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Comsat, the Carriers, and the Earth Stations: Some Problems with "Melding Variegated Interests"

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The development of communications satellites raises, as a major public issue, the perennial problem of introducing a new technology into an existing industry. The extraordinary concern with satellite communication arises from its vast potential for social benefit and commercial gain. Satellites offer reliable, instantaneous and inexpensive communications among widely-scattered points, many of which cannot support equivalent cable facilities.¹ Once an international satellite network is established, it promises to transform the world economy, bringing particular benefits to less-developed areas.² Satellite com-

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1. For a thoughtful survey of some social implications of satellite technology, see Dallas W. Smythe, *On Thinking About the Effects of Communications Satellites*, October, 1964 (mimeo); see also Address by John A. Johnson, *Satellite Communications: Some International, Political and Economic Implications*, American Life Convention, Toronto, Canada, Oct. 13, 1965.

2. Similar benefits are available for communications between distant parts of the same country, and, with low satellite costs, perhaps for shorter distances as well. Domestic uses may thus come to account for the bulk of satellite business. Gould, *N.Y. Times*, Nov. 20, 1966, § 3, p. 8A, col. 1; *Hearings on Government Use of Satellite Communications Before the Military Operations Subcommittee of the House Committee on Government Operations*, 89th Cong., 2d Sess. 510 (1966) (testimony of Comsat Chairman James McCormack) [hereinafter cited as 1966 *Holifield Hearings*]. The future of educational television may depend on how satellites will be utilized for such transmission. *Hearings on Progress Report on Space Communications Before Communications Subcommittee of Senate Commerce Committee*, 89th Cong., 2d Sess. 78-87 (1966) (statements by McGeorge Bundy and Fred Friendly) [hereinafter cited as 1966 *Commerce Committee Hearings*]. And, as satellite communication develops, more uses will be conceived, including airline communications, which will greatly improve air safety, and weather satellites, House Comm.

munication, like so much post-war technology, is a beneficiary of the federal funds which have financed over two-thirds of our national research and development effort during the past ten years.³ As the guardian of the national economy, the government would in any event have had an interest in the course of communications satellite development, but this financial stake has made satellite communication even more clearly a public policy issue. Finally, the industries most directly involved—communications and aerospace—are either monopolistic or oligopolistic, powerful and prosperous, and thus natural objects of public concern.

In theory, satellite communication was susceptible to any number of institutional arrangements. The new technology could have been turned over to the existing industry, vested in a new private organization or government enterprise, or simply made available to all.⁴ From among these alternatives, Congress chose in 1962 to create Comsat, a heavily regulated "meld of variegated interests," which divided ownership and control of satellite technology among the communications common carriers, the general public and the government.⁵ Common stock ownership was split equally between the general public and the carriers, each of which is to select six directors. The President of the United States, with the advice and consent of the Senate, chooses three.⁶

on Government Operations, *Government Use of Communications Satellites*, H.R. REP. No. 2318, 89th Cong., 2d Sess. 70-72 (1966). Computer-to-computer usage will become especially important.

3. See e.g., *Hearings on H.R. 14921 Before the Senate Independent Offices Subcommittee of the Committee on Appropriations*, 89th Cong., 2d Sess. 1492 (1966); Barber, *Economic and Legal Problems of Government Patent Policies, A Report for the Monopoly Subcommittee of the Senate Small Business Committee*, 88th Cong., 1st Sess. 4-6 (1963). The communications industry accounts for an especially large portion of this governmentally financed research. *Ibid.* See also *Hearings on National Communications Satellite Programs before the Senate Committee on Aeronautical and Space Sciences*, 89th Cong., 2d Sess. 8, 9, 30, 64-72, 99 (1966) [hereinafter cited as 1966 *Senate Space Committee Hearings*].

4. The problems involved in how best to develop satellite communications are variants of the more fundamental concern with how the State can best promote economic and social development. Similar issues were raised in the 19th century debates over internal improvements, and also in earlier state and local attempts to assist and develop industry. See generally GOODRICH, *GOVERNMENT PROMOTION OF AMERICAN CANALS AND RAILROADS, 1800-1890* (1960); HARTZ, *ECONOMIC POLICY AND DEMOCRATIC THOUGHT* (1948); Schwartz, *Governmentally Appointed Directors In A Private Corporation—The Communications Satellite Act of 1962*, 79 HARV. L. REV. 350, 357-61 (1965). More recent controversies have involved government patent policy, Leontief, *On Assignment of Patent Rights On Inventions Made Under Government Research Contracts*, 77 HARV. L. REV. 492 (1964), and atomic energy development, Newman, *The Atomic Energy Industry: An Experiment in Hybridization*, 60 YALE L.J. 1263 (1951).

5. Communications Satellite Act of 1962, 76 Stat. 419, 47 U.S.C. §§ 701-44 (1964) [hereinafter cited as Comsat Act]. The phrase "meld of variegated interests" was used by FCC Chairman Rosel H. Hyde in a talk in 1964.

6. Comsat Act, §§ 304(b)(2), 303(a), 47 U.S.C. §§ 734(b)(2), 733(a).

The Act also provides for non-voting securities which have no ownership limitations

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The 1962 Act gave only the satellites themselves to Comsat.⁷ Congress left it to the FCC to decide ownership and control of the earth stations which relay messages to and from the satellites in the sky.⁸ On December 8, 1966, the Commission ruled that in order to avoid delay in establishing the satellite system, each of the six initial earth stations in the continental United States, Hawaii and Puerto Rico is to be owned jointly by Comsat and the carriers. Comsat will have 50 per cent ownership, and the carriers are to divide the rest according to anticipated proportionate use.⁹ This policy, which is to be reviewed in late 1969, is designed (1) to enable all participants to contribute to the art and to gain experience in the field; (2) to maximize carrier incentive to use the system; (3) to facilitate orderly planning for new satellite, cable and other facilities; and (4) to enable a united American telecommunications industry to deal more effectively with foreign correspondents.¹⁰ It overrules the Commission's earlier decision in May 1965 giving Comsat exclusive ownership¹¹ and control of the first three

and which may be includible in a carrier's rate base. Comsat Act, § 304(c), 47 U.S.C. § 734(c). For a discussion of these securities, see text accompanying note 33 *infra*.

The function and utility of the governmentally appointed directors are discussed in Schwartz, *supra* note 4. For the best analyses of the legislation, see Note, *The Communications Satellite Act of 1962*, 76 HARV. L. REV. 388 (1962) and Levin, *Organization and Control of Communications Satellites*, 113 U. PA. L. REV. 315 (1965).

The corporation was incorporated in the District of Columbia on February 1, 1963, and is commonly called "Comsat."

7. The satellites are now the property of an international consortium of which Comsat is a member, with an approximately 55 per cent interest. 1966 *Commerce Committee Hearings* 4-5 (testimony of FCC Chairman Rosel H. Hyde).

8. Comsat Act, § 201(c)(7), 47 U.S.C. § 721, directs the FCC to:

grant appropriate authorizations for the construction and operation of each satellite terminal station, either to the corporation or to one or more authorized carriers or to the corporation and one or more such carriers jointly, as will best serve the public interest, convenience, and necessity. In determining public interest, convenience and necessity the Commission shall authorize the construction and operation of such stations by communications common carriers or the corporation, without preference to either

The legislative history shows a series of twists and turns on this issue. The original administration bill gave both the satellites and the stations to Comsat. See S. 2814, 87th Cong., 2d Sess., §§ 103(1), 305(a)(1), reprinted in *Hearings on Antitrust Problems of the Space Satellite Communications System Before the Antitrust and Monopoly Subcommittee of the Senate Judiciary Committee*, 87th Cong., 2d Sess., pt. 1, at 233 (1962) [hereinafter cited as *Kefauver Hearings*]. After the Administration bill was compromised with the bill introduced by Senator Robert S. Kerr (which would have turned the whole system over to the carriers, see S. 2650, 87th Cong., 2d Sess. (1962), reprinted in *Kefauver Hearings*, pt. 1, at 238) a provision "encouraging" carrier ownership of the stations was inserted. However, Comsat retained the satellites, and the FCC could still award Comsat the stations. See S. REP. NO. 1319, 87th Cong., 2d Sess. 5 (1962). An amendment to strike this preference from the House-passed version of the bill was defeated in the House floor debate, 108 CONG. REC. 7524-26, 7697-7704 (May 2, 3, 1962), but the preference was completely deleted in the final version. See S. REP. NO. 1584, 87th Cong., 2d Sess. 12, 18 (1962).

9. 5 F.C.C.2d 812, Dkt. No. 15735 (Dec. 8, 1966) [hereinafter cited as Second Report].

10. Second Report, 5 F.C.C.2d at 816.

11. 38 F.C.C. 1104 (1965) [hereinafter cited as First Report], *reaff'd*, F.C.C. 66-176 at 5 (Feb. 25, 1966). Although the 1965 decision did not explicitly authorize Comsat to own the stations, all parties, including the Commission, have so construed it. See, e.g., Second Report, 5 F.C.C.2d 812.

stations for two years from the date the first license was granted, a period which has not yet expired.¹² The rationale of that decision was also expeditious satellite development.

The earth station problem dramatizes the difficulty of using an established regulated industry, with a heavy fixed investment in old equipment, to introduce a new technology.¹³ The carriers' knowledge and experience might have been unavailable to the satellite enterprise unless they were allowed to participate in ownership and control of the stations. And as a practical matter an ownership interest may have been the only way of allowing them to include satellite plant in their rate base and thereby derive some earnings from the new technology. The carriers, however, have much larger investments in conventional cable and radio facilities, which may be jeopardized by rapid satellite development. The battle for communications supremacy between cables and satellites is one of the most significant results of satellite technology, and allowing the carriers to control satellite development could prejudice its future.

The carriers also face direct Comsat competition for the communications business of the ultimate user. A desire to make the communications industry more competitive is manifest in both the legislation and its history,¹⁴ and direct competition by Comsat may be one of the few ways of introducing meaningful price and service rivalry into a dominant-firm oligopoly like the communications industry. Comsat might also make the communications industry a better customer for suppliers who are not connected with the leading firms. On the other hand, with monopolistic control of all satellite technology Comsat might overwhelm many of the other firms. Also it is not clear that this industry, despite its imperfect structure, requires an additional vigorous competitor since its pricing and entry decisions are regulated, nor is it certain that Congress wanted it so radically restructured. In their filings for the *First Report*, the carriers stressed, with much apprehension, the

12. The *First Report* decision had another controversial aspect: it gave not only the stations to Comsat but also a substantial share of the terrestrial facilities carrying the traffic to the station. After very strong carrier protest, this part of the decision was reversed in February, 1966. F.C.C. 66-176, *supra* note 11, at 6-9, 10. The Commission has thus effected a complete reversal of its original decision, neatly dividing its reversing actions in proportion to the time elapsed—the terrestrial facilities issue was reversed after the first 9½ months, and earth station ownership after another 9½ months.

13. The introduction of such technology into a non-regulated context raises different though equally difficult problems which will not be specifically discussed in this paper, though some of the points made will be equally relevant to that context. For a few brief but penetrating comments on these aspects of the problem, see HEILBRONER, *THE LIMITS OF CAPITALISM* 96-100, 117-34 (1966).

14. See Comsat Act, § 102(c), 47 U.S.C. § 701(c); S. REP. NO. 1584, 87th Cong., 2d Sess., 13-14 (1962).

link between earth station ownership and Comsat's ability to offer such direct competition. The Commission, however, explicitly declared that its decision giving Comsat an interim monopoly was not to affect the latter question,¹⁵ and a year later, in the *authorized user* decision, it ruled that Comsat was not to offer services directly to anyone except under "unique or exceptional" or "national interest" circumstances, to be decided by the Commission.¹⁶

This paper will be concerned with the soundness of the *Second Earth Station* and the *Authorized User* decisions, as well as their implications for the success of the Comsat experiment. It will try to show that, as a "meld of variegated interests," Comsat is burdened with too many conflicts of interest to operate effectively as this country's chosen instrument for satellite communications, and that the Commission's *Earth Station* ruling has compounded the problems; further, that any progress toward achieving the legislative objectives has been the result of a rare and perhaps temporary combination of vigorous and effective regulation and aggressively independent management, which have made up, in part, for Comsat's unwieldy structure.

I. Interests and Issues

A. Background—The Industry Structure

The communications common carrier industry is an oligopoly dominated by AT&T, the largest corporation in America and one of the most powerful in the world.¹⁷ In domestic communications, AT&T completely overshadows the rest of the industry, controlling 85 per cent of the telephones in the United States, and monopolizing other services such as inter-city television. The rest of the domestic industry is made up of competing monopoly services, such as Western Union's telegraph franchise, and a few services, such as teletypewriter exchange, in which several firms including AT&T compete.

International communications, which at 22 per cent per year is the faster growing segment of the industry,¹⁸ is divided like domestic com-

15. See First Report, 38 F.C.C. at 1119-20.

16. In the Matter of Authorized Entities and Authorized Users Under the Communications Satellite Act of 1962, 4 F.C.C.2d 421 (1966) [hereinafter cited as *Authorized Users*].

17. In 1965, AT&T had \$33 billion in assets and \$4.4 billion in net operating revenues before taxes. AMERICAN TELEPHONE AND TELEGRAPH COMPANY, ANN. REP. 28, 30 (1965).

18. 1963 FCC REPORT 22 (1964); in 1965, total revenues from overseas communications amounted to \$222,700,000. See *Authorized Users*, 4 F.C.C.2d at 432. It is expected that demand will increase four-fold and maybe more in the next decade, particularly if rates fall. See REPORT AND RECOMMENDATIONS TO SENATE-HOUSE COMMITTEES OF THE INTRAGOVERNMENTAL COMMITTEE ON INTERNATIONAL COMMUNICATION 20 (1966) [hereinafter cited as *INTRAGOVERNMENTAL COMMITTEE REPORT*].

munications into voice and record, such as telegraph and teletype. AT&T has a monopoly of voice, while ITT, RCAC and WUI account for the bulk of record and mixed voice-record communications.¹⁹ So far record communications media still handle most of the international traffic, but voice is rapidly increasing its share, as are hybrid services such as alternate voice and record, dataphone, and television. These services are hard to classify as voice or record, and there is some dissatisfaction with the regulatory distinction between them, especially since there are almost no technical differences in the means of transmission.²⁰

At present, most overseas traffic moves via radio or high capacity undersea cable. Originally, the international record carriers operated almost exclusively over their own low-capacity telegraph cables. In the early 1950's RCAC developed efficient radio communications, and the other carriers followed suit. But the growth of voice and hybrid services exhausted the potential of ordinary radio communication and created a demand for the high-capacity undersea cables that AT&T alone started to build in the mid-fifties after the other carriers declined an invitation to participate. In 1964, the Commission, fearing the monopolistic power inherent in exclusive cable ownership, granted the record carriers joint ownership with AT&T in the fourth transatlantic cable, as well as infeasible rights of user—which is tantamount to ownership—in the first three. Additional plans are being made for other cables, also to be jointly owned.

