

Satellite Digital Radio Searching for Novel Theories of Action

The law “has become a conscious reaction upon itself of organized society knowingly seeking to determine its own destinies.”¹ Law intrudes upon new technology to regulate its operation and determine its allowable societal impact. This note focuses primarily upon the legal effect of Satellite Digital Audio Radio (SDAR), a novel technology, upon existing wireless networks and other signal receiving devices licensed by the Federal Communications Commission. Additionally, the note seeks to find theories upon which legal actions may lie to remedy the situation caused by SDAR licensees’ electrical interference with wireless services providers.²

I. THE PROBLEM PRESENTED

In 1997 an auction for two SDAR licenses occurred.³ Out of six bidders, two were successful in obtaining a license.⁴ One belongs to Sirius Satellite Radio, Inc. and the other to XM Radio, Inc., both of who have constructed operational centers and satellite arrays.⁵ The successful bidders expended \$83 million to obtain the Sirius license and \$89 million for the XM Radio license.⁶ Although both companies have FCC licenses, only Sirius Radio owns patents on the type of satellite configuration and certain reception enhancing devices utilized in SDAR broadcast.⁷

Once the licenses were obtained, the FCC, in May of 1997, issued its rule-making order establishing the regulations governing SDAR.⁸ In the order the FCC pointed to a number of compelling reasons for the operation of SDAR.⁹ Among the foremost was the ability of the technology to reach portions of the

1. Oliver Wendell Holmes. *Privilege, Malice, and Intent*. 8 HARV. L. REV. 1, 9 (1894).

2. See FCC Miscellaneous Wireless Communications Services, 47 C.F.R. § 27.58 (2001). Currently the FCC considers a compensation scheme similar to the wireless licensees’ payment to Instruction Fixed Television Service (IFTS) and Multipoint Distribution Service (MDS) licensees for interference. The Wireless Communications Services (WCS) Coalition proposes a ‘sunset’ provision allowing SDAR licensees to operate high powered repeaters for five years with the consent of all interfered with WCS licensees. Both are regulatory relief initiatives.

3. The usual process of obtaining a license is to competitively bid. See FCC Satellite Communications, 47 C.F.R. § 25.401 (2001) (establishing competitive bidding procedure for SDAR). See also In the Matter of Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band, 12 F.C.C.R. 5754 (1997) (initial decision by FCC to license SDAR using competitive bidding).

4. In the Matter of Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Frequency Band, 12 F.C.C.R. 5754 (1997) [hereinafter *Rules and Policies for SDAR*].

5. In the Matter of American Mobile Radio Corp., 13 F.C.C.R. 8829 (1997).

6. *Id.*

7. U.S. Patent No. 6,223, 019 (issued April 24, 2001); U.S. Patent No. 6,023,616 (issued Feb. 8, 2000).

8. See *Rules and Policies for SDAR*, *supra* note 4, at 5754.

9. See *Rules and Policies for SDAR*, *supra* note 4, at 5759-60.

United States currently receiving little or no radio broadcasts.¹⁰ The variety of broadcast proposed by the two licensees would fill the need of certain niche programming, better accommodating minority interests.¹¹

Equally important was the capability of SDAR to broadcast continuously across the entire continental United States.¹² An individual driving an automobile from New York to Los Angeles could listen to the same station without interruption or interference.¹³ Lastly the ability of instantaneous communication throughout the country through this system appealed to the FCC whose governing statute permits the President of the United States in time of war to appropriate radio broadcasts for national defensive purposes.¹⁴

The anywhere, anytime listening convenience of SDAR has one considerable drawback—interference. The terrestrial repeaters employed by SDAR in the major metropolitan areas cause interference with other wireless services. Most notably wireless cellular services such as cellular telephones may be subject to blanket interference.¹⁵ Such interference results when the receiver is near a high powered transmitter. The transmitter overloads the components of the receiver preventing reception of the desired signal.

The FCC in response to these concerns issued a Special Temporary Authority Order to both SDAR licensees to coordinate with the affected services and shut down any repeater causing interference immediately.¹⁶ Shortly after, the Commission filed a public notice to solicit commentary on proposed rules for the operation of terrestrial repeaters.¹⁷ The outcome of this rule making will affect the future of SDAR in those areas where repeaters are necessary.

