters 1986 Television Financial Survey (1985 data)

1985 Independent Station Reports ($ thousands)

	All Mrkts	Mrkts 11-20	Mrkts 21-40	Mrkts 81+
Sales Revenues	$15,683	$16,654	$9,650	$4,669
Program/Product	5,589	6,151	3,355	1,423
Pre-Tax Profit	1,746	1,455	(632)	(313)

The obvious inference arising from the comparison is that the projected dollar impact of program duplication is extremely critical, particularly to independent stations in markets outside the top 10 The average impact projected above is equal to one-tenth of the pre-tax profits of the average station in markets 11-20 The highest projected dollar impact was equal to 64% of the pre-tax profits of the same station The total of six estimated dollar impacts for San Diego exceeds the average pre-tax profit for independent stations in markets 11-20 by a factor of 2, and as mentioned before, the aggregate impact on the market will be far larger than the total of the examples examined in this analysis

Overall, our analysis demonstrates that independent television stations suffer substantial economic injury from the audience and sales revenue losses which arise when cable television systems import programs which duplicate their own

* * *

Butterfield Communications Group has, in its ten-year history, acquired extensive experience in broadcast finance and operations In the course of providing management and marketing counsel to a large number of television stations and group owners, BCG has developed particular skills in charting and forecasting broadcast revenues BCG has carried out feasibility studies of the acquisition of television stations for several investment banking firms, and evaluated the viability of establishing new stations in larger markets

A small sample of current and past BCG clients includes ABC, Blair Television, Capital Cities Communications, Tribune Broadcasting Company, Cox Communications, Lee Enterprises, Susquehanna Broadcasting, Metromedia Television, Petry Television, Inc , the Washington Post Company, and Westinghouse Broadcasting, as well as the Association of Independent Television Stations, Inc , Boston Ventures Management, the National Association of Broadcasters, and the Television Bureau of Canada

Chart 1 Selected Program Duplications

HOME MARKET	DUPLICATED PROGRAM	HOME MARKET STA	DAY&TIME	HH RTG	HH % CABL PENETR	IMPORTED SIGNAL	DAY&TIME	IMPORT RTG CAB HH	TOT HH	CPP	TOT 30s	BRTR 30s	SHOWS /YEAR	DSCNT FCTR	DOLLAR IMPACT
ALBANY NY	G I JOE	WCDA	M-F/4 3OP	2	59 9	WPIX	M-F/4 OOP	1	1	30	12	5	260	0 8	43680
ALBANY NY	SMURFS	WCDA	M-F/3 3OP	2	59 9	WPIX	M-F/3 OOP	1	1	30	12	5	260	0 8	43680
ALBANY NY	GIMME A BREAK	WCDA	M-F/6 3OP	2	59 9	WPIX	M-F/6 OOP	3	2	40	12	6	260	0 8	99840
BIRMINGHAM	THE FLINTSTONES	WNAL	M-F/4 OOP	2	49 0	WTBS	M-F/3 3OP	2	1	20	12	5	260	0 8	29120
CHAMP/SPRFLD	G I JOE	WRSP	M-F/4 3OP	2	62 4	WGN	M-F/4 OOP	2	1	30	12	5	260	0 8	43680
HARTFORD	BARNEY MILLER	WTXX	M-F/7 3OP	3	70 3	WSBK	M-F/7 3OP	1	1	100	12		260	0 8	249600
JOHNS/ALTOONA	IT S A LIVING	WFAT	S/7 3OP	1	54 2	WOR	S/7 OOP	2	2	15	12	6	52	0 8	7488
JOHNS/ALTOONA	SMURFS	WFAT	M-F/3 3OP	1	54 2	WPIX	M-F/3 OOP	1	1	10	12	5	260	0 8	14560
JOHNS/ALTOONA	BOSOM BUDDIES	WWCP	SU/6 OOP	2	54 2	WOR	S/6 OOP	2	1	15	12		52	0 8	7488
JOHNS/ALTOONA	G I JOE	WWCP	M-F/4 3OP	1	54 2	WPIX	M-F/4 OOP	1	1	10	12	5	260	0 8	14560
MOBILE	TOM & JERRY	WJTC	M-F/2 3OP	1	53 6	WTBS	M-F/6A&2P	1	1	25	12		260	0 8	62400
OMAHA	FACTS OF LIFE	KPTM	M-F/5 3OP	10	54 1	WGN	M-F/5 OOP	2	1	40	12		260	0 8	99840
PEORIA	G I JOE	WYZZ	M-F/4 3OP	2	57 5	WGN	M-F/4 OOP	1	1	20	12	5	260	0 8	29120
PROVIDENCE	MAMA S FAMILY	WNAC	S/7 3OP	2	55 2	WSBK	S/6 3OP	4	2	30	12	6	52	0 8	14976
RICHMOND	BEVERLY HILLBILLY	WVRN	M-F/6 OOP	1	45 2	WTBS	T-F/6 OOP	1	1	30	12		260	0 8	74880
RICHMOND	SANFORD & SON	WRLH	M-F/7 3OP	3	45 2	WTBS	M-F/7 OOP	3	1	30	12		260	0 8	74880
RICHMOND	ANDY GRIFFITH	WVRN	M-F/6 3OP	2	45 2	WTBS	M-F/6 3OP	1	1	30	12		260	0 8	74880
ROCHESTER	ENTERTAIN TONIGHT	WUHF	M-F/7 3OP	4	54 2	WOR	M-F/7 3OP	1	1	30	12	2	260	0 8	62400
ROCHESTER	THE NEW GIDGET	WUHF	SU/1 30p	1	54 2	WOR	SU/11 00A	2	1	20	12	6	52	0 8	4992
ROCHESTER	G I JOE	WUHF	M-F/4 OOP	3	54 2	WPIX	M-F/4 OOP	1	1	50	12	5	260	0 8	72800
ROCKFORD	THE JEFFERSONS	WORF	M-F/6 3OP	2	57 8	WGN	M-F/6 3OP	2	1	50	12		260	0 8	124800
TRI-CITIES	GILLIGAN S ISLAND	WETO	M-F/5 3OP	2	55 5	WTBS	M-F/5 OOP	5	4	13	12		260	0 8	129792
INDIANAPOLIS	FACTS OF LIFE	WTTV	M-F/6 OOP	7	51 8	WGN	M-F/5 OOP	1	1	60	12	0	260	0 8	149760
INDIANAPOLIS	GI JOE	WTTV	M-F/4 3OP	3	51 8	WGN	M-F/4 OOP	1	1	35	12	5	260	0 8	50960
INDIANAPOLIS	SMURFS	WTTV	M-F/3 3OP	1	51 8	WGN	M-F/3 3OP	1	1	35	12	5	260	0 8	50960
INDIANAPOLIS	THE JEFFERSONS	WTTV	M-F/7 3OP	6	51 8	WGN	M-F/6 3OP	2	1	60	12	0	260	0 8	149760
INDIANAPOLIS	WKRP IN CINN	WTHR	M-F/5 3OP	8	51 8	WGN	M-F/5 3OP	3	2	48	12	0	260	0 8	239616
MILWAUKEE	CHARLES IN CHARGE	WVTV	S/6 OOP	3	42 1	WGN	S/5 OOP	1	1	50	12	6	52	0 8	12480
MILWAUKEE	FACTS OF LIFE	WVTV	M-F/6 3OP	5	42 1	WGN	M-F/5 OOP	1	1	50	12	0	260	0 8	124800
ROANOKE	ANDY GRIFFITH	WDBJ	M-F/5 3OP	14	52 6	WFMY	M-F/5 3OP	2	2	45	12	0	260	0 8	224640
ROANOKE	ENTERTAIN TONIGHT	WSET	M-F/7 OOP	11	52 6	WXIT	M-F/7 OOP	1	1	30	12	2	260	0 8	62400
ROANOKE	JEOPARDY	WDBJ	M-F/7 3OP	22	52 6	WGHP	M-F/7 3OP	2	1	30	12	2	260	0 8	62400
ROANOKE	SILVERHAWKS	WJPR	M-F/8 00A	0	52 6	WGN	M-F/7 30A	1	1	30	12	5	260	0 8	43680
ROANOKE	THREE S COMPANY	WSET	M-F/7 3OP	15	52 6	WGHP	M-F/5 3O	3	2	50	12	0	260	0 8	249600
ROANOKE	WHEEL OF FORTUNE	WDBJ	M-F/7 OOP	25	52 6	WGHP	M-F/7 OOP	2	1	50	12	2	260	0 8	104000
SAN DIEGO	EMERGENCY	KTTY	M-F/3 OOP	1	67 1	KTLA	M-F/2 OOP	1	1	100	24	0	260	0 8	499200
SAN DIEGO	ENTERTAIN TONIGHT	KGTV	M-F/7 3OP	6	67 1	KCOP	M-F/7 OOP	1	1	125	12	2	260	0 8	260000
SAN DIEGO	FACTS OF LIFE	KUSI	M-F/6 OOP	4	67 1	KTTV	M-F/5 OOP	4	3	125	12	0	260	0 8	936000
SAN DIEGO	GIMME A BREAK	XETV	M-F/7 OOP	3	67 1	KCOP	M-F/6 OOP	2	2	125	12	0	260	0 8	624000
SAN DIEGO	LIL HSE ON PRAIRIE	KCST	S/4 OOP	1	67 1	KTLA	M-F/4 OOP	2	1	100	24	0	260	0 8	499200
SAN DIEGO	WHEEL OF FORTUNE	KCST	M-F/7 OOP	13	67 1	KCOP	M-F/7 OOP	4	3	125	12	2	260	0 8	780000

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Chart 2 "Shortfall" Analysis

HOME MARKET	DUPLICATED PROGRAM	HOME MARKET STA	DAY&TIME	HH AVERAGE HH RTG	NATIONAL RATING	LOCAL SHORTFALL	IMPORT RATING
ALBANY, NY	G I JOE	WXXA	M-F/4 30P	2	3	1	1
ALBANY, NY	SMURFS	WXXA	M-F/3 30P	2	3	1	1
ALBANY, NY	GIMME A BREAK	WXXA	M-F/6 30P	2	6	4	2
BIRMINGHAM	THE FLINTSTONES	WNAL	M-F/4 00P	2	2	0	1
CHAMP/SPRFLD	G.I JOE	WRSP	M-F/4 30P	2	3	1	1
HARTFORD	BARNEY MILLER	WTXX	M-F/7 30P	3	6	3	1
JOHNS/ALTOONA	IT'S A LIVING	WFAT	S/7 30P	1	4	3	2
JOHNS/ALTOONA	SMURFS	WFAT	M-F/3 30P	1	3	2	1
JOHNS/ALTOONA	BOSOM BUDDIES	WWCP	SU/6 00P	2	3	1	1
JOHNS/ALTOONA	G.I. JOE	WWCP	M-F/4.30P	1	3	2	1
MOBILE	TOM & JERRY	WJTC	M-F/2 30P	1	3	2	1
OMAHA	FACTS OF LIFE	KPTM	M-F/5 30P	10	7	-3	1
PEORIA	G I. JOE	WYZZ	M-F/4 30P	2	3	1	1
PROVIDENCE	MAMA'S FAMILY	WNAC	S/7 30P	2	5	3	2
RICHMOND	BEVERLY HILLBILLY	WVRN	M-F/6.00P	1	2	1	1
RICHMOND	SANFORD & SON	WRLH	M-F/7:30P	3	5	2	1
RICHMOND	ANDY GRIFFITH	WVRN	M-F/6·30P	2	3	1	1
ROCHESTER	ENTERTAIN TONIGHT	WUHF	M-F/7 30P	4	8	4	1
ROCHESTER	THE NEW GIDGET	WUHF	SU/1 30p	1	2	1	1
ROCHESTER	G.I JOE	WUHF	M-F/4.00P	3	3	0	1
ROCKFORD	THE JEFFERSONS	WQRF	M-F/6 30P	2	4	2	1
TRI-CITIES	GILLIGAN'S ISLAND	WETO	M-F/5.30P	2	2	0	4

APPENDIX D

July 2, 1987 THE WASHINGTON POST p B7

No NFL for Channels 5 or 20

16 Independents Excluded From Bidding on ESPN's Games

By Norman Chad
Washington Post Staff Writer

Sixteen independent television stations, including WTTG-TV 5 and WDCA TV 20 in Washington, have been excluded from bidding for local market telecasts of ESPN s National Football League games, and independents are upset by the cable-sports network s decision.

In its three-year $153 million deal with the NFL, ESPN agreed to sell rights to broadcast stations in the home and away markets of the games it is televising enabling viewers without cable in those areas to watch their local teams. But ESPN is barring certain independent stations that are widely carried by cable systems—the same systems that would pay ESPN to carry NFL games. In Washington it is likely one of the three network affiliates—WRC TV-4 WJLA TV 7 or WUSA TV 9—will buy the rights to ESPN s Redskins-at Miami game Dec 20

Preston Padden president of the Washington-based Association of Independent Television Stations, wrote a letter of protest to Capital Cities/ABC which owns 80 percent of ESPN saying "It seems patently unfair to declare our stations ineligible because of distant cable carriage—a phenomenon over which the originating station has absolutely no control "

Tim Lynch general manager at WDCA was upset at the news that his station could not bid for ESPN's Redskins game Dec 20. "What ESPN and the NFL are doing is clearly not in the interest of the viewing public " he said "I d be happy to pick up the game and let them black me out from cable systems. We re on the Raleigh N C cable system, for instance and they can black us out there ESPN s playing both ends against the middle Obviously they don t want Raleigh showing the game off Channel 20 but they can control that "

But Andrew Brilliant, an ESPN senior vice president for legal affairs, said that the cable network cannot control cable systems rebroadcasts of over the-air independents.

"I can t tell a cable system to black out another signal " he said. "I don t have that right. Our primary interest is getting as much revenue as we can from these sales. A cable system would say Why should I pay ESPN when I can pick it up free off a distant signal?' And, of course we also want to limit the overall exposure of these games outside of the home and away [markets] to strengthen the value of our package "

ESPN has rights to four preseason and eight Sunday night regular season games. While prohibiting the largest independents and superstations (such as WWOR and WPIX in New York and WGN in Chicago) from the bidding ESPN says at least one independent in each market will be eligible That independent in Washington would be little-watched WFTY-TV 50 but it is more likely that a network affiliate would buy the rights. In cities in which ESPN already has conducted bidding for preseason games—Denver Miami, Chicago and Minneapolis—three ABC stations and one NBC affiliate have won local market rights

ESPN s list of ineligible bidders has further incited a recent debate between independents and cable with the independents complaining about the continued loss of programs from free television to cable

"There s nothing WTTG [which televises Redskins preseason games] can do to stop the cable carrier from importing it into Richmond " Padden said. "We thought we had a simple solution let WTTG bid on the games, and if their signal is imported into Richmond by a cable operator and if that causes a problem for ESPN s exclusivity the cable operator has every opportunity to black it out "

Cable operators near Washington for instance might look at it this way ESPN is asking for an extra 10 to 14 cents per subscriber per month for the entire NFL package yet the Redskins game alone might be worth the rest of them combined If the cable operator can get the Redskins game without paying anything additional, from one of the independent stations it already carries, is it worth paying all that extra money to ESPN?