19. For a brief description of the overseas communications industry, see INTRAGOVERNMENTAL COMMITTEE REPORT 6-11; Communications Satellite Corporation Prospectus 22-28 (1964).

20. Messrs. Frederick A. Kappel and David Sarnoff, of AT&T and RCA respectively, have noted that more facilities are becoming harder to classify because of the intermixture of voice and record. See Sarnoff letter of June 27, 1963, to Senator Warren G. Magnuson reprinted in 110 CONG. REC. A5965-66 (daily ed. Sept. 23, 1965). Dataphone and television are good examples of such a mixture.

Professor Dallas W. Smythe, formerly FCC Chief Economist, has argued, on the other hand, that the distinction is both technically and organizationally sound, and must be maintained if the Bell system is not to drive all the other carriers out of existence. Testimony in Domestic Telegraph Investigation, F.C.C. Dkt. No. 14650 at 6-11 (1963). He would confine AT&T to pure voice communications, allowing the other carriers all the other services. ITT's position also calls for maintaining the voice-record distinction. See letter from ITT President Harold S. Geneen to Senator Warren G. Magnuson, reprinted in 110 CONG. REC. A5965 (daily ed. Sept. 23, 1963). General Sarnoff's solution to the problem of AT&T competition is to merge all the carriers other than Bell. See 1966 *Holifield Hearings* 557-58.

Some of the record carriers have expressed fears that AT&T may try to use the blurring of the voice-record distinction to expand its operations into record. See Response of Western Union International to Replies of Other Carriers In the Matter of AT&T and WUI Applications . . . to Lease and Operate Voice and Television Channels . . . [in] the Communications Satellite System 8-10 (Aug. 27, 1965).

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B. *The Rate Base Issue*

Whatever the public interest in the *Earth Station* decision, part of the carriers' motivation is simply that without earth station ownership their prospects for significant profits from the satellite communications system are poor. Investment in an earth station may be included in the rate base and in the regulated communications industry, where a firm's prices are set by regulation to produce a reasonable return²¹ on its plant investment, earnings are directly related to the size of the rate base.²² If the carriers do not own the earth station facilities and want to use the satellite system, they will have to lease the space and earth facilities. The rental payments for such leases, however, are not a source of earnings for they are merely expenses which, although reimbursable dollar for dollar, are excluded from the rate base.

Rate base disputes, of course, occur all the time, but this one is crucial to the carriers, for the ground facilities are their only source of substantial satellite rate base and earnings. The satellites themselves are the exclusive monopoly of Comsat and its foreign partners in the international consortium, the carriers' present stock investments in Comsat may not be included in their respective rate bases (unlike possible future issues under section 304(c) of the Act),²³ and there are unlikely to be substantial dividends on this common stock for some time.²⁴ In addition, research and development expenses in connection with these stations may also be eligible for inclusion in the rate base and thereby become an additional source of earnings. Research also helps develop competence and know-how that can lead to profitable contracts with outsiders. Comsat and its carrier owners may thus compete with each

21. Setting a reasonable rate of return is, of course, one of the most difficult problems in public utilities regulation. See generally BONBRIGHT, *PRINCIPLES OF PUBLIC UTILITY RATES* chs. X-XV (1961). Because of the newness of the firm and the venture, setting Comsat's rate of return for satellite service may be an especially difficult problem. This problem is presently being considered by the FCC. See F.C.C. Dkt. No. 16070.

22. This may be at least one reason for the utilities' massive construction programs, for in the utility industry, it is generally true that the more you invest, the more you earn. Shepherd, *Utility Profits and Growth Under Regulation*, in *UTILITY REGULATION—NEW DIRECTIONS IN THEORY AND POLICY* 3, 31-34 (Shepherd & Gies eds. 1966). Comsat President Charyk has suggested that because less plant investment will be needed for future communications uses, the rate base method ought perhaps be abandoned for communications rate making. 1966 *Holifield Hearings* 515. See text accompanying note 82 *infra*.

23. See notes 6 *supra* and 33 *infra*. Under an earlier draft, the carriers' voting stock might have been includible in the rate base. Testimony of FCC Common Carrier Bureau Chief Bernard Strasburg at *Kefauver Hearings* 338. Issues of section 304(c) stock are probably some time away. See text accompanying note 27 *infra*.

24. Even if dividends were more likely, the after-tax return to the carriers is but a fraction of what they could obtain on their own rate base.

other for Government research business²⁵ and for contracts relating to the construction of new or foreign earth stations. Carriers have even claimed that without direct interest in the earth stations, they may be unable to continue research on earth station technology and therefore unable to compete for future earth station construction either in the United States²⁶ or abroad.

On this relatively narrow issue of rate base allocation, Comsat has one very strong and simple argument: it desperately needs immediate investment outlets, and far more so than the carriers. Comsat obtained almost \$200 million in cash from its initial common stock issue, and expects at least \$80 million more from its foreign partners; improving technology, however, has sharply reduced the anticipated cost of the system.²⁷ Although it has been spending money on research and on a few satellites, at the moment it has relatively few substantial investment outlets other than stations.²⁸ An earth station monopoly could contribute significantly to Comsat's rate base, for the stations, each of which is estimated to cost some \$6.5 million, are expected to account for at least 50 per cent of the satellite system investment and perhaps very much more.²⁹ Dividing the stations between Comsat and the carriers would thus reduce Comsat's total plant by at least 25 per cent, while

25. 31 TELECOMMUNICATIONS REPORT 25 (June 21, 1965); *Hearings on Nomination of Incorporators Before Senate Aeronautical and Space Sciences Committee* 82, 88th Cong., 1st Sess. (1963) (testimony of former Comsat Director Leonard Marks).

26. Petition of ITT World Communications Inc. for Reconsideration by the Commission of its Interim Policy 8 (June 10, 1965).

27. Present estimates are that Comsat's share of the cost will be about half the original estimates. Address by A. Bruce Matthews, Comsat Financial Vice President and Treasurer, before Financial Analysts of Philadelphia, Feb. 2, 1967; see note 29 *infra*.

The fact that Comsat's capital is entirely equity, and that it will have no need to borrow money for some time aggravates Comsat's plight, for equity capital is far more expensive than debt and requires a far higher rate of return, thus requiring higher customer charges. Indeed, Comsat's currently high rates are one reason for its relatively low operating revenues so far. See *N.Y. Times*, Sept. 18, 1966, § 3, p. 1, col. 3. Since Comsat's future success depends on low price-high volume service, it is important for Comsat to float bond issues, but without the need for such capital, it is difficult to see how the Commission could authorize such financing, under Comsat Act, § 201(c)(7), 47 U.S.C. § 721(c), which requires FCC approval of all financing. The small likelihood that Comsat will resort soon to the bond market for debt financing was recently noted by management. COMMUNICATIONS SATELLITE CORPORATION, REP. OF 1966 ANN. MEETING (May 10, 1966).

28. See *The Company Nobody Knows*, *Forbes*, Jan. 15, 1965, pp. 19, 20. As of September, 1966, Comsat's rate base was still only \$13 million. 1966 *Holifield Hearings* 366 (testimony of Director of Telecommunications Planning James D. O'Connell). It apparently anticipates a rate base of from \$62 to \$95 million.

29. Originally, it was thought that the space segment and the earth stations would each require a heavy investment, and hence the \$200 million initial issue. But this calculation assumed a random orbit system requiring some 30-40 satellites and very complex earth stations. The synchronous system, however, involves only a few satellites and thus a small investment in the space segment. See 1966 *Commerce Committee Hearings* 126-27 (testimony of Comsat Chairman McCormack).

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adding relatively little to most of the carriers.³⁰ Indeed, as the table shows the Commission's allocation of partial carrier ownership will provide rate base increments for the record carriers ranging from 4.75 per cent (RCAC) to 7.5 per cent (WUI); the aggregate increment for all the carriers will be only 4 per cent.³¹

	International Rate Base (millions)	Earth Station Increment (millions)	% Increment
ITT	50	2.9	5.8
RCAC	80	3.7	4.75
WUI	19	1.5	7.5
All international carriers	490	19.5	4.0

Each carrier also has an expanding cable system, which will increase its rate base apart from satellites and at a much faster rate.³² And the FCC can give them an additional opportunity to increase their rate base by buying section 304(c) stock, which is "eligible for inclusion in the rate base to the extent allowed by the Commission."³³ It is also unlikely that the carriers will substantially reduce research if denied ownership, because they have been building earth stations in other parts of the world,³⁴ and have been working with Comsat on stations in this country.³⁵ Thus, Comsat Chairman McCormack's characterization of the financial investment in the U.S. earth stations as being "significant to

30. 1966 *Holifield Hearings* 366 (testimony of Associate Director of Telecommunications Planning Fred W. Morris, Jr.).

31. The rate base figures, which are approximate only, appear in 1966 *Holifield Hearings* 366-67. Separate information as to AT&T's international rate base was not provided. The allocation figures are in Second Report, 5 F.C.C.2d at 819. Other shares went to Hawaiian Telephone Corp. and to a local ITT-owned telephone company in the Caribbean. *Ibid.*

32. One cable in the Caribbean, ownership of which will be shared according to expected use, will cost \$33 million.

33. Comsat Act, § 304(c), 47 U.S.C. § 734(c), provides: The corporation is authorized to issue, in addition to the stock authorized by subsection (a) of this section, nonvoting securities, bonds, debentures, and other certificates of indebtedness as it may determine. Such nonvoting securities, bonds, debentures, or other certificates of indebtedness of the corporation as a communications common carrier may own shall be eligible for inclusion in the rate base of the carrier to the extent allowed by the Commission. The voting stock of the corporation shall not be eligible for inclusion in the rate base of the carrier.

Through their 50 per cent stock ownership of Comsat, the carriers will also obtain, ultimately, at least some benefit from Comsat earth station ownership, but probably only a fraction of what they could obtain by direct ownership. Their precise benefit will depend upon the dividend pay-out ratio and the tax rates.

34. ITT is constructing terminals in Latin America, see Application of ITT Cable & Radio, Inc.—Puerto Rico for authority to construct a Satellite Earth Station in Puerto Rico . . . 8 (Nov. 22, 1965), and in Spain. See Earth Stations Backgrounder issued by Comsat 10 (Fall 1966); RCA is involved in earth station construction in Canada, *id.* at 22, and the Philippines.

35. See Comsat Notice of Annual Meeting of Shareholders to be held May 10, 1966, at 8-10 (April 7, 1966).

the other carriers, especially the smaller overseas record carriers," but "vital to Comsat" is understandable.³⁶

C. *Expeditious Development—The Satellite-Cable Competition*

It thus seems that the carriers' sharp responses to a possible Comsat monopoly of earth stations must have been based not so much on concern for the small rate base *increments* represented by the earth stations but on something much more fundamental—the threat that satellites present to their *existing and planned* rate base consisting of cable and radio facilities, a threat which vitally affects the "expeditious development" of the satellite venture and the future of the communications industry.

It was early recognized that a satellite system might well be much cheaper and more versatile than conventional cable and radio facilities,³⁷ although steady improvement in cable technology may overcome this trend.³⁸ Technically satellites are more flexible than cables. They are not limited to point to point communication, and their capacity, presently much greater than cables, can be expanded without great difficulty. On the other hand, cables may be more economical for shorter distances.³⁹ Unlike satellites, they do not consume the already overcrowded radio frequency spectrum, and there may be a troubling echo effect for long-distance, two-way satellite communication.⁴⁰ Moreover, the development of cable technology is expected to cut cable costs and increase cable capacity enormously.⁴¹ At present there is more than enough demand in most parts of the world for existing cable and satellite facilities. But before long surplus capacity may develop,⁴² and cable-satellite competition could then become highly intensive, espe-

36. 1966 *Commerce Committee Hearings* 133.

37. *Id.* at 65 (O'Connell); Western Union has estimated that satellites are cheaper than cables at distances of 1000 miles or more. Application by the Western Union Telegraph Co. for Authority to Construct and Operate a Domestic Earth Station in Colorado, pt. I, at 8 (Nov. 7, 1966).

38. Letter from RCA Chairman David Sarnoff to Communications Satellite Corporation Chairman Leo D. Welsh, April 2, 1963, reprinted in 110 CONG. REC. 9208-09, (daily ed. May 28, 1963) (new transistorized cables with capacity increased to 720 voice circuits will seriously impair Comsat profit possibilities); cf. Rand Corp. *Submarine Telephone Cables and International Communications*, Memo RM-3472-RC 12 (Feb. 1963); 1966 *Senate Space Committee Hearings* 100-01 (O'Connell).

39. See 1966 *Holifield Hearings* 516 (McCormack). But see 33 TELECOMMUNICATIONS REPORTS 23 (Feb. 23, 1967) (possibility of economical satellite use for short distances).

40. But see *Wall St. Journal*, Aug. 2, 1965, p. 1, col. 8 (echo not significant).

41. See authorities cited note 38 *infra*; 1966 *Holifield Hearings* 529-30, 533 (AT&T views).

42. See INTRAGOVERNMENTAL COMMITTEE REPORT 18-19. This may be true in Pacific if the present Vietnam crisis ends, for our present needs arise largely out of our military involvement in South East Asia. 1966 *Holifield Hearings* 44 (statement of Lt. Gen. Alfred D. Starbird, Director, Defense Communications Agency).

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cially since communications is an industry of declining costs and earnings are directly related to volume.⁴³

If satellites were to prevail in this competition, or even if they merely obtained a substantial part of the business, there would be little justification for substantial additional cable investment, and earnings might drop on the carriers' already heavy investment in cables and radio.⁴⁴ Then if the carriers were also denied rate base use of the satellite plant, they might well be left with a depreciating and declining portion of the industry's communications plant.⁴⁵ The carriers could conceivably be relegated to moving messages from the customer to Comsat, a task which requires relatively little plant investment. Although this is hardly an urgent problem for the mammoth Bell system, which is always likely to have a vast amount of non-satellite business, the prospect is far more serious for the international record carriers whose entire carrier business is involved.⁴⁶

The cable-satellite conflict and its effect on expeditious development of a satellite system cast a shadow on the legislative debate over the Communication Satellite Act. The carriers and the FCC feared the threat to existing investment if the carriers did not control the technology, while the opponents feared impediments to expeditious development if they did.⁴⁷ Exactly the same considerations apply to earth

43. The first head-on confrontation between cables and satellites has already taken place in connection with providing much needed new facilities in the Caribbean, and the result is a draw: the FCC has authorized both a cable and an earth station on the grounds that (1) the expected traffic can support both facilities, especially since AT&T and ITT, the two carriers who petitioned for the cable, have agreed to lease 100 satellite circuits; (2) having two types of facilities would provide a necessary redundancy in case one of the facilities suffers an outage; and (3) authorizing a new transistorized, high-capacity cable as well as satellite traffic would facilitate development of cable technology, which the Commission found to be still in the public interest, and permit a direct comparison between the two facilities. See Second Report, 5 F.C.C.2d at 823, 828, 830-31.