A legal issue arises as to the liability faced by SDAR operators interfering with other licensed entities. An exploration of what, if any, causes of action may be had against SDAR licensees consumes the rest of the article. As a starting point, a brief explanation of the technologies involved in the problem follows.

10. See *Rules and Polices for SDARS*, *supra* note 4, at 5760. There are 772, 102 persons (0.3% of U.S. population) not covered by any FM stations, 2.4 million (1.0% of the U.S. population) are covered by one or more FM stations, and 22 million persons (8.9% of the U.S. population) are covered by five or fewer FM stations. *Id.*

11. See Sirius Satellite Radio, Inc. 10-K annual report 2000. Also, the majority of SDAR channels will be completely commercial free and include broadcasts from CNN, MTV, BBC World Radio, and numerous others. *Id.* Weather Channel updates will also be played on a number of the stations. *Id.* The quality of the sound will be digital or CD quality far superior to terrestrial radio. *Id.*

12. See *Rules and Polices for SDAR*, *supra* note 4, at 5760-61.

13. See Sirius Satellite Radio, Inc. 10-K annual report 2000. The licensees' major target consumers are the driving public. Both licensees have contracts with major corporations including General Motors, BMW, Mercedes-Benz, Kenwood Audio, and Sony. *Id.* The two licensees agreed and developed a receiver so both company's programming can be broadcast to the same device. *Id.*

14. 47 C.F.R. §§ 2.406, 2.407 (2001) (authorizing free service during national emergency and empowering military through FCC to use licensee stations). See also 47 U.S.C. §§ 154, 302(a), 303, 336 (1994) (statutory provisions authorizing President to appropriate commercial radio for national defense purposes).

15. See *In the Matter of XM Radio, Inc.*, 16 F.C.C.R. 18484, at note 3 (2001) (special temporary authority order); *In the Matter of Sirius Satellite Radio, Inc.*, 16 F.C.C.R. 18481 (2001) (special temporary authority order).

16. See *In the Matter of Sirius Satellite Radio, Inc.*, 16 F.C.C.R. 18481 (2001).

17. See *Authorization of Satellite Digital Audio Radio Service Terrestrial Repeater Networks*, 66 Fed. Reg. 58697 (Nov. 1, 2001) (further comments requested Nov. 23, 2001).

II. SDAR TECHNOLOGY, TERRESTRIAL RADIO, AND WIRELESS DEVICES

A. SDAR

Satellite Digital Audio Radio Service is “a radio communication service involving the digital transmission of audio programming by one or more space stations directly to fixed, mobile, or portable stations, which may utilize complementary repeating terrestrial transmitters, telemetry, tracking and control facilities.”¹⁸ The satellite used in operation of SDAR is a geostationary satellite. A geosynchronous satellite is one whose circular and direct orbit lies in the plane of the Earth’s equator and which remains fixed relative to the Earth.¹⁹ More simply, a studio on Earth creates the program and transmits the audio to the space station or satellite, which relays the program to a station or receiver like the radio in your car.

SDAR operates on the S-Band frequency at 2310 to 2360 Megahertz (MHz).²⁰ SDAR is divided into two segments each of 25 MHz.²¹ Within these 25 MHz, 12.5 MHz may be used as a channel to produce, through spatial diversity, 33 channels of CD quality sound.²² The two segments can produce 132 channels at present, but with advances in the technology each 12.5 MHz segment could produce 100 channels each or a total of 400 channels between the two 25 MHz segments.²³

Unlike FM and AM radio, the FCC does not license the individual channels within the 12.5 MHz frequencies. The FCC only licenses each of the 25 MHz segments.²⁴ These 25 MHz segments represent a traditional channel or frequency classification made by the FCC, and the Commission permits only the two licensees to operate at the S-Band frequency. In contrast, the FCC allows FM and AM stations to operate upon the same channel or frequency at differing powers and times.²⁵ The reason for diversity in licensing between SDAR and traditional FM and AM radio is a result of technological differences.²⁶

18. FCC Satellite Communications, 47 C.F.R. § 25.201 (2001).

19. *Id.*

20. *See Rules and Polices for SDAR, supra* note 4, at 5754. Adjacent devices operating near SDAR in the electro-magnetic spectrum are the U.S. Government and U.S. commercial mobile aeronautical telemetry (1452-1492 MHz), Canadian terrestrial stations (2310-2320 MHz), Canadian mobile aeronautical telemetry (2350-2360 MHz), flight test stations (1435-1525 and 2360-2390MHz), Deep space research (2290-2300 MHz), Radio research for extraterrestrial life (1400-1727 MHz). *See* FCC Frequency Allocations and Radio Treaty Matters, General Rules and Regulations, 47 C.F.R. § 2.106 (2001).