"It s a very expensive product for us," said Matt Zollar marketing manager for Continental Cable in Richmond, which is picking up the ESPN package and also imports WTTG and WDCA. "The package would be considerably less valuable to us [if WTTG or WDCA could buy the Redskins-Miami game] I don t think it would have been a deal-breaker but we definitely would ve been grumbling."



Independent Television

James B Hedlund
Vice President, Government Relations

September 20, 1988

Michael Remington, Esq
Subcommittee on Courts, Civil Liberties
& the Administration of Justice
U S. House of Representatives
2137B Rayburn House Office Bldg
Washington, DC 20515

Dear Mike

When reading the Judiciary Committee's report on H R 2848, we realized that Section 3, dealing with the FCC's inquiry and rulemaking on the feasibility of adopting syndicated exclusivity rules for home dishes, was incomplete We apologize for not recognizing this earlier.

Essentially, there is no enforcement mechanism. The bill does provide that willful and repeated violation of the network "white area" provisions are actionable as infringements of copyright. The bill does not state, however, that if the FCC adopts syndex for the home dish industry, violations of those rules would also be considered acts of infringement As we discussed with you, the FCC syndex rules for cable are enforceable by bringing actions under Section 111 of the Copyright Act

We have therefore prepared the attached amendment to H R 2848 that we would like to have added to the bill before it reaches the House floor Note that this is a slightly changed version of the amendment we had given you earlier. The changes reflect the suggestions of Mark Ellison of SBCA

We look forward to working with you to accomplish this minor, but important, clarification.

Best regards,

JBH sb
Attachment

INTV Association of Independent Television Stations, Inc.
1200 Eighteenth St., N W Suite 502, Washington, D C. 20036 • (202) 887 1970/Fax (202) 887-0950

Amendment to Section 3 of H.R. 2848 ("Syndicated Exclusivity")

1 Insert "(a)" prior to the beginning of the section

2 Add at the end the following new subsection

"(b) In the event that the Commission adopts such rules, any willful and repeated secondary transmission made by a satellite carrier to the public of a primary transmission embodying the performance or display of a work which violates such Commission rules shall also be actionable as an act of infringement under section 501 and fully subject to the remedies provided by sections 502 through 506 and 509 A television broadcast station holding a copyright or other license to transmit or perform the same version of that work shall, for purposes of section 501 (b), be treated as a legal or beneficial owner if such secondary transmission occurs within the local service area of that television station "

INTV 9/20/88

National Rural Electric Cooperative Association

1800 Massachusetts Avenue, NW
Washington, D.C. 20036
Telephone: 202/857-9500

August 1, 1988

Hon Robert W Kastenmeier
Chairman
Subcommittee on Courts, Civil Liberties &
the Administration of Justice
Committee on the Judiciary
U S House of Representatives
Washington, D C 20515

Dear Chairman Kastenmeier

On behalf of the memberships of the National Rural Electric Cooperative Association (NRECA) and the National Rural Telecommunications Cooperative (NRTC), I want to thank you for your strong leadership on H R 2848, the Satellite Home Viewer Copyright Act, as passed by the Subcommittee on Courts on July 7, 1988 NRECA and NRTC support the enactment of H R 2848 as it is vitally needed to ensure the delivery of satellite television signal to rural America

I understand that the full House Judiciary Committee will be voting on H R 2848 in the coming days This is an important issue and I urge your colleagues to join in their support for the bill I understand that there may be an amendment to strike those provisions relating to the Federal Communications Commission for jurisdictional reasons NRECA and NRTC are in full support of these provisions especially as they relate to price discrimination NRECA and NRTC stand firm in our support for their inclusion in another Committee if that is the path taken by H R 2848

I appreciate your, and many Subcommittee members', support, concern and interest on this important issue to rural America I look forward to the entire Judiciary Committee joining your Subcommittee in support of this matter

Sincerely,

Carolyn Herr Watts
Legislative Specialist

National Rural Electric Cooperative Association

1800 Massachusetts Avenue, NW
Washington, D.C. 20036
Telephone: 202/857 9500

July 6, 1988

Hon Robert W Kastenmeier
U.S. House of Representatives
Washington, D.C. 20515

Dear Chairman Kastenmeier:

On behalf of the memberships of the National Rural Electric Cooperative Association (NRECA) and the National Rural Telecommunications Cooperative (NRTC), I want to inform you of our support for H.R. 2848, the Satellite Home Viewer Copyright Act, as detailed by Subcommittee Chief Counsel Michael Remington

I understand that the Subcommittee on Courts, Civil Liberties and the Administration of Justice will consider the bill at a mark-up scheduled for July 7, 1988 The bill to be voted on will include a number of changes to H R 2848 as introduced Of these changes of importance to NRECA and NRTC are the expanded definition of "satellite carrier" and instructions for the Federal Communications Commission (FCC) to investigate satellite carrier price discrimination and report back to Congress in one year This will give packagers, such as the NRTC, an administrative remedy to address price discrimination and gives Congress an opportunity to revisit the issue pending the FCC findings

I appreciate your, and many Subcommittee members', support, concern and interest on this important issue to rural America I look forward to the Subcommittee meeting tomorrow

Sincerely,

Carolyn Herr Watts
Legislative Specialist

NRECA NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION
1800 Massachusetts Avenue N W Washington D C. 20036
Telephone (202) 857 9500

September 25, 1987

Honorable R W Kastenmeier
Chairman
Subcommittee on Courts, Civil Liberties,
and the Administration of Justice
U S House of Representatives
2328 Rayburn House Office Building
Washington, D C 20515

Dear ~~Mr. Chairman~~

On behalf of the National Rural Electric Cooperative Association and the National Rural Telecommunications Cooperative, I want to thank you for appearing in the launch of Rural TV We are quite proud of the efforts of our cooperative members in bringing the diversity that television has to offer into the homes of rural Americans

I've enclosed a copy of our launch announcement The direct satellite program is scheduled for Thursday, October 1 I will make sure that you receive a video tape of the program in its entirety

I also want to take a momert to compliment you on your professional staff Mike Remington and Mary Dixon are good and competent staff It was a pleasure working with them

Again, thank you for your time and interest in providing television services to the sparsely-settled areas of the United States

Sincerely,

Bob Bergland
Executive Vice President

Enclosure

cc Leroy Rose
Wisconsin Statewide Manager

BB dfs



National Rural Telecommunications Cooperative

P O Box 9904
1115 30th Street N W
Washington D C 20007
(202) 944 2539

For Release
September 9, 1987

Contact
Jeff Almen CPC
(202) 337-6700

Tom Hoy NRECA
(202) 857 9536

NRTC To Launch Program Package for Rural Satellite Dish Owners

Washington D C The National Rural Telecommunications Cooperative (NRTC) will announce the national launch of its program package for rural dish owners *Rural TV* during a live satellite television broadcast on October 1 1987

Uplinked from Kansas City Missouri the broadcast will review the elements of the program package the just-concluded *Rural TV* test phase the technology and applications of the NRTC effort and it will address the future of the package

NRTC s Chief Executive Officer Bob Phillips will host the program He will be joined by rural utility leaders industry experts and consumers involved in the test effort

The program time and satellite location is

"The Sky is Open"
The NRTC National Launch of *Rural TV*
Thursday, October 1
Test signal begins at 12 45 p m , Central Time
Broadcast begins at 1 00 p m , Central Time
Satellite SpaceNet 1
Channel 19
Audio 6 2/6 8

Copies of the broadcast will be available from NRTC but co-ops are encouraged to contact other systems with dishes about viewing the program or to make local or statewide arrangements for taping to be done

# # # # #



National Rural Telecommunications Cooperative

1115 30th Street N W
Washington D C 20007
(202) 944-2504

March 24, 1988

ARGUMENTS TO SUPPORT A NON-DISCRIMINATION AMENDMENT
TO H.R. 2848 - THE HOME SATELLITE VIEWERS COPYRIGHT ACT

TVRO consumers should receive satellite programming for the same costs as do cable consumers These charges should take into account the actual costs of doing business

The argument has been made that a signal distributor needs only write one order to serve 10,000 customers in the cable market, but in order to serve 10,000 TVRO customers, the same signal distributor must write 10,000 orders In order to serve those customers directly, this is true and any amendment to HR 2848 should address these incremental business costs

The issue, however, that reaches beyond this "order-taking" argument is that signal packagers, like the National Rural Telecommunications Cooperative, have the ability, identical to a cable company. NRTC has the "back office" facilities, identical to cable companies and other distributors to process orders, provide direct signal authorization, furnish a one-stop billing and collection system and provide marketing promotions to support the business There should be no additional costs that a signal distributor should bear when dealing with a packager like the NRTC

However, despite the marketing, billing and authorization support that a packager like NRTC brings to the market, distant signal satellite carriers discriminate against the home satellite viewer NRTC has been forced to accept, in order to secure contracts, wholesale signal prices ranging from 500 to 1000% higher than the wholesale prices charged to the cable industry In addition to experiencing indefensible prices, NRTC has simply been denied access to other signals

It is patently unfair that "passive common carriers" be allowed to reap the windfall from the home satellite dish customer by charging exorbitant rates for the carriage of a distant signal when there are no incremental costs involved for their service

As copyright owners of broadcast station programming have agreed to a legislatively-negotiated copyright royalty, as contained in HR 2848, it is only fair that the satellite carriers could at least distribute the signals on fair terms and conditions.

HOME SATELLITE TELEVISION ASSOCIATION
P O BOX 18852
WASHINGTON DC 20036

May 2, 1988

The Honorable Robert Kastenmeier
Chairman, Subcommittee on Courts, Civil
Liberties and the Administration of Justice
2137 Rayburn House Office Building
Washington, D C 20515

Dear Chairman Kastenmeier

On behalf of the Home Satellite Television Association and its membership in nearly every state in the country, we wish to strongly thank you for the hard work which you and your able counsel Mike Remington have put forward in pushing the markup of H R. 2848 As you pointed out in the markup, there are many, often conflicting, interests involved in these issues. We strongly support your continued efforts to balance among these interests, recognizing that those of consumers are paramount.

Again, thank you for your tireless efforts to resolve these matters We will be working to gain additional support for the legislation

Sincerely,

George Kocian, Chairman
Home Satellite Television Association

LAW OFFICES
BROWN & FINN
CHARTERED
SUITE 510
1920 N STREET N W
WASHINGTON D C 20036

(202) 887 0600

September 15, 1987

The Honorable Robert Kastenmeier
Chairman, Subcommittee on Courts, Civil
Liberties & the Administration of Justice
Committee on the Judiciary
United States House of Representatives
2137 Rayburn House Office Building
Washington, D C. 20515

Dear Chairman Kastenmeier

This firm represents the Home Satellite Television Association ("HSTA") and Amway Corporation ("Amway") HSTA is the trade association of home satellite earth station consumers and retailers. It has testified this year on satellite legislation before both the House & Senate Amway Corporation is the second largest direct selling company in the world with 1986 sales of 1 3 billion dollars. With nearly 2 million independent distributors worldwide and 750,000 within the United States distributing 4,000 different products, Amway is the only nationwide distributor of satellite programming that is independent of the cable industry It currently distributes a feature film channel, Select TV, to home dish owners. It intends to distribute the signals of broadcast television stations as well.

We wish to sincerely thank you for recognizing again this year that there are copyright issues that demand Congressional clarification and for taking the legislative initiative to introduce H R. 2848. We respectfully urge that you schedule hearings on this bill as soon as possible and we would be pleased to testify in those hearings if it would assist the Committee in its examination of the issues.

Each of our clients is highly interested in the passage of a fair copyright bill to eliminate the uncertainty presently surrounding the marketing of scrambled broadcast signals to home satellite dish owners. Our clients agree that there should be legislation which both balances the interests of the creative community and home satellite antenna consumers while treating such consumers no less favorably than cable television subscribers.

In hearings before you last year, we pointed to a number of areas that we felt were necessary to establish a more level playing field. We would like to briefly reiterate the major areas of concern We are confident that changes in H R. 2848 to ameliorate these concerns would unleash vast constituent support for this legislation.

LAW OFFICES
BROWN & FINN
CHARTERED

Proposed Section 119(b)(1)(B) establishes a payment of $.12 per month per signal. This payment now appears to be substantially in excess of the average charge per cable subscriber for the identical signal in light of the recent Cablevision v MPAA decision. We are concerned, in addition, that to the extent that there is a significant difference between a cable price and a dish price for broadcast signals, this could be used as a precedent for establishing a higher price for dish owners for viewing other types of signals as well We propose amending this section to indicate that the average fee paid for dish distribution should correspond to the average fee for cable distribution on a per subscriber basis

It is unfair to establish a sunset provision in the legislation for home dish viewers and have no such provision for cable television subscribers. Therefore, we urge that the sunset provision contained in proposed Section 119(c) and Section 4 be deleted

Proposed Section 119(d)(9)(B) limits the number of superstations available to home dish owners to those signals obtaining 10% of the cable viewing audience. It is unfair to make the future opportunity for viewing of broadcast signals by means of home satellite antennas depend upon how many cable subscribers happen to choose to view a particular service The effect of such a provision would be to consign home dish viewing opportunities to what cable subscribers, or more realistically cable companies, feel is important Potential entrepreneurs wishing to bring increased broadcast signals to dish owners should not be required to serve 10% of cable homes first Again, this is a matter of fundamental fairness.

Also, we believe that the bill should be strengthened to prevent unfair discriminatory pricing practices against home dish owners. Proposed Section 119(a)(4) purports to prohibit discrimination if such discrimination is against the provisions of the Communications Act or the FCC rules It is far from clear that the provisions of the Communications Act would in fact prohibit the type of price discrimination that home satellite dish owners have encountered. Also, resolution of the matter is needed now, not after FCC proceedings and possible court appeals that can drag on for years. The discrimination is very real and is harmful to the development of home satellite earth station technology For example, some carriers are charging up to 1,000% more for home dish viewing than for distribution to cable companies.

We believe the legislation should be modified to make it clear that carriers cannot discriminate in charges (other than volume discounts) between cable systems for service to their cable subscribers and satellite carrier customers, including distributors for private viewing, for service to their subscribers. To avoid hidden charges and mark-ups, we also urge that the legislation require that the copyright charge be separately specified by the carriers when billing their customers. Finally, we urge amending the definition of private viewing contained in proposed Section 119(d)(5) to include broadcast radio stations.

LAW OFFICES
BROWN & FINN
CHARTERED

We wish to reiterate our strong support for you and for Congressman Synar for having taken the lead on these issues. We look forward to working with you through hearings and passage of the bill.

Sincerely,

Richard L Brown

Frederick W. Finn

RLB/FWF-bf

Extra-terrestrial Relays

Can rocket stations give worldwide radio coverage?