44. For many years AT&T, some of its foreign partners such as the British, and, to a lesser but increasing extent, the record carriers, have been building vast and expensive cable systems, all of which go into the carriers' respective rate bases if kept in service. The present investment in such cables is over \$600 million and by 1970, it is expected to be about \$1 billion. Wall St. Journal, July 18, 1963, p. 1, col. 6. See generally Communications Satellite Corporation Prospectus 22-23 (1964). For this and other reasons, the British and some other Europeans are less than wholly enthusiastic about satellites. Wall St. Journal, Aug. 2, 1965, p. 1, col. 6; 1966 Senate Space Committee Hearings 100 (O'Connell); 1966 Holifield Hearings 324 (O'Connell).

45. They would be faced with the prospect of ever diminishing rate bases, both in the absolute and relative senses, and would be driven to seek alternative means not necessarily dictated by efficiency but by need for survival. Second Report, 5 F.C.C.2d at 815.

46. The carriers' desire for earth station ownership apparently goes back to the earliest days of the satellite experience. 1966 Holifield Hearings 365 (O'Connell).

47. Compare Kefauver Hearings, pt. 2, at 328-29, (FCC Commissioner T. A. M. Craven) and 1962 Senate Space Committee Hearings 294 (ITT Vice President Henri Busignies) with *id.* at 412-13 (Deputy Attorney General Nicholas de B. Katzenbach) and 1966 Holifield Hearings 367 (O'Connell). This concern is not peculiar to satellite develop-

station ownership, for satellite capacity, and hence satellite rates, depend directly on the size and efficiency of the stations. It is therefore arguable that only an entity devoted solely to satellites and with no mixed feelings about their displacement of established technology, should be entrusted with this difficult task, and in the *First Earth Station* decision, the Commission apparently agreed.⁴⁸

On the other hand, excluding the carriers from the satellite system would not eliminate the danger of delay. The carriers are Comsat's main customers and Comsat depends on them to direct traffic to the satellites. As an ITT spokesman indicated, if the carriers were not given control over this technology which could "seriously dilute" their existing investment,

it would then be the duty of the common carriers to their stockholders to avoid such dilution, insofar as possible, *which would undoubtedly tend to reduce their use of the satellite system in favor of the existing systems which they own.*⁴⁹ (Emphasis added.)

The same boycott threat was made in the earth station controversy, where ITT and RCA warned that without at least part ownership of the earth stations, they would have no incentive to use the satellite system and would rely on their own facilities instead.⁵⁰ The *Authorized User* decision,⁵¹ which generally precludes Comsat from dealing directly with the ultimate user, reinforces the carrier's ability to avoid the satellite system. Under that decision, the carriers will control the choice of facilities, and if all other things are equal, they can simply divert most traffic to their own cable facilities. If a substantial boycott were carried out, it would hinder the development of inexpensive services, since satellite communication involves sharply decreasing costs, and maxi-

ment but is reflected in long-standing policies in both the transportation and communications industries whereby established industry members are either flatly prohibited from owning other modes of service, or otherwise restricted. See 54 Stat. 905 (1940), as amended, 49 U.S.C. § 5 (1964) (railroads and water carriers); 72 Stat. 767 (1958), as amended, 49 U.S.C. § 78 (1964) (surface and air carriers); 48 Stat. 1087 (1934), as amended, 47 U.S.C. § 314 (1964) (radio and wire communications). See *Hearings on S. 2814 and S. 2814 Amendment Before the Senate Committee on Commerce*, 87th Cong., 2d Sess. 273-74 (1962) [hereinafter cited as 1962 *Commerce Committee Hearings*]; FULDA, COMPETITION IN THE REGULATED INDUSTRIES—TRANSPORTATION ch. 12 (1961); Cramton, 19 ABA ANTI-TRUST SECTION 364 (1961); L. B. Schwartz, *Legal Restriction of Competition in the Regulated Industries: An Abdication of Judicial Responsibility*, 67 HARV. L. REV. 436, 460-63 (1954).

48. First Report, 38 F.C.C. at 1113, ¶ 31.

49. 1962 *Senate Space Committee Hearings* 294 (Busignies). For evidence that this has happened see 1966 *Senate Space Committee Hearings* 100 (O'Connell), and for a more generalized statement of some of the reasons underlying such a decision see CLARK, *STUDIES IN THE ECONOMICS OF OVERHEAD COSTS* 145 (1923).

50. Cf. First Report, 38 F.C.C. at 1110; *id.* at 1126 (dissent).

51. *Authorized Users*, 4 F.C.C.2d 421 (1966).

imum efficiency can be achieved only through full use of the facilities.

The boycott threat does not seem too serious, however, at least for the near future.⁵² The success of a boycott would depend on the availability of other facilities, and in the next few years such facilities will probably be in critically short supply. Even after the 1965 *Earth Station* decision, the carriers asked for far more channels than were available.⁵³ When a voracious demand for television channels and private data transmission develops, there is likely to be a period of acute shortage. Moreover, Comsat may not be wholly dependent on the record carriers, for it is likely to obtain a heavy volume of business from AT&T and the Government. The former requested 100 channels as early as December 1963,⁵⁴ and cheap satellite channels would attract heavy demand from NASA and the Defense Department.⁵⁵

On the other hand, even if the carriers own earth stations and have some satellite rate base, they will still be biased toward their own facilities, representing a much larger investment. The Commission itself recognized the latter point in its *Earth Station, Authorized User* and *Caribbean* decisions, and suggested one way of preventing a boycott: the Commission required the carriers constructing the Caribbean cable to ensure that satellites get a proper share of the traffic,⁵⁶ and in the *Authorized User* decision warned that it would allow Comsat to offer direct service if the carriers refused to use available satellite capacity upon reasonable demand therefor.⁵⁷

Despite these considerations, the Commission ruled that partial carrier ownership was necessary to ensure expeditious development of the system. Pointing to the enormous volume of pleadings and comments filed with the Commission on various aspects of the earth station issue, and stressing the urgency of determining certain competing applications without a full dress hearing, the Commission concluded that ownership of all six initial stations should be shared between Comsat and the carriers. It refused to extend its 1965 decision giving Comsat a temporary monopoly of the first three stations to the three additional stations, on the ground that this would

52. See text accompanying notes 49-50 *supra*.

53. Letter from Ben F. Waple, Secretary, FCC, to Herman Schwartz, Feb. 13, 1967.

54. 30 TELECOMMUNICATIONS REPORTS 1-3 (Dec. 16, 1963).

55. The Apollo program alone is likely to pay the bill for a large portion of Comsat's operations for the next few years. See *Missile and Space Ground Support Operations*, H.R. REP. NO. 1340, 89th Cong., 2d Sess. ch. 6 (1966).

56. Second Report, 5 F.C.C.2d at 831-32; *cf. id.* at 816 n.7.

57. Authorized Users, 4 F.C.C.2d at 435.

. . . be contrary to the spirit and intent of Congress . . . in Section 201(c)(7); *e.g.*, see Senate Report No. 1584, 87th Cong., 2d Sess., page 18. Under such a course the carriers would not, for the extended period of time, be in a position to make meaningful contribution [sic] to the development of the art and their incentives to aid in the growth of satellite communications would be severely limited. They would be faced with the prospect of ever diminishing rate bases, both in the absolute and relative senses, and would be driven to seek alternative means not necessarily dictated by efficiency but by need for survival.⁵⁸

The Commission also rejected the alternative of assigning different stations to different carriers, both for technical reasons and because it would

fragment responsibility, and control of what must be a unified system at this stage of development of the act when proliferation of earth stations is neither technically nor economically feasible.⁵⁹

The Commission concluded that joint ownership, with Comsat as manager subject to a committee of the particular carriers owning the particular stations, was best because:

reasonable and equitable opportunities would thereby be offered all entities which make use of the satellite facilities to make whatever contributions they can to the advance of the art and to the achievement of the objectives of the Satellite Act. No one carrier or group of carriers would be precluded from gaining valuable experience in this field. Ownership participation and investment would provide powerful incentives to maximize use. Orderly planning of needed new cables, satellite, and other facilities would be facilitated so that the inherent advantages of each could be exploited to the maximum. The United States telecommunications industry would be in a position to deal on equal terms with its foreign correspondents which, for the most part, have unified cable and satellite interests.⁶⁰

The Commission thereupon allocated carrier shares according to expected use⁶¹ and pledged to review the policy at the end of 1969.

Although it is hard to fault a compromise apparently accepted by the party most adversely affected,⁶² most of the Commission's reasons

58. Second Report, 5 F.C.C.2d at 815.

59. *Ibid.*

60. *Id.* at 816.

61. The carriers had been unable to agree on their shares among themselves. *Id.* at 818.

62. Comsat expressed willingness to accept joint ownership. See *id.* at 817. A Comsat shareholder has recently filed a protest with the Commission. 33 TELECOMMUNICATIONS REPORTS 36 (Jan. 30, 1967).

for allowing carrier participation in ownership are not entirely convincing and are inconsistent with its analysis of these same considerations announced less than twenty months earlier, and reaffirmed confidently less than ten months earlier. Furthermore, the Commission's joint ownership and committee arrangements could adversely affect not only earth station technology⁶³ and the satellite venture but the possibilities, currently much mooted, of merging some or all of the international carriers.

Some of the Commission's reasons have already been considered earlier, such as the contention that ownership is necessary for the carriers to contribute to the art, and the problem of carrier incentive to use the system. Indeed, the very same contentions were made by the carriers and flatly rejected by the Commission in its 1965 decision, though for reasons other than those set forth here. As to the first, the Commission then declared that Comsat could benefit from the carriers' knowledge through the carriers' representatives on its board, and from the normal interchange of information between a monopolistic supplier and its customers.⁶⁴ It also refused to take seriously the threats of boycott on the ground that the carriers' stock investment in Comsat would impel them to use it to the maximum.⁶⁵ As to effective dealing with foreign correspondents, the Commission in 1965 concluded that only *full* Comsat ownership would enable Comsat to best represent American interests.⁶⁶ And as to the rate base problem—which the Commission did not discuss in its first decision—the relevant considerations have already been discussed and will be returned to later. The Commission's First Report also seemed to give some weight to Comsat's contention that its sole reliance on satellites made it the most "reliable" entity to develop the system,⁶⁷ but in December 1966 it only mentioned this factor as one that it had taken into account.⁶⁸

The only really new consideration in the December opinion is the Commission's deduction from legislative history that to give Comsat a monopoly "would be contrary to the spirit and intent of Congress

63. See text accompanying note 38 *supra*.

64. First Report, 38 F.C.C. at 1114-15.

65. This ignores the relatively small size of most carriers' investments and the even smaller likelihood of substantial profits for some time. Indeed this investment was probably made more for control than for income, since at the time of issue, most professional securities analysts considered the stock a poor investment because of the inevitably long wait for earnings. The experts failed to anticipate the glamour of the stock which has gone as high as 71, from an issue price of 20. Most of the time, it has been in the 40's and 50's.

66. First Report, 38 F.C.C. at 1113.

67. See *ibid.*

68. Second Report, 5 F.C.C.2d at 818.

in Section 201(c)(7); e.g., Senate Report No. 1584, 87th Cong., 2d Sess., page 18." There is very little to support such a "spirit and intent." In the first place, section 201(c)(7) clearly *allows* a Comsat monopoly as one of its alternatives.⁶⁹ It is true that the Committee Report described some of the carriers' arguments for carrier ownership,⁷⁰ as

significant factors which are directly related to the public interest, convenience and necessity, and which should be taken fully into account by the Commission along with all other relevant factors

But it went on to say:

While the common carriers have urged the desirability of their operation of ground stations, *it does not seem appropriate to legislatively limit the Commission in the exercise of its licensing functions.* In view of the various statements made throughout the numerous hearings on this proposal, your committee's intention must be made quite clear.

It is for this reason that the second sentence that appears in S. 2814, section 201(c)(7), as reported by the Senate Aeronautical and Space Committee, which provides that the Commission should 'encourage' establishment of ground stations by the carriers has been changed to provide that there shall be no preference shown either to the corporation or the carriers.

The intention of this change in language is to make clear that there is no legislative prejudgment as to who shall establish a ground terminal station. The Commission is authorized to give full consideration to all relevant technological, economic, and operating factors in determining what meets the public interest, convenience, and necessity.⁷¹

Thus, it seems clear that the Commission had complete discretion on this question, a discretion which would seem especially appropriate with respect to interim ownership control.⁷²

The two decisions are in sharpest disagreement on the paramount

69. The concluding phrase "without preference to either" was expressly inserted to replace and negate a much-disputed provision in the House-passed version of the bill which gave a preference to the carriers. See note 8 *supra*. Had Congress intended to limit the Commission in any way, it surely could have done so, and indeed, as noted earlier, the House unsuccessfully made such an attempt. *Ibid.*

70. These consisted of the arguments that (1) since it is the carriers who directly serve the public, they should therefore have undivided responsibility; and (2) the carriers have experience and expertise with earth stations. S. REP. No. 1584, 87th Cong., 2d Sess. 18 (1962).

71. *Ibid.* (Emphasis added).

72. Interestingly, the Commission's *First Report* nowhere mentioned even a carrier claim that congressional intent pointed toward joint interim ownership; indeed, if the Commission's December 1966 reading of such "spirit and intent" is correct, did the Commission contravene that intent in May 1965?

issue: how will sharing responsibility and control of the stations affect development of the satellite system? In 1965, the Commission reasoned that the "centralized authority" of a Comsat monopoly was necessary to avoid "the risk of delay, uncertainty and compromise which would be involved if the carriers were to have direct ownership interest and a voice in the management decisions."⁷³

And in February 1966, the Commission noted with satisfaction that

the rapid technological and accelerated requirements for the availability of facilities, particularly in connection with the Apollo program, indicate to us that the advantages we envisaged would result from a centralization of responsibility and control in Comsat are even greater than appeared when we first considered the matter.⁷⁴

But is there now less need for centralized authority? If not, why is there now reason to think that these committees will be able to operate efficiently, when 19 months ago it was most confidently thought otherwise? Won't the "negative control" given the carriers by their 50 per cent ownership continue to involve "the risk of diluting responsibility, . . . delays . . . , undesirable compromises [and] uncertainties"?⁷⁵ Experience during the period does not offer much hope of smooth operation for, as the *Second Report* itself notes, the carriers and Comsat were unable to agree on shared ownership arrangements without an FCC edict.⁷⁶ There have been constant complaints by Comsat and the carriers about the other's failure to cooperate on additional matters.⁷⁷ If

73. [A]s a practical matter, we believe that any arrangement calling for a substantial ownership interest on the part of the carriers, however effectively it may function, involves the risk of diluting responsibility, with resultant risk of possible delays and undesirable compromises in the decisions affecting the stations and the system during the interim period. *We think this will be particularly true if, as has been suggested, the carriers were to have 50 percent ownership of the earth stations.* Further, the joint station ownership would require some type of temporary or ad hoc arrangement, the formulation and functioning of which could involve unnecessary delays, uncertainties, and possible conflicts among the parties greatly out of proportion to the temporary conditions it is designed to meet. In short, we believe that any joint station ownership during the initial period involves certain risks and disadvantages which far outweigh any possible gains to be derived; and here we again take into account that, to a significant degree, the carriers will be able to contribute their knowledge and experience and protect their vital interests through the means described above.