21. *Rules and Polices for SDAR, supra* note 4, at 5776.

22. *Rules and Polices for SDAR, supra* note 4, at 5776.

23. *Rules and Polices for SDAR, supra* note 4, at 5776.

24. *See Rules and Polices for SDAR, supra* note 4, at 5776.

25. *See* FCC Broadcast Totals for Fiscal Year 2001. Upon these channels 4,727 AM stations operate, 6,051 commercial FM stations, and 2,234 FM educational stations. *Id.*

26. *See* DOUGLAS H. GINSBURGH, REGULATION OF BROADCASTING: LAW AND POLICY TOWARDS RADIO, TELEVISION, AND CABLE COMMUNICATIONS 14-18 (1979). All radio transmissions operate on the electro-magnetic spectrum, which comprises the entire range of frequencies or wavelengths of electro-magnetic radiation. *Id.* The spectrum begins with long wavelengths or low frequencies and ends with short wavelengths or high frequencies. *Id.* Radio waves are present at both ends of the spectrum. *Id.* Each of these electro-

SDAR, being a satellite signal, requires a line of sight in the same way that FM radio does. The benefit of satellites is their ability to relay a signal almost anywhere in the country. A problem does arise in large cities like New York or Boston where tall buildings may significantly block the signal, which affects reception. As a result, SDAR utilizes terrestrial repeaters to relay the signal around these buildings. Terrestrial repeaters are basically antenna arrays that receive the signal from the satellite and redirect it toward the receiver.

B. Terrestrial Radio

Conventional FM radio or frequency modulation operates at 88 MHz to 108 MHz. AM or amplitude modulation radio operates at 535 KHz to 1605 KHz.²⁷ Divided into several channels over specific frequencies, FM and AM radio stations obtain licenses for a block of frequency within terrestrial radio's operational spectrums. FM radio constitutes 100 channels each of 200 KHz, while AM radio comprises 107 channels divided at intervals of 540 KHz.²⁸

Both types of terrestrial radio operate by producing signals from an earth based antenna. This antenna relays the signal either to other antenna arrays or directly to a receiver. The signal is not digital. Rather an audio wave impressed upon electrical waves produce the sound you listen to from your home or automobile radio. Digital terrestrial radio is possible, but as of yet has failed to become implemented.

C. Wireless Services (WCS)

Wireless services are radio communications providing fixed, mobile, radiolocation or satellite communication services to individuals and businesses within their assigned spectrum block and geographical area.²⁹ WCS permit subscribers to send and receive data and video messages through a wireless phone connection.³⁰ Personal assistants like Palm Pilots and Handspring Visors equipped with wireless internet capability, allowing one to send and receive e-mails, pictures, and other data without the necessity of jacking into a phone line, are classified as wireless devices.

WCS operates between 2305—2320 MHz and 2345—2360 MHz.³¹ The FCC delineated 128 markets into which the preceding blocks of spectrum are divided into four blocks labeled A through D.³² Two licenses are granted per block.³³ Each block is subdivided into Major Economic Areas and Regional

magnetic waves travels at the speed of light or 186,000 miles per second. *Id.*

27. FCC information bulletin (Nov. 1977).

28. *Id.* There also exists a low power FM radio, which is a broadcast service that permits the licensing of 50-100 watt FM radio stations within a service radius of up to 3.5 miles and 1-10 watt FM radio stations within a service radius of 1 to 2 miles. See DOUGLAS H. GINSBURGH, REGULATION OF BROADCASTING: LAW AND POLICY TOWARDS RADIO, TELEVISION, AND CABLE COMMUNICATIONS 14-18 (1979).