BY ARTHUR C CLARKE

THE FOLLOWING ARTICLE WAS FIRST published in Wireless World *40 years ago this month—20 years before the launch of Early Bird the world's first operational commercial communications satellite*

Although it is possible by a suitable choice of frequencies and routes to provide telephony circuits between any two points or regions of the earth for a large part of the time long distance communication is greatly hampered by the peculiarities of the ionosphere and there are even occasions when it may be impossible A true broadcast service giving constant field strength at all times over the whole globe would be invaluable not to say indispensable in a world society

Unsatisfactory though the telephony and telegraph position is that of television is far worse since ionospheric transmission cannot be employed at all The service area of a television station even on a very good site is only about a hundred miles across To cover a small country such as Great Britain would require a network of transmitters connected by coaxial lines waveguides or VHF relay links A recent theoretical study[1] has shown that such a system would require repeaters at intervals of 50 miles or less A system of this kind could provide television coverage at a very considerable cost over the whole of a small country It would be out of the question to provide a large continent with such a service and only the main centers of population could be included in the network

The problem is equally serious when an attempt is made to link television services in different parts of the globe A relay chain several thousand miles long would cost millions and transoceanic services would still be impossible Similar considerations apply to the provision of wideband frequency modulation and other services such as high-speed facsimile which are by their nature restricted to the ultra high frequencies

Many may consider the solution proposed in this discussion too far fetched to be taken very seriously Such an attitude is unreasonable as everything envisaged here is a logical extension of developments in the last 10 years—in particular the perfection of the long range rocket of which V2 [the rockets used against the British by the Germans in World War II] was the prototype While this article was being written it was announced that the Germans were considering a similar project which they believed possible within 50 to 100 years

Before proceeding further it is necessary to discuss briefly certain fundamental laws of rocket propulsion and astronautics A rocket which achieved a sufficiently great speed in flight outside the earth's atmosphere would never return This orbital velocity is 8 km/second (5 miles/second) and a rocket that attained it would become an artificial satellite circling the world forever with no expenditure of power—a second moon in fact The German transatlantic rocket A10 would have



William Coupon

Clarke s theories laid the groundwork for modern satellite communications. The English born writer now lives in Sri Lanka.

reached more than half this velocity

It will be possible in a few more years to build radio-controlled rockets that can be steered into such orbits beyond the limits of the atmosphere and left to broadcast scientific information back to the earth A little later manned rockets will be able to make similar flights with sufficient excess power to break the orbit and return to earth

There are an infinite number of possible stable orbits circular and elliptical in which a rocket would remain if the initial conditions were correct The velocity of 8 km/second applies only to the closest possible orbit one just outside the atmosphere and the period of revolution would be about 90 minutes As the radius of the orbit increases the velocity decreases since gravity is diminishing and less centrifugal force is needed to balance it Figure 1 shows this graphically The moon of course is a particular case and would lie on the curves of figure 1 if they were produced The proposed German space stations would have a period of about four and a half hours

It will be observed that one orbit with a radius of 42 000 km has a period of exactly 24 hours A body in such an orbit if its plane coincided with that of the earth s equator would revolve with the earth and would thus be stationary above the same spot on the planet It would remain fixed in the sky of a whole hemisphere and unlike all other heavenly bodies would neither rise nor set A body in a smaller orbit would revolve more quickly than the earth and so would rise in the west as indeed happens with the inner moon of Mars

Using material ferried up by rockets it would be possible to construct a space station in such an orbit The station could be provided with living quarters laboratories and everything needed for the comfort of its crew who would be relieved and provisioned by a regular rocket service This project might be undertaken by purely scientific reasons as it would contribute enormously to our knowledge of astronomy physics and me-

teorology A good deal of literature has already been written on the subject[2]

Although such an undertaking may seem fantastic it requires for its fulfillment rockets only twice as fast as those already in the design stage Since the gravitational stresses involved in the structure are negligible only the very lightest materials would be necessary and the station could be as large as required

Let us now suppose that such a station were built in this orbit It could be provided with receiving and transmitting equipment (the problem of power will be discussed later) and could act as a repeater to relay transmissions between any two points on the hemisphere beneath using any frequency which will penetrate the ionosphere If directive arrays were used the power requirements would be very small as direct line of sight transmission would be used There is the further important point that arrays on the earth once set up could remain fixed indefinitely

Moreover a transmission received from any point on the hemisphere could be broadcast to the whole of the visible face of the globe and thus the requirements of all possible services would be met (fig 2)

It may be argued that we have as yet no direct evidence of radio waves passing between the surface of the earth and outer space all we can say with certainty is that the shorter wavelengths are not reflected back to the earth Direct evidence of field strength above the earth s atmosphere could be obtained by V2 rocket technique and it is to be hoped that someone will do something about this soon as there must be quite a surplus stock somewhere! Alternatively given sufficient transmitting power we might obtain necessary evidence by exploring for echoes from the moon In the meantime we have visual evidence that frequencies at the optical end of the spectrum pass through with little absorption except at certain frequencies at which resonance effects occur Medium high frequencies go through the E layer twice to be reflected from the F layer and echoes have been received from meteors in or above the F layer It seems fairly certain that frequencies from say 50 Mc/s to 100 000 Mc/s could be used without undue absorption in the atmosphere or the ionosphere

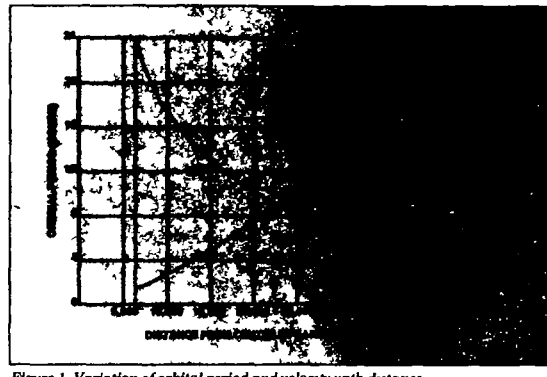

Figure 1 Variation of orbital period and velocity with distance from the center of the Earth

A single station could only provide coverage to half the globe and for a world service three would be required though more could be readily utilized Figure 3 shows the simplest arrangement The stations would be arranged approximately equidistantly around the earth and the following longitudes appear to be suitable

30 E—Africa and Europe
150 E—China and Oceana
90 W—The Americas

The stations in the chain would be

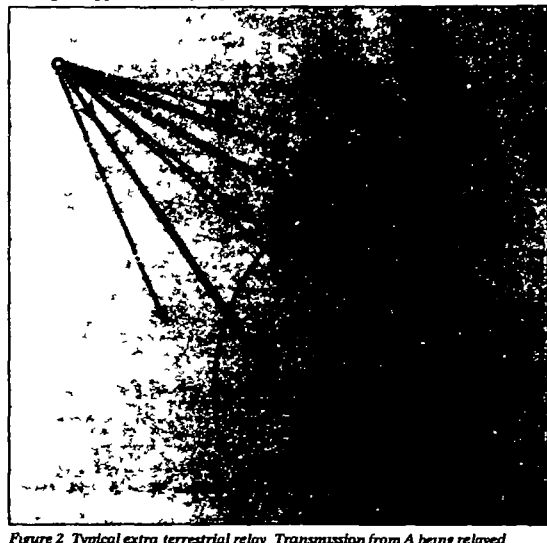

Figure 2 Typical extra terrestrial relay Transmission from A being relayed to points B and C transmission from D being relayed to whole hemisphere

89-491 0 - 89 - 24

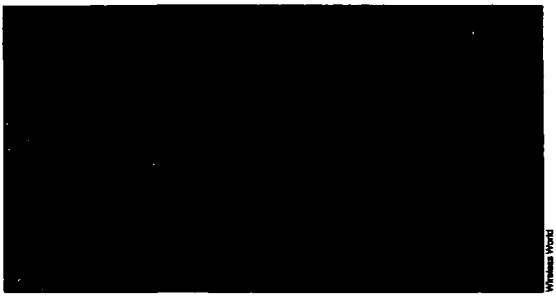

Figure 3 Three satellites would ensure complete coverage of the globe

linked by radio or optical beams and thus any conceivable beam or broadcast service could be provided

The technical problems involved in the design of such stations are extremely interesting [3] but only a few can be gone into here Batteries of parabolic reflectors would be provided of apertures depending on the frequencies employed Assuming the use of 3 000 Mc/s waves mirrors about a meter across would beam almost all the power on to the earth Larger reflectors could be used to illuminate single countries or regions for the more restricted services with consequent economy of power On the higher frequencies it is not difficult to produce beams less than a degree in width and, as mentioned before there would be no physical limitations on the size of the mirrors (From the space station the disc of the earth would be a little over 17 degrees across) The same mirrors could be used for many different transmissions if precautions were taken to avoid cross modulation

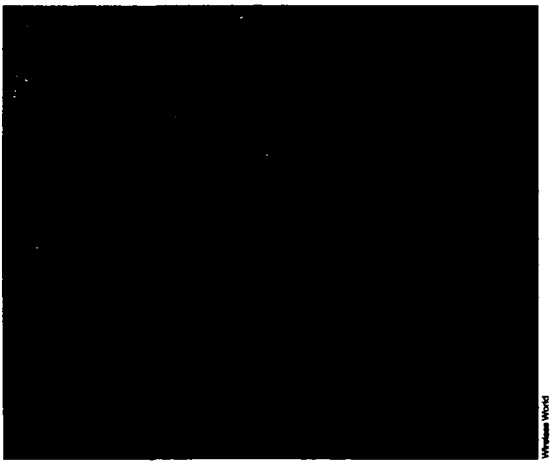

Figure 4 Solar radiation would be cut off for a short period each day at the equinoxes.

It is clear from the nature of the system that the power needed will be much less than that required for any other arrangement since all the energy radiated can be uniformly distributed over the service area, and none is wasted An approximate estimate of the power required for the broadcast service from a single station can be made as follows

The field strength in the equatorial plane of a $\lambda/2$ dipole in free space at a distance of d meters is

$$e = 6\,85\,\frac{\sqrt{P}}{d} \text{ volts/meter where}$$

P is the power radiated in watts

Taking d as 42,000 km (effectively it would be less) we have

$$P = 37\,6\,e^2 \text{ watts } (e \text{ now in } \mu\text{V/meter})$$

If we assume e to be 50 microvolts/meter which is the FCC standard for frequency modulation P will be 94 kW This is the power required for a single dipole, and not an array that would concentrate all the power on the earth Such an array would have a gain over a simple dipole of about 80 The power required for the broadcast service would thus be about 1.2 kW

Ridiculously small though it is this figure is probably much too generous Small parabolas about a foot in diameter would be used for receiving at the earth end and would give a very good signal/noise ratio There would be very little interference partly because of the frequency use and partly because the mirrors would be pointing toward the sky which could contain no other source of signal A field strength of 10 microvolts/meter might well be ample and this would require a transmitter output of only 50 watts

When it is remembered that these figures relate to the broadcast service the efficiency of the system will be realized The point to point beam transmissions might need powers of only 10 watts or so These figures of course would need correction for ionospheric and atmospheric absorption but that would be quite small over most of the band The slight falling off in field strength due to this cause toward the edge of the service area could be readily corrected by a non-uniform radiator

The efficiency of the system is revealed when we consider that the London television service required about 3 kW average power for an area less than 50 miles in radius [5] —

A second fundamental problem is the provision of electrical energy to run the large number of transmitters required for the different services In space beyond the atmosphere a square meter normal to the solar radiation intercepts 1.35 kW of energy [6] Solar engines have already been developed for terrestrial use and are an economic proposition in tropical countries They employ mirrors to concentrate sunlight on the boiler of a low-pressure steam engine Although this arrangement is not very efficient it could be made much more so in space where the operating components are in a vacuum the radiation is intense and continuous and the low temperature end of the cycle could be not far from absolute zero Thermoelectric and photo-electric developments may make it possible to utilize the solar energy more directly

Though there is no limit to the size of the mirrors that could be built one 50 meters in radius would intercept over 10 000 kW and at least a quarter of this energy should be available for use

The station would be in continuous sunlight except for some weeks around the equinoxes when it would enter the earth s shadow for a few minutes every day Figure 4 shows the state of affairs during the eclipse period For this calculation it is legitimate to consider the earth as fixed

'It's the only way true world coverage can be achieved.'

and the sun as moving around it The station would graze the earth s shadow at A on the last day in February Every day as it made its diurnal revolution it would cut more deeply into the shadow undergoing its period of maximum eclipse on March 21. On that day it would only be in darkness for 1 hour 9 minutes From then onward the period of eclipse would shorten and after April 11 (B) the station would be in continuous sunlight again until the same thing happened six months later at the autumn equinox between September 12 and October 14 The total period of darkness would be about two days per year and as the longest period of eclipse would be little more than an hour there should be no difficulty in storing enough power for an uninterrupted service

Conclusion

Briefly summarized the advantages of the space station are as follows

1) It is the only way in which true world coverage can be achieved for all possible types of service

2) It permits unrestricted use of a band at least 100 000 Mc/s wide and with the use of beams an almost unlimited number of channels would be available

3) The power requirements are extremely small since the efficiency of illumination will be almost 100 percent Moreover the cost of the power would be very low

4) However great the initial expense it would only be a fraction of that required for the world networks replaced and the running costs would be incomparably less

Appendix—Rocket Design

The development of rockets sufficiently powerful to reach orbital *and even escape velocity is now* only a matter of years The following figures may be of interest in this connection

The rocket has to acquire a final velocity of 8 km/second Allowing 2 km/second for navigational corrections and air resistance loss (this is legitimate as all space rockets will be launched from very high country) gives a total velocity needed of 10 km/second The fundamental equation of rocket motion is[2]

$$V = v \log_e R$$

where V is the final velocity of the rocket v the exhaust velocity and R the ratio of initial mass to final mass (payload plus structure) So far v has been about 2 to 2 5 km/second for liquid fuel rockets but new designs and fuels will permit of considerably higher figures (Oxy hydrogen fuel has a theoretical exhaust velocity of 5 2 km/second and more powerful *combinations are known*) If we assume v to be 3 3 km/second R will be 20 to 1. However owing to its finite acceleration the rocket loses velocity as a result of gravitational retardation If its acceleration (assumed constant) is a meters/second[2] then the necessary ratio Rg is increased to

$$Rg = R \frac{a+g}{a}$$

For an automatically controlled rocket a would be about $5g$ and so the necessary R would be 37 to 1. Such ratios cannot be realized with a single rocket but can be attained by step-rockets [2] while very much higher ratios (up to 1 000 to 1) can be achieved by the principle of cellular construction [3]

'Atomic power has brought space travel half a century nearer '

Epilogue—Atomic Power

The advent of atomic power has at one bound brought space travel half a century nearer It seems unlikely that we will have to wait as much as 20 years before atomic powered rockets are developed and such rockets could reach even the remoter planets with a fantastically small fuel/mass ratio—*only a few percent* The equations developed in the appendix still hold but v will be increased by a factor of about a thousand

In view of these facts it appears hardly worthwhile to expend much effort on the building of long-distance relay chains Even the local networks that will soon be under construction may have a working life of only 20 to 30 years