First Report 1115. (Emphasis added.)

74. Second Report, 5 F.C.C.2d at 816.

75. First Report, 38 F.C.C. at 1115.

76. Second Report, 5 F.C.C.2d at 818. Even after the edict, it has taken many months to arrive at an agreement, and one carrier is apparently still dissatisfied. See 33 TELECOMMUNICATIONS REPORTS 6 (Mar. 13, 1967).

77. Extremely harsh exchanges between Comsat and the carriers have characterized numerous issues before the Commission in the last few years. The sharp exchanges on earth station ownership continued up to two days before the December issue came out,

this hostility and the inevitable disparity of interests between Comsat and the carriers continue to produce "sharp, if not bitter" disagreements,⁷⁸ development could indeed be held up; also, the FCC may become even more involved in day-to-day operations.⁷⁹

Why then, have one of the better Commissions and staffs in FCC history so drastically reversed themselves and disowned their analysis just 19 months later, long before the allotted interim was to expire? At least one reason is clear—Congress⁸⁰ and the Commission were eager to end the squabbling and delay. Comsat on the other hand, was apparently willing to settle for 50 per cent of six stations, in place of 100 per cent of only three with bruising battles with its customers for a share of the rest. And perhaps there would have been a substantial delay had the Commission attempted to fully resolve the earth station controversy at this time,⁸¹ although it is difficult to see why the delay problem could not have been resolved by simply expanding the original interim policy to the three new stations. Moreover, the decision may not even be very significant to Comsat's search for much-needed rate base. Comsat's rate base problem is so acute that the \$19.5 million earth station increment would not have made much of a dent in its \$200 million of available funds. Indeed, Comsat President Charyk implied as much when he suggested that the Commission perhaps ought to abandon the rate base method for Comsat's rate setting because the necessary capital investment in a satellite system is so small compared to the volume of business it can handle.⁸²

Of possibly greater significance is the shared management of the earth stations. In a sense, each earth station will be a microcosm of Comsat's own mixed carrier and non-carrier representation, but with several important differences: First, the carriers' interest in the earth stations is much greater than 50 per cent, because in addition to their direct ownership interest they hold half the stock in Comsat. This, of course, reduces the general public's ownership interest and earnings potential from the satellite system.⁸³ Secondly, the carriers' 50 per cent gives

even though the industry knew of the impending decision. See 33 TELECOMMUNICATIONS REPORTS 3 (Dec. 12, 1966).

78. H.R. REP. No. 2318, *supra* note 2, at 82.

79. The Commission may also find itself spending time supervising the carriers to prevent any self-preference in their use of the Caribbean cable.

80. 1966 *Commerce Committee Hearings* 67 (Senator John O. Pastore).

81. To avoid delay resulting from conflicting applications Comsat decided to apply for authorization to build a second antenna at Andover, even though this would not be as useful as a completely new earth station in the southeastern United States. Comsat Press Release 1 (October 6, 1966).

82. 1966 *Holifield Hearings* 515.

83. 1966 *Holifield Hearings* 365 (O'Connell).

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them what the Commission described in 1965 as “negative control,”⁸⁴ the power to block action. This power is even greater than the May 1965 Commission dissenters were willing to grant,⁸⁵ for they urged that Comsat be given 51 per cent so that the stations could be built “without unnecessary delay, [with] ultimate control in one entity, and efficient operation.”⁸⁶ In Comsat itself, the carriers have only 40 per cent of the directorate. Finally the Committee is likely to give the carriers much greater control over Comsat’s operations. Board membership alone does not seem to have provided the carriers with decisive influence within Comsat although one cannot be sure.⁸⁷ In part, this is because the board meets rarely, generally deals only with high policy, and carrier members have frequently abstained⁸⁸ from meetings and issues. The earth station committees, however, have plenary day-to-day authority since they will be responsible for

formulating overall policy and deciding on major investments, types of major equipment and location of new stations, and the establishment of day-to-day operations of the stations.⁸⁹

As a result, Comsat will have to work closely with the carriers and the carriers with each other, despite the many differences.

Shared ownership of the earth stations continues a pattern which has recently been developing in the industry—joint ventures in the construction and maintenance of key facilities. Many present and most future cables are to be jointly owned and operated. This is partly to improve competition with AT&T⁹⁰ and partly to spread around the rate base. Nevertheless, the number of partial mergers, including each of the earth stations and Comsat itself, may become so numerous that the next step will seem quite natural—full merger of some or all of the international facilities. Such a merger, advocated by the Commission first in 1959,⁹¹ and often proposed in varying forms by RCA Chairman

84. First Report, 38 F.C.C. at 1115. It was AT&T which originally suggested that the carriers be given a 50 per cent interest in the stations.

85. *Id.* at 1110-11.

86. *Id.* at 1126.

87. See text accompanying notes 170-73 *infra*.

88. 1966 *Holifield Hearings* 486 (McCormack).

89. Second Report, 5 F.C.C.2d at 819.

90. See American Telephone & Telegraph, 37 F.C.C. 1151, 1156-57 (1964).

91. The Commission’s support in 1959 of a proposed merger of the international telegraph carriers reversed a prior long-standing FCC opposition to merger. See *Hearings on Merger of International Telegraph Carriers Before the Senate Committee on Interstate and Foreign Commerce*, 86th Cong., 1st Sess. 24-168 (1959) [hereinafter cited as 1959 *Merger Hearings*]. In his testimony John C. Doerfer, at that time FCC Chairman, said he saw no reason for any competition at all in a regulated industry, 1959 *Merger Hearings* 152-59. The argument for merger was also based on the fear that the record

David Sarnoff and ITT Chairman Harold T. Geneen, has recently been supported by a high-level intra-governmental committee, and permissive legislation will probably be introduced in the 1967 Congressional session. In the legislative hearings proponents of merger will undoubtedly use the joint earth station ownership and operation as evidence that merged operations are necessary both for efficiency and because of an industry-wide rate base shortage.

D. *Customer Competition Between Comsat and the Carriers*

Discussion of the merger problem raises a second major goal of the legislation—"to maintain and strengthen competition in the provision of communications services to the public."⁹² Communications services are regulated as to entry and price, however, and the role of competition may not be quite the same as in a non-regulated industry. Indeed, in the 1953 *RCAC* case, the Supreme Court held that because of the regulation of price and entry, the national policy favoring competition was not fully applicable to the common carrier industry.⁹³

Where there is technological stability, the *RCAC* holding may have some validity. In such a context, the primary concern is to ensure a

carriers could not survive Bell Telephone competition unless they merged, although they were then quite prosperous. Subsequent events have not borne out these fears. Except for a slight downturn in 1962 the international telegraph carriers have enjoyed a steadily expanding business. See FCC, 1965 ANN. REP. 62 (1966); INTRAGOVERNMENTAL COMMITTEE REPORT 23. For a brief summary of the arguments for and against merger, see PRESIDENT'S COMMUNICATIONS POLICY BOARD, TELECOMMUNICATIONS—A PROGRAM FOR PROGRESS 154-56 (March 1951).

Despite the carriers' favorable earnings, merger is again being suggested by the international record carriers, as indicated in the text. The proposal, with certain variations, is that all the record carriers and, in the Sarnoff proposal, Comsat, be merged to form a strong competitor to the Bell system, with both systems permitted to engage in all types of communications traffic. See Sarnoff and Geneen letters, *supra* note 20. More recently, the Intragovernmental Committee, co-chaired by former FCC Chairman E. William Henry and the President's Director of Telecommunications Management, General James D. O'Connell, concluded that costs and rates could be reduced, and service improved, by merging most or all of the international carriers, including in one of the proposals AT&T's overseas services. INTRAGOVERNMENTAL COMMITTEE REPORT 28-30. As a result, the Committee recommended that the FCC be authorized to approve such a merger, if it found it appropriate. *Id.* at 32-33. The arguments for merger presented by this Committee, which included representatives from the State, Justice and Defense Departments, as well as the FCC and the White House, seem no stronger now than when they were first set forth, in essentially the same form, as early as 1951. It is especially interesting that despite the Committee's conclusion that the international record carriers would be unable to reduce rates without eliminating duplicating services by merger, *id.* at 29, the carriers reduced rates very substantially under FCC prodding, just a few weeks after the Report appeared. See text accompanying note 152 *infra*. And if satellites do become more significant, then the facilities will hardly be too costly for the carriers to finance individually. See text accompanying note 82 *supra*.

92. Comsat Act, § 102(c), 47 U.S.C. § 701(c).

93. 346 U.S. 86, 98 (1953); *cf.* McLean Trucking Co. v. United States, 321 U.S. 67 (1944); Seaboard Airline R.R. Co. v. United States, 382 U.S. 154 (1965); Schwartz, *supra* note 47, at 438-44; *but cf.* United States v. Philadelphia National Bank, 374 U.S. 321, 341, 348-50 (1963) (competition as our basic policy).

fair price, and theoretically this can be approximated by rate regulation designed to produce only a reasonable profit. Even here, however, competition may be useful and indeed necessary, for the practical difficulties of rate regulation are notorious.

Price regulation becomes even less adequate when a major technological innovation appears or is likely. In a workably competitive context, the benefits of the innovation will—again, theoretically at least—be passed along to the consumer by those firms responsible for the innovation, and the others will have to match the cost or quality changes regardless of their investment in older, less efficient plant. If the industry is oligopolistic with substantial barriers to entry, and if all the major firms have a substantial investment in preexisting plant, they can delay introduction of the innovation until they have fully recouped their investment in their existing plant.⁹⁴

The agency's control over the rate base can be of some use in preventing delay and promoting the innovation; the FCC, for example, has the power to exclude obsolete plant from the rate base under the traditional doctrine that the rate payer should pay the utility only for plant which is used and useful. The Commission, however, has followed the policy of allowing the industry to recoup its old investment before requiring full and maximum use of new techniques, and it seems never to have required a firm to drop plant out of its rate base for obsolescence.⁹⁵ The agency's control over entry has therefore become of primary importance, and it has used this control to inject a certain amount of competition into the industry, despite the *RCAC* decision.⁹⁶ Relying in part on sections 313 and 314 of the Communications Act of 1934,⁹⁷ the Commission has stressed that international telegraph com-

94. See discussion at text accompanying notes 48-50 *supra*, and particularly, the testimony of an ITT spokesman, for the possibility of such a retardation.

95. See *Kefauver Hearings* 305-06 (FCC Common Carrier Bureau Chief Strassburg). For discussion of the "used and useful" concept, see BONBRIGHT, *PRINCIPLES OF PUBLIC UTILITY RATES* 213-14 (1961); WELCH, *CASES AND TEXT ON PUBLIC UTILITY REGULATION* 363-72 (1961).

96. On remand in *RCAC* itself, the FCC ruled and expressly found that: (1) since 1934 competition had been increasing steadily in radio-telegraph; (2) Mackay and *RCAC* (the two carriers concerned) had prospered; and (3) competition was at least partly responsible for the maintenance of low rates and steadily improving and expanding service. It also noted that certain complaints about *RCAC* service disappeared after Mackay competition was authorized. *RCAC, Inc.*, F.C.C. 55-699 (1955), *aff'd*, 238 F.2d 24 (D.C. Cir. 1956), *cert. denied*, 352 U.S. 1004 (1957). Similar findings have been made repeatedly in international record communications cases. *E.g.*, *Western Union Telegraph Co.*, 24 F.C.C. 535, 585, 589-91 (1958); *Mackay Radio and Telegraph Co.* 25 F.C.C. 667 (1958), *modified*, 25 F.C.C. 1197 (1958). In some instances, such findings were reaffirmed after some experience with the specific competitive situation before the Commission. *E.g.*, *RCAC, Inc.*, F.C.C. 55-699, Dkt. 8777 (1955); *Mackay Radio & Telegraph Co.*, 26 F.C.C. 566, 568-69 (1959), *modifying*, 26 F.C.C. 557 (1958) and 24 F.C.C. 667 (1957); see also 26 F.C.C. 557, 562-63 for a statement of the FCC's competitive policy.

97. Section 313 expressly applies the antitrust laws to domestic and foreign radio

munication is not a natural or economic monopoly, for the necessary investment is relatively small,⁹⁸ and there is no technical reason for only one facility.⁹⁹ As the footnote shows, the *TAT-4* decision is the latest example of the Commission's efforts to maintain competition in the industry.¹⁰⁰

Despite these efforts, which seem to have produced some competition among the international record carriers, experienced observers have remarked that this competition does not extend to rates or service, but only to salesmanship.¹⁰¹ A recent episode in the Pacific, where only the threat of Comsat competition secured a rate reduction, seems to sup-

communications. Section 314 requires a diversification of facilities by prohibiting radio licensees from acquiring cable or wire carriers and vice versa, where the effect is to substantially lessen competition or to restrain commerce in international communications or to create a monopoly in any line of commerce, domestic or foreign. See Mackay Radio & Telegraph Co., 25 F.C.C. 1197 (1958). It is designed to "preserve competition in international communications . . . [and] is copied from Section 17 of the Radio Act." S. REP. NO. 781, 73d Cong., 2d Sess. 8 (1934). Under this section, the Commission has ruled that none of the major record carriers was eligible to acquire the Western Union Telegraph Company's international operations, divestment of which by Western Union was a condition of its domestic merger with Postal Telegraph. Western Union Telegraph Co., 25 F.C.C. 34, 77 (1958). This condition was imposed in order to avoid the possibility that the domestic telegraph monopoly would favor its international affiliate over the latter's competitors in allocating international messages, since all messages not in one of the "gateway" cities would have to move initially by domestic telegraph and would generally be routed internationally by the domestic telegraph carrier. Evidence of such favoritism was found, *id.* at 87, and charges thereof still continue. See 31 TELECOMMUNICATIONS REPORTS 23 (June 14, 1965). The danger of such a problem exists with respect to the carriers favoring their own cables over the satellite system. See text accompanying note 56 *supra*.

98. See RCAC, Inc., F.C.C. 55-699 (1955); *but see* FCC Testimony, 1959 *Merger Hearings* 161-64.

99. The Intragovernmental Committee concluded that the investments now required are so great as to require shared facilities. INTRAGOVERNMENTAL COMMITTEE REPORT 25. This does not seem entirely accurate for some of the carriers at least, like ITT, are still willing to go it alone. Moreover, as noted at text accompanying note 82 *supra*, Comsat President Charyk has raised the possibility that the satellite facilities might involve so small an investment that the rate base method for determining rates may be inappropriate and the operating ratio return margin method used in motor carrier regulation may be more appropriate. 1966 *Holifield Hearings* 515.