29. See FCC Miscellaneous Wireless Communication Services, 47 C.F.R. §§ 27.4, 27.5 (2001).

30. *Id.*

31. FCC Miscellaneous Wireless Communication Services, 47 C.F.R. § 27.5 (2001).

32. See *id.*

33. FCC Miscellaneous Wireless Communication Services, 47 C.F.R. §§ 27.6, 27.13 (2001).

Economic Area Groupings.³⁴ Within blocks A and B are 52 Major Economic Areas, while blocks C and D house twelve Regional Economic Area Groupings.³⁵

III. THE 1934 COMMUNICATIONS ACT IN THE SDAR CONTEXT

A. History

The events leading to Congress' adoption of the 1934 Communications Act help explain the need for the Act and what purpose it served. Radio in the American context has been subject to regulation since 1910.³⁶ The first uses of radio were as a communicative device for the military and a safety measure in ships. In the early years of commercial radio broadcasting Congress empowered the Secretary of Commerce and Labor to issue licenses to any individual wanting to broadcast.³⁷ The Radio Act of 1912 provided the statutory basis for the Secretary's authority.³⁸ Yet, with the rapid growth of radio and the limited amount of frequencies available, many licensees interfered with each other's frequencies.³⁹ The Secretary sought to remedy this situation, but found he lacked the authority to regulate radio in this manner.⁴⁰ By the 1920's radio became a vibrant commercial mechanism. The 1927 Radio Act created the basis for the present regulatory scheme under the Federal Radio Commission.⁴¹ The object of this commission was to bring order to the chaos of rampant interference.⁴²

The 1927 Act empowered the Commission to classify stations, prescribe the nature of service to be rendered, assign frequencies to stations or classes of stations, and determine the power used and time allocated to each station for operation.⁴³ Also, the 1927 Act instructed the Commission to catalog the location of stations, regulate the apparatus used in the production of radio signals, establish regulations to prevent signal interference, and delineate zones within the nation for stations to serve.⁴⁴ Most importantly, the FRC required

34. *Id.*

35. *Id.*

36. See Wireless Ship Act, ch. 379, §§ 1-4, 36 Stat. 629 (repealed 1912).

37. See Radio Act of 1912, ch. 287, §§ 1-11, 37 Stat. 302 (repealed 1927); LAURENCE SCHMECKEBIER, THE FEDERAL RADIO COMMISSION 21 (1932).

38. See Radio Act of 1912, ch. 287, §§ 1-11, 37 Stat. 302 (repealed 1927).

39. See *Nat'l Broad. Co. v. United States*, 319 U.S. 190 (1934) (describing situation leading to 1927 Act). See also STEPHEN DAVIS, THE LAW OF RADIO COMMUNICATIONS 32-53 (1926).

40. *United States v. Zenith Radio Corp.*, 12 F.2d 616 (N.D. Ill. 1926); 35 Op. Att. Gen. 126-132 (1926). Cf. *Hoover v. Intercity Radio Co.*, 286 F. 1003 (D.C. Cir. 1923) (holding Secretary of Commerce had authority to place constraints on licenses).

41. See Radio Act of 1927, ch. 169, §§ 1-41, 44 Stat. 1162 (repealed 1934).

42. See generally HARVEY LEVIN, THE INVISIBLE RESOURCE: USE AND REGULATION OF THE RADIO SPECTRUM (1971) (describing history and development of radio regulation).

43. See Radio Act of 1927, ch. 169, § 4, 44 Stat. 1163 (repealed 1934).

44. See *id.* By 1923 the nation had been divided into five zones as required by 1912 Radio Act. The 1927 Act maintained the zones, and the 1934 Communications Act excluded some territories and possessions from the zones. In 1936 section 302 of the Communications Act abolished the zones. See Radio Facilities, ch. 511, § 2, 49 Stat. 1475 (1936) (codified as amended at 47 U.S.C. § 302 (1994)).

licensees to sign a waiver of any propriety rights or claims upon the particular frequency assigned to the station.⁴⁵

The 1934 Communications Act consolidated the regulation of radio with that of telephone and telegraph services.⁴⁶ The FRC transformed in the FCC to cover the new grant of authority by Congress.⁴⁷ The objectives for the regulation of radio remained the same as the 1927 Act.⁴⁸ The FCC issues licenses for particular frequencies for the operation of radio.⁴⁹ In 1934 licenses were granted for a period of only one year. By 1980 Congress extended the license period to three years, and in 1996 through the Telecommunications Act increased the term of license to eight years.⁵⁰ The FCC has the sole authority to grant, revoke, and reissue licenses for radio operation.⁵¹

B. Scope of the Act

The 1934 Communications Act applies to all interstate and foreign communication and transmission of energy by wire or radio, "which originates or is received within the United States, . . . and to the licensing and regulating of all radio stations."⁵² The breadth of the Act coincides with the vast regulatory authority of the FCC.⁵³ The Supreme Court held the language, history, or purposes of the Act does not limit the authority of the FCC to those activities and forms of communication that are specifically described by the Act's other provisions.⁵⁴ Regulation of these forms of communication is the exclusive arena of the FCC.