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by Mark Long

THE ASCENT OF KU-BAND

DURING THE NEXT FEW YEARS, KU-BAND WILL GROW TO MATCH C-BAND IN SERVICES

In this first part of a two-part series Satellite ORBIT *covers the latest advances in Ku band satellite technology and services In this article Technical Editor Mark Long looks at new Ku-band satellites that will be in operation by the end of this year Next month he will describe new equipment that dish owners can use to receive both Ku and C band signals*

A revolution in satellite TV is about to shift into high gear During the coming year several new satellites will be launched that will dramatically expand the number of services available in the Ku band a higher frequency range than C band Thanks to the higher powered signals transmitted by Ku band satellites consumers will be able to pick up a host of new services on smaller diameter dishes without the microwave interference problems that often plague C band reception

North American Ku band satellites with output power levels of 16 to 45 watts could be carrying more than 100 channels by the end of 1987 These new channels will offer such services as satellite news gathering regional coverage of live sports distribution of syndicated TV programming educational TV for college credit premium TV program distribution to hotels motels and SMATV systems and direct to-home satellite TV

SATELLITE NEWS GATHERING

By 1987 Ku band satellite links will be the dominant method of delivering video news coverage from the field to the studio control room Mobile Ku band satellite news-gathering teleports are clearly superior to their C band counterparts in several respects Since Ku band satellites operate on much higher frequencies than C band birds smaller dishes can be used for uplinking video signals This not only lowers the cost of mobile dishes but also makes them

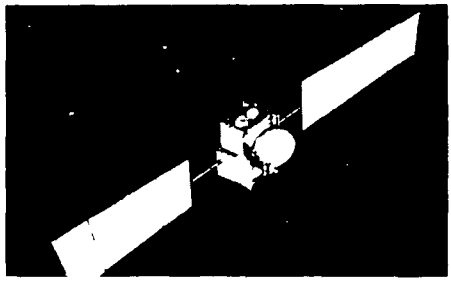
ILLUSTRATION BY CYNTHIA BAKER

much easier and less expensive to transport Because the cost of transportable Ku band earth stations is appreciably lower than the cost of C-band units local TV stations as well as regional and national news services will be able to afford their own rigs

The 12-GHz frequency spectrum also affords mobile teleports another distinct advantage over C band transportables While C band satellites share the same frequency band with Ma Bell s extensive network of terrestrial microwave links 12-GHz uplinks and downlinks remain relatively free from interference problems caused by nearby telephone transmission facilities This makes it easier to conduct mobile operations in crowded urban and suburban environments

After it is launched this month, Satcom K2 will be used to distribute national and regional news services to affiliates across the U S.

Several organizations have already announced their plans for using the latest Ku band birds for satellite news gathering United States Satellite Broadcasting (USSB) of St Paul Minnesota has leased four transponders on RCA Americom s Satcom K2 satellite for more than $85 million CONUS Communications a USSB subsidiary will use Satcom K2 to distribute



national and regional news services to affiliate stations across the U S

RCA s Satcom K2 and K1 satellites are scheduled for deployment this month and in December of 1985 via NASA space shuttle missions

These satellites will be the most powerful domestic communications satellites in service states Eugene F Murphy chairman of RCA Communications Each satellite carries 16 transponders with 45 watts of power which means that they can deliver a superior quality television signal into antennas as small as three feet in diameter

The four transponders on Satcom K2 will augment the single SBS III transponder which CONUS has been using for the past year CONUS Communications already has a fleet of 25 transportable uplinks in the field Not only can CONUS-member stations use the system to link transportable facilities to their local broadcast studios but they can also access a video digest of newsworthy events transmitted daily from the Twin Cities studios of USSB or exchange programs with other broadcasters

With the launch of Satcom K2 this month CONUS will have the capacity it needs to continue expanding its base of operations Because our member stations are located nationwide we ll be in an excellent position to continue not only with first or early coverage of events having local interest but those with national impact as well said Chuck Dutcher vice president and general manager of CONUS Television stations equipped with RCA s Ku band antenna/receiver package will be able to take advantage of this new source of news programming material—either live or to be taped for later playback

This past September CONUS began offering Washington Direct an innovative news service that supplies subscribing stations with a daily feed of two or more hours of news programming from the nation s capital Unlike its other satellite news gathering service which is only available to affiliate stations CONUS s Washington Direct service is available to any TV station magazine or newspaper that wishes to subscribe Dish owners will also be able to use the service to keep up with the latest developments in Washington since CONUS has no plans at present to scramble any of its Ku band satellite TV transmissions

NBC will also be using Satcom K2 for satellite news gathering purposes Earlier this year NBC inaugurated an extensive 12 GHz satellite network linking the broadcaster s main studios with NBC affiliate stations nationwide The network will lease six Satcom K2 transponders from RCA to replace some of the capacity it currently leases on two satellites SBS II and SBS III By February 1986 NBC will be off SBS II entirely and will use just one full time and five part time transponders on SBS III Since Satcom K2 coverage is limited to the continental U S NBC will continue to use a single C-band transponder on Satcom F1R to distribute NBC programming to Alaska and Hawaii

NBC s Ku band transponders will see extensive part time use on weekends when the network transmits regional coverage of NFL football games or other professional sporting events to NBC affiliate stations

NBC is also considering the creation of its own cable news service to directly compete with Turner Broadcasting s CNN and CNN Headline News If NBC does go ahead with plans to launch a competing service in 1986 look for Satcom K2 to provide the essential satellite capacity for linking the network s transportable uplinks with NBC studios Although NBC has gone on record

as favoring scrambling of all network transmissions the network s representatives have indicated that there are no immediate plans to encrypt it s signals

SBS III and Satcom K2 won t be the only 12 GHz satellites used for satellite news gathering Spacenet satellites have been regularly used during the past year by the Florida News Network (FNN) for the exchange of news items among local Florida broadcasters The BAF Communications Corporation of Salem Massachusetts plans to use leased capacity on the recently launched GStar A1 satellite to link the company s fleet of transportable uplinks to TV broadcasters nationwide Present plans call for BAF to utilize more than five hours of transponder time each weekday The initial service on GStar A1 will involve transportables which have been leased to local TV stations in Colorado Arizona and Georgia

SATELLITE SYNDICATION SERVICES

With the launch of Satcom K2, RCA intends to offer television program syndicators a distribution system for reaching commercial broadcast TV stations beginning in early 1986 As part of the system RCA Americom will use two 45-watt transponders to simultaneously transmit as many as four individual TV signals The RCA Americom Syndication System is designed to provide a means whereby television stations have more flexibility in program reception said Dr James J Tietjen president and chief executive officer of RCA Americom It is a major step in eliminating antenna conflict allowing station operators to simultaneously receive both time-sensitive and non time sensitive programming

The increased flexibility is due to RCA Americom s decision to supply every TV broadcast station in the U S with a free 3 7 meter Ku band terminal that will be sighted onto the RCA Satcom K2 bird Each TV station will receive $1 000 from RCA to defray the cost of installing the 12-GHz TVRO The RCA supplied earth stations will be a valuable addition to existing C and Ku band terminals already owned by TV broadcasters At press time more than 420 TV stations had accepted RCA s offer providing customers leasing Satcom K2 capacity with a highly attractive marketing network for new program services that will be on line by the time that the K2 satellite is fully operational

EDUCATIONAL AND PREMIUM PROGRAMMING

Hi tech oriented individuals and organizations looking for something more than just entertainment programming will find that the GStar A1 satellite is now transmitting professional educational TV services not currently available on C band The National Telecommunications University (NTU) has leased a single transponder on GStar A1 to transmit graduate courses in engineering prepared by NTU s 19 member colleges and universities

Currently 40 American corporations pick up NTU programming for their internal training departments For this fall more than 600 students from major corporations have enrolled in 45 to 50 different courses in the fields of computer engineering computer science electrical engineering and engineering management and manufacturing systems The AMCEE (Association for Media Based Continuing Education for Engineers) an organization which shares satellite capacity with NTU will also pro-

TRY A KU MENU

Mark Allen of Woodlands Texas is a recent newcomer to Ku band (see this month s Letters to the Editor) A chief engineer with Microwave Engineers, Inc of Woodlands Texas Allen enjoys scanning Ku band satellites to see what programming is on the occasional-use transponders and to see what new programming is beamed down regularly via 12 GHz

I m using a DX 700 series dual band receiver and an Andrews 6-foot dish with a homemade support for the feed ' Allen says I tend to scan the satellites to see what s up there. Currently the programming is sporadic I take great interest in NBC news feeds During the last Louisiana hurricane, for example I saw as many as 12 simultaneous Ku band feeds coming from the disaster area These were originated by individual NBC affiliate stations from around the country who had sent reporters to the area

'Regular TV viewers were getting only 3 or 4 minute news segments I got a far better idea of what was really happening with the hurricane '

Allen says he's found some teleconferencing during business hours on SBS III and watches NBC sports on Ku band often

' The byword is patience ' Allen says ' But scanning the spectrum is half the fun In Ku-band, the programming services tend not to use test patterns when their transponders are not in use so you tend to scan across them and then find some programming on them later You have to avoid getting frustrated

As more regular programming becomes available on Ku band many more dish owners are considering buying Ku band equipment or retrofitting their C-band systems to receive Ku-band signals too

Though Ku-band services are listed in *Satellite ORBIT*'s Guide to the Satellites in the Birdwatcher section here are just a few new services (in addition to sports and satellite news gathering feeds) that are currently available on Ku-band

- Hi Net Showtime ESPN BizNet, CNN and Satellite Cinema
- Washington Direct daily feeds of of two or more hours of news from the nation's capital
- National Telecommunications University graduate course work in engineering prepared by 19 member colleges and universities
- Campus Satellite Network. concerts in stereo and other programming of interest to college students

HI-NET IS NOW SUPPLYING ESPN, CNN, SHOWTIME, AND HI-NET'S OWN SATELLITE CINEMA.

SATELLITE CINEMA SHOULD BE OF SPECIAL INTEREST TO KU-BAND VIEWERS SINCE IT CARRIES MANY FIRST-RUN MOVIES

vide several hours each day of unaccredited courses of interest to engineers and technicians. Since each GStar satellite transponder has a usable bandwidth of 54 MHz instead of the 36 MHz bandwidths employed by most C-band satellites, the NTU transponder will be able to transmit two educational TV courses simultaneously. The satellite classroom will be active from 8:00 a.m. to midnight weekdays. Individuals or organizations that have Ku-band earth stations can arrange to audit courses by contacting Mark Bradley, NTU, P.O. Box 700, Fort Collins, Colorado 80522.

Also appearing on GStar satellites is the Campus Satellite Network, which supplies a variety of entertainment programming to college and university campuses across the country. Concerts in stereo and other programs of interest to students appear on a regular basis.

On September 12, 1985, Hi Net Communications, a joint venture of Holiday Inn and Comsat General, inaugurated a new satellite-delivered service that eventually will supply premium program services to Holiday Inn hotels around the world.

ESTIMATED NUMBER OF TV CHANNELS TO BE CARRIED BY NORTH AMERICAN KU-BAND SATELLITES

	1985	1986	1987
SBS I-V	9	10	12
Spacenet I-II	3	5	6
GStar A1, A3	10	16	20
RCA Satcom K1-K3	—	26	43
Morelos F1, F2	0	1	3
Anik C1-C3	14	15	17
ASC 1, 2	1	2	3
Total	37	75	104

Using leased capacity on GStar A1, Hi Net is now supplying ESPN, CNN, Showtime and Hi Net's own Satellite Cinema pay-per-view service to Holiday Inns throughout North America. Both ESPN and CNN will be transmitted by means of a single GStar transponder which covers the entire continental U.S. Two additional transponders, one beaming east and the other west, are used to carry East and West Coast versions of Showtime and Satellite Cinema. Since the Satellite Cinema service is aired only at night, its capacity is used during daytime hours for BizNet programs and for conducting videoconferences. Satellite Cinema should be of special interest to Ku-band viewers since it carries many first-run movies before they are aired by any of the C-band premium programmers (at press time, Satellite Cinema and Showtime were available only on the East Coast beam). Currently, Hi Net is not scrambled. Hi Net has confirmed, however, that it has signed a $2.6 million agreement with Scientific Atlanta for the production of B-MAC encryption technology which will allow Hi Net to scramble its program feeds. By June of 1986, the B-MAC scrambling system should be fully implemented.

RCA Americom plans to supply premium programming via its second Ku-band spacecraft, Satcom K1, which is scheduled to be launched in December of this year. Negotiations are currently under way with a number of different organizations interested in offering premium program services to multi-unit dwellings and complexes. RCA contends that its 12-GHz Satcom birds are ideal for serving urban locations since the medium-powered spacecraft could conceivably deliver a commercial-quality signal into antennas as small as 1 meter (3.28 feet) in diameter.

DBS

RCA has also been touting Satcom Ku-band transponders as excellent berths for new direct-to-home satellite TV services. RCA hopes to regain some of the cable TV services that the corporation lost to Hughes Communications when Galaxy I was launched in 1983. Claiming that home satellite TV reception would be possible with antennas only 70 centimeters (2 feet) in diameter, RCA now intends to market some of the available capacity on Satcom K1 for direct reception by individual households. RCA is currently talking with various cable conglomerates about the lease or outright purchase of transponders for transmission of direct-to-home satellite TV services.

Of course, readers should keep in mind that even with all the upcoming Ku-band programming, a wider selection of entertainment choices will continue to be carried by C-band satellites in the foreseeable future. The situation was similar in the 1960s when terrestrial UHF TV channels first became available. Few if any of the established VHF TV channels were put out of business. Future Ku-band services should be seen as supplementing rather than replacing C-band programming. Ku-band satellite services also represent an alternative for those viewers who, for one reason or another, cannot access C-band satellites.

The Ku-band represents a new frontier which many C-band dish owners may wish to explore for themselves. The cost of modifying your existing earth station for reception of both C- and Ku-band signals currently is less than $400 for those systems equipped with block downconversion receivers, and this cost will drop even further in the months ahead.