100. In the *TAT-4* decision, 37 F.C.C. 1151 (1964), the FCC allowed the carriers to share ownership in the fourth transatlantic cable, and excluded AT&T from future alternate voice-non-voice business. Both parts of the decision were expressly premised on the need to strengthen competition in international communications.

The importance of competition has also been stressed by customers. 1959 *Merger Hearings* 386, 388 (Amory Bradford of the New York Times); COMMUNICATIONS POLICY BOARD, 1951 REPORT (survey showed that customers uniformly opposed a merger of the international record carriers, many citing unhappy experiences with monopolistic foreign carriers who allegedly ignored complaints and inquiries because of their monopoly status, and some of the customers experiencing similar difficulties with domestic Western Union service after it obtained a monopoly of all domestic telegraph service). See also INTRAGOVERNMENTAL COMMITTEE REPORT 16.

101. See Letter from Richard Gabel, of the Transportation and Communications Service of the General Services Administration, to the author, Sept. 14, 1965, at 3. For support for this view, see 1966 *Holifield Hearings* 139-40 (O'Connell); H.R. REP. NO. 2318, *supra* note 2, at 41; and text accompanying note 152 *infra*. However, the FCC's specific findings some years ago do seem contrary to this view with respect to civilian business as of the 1950's. This applies particularly to its findings in RCAC regarding the reason for the decline in rates and the increase in services after Mackay entered. See note 93 *supra*.

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port this more pessimistic judgment. Moreover, the industry operates under the continuing threat of domination by AT&T. That company, realizing the potentially enormous magnitude of international traffic, has made numerous attempts to enter the international field in other than voice services. It sought, though unsuccessfully, to become the chosen instrument of the United States in satellite communications.¹⁰² It succeeded in entering the alternate voice-record field by obtaining FCC permission to provide such service to the Defense Department over the first three transatlantic cables, until it became clear that most of the traffic was record¹⁰³ and that the record carriers were losing substantial revenues. And it has been able to obtain permission to offer limited data transmission services.¹⁰⁴ The basic problem is that the voice—non-voice distinction which has held AT&T in check so far is very hard to maintain. Already there are indications that AT&T will attempt to enter the most lucrative of the leased-line service areas which cannot readily be classified as exclusively voice or record.¹⁰⁵ Where AT&T does compete with the other carriers, its power is so great and its activities so widespread, both domestically and internationally, that the latter are usually at a distinct disadvantage. For example, until recently they have had to go, with little success, to AT&T to lease cable channels,¹⁰⁶ or to link-up with domestic users.¹⁰⁷ Under these circumstances they have not been able to compete with AT&T.¹⁰⁸ Furthermore, AT&T

102. See *Hearings on the Establishment, Ownership and Regulation of a Commercial Communications Satellite System Before the House Committee on Interstate and Foreign Commerce, 87th Cong., 1st Sess., pt. I, at 102 (1961)* (testimony of NASA Administrator James E. Webb).

103. American Telephone & Telegraph Co., 37 F.C.C. 1151, 1160 n.9 (1964).

104. FCC, 1966 ANN. REP. 65 (dataphone service between U.S. mainland and Hawaii).

105. Support for the carriers' fears can be found in former AT&T Chairman Frederick Kappel's continued references to the obsolescence of the record-voice distinction and to the brilliant future of data communications. See Address Before Boston Conference on Distribution, Oct. 18, 1960, quoted in Response of Western Union International to Replies of Other Carriers in the Matter of American Telephone & Telegraph Co., [and] Western Union International, Inc., Applications for Authorization to Lease and Operate Voice and Television Channels . . . , P-C-6019, at 9 (Aug. 27, 1965); see also Comments of ITT World Communications, Inc., P-C-6019, at 2-4 (June 14, 1965).

106. AT&T was first authorized to lease all of its telephone cables to the other carriers for voice and non-voice traffic; with respect to the Hawaii-Japan cables, it was ordered to do so. So far, however, it has leased only non-voice channels in these cables. See American Communications Association Statement on Application For Modification of TAT-1, 2 and 3 to Permit AT&T to Provide Alternate Voice-Record Service to All Customers, File Nos. 2474-DL-ML-64 (1963). The Commission resolved these problems in TAT-4.

107. See TAT-4, 37 F.C.C. at 1160. For interconnection difficulties, see WUI Response, *supra* note 103, at 4-7.

108. Relying on AT&T for cable channels means that they must pay AT&T a reasonable rate and therefore cannot readily compete in price with AT&T when it offers this same reasonable rate to the ultimate consumer. See Authorized Users, 4 F.C.C.2d at 433 n.9. For difficulties with this situation in other contexts, see *United States v. Phila-*

probably carries more weight with foreign correspondent companies, especially since a foreign carrier must deal with only the one voice carrier but can try to play off the three record carriers against each other.¹⁰⁹

Communications satellite legislation thus offered a rare opportunity: if kept from industry control, and particularly out of AT&T control, the new technology could be used to loosen an oligopoly, to weaken Bell dominance, or both; if given to the industry, however, and particularly to AT&T, not only would the opportunity for new competition be lost, but AT&T's control might be even further enhanced.

At first glance, it seems that this opportunity was lost. The unique aspect of the legislation is the union of Government, the general public and the carriers. Carrier participation in this union hardly seems likely to promote either present or future competition. Competition among the non-satellite carriers is unlikely to be strengthened or even maintained by uniting in a joint venture all the major carriers and many of the smaller ones.¹¹⁰ It is equally unlikely that *potential* competition will be fostered by a structure which contemplates numerous interlocking directorates;¹¹¹ creates a backward and forward vertical joint venture;¹¹²

delphia National Bank, 374 U.S. 321, 356-57 (1963); United States v. Aluminum Co. of America, 148 F.2d 416, 425 (2d Cir. 1945).

109. This bargaining disadvantage faced by the international record carriers is one of the primary reasons for the continued pressure for merger. See INTRAGOVERNMENTAL COMMITTEE REPORT 26. This is a dubious reason for governmental agencies to reduce concededly effective and significant competition.

110. The initial investment of the domestic and international carriers in the Corporation is as follows:

AT&T	2,895,750 shares	(29%)
ITT	1,050,000 "	(10.5%)
GT&E	350,000 "	(3.5%)
RCAC	250,000 "	(2.5%)
Others	454,250 "	(4.5%)
	5,000,000 "	(50%)

See Communications Satellite Corporation Prospectus 7 (1964).

Although something of a joint venture is also created by the *TAT-4* decision, 37 F.C.C. 1151 (1964) and by the decision to allow the carriers temporary authority to offer television jointly, such jointness is still relatively new in the international record industry. If many more cables are laid, it may become more common. See INTRAGOVERNMENTAL COMMITTEE REPORT 18, and text accompanying note 91 *supra*.

111. There are six carrier representatives on the Board of which three are from AT&T, two from ITT and one is from the Hawaiian Telephone and Telegraph Company. These interlocks were authorized by the Commission under §212 of the Communications Act. Eugene R. Black, F.C.C. 64-793 (Sept. 2, 1964), I-D-294-R-65 (5-5-65) with warnings that the dangers presented by such interlocks warranted limiting the authority to only a year under close Commission scrutiny.

For some of the problems raised by such interlocks and by section 8 of the Clayton Act, see Kramer, *Interlocking Directorships and the Clayton Act After 35 Years*, 59 YALE L.J. 1266 (1950); for recent developments, see BNA, ATRR, May 18, 1965, B-1.

112. The carriers will be buyers of communications services from Comsat, as well as sellers of manufacturing apparatus, through the carriers' manufacturing affiliates. Fear of unfair advantage for the carriers' manufacturing affiliates impelled General Electric,

and provides for substantial minority interests¹¹³ by companies which are simultaneously potential suppliers, customers, and competitors.¹¹⁴ And it seems even less probable that AT&T dominance will be weakened by allowing it 29 per cent of Comsat's total voting stock and 20 per cent of its Board of Directors.

The industry is, however, subject to regulation by the FCC which has evinced an interest in competition, at least apart from merger. If sufficiently vigorous, this agency interest might offset these structural blocks to competition, especially if Comsat's management is aggressive and independent.

The interplay among these forces may well determine the fate of the satellite experiment; the interaction of these forces in the earth station dispute and the resultant effect on competition between Comsat and

Lockheed and others to seek the broad based ownership which resulted. See, e.g., 1962 *Senate Space Committee Hearings* 230 (Hughes). Their victory, however, seems rather empty for the initial issue of the non-carriers stock has been so widely and thinly distributed (almost 150,000 shareholders of record as of the third shareholders' meeting) that these non-carrier hardware companies are not likely to have sufficient stock to elect a director, at least at this time. Moreover, the first slate of non-carrier directors was selected by the incorporators from among themselves and it is difficult to see how any non-carrier hardware manufacturer can ever accumulate enough stock to overcome the hold of the incumbent directors on the proxy machinery.

113. In addition to the 50 per cent share of the voting common stock which the carriers were allocated, they also have an unlimited right to buy bonds and/or other non-voting securities under section 304(c) of the Act. Because such securities may be eligible for inclusion in the carriers' rate bases, this group will have an especially strong incentive to purchase such securities. For this reason Comsat may find it much cheaper and easier to sell such securities to these carriers rather than on the open market, especially since underwriting costs of such a private offering will probably be less than a public offering. Such cheaper securities may have to be sold in the not-too-distant future, because Comsat's present all-equity (common) structure is extremely expensive and hinders the setting of low rates, which are so necessary to Comsat's most expeditious development. If the carriers do buy such securities, they will be in an even stronger position. However, Comsat's currently excessive capitalization may not justify such additional issues for some time. See notes 6, 27, 33 *supra*.

114. Decisions which have found such interests objectionable under the antitrust laws include *Hamilton Watch Co. v. Benrus Watch Co.*, 114 F. Supp. 307 (D. Conn.), *aff'd*, 206 F.2d 738 (2d Cir. 1953); *Briggs Mfg. Co. v. Crane Co.*, 185 F. Supp. 177 (E.D. Mich. 1960); *American Crystal Sugar Co. v. The Cuban-American Sugar Co.*, 152 F. Supp. 387 (S.D.N.Y. 1957), *aff'd*, 259 F.2d 524 (2d Cir. 1958) (competitors); *United States v. E. I. du Pont de Nemours & Co.*, 353 U.S. 586 (1957) (suppliers).

Most of the antitrust decisions have ignored the defendant's contention that the directors appointed by such minority owners would be independent of those who nominated them. See, e.g., *Hamilton Watch Co. v. Benrus Watch Co.*, 114 F. Supp. at 314; *Briggs Mfg. Co. v. Crane Co.*, 185 F. Supp. at 181; *but cf. Gilman v. Jack*, 91 A.2d 207 (Sup. Ct. Me. 1952) (under Public Utility Holding Co. Act. § 17(c), 15 U.S.C. § 79q(c) (1964), held that a director elected by bankers and sympathetic to their views was not precluded from serving as director under section 17(c) which bars appointees or representatives). Instead, the courts have pointed to the minority director's opportunity to persuade or compel relaxation of competitive vigor and to learn competitive secrets. *American Crystal Sugar Co. v. The Cuban-American Sugar Co.*, 152 F. Supp. at 394. One court noted that it would be very difficult to show that a director had been improperly influenced by the views of his nominator because directorial decisions usually involve judgmental factors which would be difficult to trace to the influence of the minority's special interest. *Hamilton Watch Co. v. Benrus Watch Co.*, 114 F. Supp. at 314.

the carriers, as well as among the carriers themselves, is the subject of this section.

In one sense, of course, Comsat ownership can improve competition in the communications industry simply by offering an alternative to AT&T's present dominance in cable facilities, both overseas and domestically.¹¹⁵ Moreover, even where the facilities are not owned by AT&T, Comsat ownership may be the best way to insure non-discriminatory access to satellite communications facilities for all carriers. Ownership by any one or more of the other carriers may put the non-owners who depend upon that facility at a disadvantage. If there is a shortage of facilities (as is likely for several years) or when emergencies knock out some of the facilities, or simply as a matter of normal competitive behavior, facility owners will normally be inclined to favor their own business. Furthermore, a major carrier might design stations to mesh more easily with its own separate facilities, thus placing non-owners at a competitive disadvantage. Other subtle methods of self-preference can also escape the eye of a heavily overworked Commission staff. Finally, the earth station owner may charge its competitors virtually the same price that it charges customers, thus making it unprofitable for its competitors to compete for those customers.

During the legislative debate, concern over these problems prompted Congress expressly to declare nondiscriminatory access to users to be one of the primary purposes of the legislation and one of the Commission's main responsibilities.¹¹⁶ The carriers and Comsat extensively debated the access issue in the earth station controversy, but the Commission treated it as secondary in the *First Report*, saying only:

In addition to the factors considered above, we have not overlooked the important public interest considerations affecting (a) uniform and non-discriminatory access to the system In our judgment, based upon all the data now available . . . [this] important public policy consideration would be served at least as well under the policy we have decided to adopt as under the joint ownership proposals.¹¹⁷

In its *Second Report* it merely included the concern for fair access on its list of pertinent considerations,¹¹⁸ perhaps in the thought that Com-

115. Domestic use may turn out to be Comsat's biggest market. 1966 *Holifield Hearings* 510 (McCormack); an FCC spokesman has also implied that it may be the only place where Comsat can manage to obtain enough rate base, *id.* at 747 (FCC Common Carrier Bureau Chief Bernard Strassburg).

116. See Comsat Act, §§ 102(c), 201(c)(2), 47 U.S.C. §§ 701 (c), 721(c)(2).

117. *First Report*, 38 F.C.C. at 1116. See the summary of grounds for the decision, *id.* at 1119. The "factors considered above" are speed and efficiency.

118. *Second Report*, 5 F.C.C.2d at 818.

sat management and partial ownership would inject a neutral force to protect against possible carrier self-preference.

But improving carrier access to facilities is not Comsat's sole potential impact on retail competition, for Comsat could itself provide "retail" services. Comsat's role as retailer has been the most hotly debated issue before the Commission. Competing carriers have claimed that if Comsat were permitted to sell to the public, they would wind up in the same position, vis-à-vis Comsat as with AT&T—facing a competitor who is also the monopolistic supplier of the facilities necessary to compete with it. Moreover, they would face a competitor to whose success there is a substantial national commitment.¹¹⁹

The prospect of such Comsat competition has been quite real. Comsat indicated early that it aspired to be more than a carriers' carrier. It negotiated for some time directly with the Defense Department, one of the largest users of communications service in the world,¹²⁰ and in July 1966 the Department announced that it had chosen Comsat over four other carriers to supply the Department of Defense with 30 Pacific channels for three years for \$19 million, a decision which was later changed.¹²¹ Comsat obtained an even larger contract with NASA for the latter's manned-flight-to-the-moon (Apollo) program. Although Comsat has disclaimed any interest in offering service to the "general public," this offers the carriers small comfort, for the truly lucrative business comes from large users such as the Government (particularly the Defense and State Departments and NASA),¹²² news gathering organizations, airlines, and large industrial organizations.¹²³

119. ITT and RCAC cited this danger of Comsat competition and the *TAT-4* decision as arguments against Comsat's exclusive control of the earth stations. See *First Report*, 38 F.C.C. at 1110, 1115. In its *First Report*, the Commission found the *TAT-4* circumstances quite different with little explanation. *First Report*, 38 F.C.C. at 1115. It obviously had no need to mention the issue in the *Second Report*, since Comsat had already been excluded from retail competition by the earlier *Authorized User* decision.