C. Licenses Issuance and Meaning

Section 301 of the 1934 Communications Act describes the purpose of the Act as to maintain control over the radio channels of the United States by the issuance of licenses by the FCC. A license is defined in the Act as a grant of authority to operate on a channel for a limited period of time on the

45. See *White v. Johnson*, 282 U.S. 367 (1931). The provision of the 1927 Act was challenged on constitutional grounds. A district court proffered a list of questions to the United States Supreme Court, and the Court refused to answer those questions, including whether the waiver required by the Act violated the Fifth Amendment. *Id.* See also *American Bond and Mortgage Co. v. United States*, 52 F.2d 318 (7th Cir. 1931) *cert. denied* 285 U.S. 385 (1932) (exact same constitutional challenge).

46. See 47 U.S.C. § 151 *et seq.* (1994). See generally H.R. REP. NO. 1918 (1934) (conference committee report and detailed comparison of 1934 Act with previous acts); A LEGISLATIVE HISTORY OF THE COMMUNICATIONS ACT OF 1934 (Max D. Paglin ed., 1989) (compilation of legislative materials and articles by former FCC commissioners).

47. See 47 U.S.C. § 303 (1994) (enumerating FCC powers). The most important powers of the FCC are the allocation of frequencies, the power to grant, renew and revoke licenses, create regulations for the operation of radio transmissions, and discover new types of radio technology. See *id.*

48. See generally Coarse, *The Federal Communications Commission*, 2 J.L. & ECON. 1 (1959); Johnson, *Towers of Babel: The Chaos in Radio Spectrum Utilization and Allocation*, 34 LAW & CONTEMP. PROBS. 505 (1969).

49. See 47 U.S.C. § 309 (1994).

50. See Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56. See also DON PEMBER, MASS MEDIA LAW 586 (2001).

51. 47 U.S.C. § 309 (1994).

52. 47 U.S.C. § 152 (1994).

53. See 47 U.S.C. § 11 (1994); 47 U.S.C. § 151 (1994)

54. *United States v. Southwestern Cable Co.*, 392 U.S. 157 (1968).

understanding that “no such license shall be construed to create any right, beyond the terms, conditions, and periods of the license.”⁵⁵ The FCC asserts a license to maintain radio transmission is not an owned asset or a vested property right, but rather a valuable privilege subject to very definite conditions and limitations.⁵⁶

Licenses to transmit over a specified frequency or channel are issued in accordance with a determination of the public convenience, interest, or necessity served by the license grant.⁵⁷ The FCC at the time of grant may allocate the specific frequency, hours of operation, and power of station operation in a manner providing fair, equitable, and efficient distribution of radio service to the several states and their communities.⁵⁸ Additionally the initial length of the license is proscribed at eight years with the provision for renewal for a period of up to eight years.⁵⁹ The Act also authorizes the FCC to classify stations according to whatever criteria the Commission believes furthers the aims of the Act. The FCC may not, in creating classes of stations, limit the period of the license to shorter than the minimum length proscribed by the Commission for that class.⁶⁰

Licenses are obtained through a process of competitive bidding.⁶¹ The provisions regarding the SDAR bidding procedure are noted in the Code of Federal Regulations.⁶² The process of obtaining a license for a new station begins with seeking a construction permit.⁶³ After obtaining a permit, the station must conform to strict technical guidelines and complete construction within a specified period of time.⁶⁴ Failure in either of these requirements results in non-issuance of a license. If the station conforms to the permit, then an application for a license may be made.

Initially a prospective licensee must possess several qualifications. The most important are that the applicant be a citizen of the United States or be a corporation with less than 25 per cent foreign ownership, have sufficient funds to build and operate the station for at least three months without earning any revenue, be able to acquire or employ individuals with the technical knowledge to operate the station, and be honest and open in dealing with the Commission as well as possess good character.⁶⁵ The FCC retains the authority to waive any of these conditions if it determines such a waiver is in the public interest,

55. 47 U.S.C. § 301 (1994). *See also* 47 U.S.C. § 309(h) (1994) (form of licenses); 47 U.S.C. § 706 (1994) (terms of use).