Next month we'll take a look at some of the new dual-C- and Ku-systems that are currently on the market. ■

Mark Long is Technical Editor of Satellite ORBIT *and author of The Down-to-Earth Guide to Satellite TV* and the *1985 World Satellite Almanac*

Eye on the Sky

SUPERSTATION MUDDLE, AGAIN

While Congress fiddles over the legalities, dish owners burn

As we report in Issues in Orbit on page 17, a viewing rights problem that has been lingering in the background for more than a year has reared its head again Tempo Enterprises, the company that puts the superstation WTBS up on satellite, announced in late April that it would not sell dish owners subscriptions to WTBS Why not? Because current law does not specifically state that common carriers like Tempo can sell superstations to home satellite TV viewers

This same problem made WOR unavailable to dish owners when Eastern Microwave, another common carrier, first scrambled the New York superstation last March But since then, WOR has been included in the Superstar Connection, a package of superstations sold by United Video, another major common carrier Why is it that WOR, KTVT, WPIX, and WGN are being marketed to dish owners, but WTBS isn't? Because United Video's lawyers believe that selling superstations to dish owners is legal under current law, but Tempo's attorneys say it's illegal United Video has decided to take a calculated risk, but Tempo refuses to gamble

Tempo and WTBS have appealed to Congress to amend the law so that they can do business with satellite TV viewers It would be nice if this issue could be dealt with quickly Unfortunately, that's unlikely Congress took a run at passing a superstation bill last year that would have cleared up the confusion, but the proposal died because the networks wanted a clause banning the uplinking and resale of their affiliate stations (ABC, CBS, and NBC have taken Satellite Broadcast Networks to court over the same issue SBN sells the PrimeTime 24 package of three network affiliates to dish owners) The House Subcommittee on Courts may bring up last year's superstation bill again soon, but the dispute over allowing network affiliates to be uplinked could delay action for months

While they wait for this muddle to be cleared up, dish owners who own VideoCipher II descramblers can probably continue watching WTBS Tempo scrambled the superstation in May, but in the "fixed-key mode," which means that no subscription is needed to receive the signal Tempo officials say they plan to keep it that way indefinitely, but the common carrier could switch to "addressable mode" at any time, making WTBS completely unavailable until the law is clear on selling subscriptions to dish owners

Congress, the common carriers, the superstations, and the networks should all bear in mind that dish owners want just one thing—access to television. From our point of view, United Video's approach is best: Take the risk that selling superstations to dish owners violates a legal technicality and make the services available today ■

Richard A Smith

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RADIO TELEVISION CABLE SATELLITE

Broadcasting Oct 24

TOP OF THE WEEK

Congress, in overtime, passes TVRO, children's ad bills

H R 2848 clears up copyright questions over delivery of over-the-air signals to home dishes broadcasters now must provide programing for special needs of children with ad limits also OK d is lottery advertising

The 100th Congress flexed its regulatory muscle last week and as a result the Fifth Estate will operate under some new ground rules For starters the Senate after months of uncertainty, approved by voice vote a House measure (H R 3966) that would reimpose limits on the amount of advertising during children s programs and require broadcasters to serve the "special needs of children " Despite earlier threats of a presidential veto most observers felt the measure would become law

And a copyright bill (H R 2848) which should bolster the struggling home satellite industry as well as ensure backyard dish owners access to network and independent broadcast signals was also headed for the President s desk

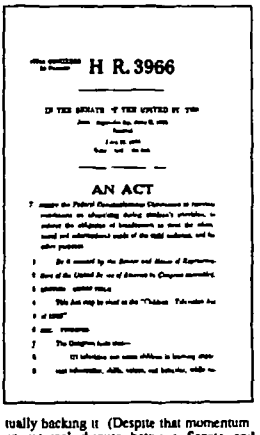
This was all part of last week's activity on Capitol Hill as Congress prepared to depart last Friday night (Oct 21) Slated to adjourn more than two weeks ago the lawmakers stayed on primarily to pass a mammoth antidrug bill (BROADCASTING Oct 10 17) By week's end however it appeared that the 100th Congress had completed its communications policymaking business

The copyright measure creates a six year compulsory license for the satellite distribution of broadcast signals to dish owners (BROADCASTING Sept 26 Oct 10) The bill goes a long way toward eliminating uncertainties surrounding the legality of such distribution under copyright law

The Satellite Broadcasting Network (trade name Primetime 24) which has been engaged in court battles over the delivery of its program package of network signals to rural dish owners hailed the new law as a "giant step" toward advancing the goal of bringing television services to "thousands of unserved households "

H R 2848 establishes more than copyright policy It should help stabilize the fledgling home satellite (TVRO) industry through provisions that establish stiffer penalties for piracy of satellite signals and make the manufacture assembly and modification of unauthorized descramblers a felony punishable by a fine of up to $500 000 and imprisonment of up to five years Also the FCC would be required to conduct an inquiry to determine if a universal encryption standard is needed

The measure was plagued by problems since its inception some two years ago But after lengthy negotiations between industry groups the lawmakers (chiefly House Copyright Subcommittee Chairman Robert Kasten (R Wis) Mike Synar (D-Okla) Rick Boucher (D Va) and Billy Tauzin (D-La)) fashioned a suitable compromise Support slowly grew with satellite carriers the TVRO industry cable the motion picture industry and broadcasters even



H R. 3966

IN THE SENATE OF THE UNITED STATES

AN ACT

tually backing it (Despite that momentum an internal dispute between Senate and House members over trademark legislation almost sank the bill (BROADCASTING Oct 17))

The most formidable opposition initially came from broadcasters But independents were finally placated with language that instructs the FCC to consider a syndex rule for the retransmission of broadcast signals to dish owners And the networks dropped their objections after stronger safeguards concerning the delivery of affiliate signals to so-called white areas (where network signals are unavailable by other means) were added

Three authorization bills affecting the FCC the Corporation for Public Broadcasting and the National Telecommunications have to provide programing that serves the "special needs of children " Additionally the FCC during license renewal time would have to determine whether a licensee had and Information Administration tailed through the House They establish funding levels and in the cases of the FCC and CPB incorporate some policy changes (BROADCASTING Oct 17)

The National Associaton of Broadcasters was especially pleased with the final passage of a lottery advertising measure enabling stations to air advertisements or even public service announcements promoting all legal lotteries Currently broadcasters can carry advertisements for state run lotteries only "Many broadcasters have had to turn down the requests of charity groups and others to publicize their community events much to the frustration of these groups " said NAB President Eddie Fritts in a statement last week

Of last week s congressional accomplishments the children s television bill was certainly the most controversial Stalled in the Senate since June (BROADCASTING June 13) the measure s fate was hanging in the balance House Telecommunications Subcommittee Chairman Ed Markey (D-Mass) and Senator Tim Wirth (D-Colo) were at loggerheads over the measure after Wirth blocked Senate action in an effort to amend the House bill of which Markey is a key sponsor (BROADCASTING Oct 10 17)

Wirth who chaired the House Telecommunications Subcommittee when he served in the House was criticized by the bill s proponents for interfering and was accused of trying to claim credit for legislation others had labored over Wirth does not sit on the Commerce Committee which oversees communications matters but in the Senate it takes only one member to hold up legislation Hill sources say he pulled back to avoid any blame for killing the measure

Nevertheless Wirth s undertakings won praise from some groups including the American Academy of Pediatrics American Psychological Association Consumer Federation of America and the National Education Association, which issued a joint statement endorsing his actions They also voiced disappointment with the broadcast industry for blocking Wirth's efforts

But Peggy Charren of Action for Children's Television defended the broadcasting industry "The industry signed onto this in good faith I think their behavior was fine " She was ecstatic about the prospects of the new law "This reverses the Reagan administration's attitude of let them eat

cable d Charren who also praised Markey Markey deserves more credit than anybody on this legislation she said

Under the measure broadcasters would served the educational and informational needs of children in its overall programing *Advertising would be restricted to 10½ min* utes per hour on weekends and 12 minutes per hour on weekdays But the limits would not take effect until after Jan 1 1990 and by 1993 the FCC would be authorized to review the standards and modify them if necessary

During the Senate s action last week Wirth expressed his frustration with the ini tiative and stated his preference to see the programing requirement made stronger and more explicit " Nevertheless he agreed to *support it after receiving a commitment* from Senate Commerce Committee Chair man Ernest Hollings (D S C) to hold a series of hearings on a "host of children's television issues

Hollings also promised that the commit tee would conduct a study in 1990 *to deter* mine whether the renewal standard provi sion is providing enough of an incentive to increase the quality and quantity of chil dren s programing something that Wirth had been pushing for in his proposed amendment

A licensee must serve "the educational and informational needs of children in its overall programing."

Moreover Hollings engaged in a collo quy with Wirth to clarify that while broad casters can rely upon overall programing " they must also make some reasonable effort to meet the unique public service needs of the various segments of the child audience including programing aimed at the young child

The legislation is the product of nearly two months of intensive negotiations be tween Markey and the NAB (BROADCAST ING April 4) The networks and the Associ ation of Independent Television Stations are also on board "Although there were parts of this bill we would have preferred to omit we did not oppose it in the interest of the child audience and in the interest of compro mise " said Benjamin McKeel chairman of NAB s television board and vice president of television for Nationwide Communica tions

Not only did broadcasters work with Mar key to reach a consensus but there were already signs of heightened sensitivity to the issue NAB announced last week it was launching a national campaign in January to promote a Family Viewing Month" to "re inforce the medium's educational and enter tainment aspects "

But the FCC reacted strongly FCC Chair man Dennis Patrick called the legislation "both unnecessary and ill-advised especial *ly considering* the pending resolution by the FCC of related rulemaking dockets Patrick was referring to the agency s comparative license renewal proceeding (see page 51) and its broad inquiry into children s adver tising Moreover the chairman took issue with the ad limits saying that they are considerably below the industry standard (Under the old NAB code the limits were 12 minutes per hour on weekdays but only nine and a half minutes on weekends)

His comments drew a sharp rebuke from *Larry Irving senior counsel to the House* Telecommunications Subcommittee who said Patrick s statement smacks of arro gance " and that it is ridiculous that the chairman of the FCC can not figure out that Congress does not have to wait for the FCC to act □

Looking ahead to the 101st more activity likely on fairness, must-carry, HDTV, cable issues

It may be far too early to read the tea leaves for next year but it does seem a virtual certainty that much of the vigorous Hill oversight of the broadcast and cable indus tries which has been the trademark of the 100th Congress will continue and possibly accelerate when the 101st Congress con venes Jan 3

Last week as Capitol Hill prepared for adjournment communications lobbyists and Hill staffers shared their thoughts with BROADCASTING on what lies ahead in the 101st Congress There was a general con sensus that lawmakers would pick up where they left off concerning the fairness doc trine must carry high-definition television children s television and the issue of cable s growing market power and whether its com petitors are being denied access to cable programing But the ongoing negotiations between Hollywood and the networks over the FCC s financial interest and syndication rules could spill over to Capitol Hill And the telephone industry s desire to enter the television business may generate some ac tivity

Reimposition of the fairness doctrine will be a chief priority House and Senate lead ers Ernest Hollings (D S C) chairman of the Senate Commerce Committee and John Dingell (D Mich) chairman of the House Energy and Commerce Committees have vowed to see it become law next year Until that happens other Hill action on broadcast issues will remain on hold as it has since the FCC abolished the doctrine in 1987

Broadcasters should prepare for a busy season Hollings promises to hold a series of hearings on children s television issues The senator's broadcast reform legislation intro duced in 1987 could serve as a base from which he might act next year It would impose significant programing and administ rative obligations in exchange for a two step license renewal procedure

The industry may come under further assault as lawmakers will probably revive a bill that would guarantee that candidates be given a lower political advertising rate Ef forts to tax the industry s use of the spectrum and legislative proposals affecting broad casters' advertising revenue are other areas of potential Hill action

Some Hill watchers were predicting that Representative Tom Tauke s (R Iowa) pro posal calling for removal of antitrust restric tions so that broadcasters can come up with a voluntary code to regulate such things as children s television and violence will gain ground next year The Association of Inde pendent Television Stations is already back ing it Some industry observers think Tauke s initiative will offer broadcasters an alternative to government regulation

Tauke told BROADCASTING he will push the measure and is interested in building support outside Congress for the initiative Senator Paul Simon (D Ill) has promised to move his television violence measure again

With fairness settled however broadcast ers would likely see a "serious run to codify some form of must-carry rules " predicted one House aide "I don t know how we ll do must carry said Larry Irving senior coun sel to the House Telecommunications Sub committee who pointed out that it has to be done carefully to create a record for rules that will pass constitutional muster

According to Irving Subcommittee Chairman Ed Markey (D-Mass) wants to take a good look at the status of the tele communications industry" He intends to take a comprehensive approach to looking at all the issues said Irving

The development of high-definition tele vision is another matter the subcommittee will focus on said Irving

As for cable the subcommittee has not developed an agenda although it will con vene the last of three oversight hearings t had planned to hold before adjournment The FCC has tentatively concluded it should recommend that Congress lift the cross ownership ban on phone companies provid ing cable television services in their servic areas and Irving anticipates the matter wi draw some interest

And the FCC is conducting an inquir into cable's compulsory license which migh result in a Hill review of the matter

As for the 100th Congress and some o the earlier forecasts that the cable industi was in deep trouble National Cable Telev sion Association President Jim Mooney quickly pointed out that despite greater co gressional scrutiny those assumptions ha not yet manifested themselves of anythin tangible "

Mooney admitted there was a fair amou of "cable bashing by various of our compe tors and a few members of Congress too But he continued "that is not somethi that has been peculiar to our industry Co gress exercises a lot of its power throu oversight not just of government agenci but oversight of industries over which it l jurisdiction Undeniably we ve come in our share of criticism but so have a lot other industries as well "

Nor does he think cable s standing been harmed by that criticism The c struck between cable programers and National Rural Telecommunications Co erative (a nonprofit distributor serving bi yard dish owners) was "obviously regar

by many in Congress as a sign of the cable industry's willingness to be responsive to members of Congress's concerns," he said. And NCTA's efforts to "try to work out some kind of resolution of the must-carry issue has been noticed up there too," said Mooney.

"The fact that must-carry was not addressed by this Congress was not our doing. That was really a function of differences some members of Congress had with the broadcast industry on another matter" (Mooney is referring to the fairness doctrine.)

As for the next Congress, Mooney hesitated to make any predictions. He does, however, think the telco-cable debate "may in the end" not be as much of an issue as many people anticipate it will be. Furthermore, he said he believes the issue is being driven by the trade press and "to a very significant degree by [FCC] Chairman [Dennis] Patrick."

Senator Al Gore (D-Tenn.), who failed to win passage of his controversial home satellite bill, is prepared to again battle with the cable industry (BROADCASTING, Oct. 17). But Mooney refrained from discussing what might occur on that front next year. He is, however, hopeful the backyard dish industry "at some point will devote its energies to marketing and pursuing business strategies."

Asked what the likelihood is for any future Hill action on cable's compulsory license, Mooney thinks it will largely depend on what happens with syndex. "If syndex sticks, I am not sure what the compulsory license issue would be because they no longer could say that they [broadcasters] are being deprived of anything that they should have. All syndex is is a kind of retrenchment of the compulsory license. Reexamination of cable's compulsory license on Capitol Hill failed to materialize despite efforts on the part of independent television to make it an issue in the must-carry debate.

There are few signs that cable's critics will be any less vocal before the 101st Congress. Based on INTV President Preston Padden's assessment of what lies ahead, there will be continued pressure. "I think some of the collective voices of concern about what is going on in the communications marketplace are going to be heard in the next Congress. I think the heat is going to be greater than ever," Padden feels policymakers will want to "fashion something to put the house in order." □

Sketching scenarios for network-cable crossownership

Analysts say if FCC prohibitions are repealed, it's more likely an MSO might try to buy a network than vice versa

The FCC's proposed rulemaking to lift restrictions on broadcast network-cable system crossownership may be debated in the language of public policy. But whether any ownership changes actually take place if the rules are changed may more likely be decided by business considerations. The current view from *Wall Street* says that the three TV networks would encounter a mess of complications were they to attempt to take advantage of the proposed rule change. If anything, the proposed rulemaking while understood as allowing ABC, CBS or NBC to buy cable systems, may more likely permit an MSO to buy a broadcast network.