120. H.R. REP. No. 2318, *supra* note 2, at 23.

121. In February 1967 the Commission ordered the contract assigned to the carriers as soon as possible. F.C.C. 67-163 (Feb. 3, 1967). The original choice of Comsat was the main focus of the extensive hearings held by the Hollifield Committee, 1966 *Hollifield Hearings*. The salient facts and considerations are set out in that committee's report, H.R. REP. No. 2318, *supra* note 2.

122. The U.S. Government accounts for some 15 per cent of our international communications, 1966 *Space Committee Hearings* 99 (O'Connell). In 1965, it accounted for some 70 per cent of total leased circuit revenues with 90 per cent of voice grade circuits. *Authorized Users*, 4 F.C.C.2d at 433. Revenues from leased circuits were described as an "important, if not indispensable part of the carrier's total receipts." *Id.* at 432.

123. Comsat set forth its aspirations as limited to the following situations:

(i) [if] the carriers fail to provide a requested service via satellite although capacity is available (ii) there is a need for development of technology or provision of new satellite services and then only during the early developmental stage; and (iii) in which case and any other case there is a finding that the public interest would be served by the authorization.

Comsat has obvious reasons for seeking this direct business. In the first place, Comsat could thus ensure that user traffic goes over satellites and not over other facilities. Even a carrier which can use the satellite system is likely to want to take the message part or all of the way over its own or other cable or radio facilities. Also, Comsat can more easily promote new uses for satellite communications if it deals directly with the user.¹²⁴ Direct dealings with customers would also give Comsat some power over retail price. It might be able to propose rates based solely on its own costs which, at least in the Defense Department 30 circuits controversy, have been much lower than rates charged by the carriers. Since Comsat's hopes for high volume depend on lower rates and costs, this possibility is particularly important. These same rates, however, may still be higher than those Comsat would have to charge as a carriers' carrier in order to allow its carrier-customers a profit on their services to the ultimate customer.¹²⁵ And finally it may be much easier for Comsat to expend its \$200 million on plant investment, if it can provide the ultimate user with supplementary equipment at the earth station for him to lease.¹²⁶

Earth station ownership affects these issues as well. If Comsat did not own any part of the earth stations, it would be unable to serve customers directly without leasing these facilities from its competitors and putting itself, to some extent, at their mercy. Its charges to the user

However, and of utmost importance, Comsat claimed "*that it is authorized by the Satellite Act to provide service directly to the Government in any instance when the Government requests service.*" Authorized Users, 4 F.C.C.2d at 423. (Emphasis added.) The possibility of direct Comsat service is, of course, not limited to international service. Many buyers, including the Federal Government and the broadcasting networks have long been forced to deal largely with AT&T for their domestic communications services. Allowing Comsat to deal directly with domestic users might weaken this AT&T dominance. The possibility of some domestic satellite competition was adverted to briefly by the Bell system in recent attempts to justify an 8 per cent rate of return on domestic service. See, e.g., 30 TELECOMMUNICATION REPORTS 21 (Aug. 17, 1964). The Commission has recently instituted an inquiry into the various domestic possibilities of satellite communication including requests by news and broadcasting media for direct use of Comsat, Notice of Inquiry, In the Matter of the Establishment of Domestic Non-Common Carrier Communications Satellite-Satellite Facilities by Non-Governmental Entities, Dkt. No. 16495 (March 2, 1966), which produced the Ford Foundation's suggestion that a separate satellite system for television be established with a percentage of the network savings from satellite usage turned over to the Educational Television Network. Hearings were held on this proposal by the Senate Commerce Committee, 1966 Commerce Committee Hearings, and more will follow. In addition, NASA has begun to investigate the feasibility of transmitting radio and television directly into homes by satellite, which would also bypass AT&T's present monopoly. Wall St. Journal, Nov. 26, 1966, p. 1, col. 1.

124. 1966 *Holifield Hearings* 489 (McCormack).

125. The danger that Comsat might charge the carrier the very same price as the user, thus putting the carriers at a great disadvantage if Comsat competed with them, was adverted to by the FCC in its decision denying Comsat the right to deal directly with the customers except in unique or exceptional circumstances. Authorized Users, 4 F.C.C.2d at 433.

126. Cf. 1966 *Holifield Hearings* at 747 (Strassburg).

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would also have to reflect the rate of return the carriers were able to attain for their earth station investment.¹²⁷ Thus Comsat would face the same disadvantages that the record carriers have suffered in their dealings with AT&T. Also, unless Comsat owns the earth station complex, it will have difficulty reaching the non-governmental ultimate user since it lacks the long-standing reputation and sales experience of the carriers.¹²⁸ The user's direct contact is more with the earth station than with the satellite; indeed, earth station design, especially during these early years, may have to be tailored to fit users' needs,¹²⁹ and the necessary technical arrangements between the earth station operator and user are likely to further business arrangements.

Though these same arguments were made by the carriers to support their fears of being as dependent on Comsat as they have been on AT&T, the situations seem fundamentally different. In the foreseeable future, the carriers' dependence on Comsat will not even begin to approximate their far greater dependence on AT&T. Comsat obviously does not compare with AT&T in overall size, power, and influence, and satellite communications will have to grow enormously before it begins to handle as much traffic as AT&T's vast cable network. Moreover, AT&T is in no way dependent on the other carriers, whereas Comsat is likely to need their patronage for some time to come, especially if carrier-owned cables remain of great competitive significance. Even if Comsat were allowed to do some retail business, its primary business would almost certainly be that of a carriers' carrier.¹³⁰ Finally, Comsat has far fewer links with foreign carriers, one of the sources of AT&T's

127. Although it would charge the carriers for use of the satellites, which the carriers would also have to pass along to the customers, the satellite charges are likely to be less than the earth station charges. The importance of earth station ownership to carrier rates can be seen in RCAC's two-price quotation to the Defense Communications Agency for the 30 Pacific circuits: \$3690/month assuming RCAC participation in earth station ownership compared with \$4848/month assuming exclusion of RCAC from earth station ownership. 1966 *Holifield Hearings* 592.

128. Comsat apparently has no difficulty making contact with governmental users. See generally, 1966 *Holifield Hearings* and H.R. REP. NO. 2138, *supra* note 2.

129. The satellite itself only amplifies and relays the signal from one station to another, from which the signal is again processed for territorial transmission.

130. Comsat will obviously be in a stronger position toward the carriers so long as facilities are in short supply. Nevertheless, Comsat and the carriers will still be far more even in bargaining power during this period, than are AT&T and its customers, especially since Comsat will remain a relative novice in the communications business for some time to come. Moreover, in some respects, the shortage of facilities has not yet materialized with respect to any but voice or Pacific traffic. Of the 66 satellite channels leased by the end of 1965, 64 were for telephone use. 1966 *Space Committee Hearings* 41 (Charyk). Moreover, the Early Bird Satellite was operating only 16 hours a day in part because there was not enough business to warrant the necessary high expense of an additional 8 hours operation. *Id.* at 52. But this may soon change as the projected expansion in communications demand takes place.

international power, although Comsat's position in the international satellite consortium could change that.¹³¹

The Commission has settled the question to a large extent in its *Authorized User* decision in June 1966.¹³² After a year's consideration, the Commission unanimously ruled that Comsat was not to offer any "retail" communications services, even to the Government, except under "unique or exceptional circumstances" to be determined by the Commission.¹³³ The decision was expressly based on a fear that "if Comsat were allowed to siphon off the most profitable part of the business [the leased circuits] from the carriers,"¹³⁴ they might have to raise rates to the general public in order to survive. "Certainly such detriment to the vast majority of users for the apparent benefit of a few larger users would be in derogation of the objectives of the Act."¹³⁵ Nor was the Government treated too differently. Though the Government "clearly does" have a "special status under the Satellite Act," to allow Comsat complete freedom to deal directly with the Government might deprive the carriers of substantial portions of their income.¹³⁶ Direct government service would therefore be allowed only in "unique or national interest circumstances," as the Commission found the NASA-Apollo contract to be.¹³⁷ The Commission also noted that Comsat would be allowed to provide service directly if the carriers "fail or refuse to meet reasonable demand therefor, although they are or would otherwise be capable of doing so in accordance with general service offerings."¹³⁸ Finally, the Commission declared that the carriers would be expected to reduce their rates to "fully reflect the economies made available through the leasing of circuits in the satellite system. Failure of the carriers to do so promptly and effectively will require the Commission to take such actions as are appropriate."¹³⁹

Although the decision was not surprising with respect to non-governmental users, the limitation on Government-Comsat dealings was quite unexpected, in view of the express provision in the Act for Com-

131. Some of the carriers have complained that Comsat has been trying to undercut their relations with their foreign components.

132. *Authorized Users*, 4 F.C.C.2d 421 (1966).

133. Several different formulations were used, often within the same paragraph: "unique or exceptional," "national interest," "unique and extraordinary." *Id.* at 435.

134. *Id.* at 431.

135. *Id.* at 433.

136. *Id.* at 433-34. This, of course, assumes that the Government would often choose to deal directly with Comsat, a not unreasonable assumption in view of the present apparent cost advantages and the governmental commitment to Comsat's success.

137. *Id.* at 431-32.

138. *Id.* at 432.

139. *Id.* at 434-35.

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sat service to Government,¹⁴⁰ and for a while Comsat and the Government seemed prepared to challenge the decision in the courts.¹⁴¹

One of the most significant results of the decision is that Comsat will not be permitted immediately to pass on its full cost advantages to the ultimate users. Although Comsat's first tariff has not yet been approved, the Commission has reaffirmed its long-standing policy that rates for communications services are not to depend upon the facility used. Rather, "composite rates" are to be charged which represent an average of the costs of *all* facilities, new and old,¹⁴² in order to prevent users of the new facility from receiving lower rates than users of the old.¹⁴³ According to a Commission spokesman, "this practice has promoted the improvement and expansion of service by encouraging the carriers to modernize their plant promptly with reasonable assurance that their investments in existing plant will not be unduly affected."¹⁴⁴

Such a policy has obvious advantages, especially if Comsat's cost advantages were to be used only for "cream skimming" while the far less lucrative general message service, which accounts for most of the

140. Comsat Act, §§ 305(a)(2), 305(b)(4), 47 U.S.C. §§ 735(a)(2), 735(b)(4). With respect to nongovernmental usages, former FCC Chairman Henry and Common Carrier Bureau Chief Strassburg have long indicated that they see Comsat as primarily a carriers' carrier, and this view was reflected in the original Notice of Inquiry:

The provisions of the Satellite Act make clear that it was the intent of Congress that the Corporation would have, as its principal domestic operating function, the furnishing for hire of channels of communication to communications common carriers authorized by the Commission, pursuant to the Communications Act of 1934, as amended, to provide services by means of communications satellites (Section 103(7) and Section 305(a)(2) of the Satellite Act). While the Satellite Act leaves open the question of whether the Corporation may be permitted to furnish satellite service or channels directly to users other than communications common carriers, it would appear, from an overall reading of the legislative history that any such activity which might be authorized should be a limited one and should be consistent with the Corporation's primary role as a "common carrier's carrier."

Notice of Inquiry, F.C.C. 65-523, at 2 (June 16, 1965).

141. The President's Special Assistant for Telecommunications, who is also the Director of Telecommunications Management for the Federal Government, immediately objected, warning that the Government might set up its own satellite system. See Letter from Gen. James C. O'Connell, June 28, 1966, reprinted in 1966 *Holifield Hearings* 304-05. His position, concurred in by Comsat, was that Government-Comsat usage is not subject to FCC control, but depends solely on decisions by the Executive Branch. And the Defense Department announced a week later, despite the FCC decision, and without obtaining any FCC authority, that it had chosen Comsat as its supplier of the 30 Pacific channels mentioned earlier. Under strong congressional pressure, see H.R. REP. NO. 2318, *supra* note 2, at 7, 49-56, and with carrier promises of reduced rates on all communications services, whether on cable or satellite, the Department later agreed to a reassignment of the contract to the carriers as soon as possible. See F.C.C. 67-163, at 2, 3 (Feb. 3, 1967).

142. This is pursuant to traditional Commission policy. See 1966 *Holifield Hearings* 704 (Strassburg).

143. *Id.* at 332 (O'Connell). For an example of the possible differences, compare Comsat's \$4000/month per circuit charge to the Defense Department with the carriers' proposed \$7100/month. See H.R. REP. NO. 2318, *supra* note 2, at 4.

144. 1966 *Holifield Hearings* 704 (Strassburg).

traffic, was left to the carriers and forced to support itself.¹⁴⁵ The public interest may well require a diversification of facilities, and it is certainly not in the public interest to let Comsat use its present cost advantages to inflict serious harm on the carriers before they get a chance to try to make cable technology into a viable competitor.¹⁴⁶ But such a policy has its social costs—it could make international communications more expensive, and it inevitably slows the growth of the industry in general, apart from the new technology, in order to protect the value of possibly obsolete equipment.¹⁴⁷ Under rate-base averaging, the speed with which cost savings are passed on to the public depends, at least in part, on the ratio of new to old use. If low-cost satellites, for example, continue to account for only a small share of the traffic, composite and therefore satellite rates will remain high. But unless satellite rates do come down, satellites will not be fully and efficiently used which, in turn, will keep costs high. Thus, the use of composite rates can doubly retard development of the satellite system.

Nevertheless, the opinion leaves some room for Comsat as a retail competitor. Comsat will probably continue to try to get some retail business, and many of its potential customers, including the Government, are likely to support it, if only to avoid paying a middleman's profit. The Commission clearly retained the power to authorize such direct service,¹⁴⁸ and it left itself very broad discretion to allow direct service to the Government, the most important of all such business.¹⁴⁹

The Commission's power to regulate price is enhanced by the mere existence of an alternative satellite system, even if Comsat does not actually compete directly and the carriers continue to transmit by cables and radio. The Commission showed how this can work in the *Authorized User* decision itself where, as part of its ruling, it declared:

We therefore expect the common carriers promptly to give further review to their current rate schedules and file revisions which fully reflect the economies made available through the leasing of satellite circuits. Failure of the carriers to do so promptly and effec-

145. For a discussion of the extremely difficult problem of designing an equitable rate structure, see BONBRIGHT, *PRINCIPLES OF PUBLIC UTILITIES REGULATION* chs. 16-20 (1961).