Especially for NBC and Capital Cities/ABC, programing for cable is a higher priority than purchasing systems, analysts say. NBC is launching its Consumer News and Business Channel in 1989. ABC owns most of ESPN and part of Lifetime and Arts & Entertainment.

General Electric, NBC's parent corporation, appears most able to afford an extensive cable purchase and has expressed the most interest in the recent move toward crossownership repeal. But before investing, "They want to see the cable telco situation work its way out," said John Reidy, an analyst at Drexel Burnham Lambert. Capital Cities/ABC would have more limited resources and CBS, which has $3 billion in cash reserves, probably would prefer to spend its money elsewhere. "Mr. Tisch does not buy things that are highly in vogue," Reidy said. The company has stated moreover that one of its major objectives is to continue station acquisitions so that its owned and operated stations currently in markets covering about 21% of U.S. households reach the maximum allowable 25% level. The cost of such a purchase, Reidy

Media agendas of Dukakis and Bush

Governor Michael Dukakis of Massachusetts is not saying no or even maybe to invitations to appear on television. Dukakis, who is trailing Vice President George Bush in the presidential race, will be the subject of a 90-minute interview on a special edition of ABC's *Nightline* beginning at 11:30 p.m. NYT this Tuesday. Dukakis and his wife, Kitty, will appear for an hour on *Larry King Live* tonight (Oct. 24), starting at 9 p.m. NYT on CNN. Those appearances followed the governor's appearances on ABC's *Good Morning America* and CBS's *This Morning* last Friday (Oct. 21). The Bushes were nowhere to be seen on any of that free media.

In fact, Dukakis's scheduled solo, face-to-face appearance with Ted Koppel tomorrow night in Denver, where the governor will be campaigning, is a consequence of the Vice President's refusal to participate in a 90-minute debate on *Nightline*. Dukakis had accepted the invitation to debate within a week of its issuance on Sept. 30. Bush made it clear he was not interested, but did not finally reject the offer until the day after his second televised debate, Oct. 13, during which he stated unequivocally his refusal to participate in any more debates. Koppel had said that if only one of the candidates accepted the invitation to debate, he would be asked to sit for a 90-minute interview.

Bush may yet show up on a special edition of *Nightline*. ABC News President Roone Arledge, during a press tour, said he would entertain having the Vice President on, although he said that was not a commitment. Bush was already the subject of a lengthy interview on a special one-hour *Nightline* on June 4. The interview is remembered primarily because of the insistence of the Vice President—who was not in the studio with Koppel but was visible to him and the audience on a monitor—on calling the anchor Dan.

Dukakis also appeared on ABC in a five-minute block of purchased time on Saturday night (Oct. 22).

In his interviews with *GMA*'s Charles Gibson and *This Morning*'s Kathleen Sullivan, Dukakis explained his eagerness to accept invitations like theirs. "I want to get my message across in the final 18 days of the campaign." Bush last week had not yet responded to invitations by the two shows to sit for five interviews. Larry King was also awaiting an answer to an offer to the Bushes to appear on his show. He said a campaign aide told him the couple might do it.

Dukakis, meanwhile, has decided to take advantage of another opportunity offered by *GMA* to get his message across. It will come in connection with Gibson's planned East-West tour of the country, examining issues in key states during the week of Oct. 31-Nov. 4. *GMA* invited each of the candidates to sit for taped interviews with Gibson on the issues. Dukakis has accepted. Bush last week had not responded. If he does not accept the invitation, a spokeswoman said, *GMA* will produce pieces on his positions.

A spokesman for the Bush campaign in Washington said the Vice President "hasn't ruled out appearances on television shows. But he said Bush was campaigning on a personal level in media markets.

METRO WSJ 11/16/88 7C

Kastenmeier clears the set

Bill to aid satellite TV reception

By Gail Harkevy
Washington bureau

WASHINGTON — Madison, its surrounding towns and other rural areas across the nation are expected to receive better satellite television reception soon, thanks to a new bill authored by Rep. Robert Kastenmeier, D-Wis.

Passed by Congress last month, the Satellite Viewer Copyright Act is designed to give people in remote rural areas who may not be able to get broadcast television "the means to view the programming that most Americans get by simply switching on the set," according to Sen. Patrick Leahy D-Vt., the bill's Senate sponsor.

"It creates rights for the public to receive television signals at a reasonable rate and will benefit the proprietors because the system operates under copyright law," Kastenmeier said.

In many rural areas, viewers lack access to cable television and are too far from a station affiliate to receive network programming. Many rely on satellite dishes to pick up broadcasts from the feeds of the major networks.

There are approximately 600 affiliates of the three major networks — ABC, NBC, and CBS — around the country, but each affiliate can reach only a limited geographic area.

Many affiliates have pressured the networks to scramble their signals, claiming the new technology cut the audience of their programming and advertising. Rural homes with dishes generally get the big networks' commercials, but not those of the affiliates.

NBC scrambled on Nov. 1. CBS threatened to scramble back in March, and ABC is still considering it.

Harry Thibedeau, director of broadcasting and media sales for the Satellite Broadcasting and Communication Association, said approximately 45,000 Wisconsin households use a satellite dish.

"A sizable percentage of the total number of satellite dishes produced each year in the United States are manufactured within a 50-mile radius of Madison, Wis.," Thibedeau added.

Pam Zander, co-owner of A to Z Electric Inc. in Cross Plains, said her dish-setup sales primarily to people living in the country.

"I've had quite a few calls from people in rural areas complaining that they just aren't receiving certain stations," Zander said.

Zander said her company makes some sales in Madison because "Madison channels are also limited."

Delila Stolen, who lives about 20 miles from Madison in rural Verona, bought a satellite dish before cable came into her area a year ago. She and her husband bought a superstation programming package about two months ago to get a wider variety of channels.

"We lived here 10 years before cable came into our area," Stolen said. "The satellite dish was the only way we could get any stations out here.

We didn't buy cable when it came to our area because we already had the dish," she added, "so we just bought a program package instead."

This recent provision of the bill is part of a larger measure that requires the Federal Communications Commission to report to Congress on whether dish owners are paying high rates for satellite programming because of price discrimination.

The bill also ensures that copyright penalties can be imposed against carriers who unlawfully discriminate against distributors in the selling of retransmitted signals.

The measure was passed in the House of Representatives on Oct. 19 and the Senate version won approval two days later. A compromise version is expected to be signed by President Reagan in coming months.

Kastenmeier said the expanded availability of network signals to unserved areas will create "parity between urban and rural dwellers."

It's hard to believe that the science fiction writer (Arthur Clarke) laid out the blueprint for the current system of transmitting television signals by television only four decades ago," Kastenmeier said. "We have much to look forward to in the next four decades."

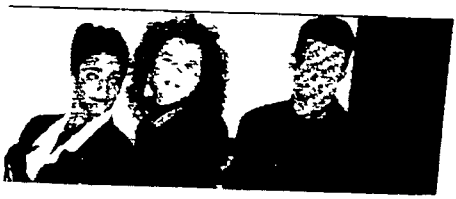
Critic recognized

Michael St. John, rock critic for The Wisconsin State Journal, has been named Music Journalist of the Year by the Wisconsin Area Music Industry.

St. John, whose weekly column appears Thursdays in The State Journal, received the WAMI award Monday night at The Pabst Theater in Milwaukee.

Wisconsin musicians, concert promoters, broadcasters and writers belong to the organization.

D I T I O N A L



QUESTION
What Kind Of People Go To Chiropractors?

Of the Superstation Bill, the SBCA/STTI Show, and GI's Anti-piracy Plan

It is the view of this publication as regular readers know that the answers to the satellite TV industry s problems generally do not lie on Capitol Hill In recent months however an exception to that view has been H R 2848 the superstation copyright bill It seemed clear a clarification of the 1976 Copyright Act was necessary to clear up any legal ambiguity concerning TVRO subscriptions to superstations

But what should have been a simple change in the law s language has become yet another attempt by the broadcasting and motion picture industries to thwart the growth of the satellite TV industry And even though it appears the bill s chances for passage are diminishing by the day the position of the TVRO industry on the issues raised by the legislation should be clearly stated as a mark up on the measure approaches

First and foremost the satellite TV industry cannot accept any so-called white area limitation on where the bill would apply to dish owners—whether for network or independent TV signals To do so would make TVRO owners second class citizens by statute and be in direct contrast to the principles which led to the founding of the satellite TV industry The networks and independent broadcasters have put forth nothing but bogus research to prove TVRO reception of superstations harms local stations Indeed the entire debate over the superstation bill has once again demonstrated the arrogance of the broadcasting industry in general

Similarly the satellite TV industry can never accept any amendment which would limit the measure to C-band and ignore the potential of Ku band The Motion Picture Association of America s advocacy of this amendment raises questions about Hollywood s recent claims it supports the development of satellite TV

The common sense approach to this legislation—one which would allow all the industries involved to spend their time more efficiently—would be to clarify the law by simply extending to the TVRO market the compulsory license which allows superstation carriers to uplink broadcast stations to cable systems The almost 2 million homes which own TVRO systems are not the issue here the very existence of the compulsory license is and fairness dictates the license should be extended to all technologies until such time its fate is determined

That is not to say the TVRO industry should stand by and watch Hollywood cable and the broadcasters fight over the future of the compulsory license Rather the satellite TV and cable industries should put their differences aside and unite to fight any repeal of the compulsory license and the re-imposition of syndicated exclusivity Taken by itself the compulsory license may be as some have called it a "regulatory anachronism But it is clear the license works in the overall scheme of things To repeal the compulsory license would be a blow against diversity and choice for all TV viewers There are philosophical questions raised by any "compulsory" access to intellectual property yet to start dismantling the entire video marketplace to appease program producers would be an egregious error

To be sure there are some risks involved for the TVRO industry if the superstation bill is not passed Satellite Broadcast Networks (SBN) could lose the copyright lawsuits brought against it by the networks which would raise serious questions about the future availability of all superstations to dish owners But the SBN case could take years to wind through the courts and the company could win the case In the meantime the satellite TV industry should take a lesson from Hollywood s battle to stifle the growth of home video through the Sony Betamax Case In that instance the VCR manufacturers realized that each unit sold represented just another reason why Congress would have had to act to permit home taping—even if Hollywood had won the case before the Supreme Court Similarly if SBN should happen to lose Congress will have little choice but to act to permit the reception of superstations directly from satellite by thousands of not millions of American homes Moreover if past actions are any indication the TVRO industry can count on copyright subcommittee Chairman Bob Kastenmeier (and chief aide Michael Remington) and Rep Mike Synar (and aide John Hollar) to help in the struggle for fair treatment of dish owners

Finally this publication s view on the superstation bill should in no way shape or form be construed as advocacy of the position on the bill propounded by K SAT Broadcasting and the Home Satellite Television Association (HSTA) The K SAT/HSTA opposition to the bill has hurt the TVRO industry in Washington and is based on the utterly fallacious theory that the superstation carriers must be breaking the law if a bill is needed to clarify the statutes Did K SAT's Chuck Dawson feel the same way when he was operating video stores before the Betamax Case was resolved?

Likewise this publication believes Dawson s recent announcement that he intended to uplink TBS and WGN in the clear should be dismissed as nothing more than a publicity stunt Though Dawson does deserve some credit for being able to generate so much publicity for such a unrealistic idea the episode also demonstrated how little the rest of the world understands satellite TV Anyone familiar with the economics of uplinking a superstation and the contracts between most cable operators and superstation carriers should have instantly realized Dawson s plan was an economic pipe dream That is why the idea did not receive any coverage on these pages Dawson s time (not to mention his considerable talent as a showman) would be better spent on his efforts to combat piracy unfair zoning laws and some of the other issues facing the satellite TV industry

EDITORIAL

The Show

As the TVRO industry gathers for its annual winter spring show in Las Vegas its reputable members should strongly applaud and commend the decision by STTI and SBCA not to give the United Satellite Industry Association (USIA) free meeting rooms and discount booths at the show The USIA has been largely ineffectual and somewhat destructive in its year of existence and allowing it to use the good auspices of the show to promote itself was a bad idea in the first place The moral fiber of several of the USIA s leaders are questionable at best and the satellite TV industry would be far better off without them and the USIA

Along the same lines this publication loudly cheers the decision by STTI and SBCA not to provide press credentials to cover the show to Shaun Kenny s Boresight program As this publication has said before were Boresight solely guilty of unprofessional incredibly inaccurate reporting, we would be standing shoulder to shoulder with Boresight in defense of its First Amendment rights But stealing programming is not protected by the First Amendment and Boresight is a journalistic abortion Kenny his airhead southern sidekick and his entire piracy promoting program are a cancer on the satellite TV industry Members of the TVRO industry who in any way aid abet or otherwise support Kenny and Boresight are committing financial suicide and may as well hang a going out of business sign in front of their stores today

The Anti-Piracy Plan

Lastly this publication is compelled to comment on the recent anti piracy proposals offered by General Instrument Corp (GI) As reported on page one GI s basic idea was to raise the price of VideoCipher decoding units by $250 and include coupons with them for about $275 of programming.

Many in the TVRO industry have praised GI for realizing that piracy is out of hand and considering dramatic ways to combat it That view is shared here Yet even though piracy is rampant and an immediate solution necessary such a dramatic step requires careful consideration and industry wide cooperation GI has taken some initial steps to improve its relationship with colleagues in the satellite TV industry should be lauded for its behavior and encouraged to continue the effort

Though the concept of establishing an economic disincentive to piracy may hold some promising ideas the plan as offered by GI is flawed Even if the myriad of legal logistical and public relations questions posed by such a scheme could be ignored—which they cannot—the GI plan has one fatal shortcoming. It raises the cost of entering the market for scrambled satellite signals at a time when that cost should be headed down

It is probably unreasonable to expect that satellite piracy can be completely eliminated given the *nature of the hacker underground and technical* characteristics of the VideoCipher system Even so the satellite TV industry can strike a powerful blow against piracy by offering consumers low-cost decoders and reasonably priced programming Some limited progress has been made on the latter but raising the price of descramblers is a step in the wrong direction Overpriced decoders and programming are obviously no justification for piracy but are the most formidable obstacles to the satellite TV industry s recovery ❑

Washington Post ____ date 10/88 page 1 col 3
New York Times ____ top right
Wall Street Journal ____
other CATACABLE
(Community Antenna Television Association
Fairfax, VA)

Gore Bill Dies— Kastenmeier's Wins Approval

It is rare that we are able to report both good news and good news from Capitol Hill But that is the case this month. Largely as a result of the efforts cable operators have made over the past several months to fully explain the "satellite scrambling" issue and the attendant problems surrounding "third party distribution " the Senate has voted to table Senator Gore s satellite scrambling bill. The vote on a procedural motion was 43 to 36 in favor of the cable industry position.

As we have been warning you for months, it seemed, Senator Gore was going to bring his bill to the Senate floor for a vote " at any time " First we thought it would come before the Democratic Convention, then between the two conventions, then right after the convention recess, and on, and on. We kept asking you to write to your Senators and call them again and again Of course the State Associations and the NCTA were saying the same thing—and happily it seems that with all of us yelling at you you responded The result was that by the time Senator Gore finally did attempt to bring his bill to a vote on a Friday evening just before the final week of the Congressional session, the Senate was ready for it.

See Gore Bill pg 3

Gore Bill cont from pg 1

There was about an hour and a half debate—mostly statements by those who have long been in favor of the Gore Bill The principal Senate opponent of the measure for debate purposes was Senator Tim Wirth. He did the sparring and Senator Dan Inouye of Hawaii, Chairman of the Senate Subcommittee on Telecommunications, did the procedural maneuver that put the issue up to a vote. Gore had tried to include the bill as part of the Senate s consideration of technical corrections to the tax code. The motion was to "table" the proposed amendment. It passed and the issue we trust, is now over. At least for this year. We can expect that questions regarding cable program exclusivity will arise again in the next Congress, but we doubt that the "Gore Bill" in its present form will ever be seen again.

Another bill authored by House Copyright Subcommittee Chairman Bob Kastenmeier, does have a strong chance of passage in the last hours of this Congress. Hopefully we can indicate the outcome on these pages before we go to press. The Kastenmeier Bill has been passed by the House and is awaiting action in the Senate.

The Kastenmeier Bill is a very strong piece of legislation and is heartily endorsed by CATA and, indeed, the entire cable television industry as well as the earth terminal industry It started out as a bill designed to deal with the "superstation" problem. That is, there did not appear to be any legal way for home earth terminal owners to receive and pay for "superstation" programming because the Copyright Law had not contemplated such things as "superstations" and they simply were not covered by the "compulsory license."

There was an argument that the existing law could be "stretched" to include the sale of "superstation" programming by the common carrier (United Video, SBN NetLink, etc.) to the public so long as the carrier was considered a "cable system" for such purposes. But a federal court in Atlanta recently ruled that was stretching things a little too far and said that Congress would have to change the law if such actions were to be considered legal.

The proposed change, to grant a "compulsory license" for a limited time, to the carriers to allow them to sell broadcast signals directly to the public had been in the works for some time. There are restrictions, of course The compulsory license sunsets after six years. In the first four of those years a flat fee per subscriber of 12 cents would have to be paid. After that the parties would have to negotiate the fee (subject to compulsory arbitration) for the remaining two years. Other provisions that were added along the way include one that would allow the distribution of network signals to home earth terminal viewers, but only in those areas not served by a network affiliate or by cable. This one is going to be fun to administer!

The bill also requires the FCC to do some studies regarding applying syndicated exclusivity to the home earth terminal market. We can tell you the outcome of that one right now! The FCC can't even figure out a practical way to apply syndex to cable operators—let alone to the home market! They also have to study discriminatory pricing complaints and the possibility that there should be technical standards set for satellite programming descrambler equipment.

See Gore Bill pg. 4

Gore Bill cont from pg 3

That last provision was added during a rapid mark-up of the bill by the House Telecommunications Subcommittee which insisted on a chance to look at the bill after the "syndex" language had been added. It seems that every one on Capitol Hill is very jealous of turf and when the folks on the Judiciary (Copyright) side started saying anything that remotely sounded like it was involved with telecommunications policy, such as "syndex," the Commerce (Telecommunications) Committee jumped in and said it had to review the bill too

Well that turned out to be a real benefit for everyone The first fear was that Congressman Billy Tauzin who had introduced a measure very similar to the Gore Bill would try to use the "superstation" bill as a vehicle to get that other piece of legislation moving Preparations were made for a fight But at the last minute Cong Tauzin reached an agreement with the cable and the home satellite industry representatives whereby only those parts of his bill that everyone agreed with would be added to the Kastenmeier Bill One of those provisions was the FCC study on scrambling technology The other was far more important it has to do with significantly strengthening the Communications Act with regard to piracy.

Last minute update ***As we are going to print Congress has passed the Kastenmeier bill and it now awaits the President's signature.***

The new provisions would not only put more teeth in the criminal provisions of the law increasing the penalties to $500 000 but also make it far easier to bring a civil case against those who sell illegal "black boxes" designed to steal satellite cable signals. This is a key provision. The biggest problem dealing with both TVRO and cable theft of service (and it is important to note that this new law would apply to BOTH) has been to get local state or federal attorneys interested enough in the issue to collect the evidence and prosecute the cases.

With this new law, assuming it passes, we will not have to convince governmental authorities to do the work and bring the cases. They after all, have lots better things to do. The civil provisions of this bill however, would allow any cable operator, any satellite programmer, and HTVRO dealer to bring a civil suit against anyone selling devices designed to steal cable satellite signals. A finding that there has been the knowing sale of a device designed to steal such signals brings with it the potential of a punitive award to the injured party (the cable operator etc) of up to $100 000 PER OFFENSE—that means per unit sold according to the bill And as a bonus, those found guilty may be assessed the legal fees of the person or company bringing the suit as well! Now that's a set of teeth if we ever saw one!

The bottom line here is that this bill could spell the end of theft of cable satellite service—both in the TVRO and the cable marketplace It will become so expensive and so dangerous to sell those "black boxes" that the underground industry should dry up That will be a huge benefit for all of us.

The addition of those provisions to a bill that the cable industry had already indicated it would support has resulted in a last minute push to assure passage Stay tuned

APPENDIX IV —MISCELLANEOUS CORRESPONDENCE

COMMITTEE OF 435
7204 South Yarrow Street
Littleton, CO 80123
(303) 973-8201

January 27, 1987

Congressman Robert W Kastenmeier
2328 Rayburn House Office Building
Washington, DC 20515

Attention: Mike Remington

Dear Mr Kastenmeier

My husband and I wish to take this opportunity to thank you for facilitating the live coverage of the Committee hearings on Copyright and Civil Liberties regarding HR2848 The live coverage by K-SAT Broadcasting and its thousands of listeners and supporters is the only way that those of us concerned with these important issues can keep informed To leave it to local broadcasters and/or the cable-owned C-SPAN would leave us, as usual, in the dark

We sincerely wish to thank you for also speaking with us after the hearings and sharing your astute observations and concerns with us It is always encouraging to meet with a legislator as genuinely concerned about small retailers and average Americans as you have proven to be

As you so thoughtfully stated, there will probably be changes made in HR2848 before leaving the mark-up proceedings of the committee The enclosed letter to our own Colorado representative on the committee will give you some idea of where our real-life observations have led us

Our ideas for changes is in no way meant as critical comments on you or your staff Rather, they are carefully considered suggestions we sincerely feel would help HR2848 more closely coincide with your original intentions for the welfare of us all You originally wished to make sure that ALL Americans had access to programming signals through independent choice of method and non-discriminatory pricing

Thank you again for your leadership and kind consideration Please tell Mike "hi" and thanks again for taking the time to let all of us out here make our mutual concerns be heard

Respectfully,
Shirley and Chris Johnson

Littleton, CO 80123
(303) 973-8201

January 27, 1988

Congresswoman Patricia Schroeder
2410 Rayburn House Office Building
Washington, DC 20515

Dear Ms. Schroeder:

Thanks to the private donations and personal efforts of K-SAT Broadcasting and its supporters, my husband and I were able to listen to the live hearings held in the Committee on Copyright and Civil Liberties concerning HR2848 We would certainly not been able to do this if left to the local broadcasters or the cable owned C-SPAN

We appreciate your questions to the second panel We understood your questions as an effort to elicit information relevant to a balance between the rightful collection of fees to the original copyright holder and the access, choice of reception method at non-discriminatory prices of the American citizens The arrogant disrespect shown to you by the answering owner of cable-owned Netlink is disturbingly all too familiar to those of us in America confronted with the reality of a vertical monopoly of the communications industry

Following are points we feel particularly interesting,

1 Common carriers are in violation of existing regulations and are now owned and operated by cable companies They are no longer a 'common carrier' but programmers just like HBO. They are using discriminatory practices both by withholding programming to other distributors and discriminatory in their pricing The discrimination of pricing exists in both the wholesale programming and copyright fees. Cable-owned common carriers are asking for permission to further withhold signals through the limitation of frequency and reception technology. Cable-owned common carriers are asking for the legitimatization and therefore a reward for the violations they are presently committing

2 Networks are claiming protection for localization and from cable companies but want to,

a. maintain discriminatory practices against independent broadcasters

b distribute non-local affiliates to dish owners through a 'policing action' and have the continuing right to throw off local broadcasters from local cable companies to be replaced by cable-owned Netlink package

c have a mandated monopoly to distribute

nationally chosen programming through cable-owned Netlink package 'deals'

' d a legal sanction to resell copyrighted programming that has not been previously contracted for resell, i e , sports, movies, PBC(S), etc

e. a legislated mandate to prevent competition from entering the distribution process

3 the hearings also brought out the interesting fact that trying to accurately define a 'white' area was discriminatory to the citizen wishing a choice of programming reception method, to the independence and competitive capabilities of the original copyright holder, the holders of independent exclusive copyright holders and the local broadcast stations The cable companies and national non-licensed networks are violating with impunity their own contention of encouraging signal availability while protecting localization

It saddened us to know you did not feel the views of independent distributors, small retailers and American consumers was sufficiently important to require your attendance at the third panel. If you had stayed to ask your usual astute questions you would have learned of the recommended changes to HP2848 that would go a long way in making the bill supportive of the intended purpose

These recommendations are

1 Clarification of the role of licensed FCC common carriers AND AT THE VERY LEAST, mandating the sale of their signals to ANY distributor at non-discriminatory wholesale prices AND separately billed non-discriminatory copyright fees

2 Clarification of the right of access to ALL signals on ALL frequencies by ANY reception method AS LONG AS the non-discriminatory copyright fees are paid

3 Access to local broadcasts NOT be limited except by the choice of the viewer through the RE-INSTATEMENT of the 'must carry' rules (local cable companies MUST be required to carry ALL local broadcast stations)

4 All congressional committees insist on the immediate enforcement of existing laws and regulations

5. ANYONE at ANYTIME be allowed the business opportunity to uplink programming in a truly competitive market WITHOUT asking permission of ANY cable interests

6 To encourage access, non-discriminatory pricing and competition by leaving the bill in place indefinitely

Thank you for taking a personal interest in these proceedings and for being the type of representative who has the ability for SELF-determination needed by and for ALL Americans

Respectfully,

Shirley and Chris Johnson

K-SAT BROADCASTING INC.

"We The People"
RICK ALDRICH
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Pasco, Washington 99301
Telephone 509-545-5814

COMMITTEE OF 435

September 28, 1987

The Honorable Robert W Kastenmeier
United States House of Representatives
House Office Building
Washington, DC 20510

Re H R. 2848 The Copyright Bill

Dear Congressman Kastenmeier

First of all I would like to thank you for your concern regarding the satellite industry. I was in Washington D C when you introduced your bill H R. 2848 and was able to speak with your aid (Mike Remington) for several minutes

Unfortunately I do not agree with several parts of H R 2848 and I have therefore found it necessary to send the enclosed letter to all of my congressman in Washington State as well as several others nationwide Although I feel you had very good intentions when you wrote this bill I believe you were grossly misinformed by the cable monopoly prior to writing it Please understand that I am fully aware that the copyright issue must be addressed before the satellite industry can reach its potential but if this bill is passed as it is written the dish industry is dead! If this bill is rewritten so that it allows the dish industry to compete and pay a fair and equal copyright fee then I and many others would find it easier to support its passage. By restricting the ability of new channels to launch without first checking with the cable industry is to allow an already established monopoly to control the free flow of information in this country. I am sure you do not want this to happen. Neither do I or any other member of the K-SAT organization Thank you for your time and concern regarding the satellite television industry.

Sincerely,

Richard Aldrich

Richard (Rick) Aldrich
Zone 1 Commander
K-SAT Committee of 435
Washington State Division

K-SAT BROADCASTING INC.

COMMITTEE OF 435

We The People

RICK ALDRICH
460 Byers Road
Pasco, Washington 99301
Telephone 509-545-6814

September 28, 1987

The Honorable &NAME&
United States House of Representatives
House Office Building
Washington, DC 20510

Re H R 1885 The Satellite Television Fair Marketing Act of 1987
and H R 2848 The copyright Bill

Dear Congressman &SALUTATION&

On June 30th of this year Congressman Kastenmeier introduced legislation in the House regarding copyright fees to be paid by common carriers of satellite television transmissions There are several areas of this bill that do not in any way help the satellite industry

First it sets a copyright fee of 12 cents per month per superstation subscribed to by individual dish owners This may be found on page 5 line 23 and conclude on page 6 line 1 This does not sound like an excessive amount but the average price nation wide that a cable subscriber pays in copyright fees per superstation per month is 005 cents per month As you can see this fee is 1/24th what we as dish owners would be required to pay We as dish owners would again be penalized by the cable cartel by paying not only our fair share, but in fact pay for 23 other cable subscribers It is not surprising to me that the cable association (NCTA) supports this bill in its entirety on this section alone! It benefits their part of the industry and does away with any part of the industry trying to create competition On this section alone this bill should never pass, or for that matter even be considered but unfortunately it gets worse

The second part of this bill that creates a problem for the dish owner may be found on page 17 line 25 and ends on page 18 line 22 This section deals with the definition of a superstation It states that if a station is to be considered a superstation then it must have been uplinked (on satellite) and available for nationwide distribution on June 1, 1987. It further states that any new station may be considered a superstation provided that it is carried by 10% of all cable companies and is viewed by its subscribers This definitely affects all new stations wishing to serve the satellite dish industry If for example a station decided it wanted to uplink and serve via satellite anyone who wished to subscribe, it first would have to sell its signal to at least 10% of the existing cable companies Since only a few corporations own and operate all cable companies nationwide, this would create a major problem for that station They would in fact be dealing with the same monopoly that we as dish owners are now It would give the cable cartel total control

over how many stations would be uplinked This in turn would limit competition, benefit the cartel and increase their anti-competitive position and increase their control on the information and entertainment available to the American public. The cable cartel needs competition, not congressional help in increasing its handle on the control of programming

The cable companies are an uncontroled, deregulated monopoly that must be halted immediately. If this bill is passed, the 240 million citizens in this country will suffer. Can we as a free society allow a small group of corporations to control the free flow of information in this country? Can we allow them to decide who will be successful in the broadcasting industry and who will not? I say absolutely NO! If congress passes this bill as it is written that is exactly what it will be doing. This bill is backed by the cable companies because is does everything in their favor and absolutely takes away any possibility of competition You and your fellow members must not allow this bill to pass There are 444 transponders available on the C-Band satellites now in use today with an additional 128 on the KU-Band. Thats 572 potentially different stations and diverse viewpoints. Are we going to limit them in number? Passage of HR 2848 will effectively do just that

The consumers and dealers of the satellite industry need a win on capital hill, and we need it this year! Failure to pass HR 1885 will effectively kill this industry as you and I know it today By passing HR 2848 as it is written, you will be giving the cable industry a free hand at no longer having to string their wire. They will simply go house to house and extending their hand into the wireless cable industry We know that industry today by the name of The Satellite Television Industry or TVRO. As a consumer I enjoy the variety I receive with the use of my satellite dish. When we allow a very small group of corporations to create and continue to operate a monopoly that involves the information you and I receive, this country is in deep trouble HR 2848 must not be allowed to pass as it is written.