146. The Government business is so important that one carrier would go out of business without it. 1966 *Holifield Hearings* 287 (O'Connell).

147. Indeed, it has been said that the carriers have a good deal of obsolete equipment. 1966 *Holifield Hearings* 367 (O'Connell-Roback exchange).

148. See *Authorized Users*, 4 F.C.C.2d at 427-28: "We think that the Act clearly empowers the Commission to authorize service to entities other than carriers."

149. The governing standard is the flexible "national interest circumstances." *Id.* at 435. Indeed, even "unique or exceptional" can be interpreted by the Commission in many appeal-proof ways. For discussion, see H.R. REP. No. 2318, *supra* note 2, at 34.

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tively will require the Commission to take such actions as are appropriate.¹⁵⁰

These rate reductions, however, went much further than the economies from satellite use, as the Commission itself realized, when it immediately added:

Even though satellite circuits are not now and will not for some time be available to all points to which users presently lease circuits . . . carriers should also reduce charges to many points to which satellite circuits are not now available.¹⁵¹

The carriers immediately made very substantial rate reductions, which were apparently long overdue,¹⁵² even though they are not yet using satellite circuits to any substantial degree.¹⁵³ Thus, the Commission effected a rate reduction without a formal rate hearing and thereby obtained the benefits of free satellite competition while avoiding some of the dangers.

But close regulation of this sort is impossible unless there is an aggressively independent satellite communications system for the Commission to use as a realistic potential competitor, and here the *Earth Station* decision creates problems. The committee arrangement subjects to a carrier veto any Comsat plan involving earth station design; indeed, it gives the carriers some indirect control over any Comsat plans, for they can use their earth station powers as leverage. Also, if Comsat develops plans to compete for ultimate-user business and seeks to make appropriate arrangements for earth station transmission, such plans will be subject to scrutiny by the carriers, and this loss of secrecy can have unfortunate effects on Comsat's ability to compete.

Denying Comsat complete earth station ownership thus weakens its role as a potential competitor. While the *Authorized User* decision was probably inevitable and almost certainly sound, the final *Earth Station* decision seems much less so. Given the realities of the rate base, competitive and other factors set out above, it was also probably unnecessary for carrier protection, especially after the *Authorized User* ruling.

150. 4 F.C.C.2d at 434.

151. *Id.* at 434-35.

152. Apparently, rates had remained extremely high for some time, 1966 *Holifield Hearings* 328 (O'Connell), lending support to those observers who consider the industry not very competitive in price.

153. Only AT&T is using a substantial number of the Early Bird circuits it was authorized to obtain. See Letter from Ben F. Waple, Secretary, FCC, to the author, Feb. 13, 1967 (AT&T is using 65 out of 74, ITT and WUI are each using 1 out of 10, and RCAC is using 2 out of 10).

E. *Procurement Competition*

Equipment procurement is another area in which the Commission has an explicit legislative mandate to encourage competition. Section 102(c) calls for "maximum competition . . . in the provision of equipment and services by the system," with special concern for small business, and authorizes the FCC to regulate procurement for the system by Comsat and the carriers. Comsat's structure, however, prejudices achievement of this objective by building in an advantage for certain suppliers who will own most of the stock. Almost all of the carriers are major equipment suppliers; indeed RCA and ITT are primarily manufacturers.¹⁵⁴ Many of their competitors are not shareholders, and none of these competitors is known to have a representative on the Board of Directors. Competing non-carrier suppliers¹⁵⁵ therefore urged the FCC to award earth station ownership to Comsat, on the ground that Comsat would not have the same incentive to favor one supplier or another as would the carrier affiliates of such huge manufacturing entities as AT&T, ITT or RCA. The non-carrier suppliers feared not only that the associated suppliers would win a few early contracts, but also that these companies would develop invaluable early know-how which would forever foreclose independent suppliers.¹⁵⁶ The carriers themselves made a similar argument when they claimed that without some earth station ownership, they could not continue effective research on earth station technology.

In the *First Report*, the Commission dismissed the issue of procurement favoritism on the ground that the procurement regulations which it had earlier issued, and any necessary amendments thereto, would guarantee equal treatment.¹⁵⁷ Whether the regulations can be relied upon still remains to be seen.¹⁵⁸ Even if the carrier-manufacturers do not own part of the earth station, they still have six directors on the Board who will be entitled to full information on all aspects of the

154. Levin, *supra* note 5, at 320, 344; 108 CONG. REC. 7522 (May 2, 1965) (Remarks of Congressman W. F. Ryan).

155. *E.g.*, Westrex Division of Litton Industries.

156. Actually, the amount of procurement by Comsat is likely to be a relatively small part of the picture. Far more important is the experience gained in building these facilities which may then be used when other entities construct satellite-related facilities. For example, each of hundreds of local television stations will need television receiving facilities when satellites become widely used for television. Similarly, the airlines, who are counting heavily on satellites for an urgently needed improvement in their vast communications systems, will need a great deal of ground equipment.

157. *First Report*, 38 F.C.C. at 1119; see 29 Fed. Reg. 348 (1964), C.F.R. § 25.151.

158. Most of Comsat's procurements have been by competitive bidding, but in many cases its owners are among the bidders, and insider knowledge can be very useful in such competition. For suspicions as to the large number of contracts going to insiders, see Kirkpatrick, *Antitrust in Orbit*, 33 GEO. WASH. L. REV. 89, 115 n.103 (1964).

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system, including the earth stations. Moreover, the carriers will be the immediate users of the station, and as the Commission originally noted, "Comsat can be expected to seek appropriate advice and assistance from those entities upon which it must depend for its revenues."¹⁵⁹

The *Second Report* should cause non-carrier competitors even more apprehension. Now the carriers are placed in a very powerful position over earth station "major investments" and "types of major equipment."¹⁶⁰ Even if they did not have such powers, partial ownership enables a carrier to obtain vital knowledge of plans and specifications which can provide a head start in the bidding. Moreover, as indicated above, ITT and RCA are building and planning to operate earth stations in other parts of the world. Since, under the decision, the carrier-owners of the American stations are allowed ownership because they will be the entities using the stations, it would seem not unreasonable to expect them—and perhaps even to encourage them—to incorporate and use the technology with which they are most familiar.¹⁶¹

II. Implications and Reflections

One indisputable fact that emerges from this review of Comsat's first four years is the pervasiveness of the conflict between the old and new technologies, and their respective backers. These conflicts will inevitably erupt in the Board room, forcing the carrier directors into hopelessly irreconcilable fiduciary duties, resolvable only by abstention.¹⁶² Abstention cannot always be the answer, however, for Congress presumably authorized these directors' presence on the Board partly in order to give Comsat the benefit of their knowledge and experience.¹⁶³ But if they do participate, can the carrier directors really be expected to devote their best efforts to Comsat as its development threatens their markets and investment? Most of these men are directors as well as top executives of their respective carriers, for which they have worked

159. First Report, 38 F.C.C. at 1114-15.

160. Second Report, 5 F.C.C.2d at 820.

161. In one respect Board representation by carrier-suppliers has had virtually no effect: the Hughes-created high altitude synchronous satellite has been chosen by Comsat for its permanent system, over AT&T's Telstar and RCA's Relay, both medium-altitude satellites. This, however, seems attributable primarily to the obviously overwhelming superiority of the synchronous satellite, and it is not clear that merit will generally win out in less obvious matters.

162. There has apparently been a substantial amount of such abstention. 1966 *Holifield Hearings* 486 (McCormack). One example occurred during discussion of the earth station ownership. See Address by RCA Chairman David Sarnoff, May 26, 1965, Washington, D.C., p. 9.

163. Eugene R. Black, F.C.C. 64-793, at 2-3 (Sept. 2, 1964).

much of their lives.¹⁶⁴ In this clash of fiduciary duties,¹⁶⁵ is there any doubt where their primary loyalty will lie, especially since part of the reason Congress authorized their presence on the Board was to protect their nominators' interests?¹⁶⁶

These same conflicts will erupt in the earth station committees, with similar consequences, except that in that arena there will not be even a clash of fiduciary duties since the carrier representatives will clearly and undividedly represent the carriers. The presence of carrier participation in the committees may also significantly reduce the power of both the already feeble Presidential directors¹⁶⁷ and of the general public directors. In the Board room, the carrier directors have only six out of the fifteen directors and, when there is some carrier-director abstention, even fewer. In some cases at least, the three governmental appointees may join with the six general public directors to outvote the carriers. It will therefore be to the latter's interest to decide as many important questions as possible at the earth-station level where they have at least a veto, unaffected by conflicting fiduciary obligations.¹⁶⁸ Thus, one effect of the earth station decision may be to strengthen significantly the carrier voice in the overall affairs of the Corporation and, correspondingly, to weaken the other interests.¹⁶⁹

Nevertheless, carrier influence on the Board does not seem to have impaired Comsat's momentum. It is much closer today to an operational system than was anticipated in 1962, when the Act was passed. The very sharpness of the Comsat-carrier exchanges implies that the carriers have been unable to control Comsat fully from within; indeed to an outsider, it is hard to see how Comsat could have acted very much more aggressively or independently on most of these issues.¹⁷⁰ As one

164. Messrs. James E. Dingman, Horace P. Moulton and Harold M. Botkin are or were high officers of AT&T (former Vice Chairman, Vice President and General Counsel, and Assistant Vice President); Ted B. Westfall is Executive Vice President of IT&T, and Douglas S. Guild is President of the Hawaiian Telephone Co. COMMUNICATIONS SATELLITE CORP., ANN. REP. 23 (1965).

165. The common directors are Black and Westfall (ITT); Guild (Hawaiian); and Dingman (AT&T). *Ibid.*

166. Compare First Report, 38 F.C.C. at 1114.

167. Schwartz, *supra* note 4. It may well be that, as in many corporations, management really controls the enterprise and the Board as a whole has relatively little power.

168. It may not be difficult to develop a unified carrier position on many of these issues, for all the carriers will have some participation with other carriers in at least some stations.

169. The express authorization for joint Comsat-carrier earth station ownership would seem to permit such accumulation of power. *But see* First Report, 38 F.C.C. at 1115.

170. It might have asked for a greater right than it did to serve users directly, but the Commission's hostility to any degree of direct service has been clear for so long, see

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example, the fact that two of the carriers had a strong interest in a medium orbit system¹⁷¹ did not keep Comsat from choosing the high altitude synchronous system created by Hughes, a non-carrier. Moreover, Comsat initially defeated the record carriers in a head-on confrontation for the 30 Pacific circuits contract, despite strong carrier efforts both within and outside the corporation. In the earth station, authorized user and cable-satellite conflicts, Comsat has not seemed particularly timid or inhibited. More significantly, the carriers' ultimate victories in the earth station, authorized user, 30 circuits, television¹⁷² and interface issues came about not (so far as one can tell) because Comsat succumbed to internal pressure but only because the FCC ruled for the carriers.¹⁷³

Do these events then prove the wisdom of the original decision to "meld" the interests? Why indeed have the carriers been unable to use their insider position and Board representation to blunt and slow Comsat's drive? Are Board membership and ownership participation in a competitor or customer really quite unimportant?

It is of course too early to answer any of these questions with assurance, but a few points may be noted. In the first place, there is some reason to think that despite the foregoing clashes, the carriers may exercise more control over Comsat than may appear. For example, a recent *Fortune* article disclosed that Comsat had originally indicated to editors of the *New York Times* that it planned to support and expand the Ford Foundation proposal for subsidizing educational television with the savings from satellite usage. This, however, entailed direct network access to the satellite system, bypassing AT&T. The plan "apparently fared worse in the Comsat boardroom than in the *Times*' private dining room" and Comsat dropped the idea.¹⁷⁴ This incident could well be but one out of many, for one serious problem here is that, the outsider really cannot know what conflicts have been smothered within the cor-

text accompanying note 140 *supra*, that the more modest request seems strategically sounder. Its willingness to compromise on the earth station issue may also have reflected reasonable strategic considerations.

171. See note 161 *supra*.

172. The Commission originally authorized Comsat to offer international television service directly to the networks, see 31 TELECOMMUNICATIONS REPORTS 2 (June 28, 1965), but when the carriers protested, the FCC reversed itself and restricted television transmission to a joint venture of all carriers. 31 TELECOMMUNICATIONS REPORTS 1 (July 19, 1965).

173. However, in both the Caribbean and earth station controversies, Comsat and the carriers seem to have agreed in principle on the ultimate compromise solutions before the FCC issued its rulings.

174. Silberman, *The Little Bird That Casts a Big Shadow*, *Fortune*, Feb. 1967, pp. 108, 225. The article provides a good sketch of some of the issues discussed herein.

poration, especially since both Comsat and the carriers may wish to prevent public exposure of these differences. This problem of knowing what occurs within the boardroom may get worse, for at the moment, Comsat's more public activities are still of enormous interest to Congress and the general public because of its novelty, glamour and the controversial circumstances of its birth. As public interest wanes, the problems arising out of Comsat's incestuous corporate structure will be even more difficult to detect and resolve.

Secondly, Comsat presently has a new and vigorous management, fired with the enthusiasm that is natural to those entrusted with so novel, revolutionary, and significant an enterprise. Here again, time may take its toll as charisma settles into routine. It is also difficult to know what will happen when a Comsat move requires secrecy from the carriers for its success. Most of the carrier-Comsat controversies, such as the earth station dispute, the authorized user question, the 30 circuit contract, and others, do not seem to have involved market strategy of the kind requiring confidentiality. However, the *Authorized User* decision expressly permits Comsat to serve users directly where "new uses of satellite facilities" are involved. Some of these new users may compete with established services, and carrier representation on the Board and in the earth station committees could preclude the secrecy necessary to achieve effective marketing or dampen Comsat's initiative.

Finally, it must be kept in mind that at the moment and for some time to come, Comsat is extremely independent financially. It will not need additional capital for many years except to build up a debt ratio. When it does have to go to the capital market, it may find it cheapest to obtain debt or equity capital from the carriers; indeed, if such flotations are substantially cheaper than the open market, it may be required to do so by the FCC which has control over its capital structure, especially if the Commission is still trying to help the carriers build up their satellite rate base. In that case, Comsat may become much more dependent on the carriers than it is now.¹⁷⁵

These considerations caution against dismissing the conflicts built into Comsat's structure as irrelevant on the basis of events so far. Moreover, these same events, together with certain other considerations, also justify a more affirmative criticism of the "meld"-chosen instrument technique for at least this regulated industry¹⁷⁶ on the grounds that:

175. 1962 *Senate Space Committee Hearings* 401 (Katzenbach).

176. As noted, the problems in an unregulated industry may be quite different though equally complex. No attempt is made here to deal with such problems.

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A. carrier participation in ownership adds too little to justify any harm that it might produce;

B. use of a private chosen instrument creates special problems regardless of industry participation; and

C. the success of the "meld"-chosen instrument technique depends too much on a rare combination of vigorous regulation and aggressive management.