The only bill before The United States House that will guarantee the American public that there will continue to be fair competition in the distribution of satellite programming and information is HR 1885. Please support, co-sponsor and call for immediate markup of HR 1885. Urge your fellow members to do the same The state of Washington only has two co-sponsors of this legislation, Congressman Al Swift and Sid Morrison. Above all, when HR 1885 comes before the House, vote in favor of it Thank you again for your time.

Sincerely,

Richard (Rick) Aldrich
Committee of 435
Washington State Division

WILLIAM J QUINLIVAN
11 4 Delta Street
Emmonak Alaska 99581
January 22,1988

The Honorable Robert W Kastenmeier
Rayburn Building
Room #2328
Washington, D C , 20215

Dear Representative Kastenmeier

It has come to my attention that the final hearings on HR 2848 before the Copyright Committee of the Judiciary sub Committee on Courts, Civil Liberties and the Administration of Justice, will take place on the 27th of January 1988

I feel very strongly about the issues involved in HR2848 and think they are very important, particularly to Alaska since the geographical size of our state and the small size of the majority of our communities makes us totally dependent on Satellite Telecommunications. The Home Dish Satellite Industry is going to play an increasingly more significant role in the lives of all our citizens as the only source of news, information and entertainment I am sure this is true for many of the other states as well

I have followed this industry since its inception in the late "70s" and finally purchased my own dish this past year I have also operated our Municipal Cable System for the past five years and do not think the Cable Industry should should have any control over what the individual can receive with their own home systems. They are each a separate and distinct entity. It appears that the Cable Industry is trying to exert pressure and control over the Home Satellite industry An example,is the fact that I as an individual can only subsribe to the Netlink Package of Programming if our local Cable System will become an affiliate of Netlink Why should this be? They are over 2000 miles away and in a different state They shouldn t be allowed to have this amount of control

The Bill as it is presently written only favors and gives more control to the unregulated Cable Cartel. It does not contain anything which would really benefit the Home Satellite viewer nor spur the growth of this Industry I believe the following eight points which were originally suggested by K-Sat Broadcasting should be considered for inclusion into HR2848 to make it more Home Dish friendly. I would rather see the bill killed if these points are not given any consideration. These eight points provide provisions to the bill which would really make it non-discriminatory to the Home Dish owner and viewer.

PAGE II

1 Parity in Copyright payments with cable (non-discriminatory)

2 Parity in Programming Prices with Cable (there is nothing to prevent non-competitive pricing practices)

3 Remove limits on Grandfather clause (why mandate Cable control by limiting the number of Superstations)

4 Remove the number of Cable Subscribers minimum clause (Why should a percentage of Cable coverage determine whether or not a Programmer may be on the air)

5 Non-Discriminatory distribution of programming (there is nothing to prevent programmers from refusing to sell programming)

6 No Sunset Clause (There is no sunset clause on the Cable Industry, why should there be one on the Satellite industry)

7 Allow for any station to uplink themselves (under #2848 only the cable/programming cartel can uplink, Common Carriers are exempt from Copyright fees so they can now be active carriers, if the Common Carriers can be active then why can't anyone uplink themselves ?)

8 Access (There is nothing in #2848 that says programming has to be sold or given to anyone, There is no MANDITORY ACCESS provision for the Home Satellite user)

Finally, I would ask you to please give these points your every consideration when this bill comes up in the hearings on January 27,1988.

Thank you very much

Sincerely yours,

William J. Quinlivan



February 3, 1988

The Honorable Robert W Kastenmeier
U. S House of Representatives
2328 RHOB
Washington, DC 20515

Dear Representative Kastenmeier

Our station has invested millions of dollars in exclusive license agreements for television programs H.R 2848 is supposed to be a bill to help bring TV service to rural satellite dish owners. However, it would grant "satellite carriers" a statutory license to exhibit in our market the very same programs for which we have purchased an exclusive license.

As a recently established Independent television station which is diligently striving to address the community needs and concerns of our service area, we believe it is absolutely imperative that our exclusive license agreements for television programs be maintained and enforced within our local market areas It is all too obvious that home satellite dishes are not restricted to the so-called "white areas," but can be seen in any area of a given marketplace regardless of off air reception quality.

H.R. 2848 should be amended to apply only to so-called "white areas" where residents do not receive adequate service from local TV stations. This amendment should not make any distinction between Independent satations and network-affiliated stations.

Sincerely yours,

PAPPAS TELECASTING OF THE CAROLINAS, INC.

Joseph A Shaffer
Vice President/General Manager

JAS/jac

PAPPAS TELECASTING
OF THE CAROLINAS, INC

GREENVILLE OFFICE
21 Interstate Court
Greenville SC 29615 □ (803) 288-2100

WPTT-TV
PITTSBURGH

P O BOX 2809 PITTSBURGH, PA 15230 (412) 856-9010

February 5, 1988

The Honorable Robert W Kastenmeier
U S House of Representatives
2328 RHOB
Washington, DC 20515

Dear Representative Kastenmeier

It seems as though over at least the past two years whenever we in broadcasting see some sign that members of Congress may be seriously considering that the framers of the 1934 Communications Act knew what they were doing, some new idea is considered which strikes at the very heart of the broadcasting/government relationship embodied in that act It also appears to me that most of these ideas, whether dealing with cable, DBS, or whatever are espoused in the name of benefiting the consumer Obviously, to someone engaged in the business of politics and balancing to the best of your ability the needs of your constituents with the needs of the State, anything which is purported to benefit the consumer would have a great attraction for you May I strongly urge you before you rush headlong to benefit the consumer, to consider the short and long term effects that HR 2848 would have on the very fabric of the broadcasting business in this country As it is, some basic principles which must govern the way in which we do business, specifically marketplace exclusivity of broadcast program usage, will be jeopardized one more time by the provisions of this bill

Our station has invested millions of dollars in exclusive license agreements for television programs H R 2848 is supposed to be a bill to help bring TV service to rural satellite dish owners However, it would grant "satellite carriers" a statutory license to exhibit in our market the very same programs for which we have purchased an exclusive license

H R 2848 should be amended to apply only to so-called "white areas" where residents do not receive adequate service from local TV stations This amendment should NOT make any distinction between independent stations and network-affiliated stations

Very truly yours,

Charles L Hobbs
General Manager

C Jim Hedlund
INTV

26 KMPH

Fresno Offices and Studio
5111 East McKinley Ave
Fresno CA 93727
(209) 255 2600
TWX 910 362 3999

Pappas Telecasting Incorporated
Visalia/Fresno

February 8, 1988

The Honorable Robert W Kastenmeier
U S House of Representatives
2328 RHOB
Washington, DC 20515

Dear Congressman

Our station has invested millions of dollars in exclusive license agreements for television programs H R 2848 is supposed to be a bill to help bring TV service to rural satellite dish owners However, it would grant "satellite carriers" a statutory license to exhibit in our market the very same programs to the same viewers for which we have purchased an exclusive license

We have carefully negotiated exclusivity agreements which include protection against, among other things, importation of programs to which we own the rights via direct-to-home satellite In fact, our standard contract language was presented to your subcommittee as a part of testimony of the Association of Independent Television Stations on January 27, 1988 As you can see, we believe this issue to be critical to the survival of independent broadcasting

H R 2848 should be amended to apply only to so-called "white areas" where residents do not receive adequate service from local TV stations This amendment should not make any distinction between Independent stations and network-affiliated stations

Sincerely,

PAPPAS TELECASTING INCORPORATED
26 KMPH

LeBon G Abercrombie
Sr Exec Vice President/General Manager

LGA/kjp

WATL 36

February 9, 1988

The Honorable Robert Kastenmeier
U S House of Representatives
2328 RHOB
Washington, DC 20515

Dear Congressman Kastenmeier

May I ask your help on a very critical issue affecting the future viability of this station and our service to the greater Atlanta area We have commitments in excess of $60 million on our books in exclusive license agreements for television programs It is my understanding that H R 2848 is supposed to be a bill to help bring TV service to rural satellite dish owners Unfortunately, it would grant "satellite carriers" a statutory license to exhibit in our market the very same programs for which we have committed millions supposedly on an exclusive license

I'm asking you to amend H R 2848 to apply only to so-called "white areas" where residents do not receive adequate service from local TV stations This amendment should most certainly not make any distinction between independent stations and network affiliated stations

It's difficult enough surviving competitively in this big market but it's suicide if we can't enjoy the benefits of exclusivity on the product we purchase which was sold to us on an exclusive basis

I would sincerely appreciate your help on this critical subject.

With kindest regards,

John A Serrao
Vice President
& General Manager

9909 Lange Rd
Newton, WI 53063
January 18, 1988

Rep Robert Kastenmeier
2328 Rayburn House Office Building
Washington, D C 20510

Dear Mr Kastenmeier

We are satellite dish owners and have some problems with H R 2848 in its present form We know you will consider our views and concerns, however, we would appreciate your specific answers to the following questions

1 In regard to copyright fees and programing prices Why are there distinctions in formulas and prices being charged to dish owners? Why is a different value being placed on "The Wheel of Fortune" because of the delivery method? We cannot understand this, please explain this to us It seems to us the value of the program is the same regardless of the delivery method, and H R 2848 should reflect this position Please tell us why we are being asked to pay more than the cable consummer who views the same program

2 If the value of copyright fees and program prices are the are the same for all, why would there be a need for a sunset provision? If prices are changed, they would change for everyone regardless of the delivery method It you do not think this is fair please explain why

3 Please explain why programming services started after June 6, 1987, will not be allowed to service dish owners Why not? Are we second class citizens? Please explain this

4 Why must a new programming service have a 10% penetration in the cable market before they can launch the service? Does this mean that if we want to open a grocery store we have to guarantee 10% of our profits go to existing grocery stores before we can open the door? It sounds that way to us Why would we have a law like this?

Mr Congressman, we are not asking you for money You don't have any You have the country nearly three trillion dollars in debt We are asking you to provide a level playing field for the home dish industry and the consumers of the products and programming services

We are avid viewers of C-SPAN, and recently we have heard a lot of jawboning about job creation and budget

deficits In the meantime, past legislation has destroyed the businesses of many manufacturers, distributors, and dealers in the home dish industry You are destroying the people whose taxes you depend upon to finance the voracious spending habits of congress Why? What are we missing?

If you are going to pass a bill, make it equitable for all involved H R 2848 needs to be fixed Please get it right Thank you for your time

Sincerely,

Delvin G Orth

Mary J Orth

Delvin G Orth
Mary J Orth

copy Rep Thomas E Petri
6th District Wisconsin

copy disk

K-SAT BROADCASTING INC.

"We The People
JOHN BACKES
203 East Sumner
Hartford Wisconsin 53027
Telephone 1-414-673-9125

COMMITTEE OF 435

RECEIVED
MAY 13, 1988
Sub on Courts

HONORABLE CONGRESSMAN ROBERT KASTENMEIER
U S HOUSE
WASHINGTON,DC

DEAR CONG KASTENMEIER

HR 2848

ROSES ARE RED VIOLETS ARE BLUE
I'M WRITING THIS POEM TO GET THRU TO YOU!

THE COPY RIGHT BILL HAS BEEN PLAYED WITH TOO LONG
BECAUSE AS WRITTEN THIS BILL IS ALL WRONG

UNFAIR PRICING AND CABLE CONTROL
MUST BE REMOVED IF THIS BILL IS TO GO

MANDATORY ACCESS IS TRULY A MUST
IN ORDER TO GET PROGRAMING DELIVERED TO US

THIS LAW MUST COVER BOTH KU AND C-BAND
OR ANY FUTURE WAVE LENGHT THAT'LL COVER THIS LAND

K-SATS 8 POINTS GIVE CONSUMERS THE BREAK
THAT WILL GIVE ACCESS AND FAIRNESS THE CABLE CARTEL WANTS TO TAKE

SO DO WHAT IS RIGHT AND VOTE A BILL IN
WITH KSATS 8POINTS,ACCESS AND KU WE ALL WILL THEN WIN!!!!

SINCERELY

John G Backes

JOHN G BACKES

#2 Beach Drive
Danbury, CT 06811

May 17, 1988

Congressman Robert Kastenmier
U. S House of Representatives
Washington, D C. 20515

RE: Satellite TV Legislation

Dear Congressman Kastenmier

As a lifelong Wisconsin resident and graduate of the University of Wisconsin as well as a current Wisconsin taxpayer (see attached), I support the current legislation that calls for an equitable program payment schedule for satellite dish owners However, there is one matter that to my knowledge has not been included in the legislation, namely, the recent scrambling of baseball signals by major league teams

Last year due to business reasons my family and I reluctantly moved to Connecticut from Milwaukee, Wisconsin. Although I maintain a business in Wisconsin and pay Wisconsin state taxes I have been unable to get back to the state frequently Therefore, I purchased a satellite system with the sole intent of watching the Milwaukee Brewers, Packers and Badgers This was all working fine until the Major League teams decided to scramble their baseball games this spring Unfortunately, the scrambling system they chose is not available for purchase Therefore, I would ask that you include in the legislation

1) Any scrambling of programming be made available on a equal access basis.

2) That this scrambling be done in the industry accepted format (VCII), not an entirely new format (VCI)

3) That in addition to this, that the programming fee be reasonable and commensurate with the fee charged television stations and networks using the current scramble baseball feeds

Any help you can give a fellow displaced Wisconsinite will be greatly appreciated. Wouldn't you dread the thought of having only access to the Yankees and Mets after investing over $3500 in a satellite system?

Sincerely,

George Conway

Attachment

Reply to:
P.O. BOX 1477
BLUEFIELD AVENUE
BLUEFIELD, W VA. 24701
PHONE: (304) 325-8437
FAX: (304) 325-8344

BLUEFIELD DISTRIBUTING COMPANY

2400 MAGNOLIA COURT
RICHMOND VIRGINIA 23223
PHONE. (804) 649-7521
FAX. (804) 649-7528

September 12, 1988

Chairman Robert Kastenmeier
2328 Rayburn House Office Building
Washington, DC 20515-2107

Dear Chairman Kastenmeier

H R 2848, the "Satellite Home Viewer Copyright Act of, 1988" should be passed without delay to promote the satellite delivery of network and independent superstations to home satellite viewers everywhere

Given past disputes concerning the authority of signal providers to sell broadcast programming by satellite, your Bill presents a much needed clarification at a time in which equipment suppliers like myself need it the most

Swift passage of this bill will assure that all Americans, no matter where they may reside, have access to network and independent programming With that access, the industry, and small business like my own, will continue to be able to compete effectively Without it we most certainly will lose that ability

Respectfully

George Leedy

George Leedy
Satellite Sales Mgr
Western Division

cc Hon Rick Boucher
Hon John Bryant
Hon Carlos Moorhead
Hon Mike Synar