A. *The Lack of Benefits from Carrier Participation*

The earth station controversy shows that carrier participation is neither necessary nor even useful in achieving the intended benefits. First, the carriers' involvement was supposed to provide Comsat with the benefit of their knowledge and experience.¹⁷⁷ But despite the Commission's belated reacceptance of this position, the previous analysis shows its weakness. In addition, the sharp conflicts between Comsat and the carriers have hindered the free flow of their expertise to Comsat, for the carriers admit that they do not want to build up a dangerous competitor.¹⁷⁸ Indeed there is reason to think that Comsat has not received full cooperation from AT&T, while all the record carriers, including those with Board representation, have complained about an information gap.¹⁷⁹ WUI, with the concurrence of other carriers, has therefore proposed an industry liaison committee, in addition to Board membership, but so far Comsat has shown no interest.¹⁸⁰ Moreover, if there were a real desire for such an exchange, neither ownership nor a liaison committee would really be necessary in view of the constant and inevitable business and other contacts between Comsat and the carriers.¹⁸¹

Secondly, the carriers and the FCC argued that satellite ownership would help the carriers integrate the satellite technology into their existing facilities,¹⁸² a contention they repeated in the earth station controversy. This argument was never very persuasive, for the carriers have been interconnecting with facilities owned by others for a long

177. 1962 *Commerce Committee Hearings* 68.

178. See N.Y. Times, July 11, 1966, p. 41, col. 6.

179. 1966 *Holifield Hearings* 616-23.

180. See 1966 *Holifield Hearings* 616-17, 618-19.

181. See *id.* at 618, 620; First Report, 38 F.C.C. at 1115. For an example of such informal cooperation, see a recent report that Comsat was sending a group of its technicians to IIT Federal Laboratories for four weeks of earth station training, Comsat Press Release: New Comsat Earth Station Technicians to Start Training, June 13, 1966.

182. See, e.g., *Hearings on H.R. 10115 and H.R. 10138 Before the House Interstate and Foreign Commerce Committee*, 87th Cong., 2d Sess. 402 (1962) (FCC Chairman Newton N. Minow).

time, and without serious technical difficulty.¹⁸³ In neither earth station decision did the Commission consider the point of sufficient importance to discuss or even to mention, even though integration involves the earth stations more than any other segment of the satellite system. The carriers also contended that their direct relationship with the public required them to control all segments of the communications system. Again, and despite its earlier acceptance of the claim, the Commission gave it no weight in the earth station controversy.

A more significant theoretical argument, pressed by the carriers in both the legislative and earth station controversies, is that carrier ownership would permit lower satellite rates immediately, for the carriers could subsidize such rates by revenues from other services.¹⁸⁴ This argument is based on sound and traditional regulatory practice, and would ordinarily have particular force against a company like Comsat that uses expensive all-equity finance and requires a high rate of return.¹⁸⁵ But Comsat, far from being short of funds, has yet to find an outlet for most of its \$200 million capitalization and can probably afford some low return years for a while. Also as the prior discussion shows, Comsat rates are still lower than the carriers' cable rates and will eventually drop even further.¹⁸⁶ Thus the carriers are really trying to raise satellite rates, not lower them. Moreover, the partial ownership device adopted by Congress would not help to reduce Comsat rates even if they were higher, since the carrier-stockholders are not allowed to commingle their funds with Comsat's.

The last argument for carrier participation is the need to protect the carriers against Comsat. As the preceding pages have tried to show, a powerful intruder could have a healthy impact on the communications industry. Equally important, the authorized user, earth station, television, 30 circuits, and interface experiences have shown that with the FCC on their side, the carriers do not need share participation, and that when the Commission is not with them, it is of little help. More-

183. 1962 *Kefauver Hearings* 330.

184. *Hearings, supra* note 182, at 403-04.

185. See Comsat Revised Report on Rates and Revenues Requirements 1967-1971, Dkt. No. 16070, § A, p. 5 (Nov. 10, 1966). Comsat is seeking a 12 per cent return. The average utility earns from 6 per cent to 7 per cent and even AT&T, whose interstate rate of return has seemed uncontrollable by the Commission, see note 200 *infra*, hovers around 8 per cent. Many of AT&T's intrastate rates of return are much lower. See, e.g., *Pacific Telephone and Telegraph*, 53 P.U.R.3d 513, *aff'd*, 62 Cal. 2d 634, 44 Cal. Rptr. 1, 401 P.2d 353 (1964) (6.3%).

186. See *Hearings on H.R. 14921 before Independent Office Subcommittee of House Appropriations Committee*, 89th Cong., 2d Sess. 931-32 (1966) (testimony of FCC Chairman Henry on Comsat's television rates). Comsat's charges are only conditional, and may be revised pending the outcome of its first tariff proceedings.

over, the carriers do not always have uniform interests—sharp conflicts exist between AT&T and the record carriers, and between the international and domestic carriers.¹⁸⁷ Share participation does not protect all of their interests equally, for only three of the carriers have Board representation,¹⁸⁸ and the other major record carriers have complained about being left out.¹⁸⁹ Thus, if industry participation via share ownership does provide some protection, it is chiefly for the financially powerful, like AT&T and ITT. Indeed, insofar as AT&T and Comsat together might have interests adverse to the record carriers, the latter may wind up with only nominal representation.

B. *The “Chosen Instrument” Policy*

Even without industry participation, using a private regulated entity as a chosen instrument has serious defects, which the satellite controversy dramatically illustrates.

In the first place, the “chosen instrument” device forces the Government to be benefactor, promoter, and regulator. It gives the regulatory agency, in particular, the role of patron as well as overseer. Though most agencies have become protectors of the industry they are supposed to regulate,¹⁹⁰ this role is rarely quite so explicit and is hardly to be encouraged, especially when the beneficiary is a single company. Moreover, the agency’s role as promoter of the new company can conflict with its often open and older role as protector of the existing industry, which may in turn produce additional friction with other governmental agencies which have their own particular uses for the new technology.¹⁹¹

187. For example, a conflict is brewing between Western Union and the international carriers. Western Union has asked for full control of all earth stations on two grounds: (1) regardless of the ultimate source or destination of the message, all earth stations in the United States are parts of the domestic communications network for a domestic carrier will have to make connection at the earth station; and (2) earth station ownership by the international carriers would enable them to get a toehold into domestic communications when satellite communications enter the domestic scene. Although the first point is obviously a make-weight, the second raises serious issues respecting the wisdom of a sharp separation between domestic and foreign service. Western Union Petition to Deny Pending Resolution of Policy and Technical Issues, File No. 10-CSG-P-66 (May 10, 1966).

188. AT&T has three directors, ITT has two, and Hawaiian Telephone has one.

189. See, e.g., 1966 *Holifield Hearings* 619 (RCAC).

190. See REAGAN, *THE MANAGED ECONOMY 197-98* (1964); Loevinger, *Regulation and Competition As Alternatives*, 11 *ANTITRUST BULL.* 101, 122-23 (1966).

191. See the recent Department of Defense—FCC controversy about whether the Executive has complete control over when it may deal with Comsat, text accompanying note 141 *supra*.

There may also be a tendency to mold foreign policy to further the interests of the “chosen instrument.” History contains more than a few instances where national policy was tailored to fit private economic interests, and an express governmental commitment can only encourage it.

Satellite communications provides an especially dramatic illustration of some of these weaknesses. The Government's commitment to the commercial and technical success of the satellite venture is obvious and has often been noted.¹⁹² But the Comsat legislation also calls for low rates and possibly non-profit or low profit services which can only make satellite communication services less profitable.¹⁹³ Rate setting is especially difficult where the Government's own business is concerned. As noted earlier, the federal government purchases approximately \$2-\$3 billion of communications annually,¹⁹⁴ and accounts for some 15 per cent of international communications. In many cases, the bill could be lowered if the Government either built its own satellite system or received preferential rates as a partial reimbursement for its investment in satellite technology,¹⁹⁵ or even if it was simply able to take full advantage of satellite economies. But the commitment to the success of Comsat and to the well-being of the carriers has foreclosed the Government from economizing in any of these ways.¹⁹⁶ On the other hand, the FCC's commitment to protecting the existing industry, as reflected in the *Authorized User* decision, has brought it into sharp conflict with other governmental agencies with other objectives.¹⁹⁷

192. See, e.g., Military Operations Subcommittee of the House Committee on Government Operations, *Satellite Communications (Military-Civil Roles and Relationships)*, 88th Cong., 2d Sess. 112-13 (1964); Address by Comsat Director Bruce G. Sundlun, Fletcher School of Law and Diplomacy, Tufts University, March 11, 1966. This commitment may also affect decisions on domestic matters. Recently, Senator Magnuson, Chairman of the Senate Commerce Committee declared with respect to the Ford Foundation's proposal for a separate domestic satellite system for broadcasting:

The Commerce Committee will take a look at the Ford Foundation proposal in the next session of Congress. In the meantime there are other proposals we will consider and do what is in the best interest of ETV to keep it alive.

I am hopeful that it won't interfere with the operation of Comsat because we made a commitment to the American people when we passed the bill (the 1962 Act): that if they put their investment in Comsat and give it their support, that we do what was best government-wise and regulation-wise to keep it going.

We have that commitment and you can't just say we are going to abolish it overnight because there is some other idea for ETV.

32 TELECOMMUNICATIONS REPORTS 13-14 (Nov. 17, 1966).

193. Comsat Act § 102, 47 U.S.C. § 701.

194. See text accompanying note 122 *supra*.

195. The need for such preferential rates for Voice of America operations was stressed by then USIA Director Edward R. Murrow. *Hearings on the Communications Satellite Act of 1962 Before the Senate Committee on Foreign Relations*, 87th Cong., 2d Sess. 128-29 (1962). Preferential rates were granted by the railroads in the nineteenth century in return for governmental aid. Cochran, *The Social Impact of the Railroad*, in *THE RAILROAD AND THE SPACE PROGRAM—AN EXPLORATION IN HISTORICAL ANALOGY* 173 (Mazlish ed. 1965).

196. To the contrary, there is apparently a governmental policy to use Comsat even if more expensive. *Hearings on Missile and Space Ground Support Operations Before the Military Operations Subcommittee of the House Government Operations Committee*, 89th Cong., 2d Sess. 77 (1966).

197. See text accompanying note 191 *supra*.

C. *The Necessary Conditions to Success*

Both of these last two factors—the absence of otherwise unobtainable benefits from carrier ownership and the defects of a private chosen entity—place an unjustifiable burden on a very infrequent combination: vigilant regulation and independent management. The independence of Comsat's management is crucial because much of an agency's vigor, particularly the FCC's, depends on the existence of vigorous and competing litigants.¹⁹⁸ If Congress in the Communications Satellite Act or the FCC in the *Authorized User* and *Earth Station* decisions had allowed for a greater degree of competition between Comsat and the carriers, close regulation would not have been so important. But the structure they did create is so full of potential conflicts and opportunities for insider self-preference that constant policing will be needed.¹⁹⁹ However, the FCC had not had a very impressive record in regulating the common carrier industry prior to the recent leadership of former Chairman E. William Henry and Common Carrier Bureau Chief Bernard Strassburg,²⁰⁰ and the regulatory pendulum may swing again. Indeed, there are signs that it already has.²⁰¹

An additional and crucial factor in this context is that we as a nation have never really developed a communications policy to guide the FCC.²⁰² Nor does it seem appropriate for a regulatory agency to develop one on its own, for this is primarily a matter for Congress. Yet the Commission has been invested with so much power, especially with the advent of a revolutionary new technology like satellite communications, that it is molding the nation's entire communication system,

198. This is one reason for whatever success the Commission has had in regulating the international communications industry. It has been far less successful in regulating Bell's monopolistic services. See text accompanying note 200 *infra*.

199. See Eugene Robert Black, F.C.C. 64-793, at 3-4 (Sept. 2, 1964) (the conflicting fiduciary duties will require close Commission surveillance).

200. AT&T's domestic and overseas business has seemed virtually uncontrollable. The Commission has continually failed to keep AT&T's interstate return down to reasonable levels, and it is still unable to adequately regulate the AT&T-Western Electric relationship. See *Hearings on H.R. 14921 Before Independent Offices Subcommittee of House Appropriations Committee*, 89th Cong., 2d Sess. 913 (1966). Part of the reason in the past has been a lack of interest in common carrier regulation, but, as indicated by the October 1965 order instituting the first formal telephone rate hearing in FCC history, this may be changing. For critical analysis of the FCC's domestic telephone regulation prior to 1962, see Booz, Allen & Hamilton, *Organization and Management Survey of the Federal Communications Commission for the Bureau of the Budget* 271-309 (1962), reprinted in *Kefauver Hearings* 653; for its poor regulation of international voice traffic, see Johnson, *Communications Satellites and Telephone Rates: Problems of Government Regulation*, Rand Memorandum RM-2845-NANA (1961); and *Kefauver Hearings* 331.

201. See Wall St. Journal, Mar. 8, 1967, p. 32.

202. The need for such a policy, to be developed by a cabinet agency like the recently created Department of Transportation, was recently called for by the President's Special Assistant for Telecommunications Management. 33 TELECOMMUNICATIONS REPORTS 1 (Mar. 13, 1967).

without any explicit guidance from Congress or discussion of overall objectives.

Finally, whatever private entity is chosen, and no matter how vigorous and effective the regulatory performance, it is not clear that the agency can be relied upon to recapture some of the community's investment in the new technology. It is a good deal more likely that absent congressional or other public pressures, an overworked and understaffed agency will concentrate solely on its traditional tasks of regulating rates and entry and protecting the industry and will hesitate to take on the industry in a bitter fight to skim off some of its profits for the community at large.

It is still much too early to make final judgments about the wisdom of the satellite legislation. It does seem already clear, however, that the method chosen offers few benefits and much potential danger. Until we have more evidence of the benefits that result from creating such a "meld of variegated interests," the Comsat experiment does not deserve emulation.²⁰³

203. The Ford Foundation has attacked Comsat's attempt to obtain control of domestic television transmission by satellites, for reasons similar to those advanced here, saying:

Not all the parties to this proceeding are equally interested in the rapid adaptation of the communications satellite to domestic uses. Except for those of us who seek a broadcast satellite service, Comsat is almost alone in its desire to move forward with a domestic satellite system as quickly as possible, but even Comsat must be sensitive to the interests of the carriers. The carriers, including AT&T, are understandably concerned to insure the most economic use of their existing microwave and other ground facilities and are naturally inclined to relegate the satellite to a supplementary role."

* * *

[To give Comsat a monopoly of all satellite services] would be unprecedented, even for public utilities. . . The problem is made more acute by Comsat's statute under which six of Comsat's 15 directors must represent common carriers; these six directors are not free to concentrate on the development of communications satellites—they must also be aware of, and sensitive to, the large common carrier investment in microwave and other land facilities.

Ford Foundation Supplemental Comment In the Matter of the Establishment of Domestic Communications Satellite Facilities by Non-Governmental Entities, Dkt. 16,495, at 16-17, 20 (April 3, 1967).