56. *In Re Twelve Seventy, Inc.*, 1 F.C.C.2d 965 (1965); *In Re Perfection Music, Inc.*, 46 F.C.C.2d 635 (1974).

57. 47 U.S.C. § 307(a) (1994).

58. 47 U.S.C. § 307(b) (1994).

59. 47 U.S.C. § 307(c)(1) (1994). *See* FCC Satellite Communications, 47 C.F.R. § 25.121 (license terms and renewals); FCC Satellite Communications, 47 C.F.R. § 25.144 (concerning SDAR license length at 8 years for 2.3GHz Mobile Satellite).

60. 47 U.S.C. § 307(c)(1) (1994).

61. 47 U.S.C. § 309(j) (1994).

62. *See* FCC Satellite Communications, Competitive bidding procedures for DARS, 47 C.F.R. §§ 25.401-6 (2001).

63. *Id.*

64. *Id.* Among these is the power or wattage the station will operate on.

65. *See* 47 U.S.C. §§ 308-10 (1994).

convenience, or necessity.⁶⁶ The FCC, determining all the requirements are met, issues a license to the station.⁶⁷

E. The Doctrine of Preemption

The doctrine of preemption stems from the Constitutional provision making federal law supreme over state law.⁶⁸ Federal law preemption of state law occurs in two distinct manners. The first is when state laws “interfere with, or are contrary to the laws of [C]ongress, made in pursuance of the constitution.”⁶⁹ In this instance the state law is invalid.⁷⁰ The second occurs when federal law so thoroughly addresses a particular field of legislative capacity that a reasonable inference may be drawn that “Congress left no room for the states to supplement it.”⁷¹

The 1934 Communications Act’s broad grant of authority often preempts similar state law.⁷² Federal common law may preempt a private right to sue if the language of the Act does not.⁷³ Courts have found no private rights of action created by the Act.⁷⁴ The FCC holds exclusive jurisdiction over enforcement of the Act.⁷⁵

Although the Act establishes no private rights of action it does preserve those causes of action existing at the time of the statute’s enactment.⁷⁶ Section 414 is a savings clause that expressly preserves causes of action for breaches of duties that do not exist under Communications Act.⁷⁷ The plain language of sections 414 and 207 demonstrates that Congress “did not intend to divest federal and state courts of their concurrent jurisdiction over causes of action that existed independently of Title 47.”⁷⁸

On the basis of section 414, courts uphold the ability of individuals to bring suits based on tort law claims.⁷⁹ Courts have not found the clause to provide a

66. *Id.*

67. The description of obtaining a license above is greatly simplified. For a better general explanation, see DON PEMBER, *MASS MEDIA LAW* 586 (2001).

68. U.S. CONST. art. VI, cl. 2.

69. *Gibbons v. Ogden*, 22 U.S. 1, 73 (1824).

70. *Wisconsin Pub. Intervenor v. Mortier*, 501 U.S. 597 (1991); *Pacific Gas & Elec. Co. v. State Energy Resources Conservation and Dev. Comm’n*, 461 U.S. 190 (1983) (holding preemption occurs when state law conflicts with area regulated by federal law).

71. *Rice v. Santa Fe Elevator Corp.*, 331 U.S. 218, 230 (1947).

72. Most of the following cases cited deal with common carriers under the Communications Act. Important to note SDAR operators are not considered common carriers under the Act. The examples, though, provide appropriate analogies. See *In the Matter of American Mobile Radio Corp.*, 13 F.C.C.R. 8829 (1997).

73. See *Ivy Broad. Co. v. Am. Tel. & Tel. Co.*, 391 F.2d 486 (2d Cir. 1968) (ruling negligence and breach of contract claims against AT&T preempted by federal law).

74. *Brafman v. Nat’l Broad. Co.*, 6 Media L. Rep. 1189 (1980) (finding no private action to seek injunctive relief against broadcast of 1980 Olympics). See also *Daly v. Cent. Broad. Serv.*, 309 F.2d 83, 86 (7th Cir. 1962) (articulating Act creates no private rights, but urges regulation in public interest).

75. *Ackerman v. Cent. Broad. Serv.*, 301 F. Supp. 628, 631 (S.D.N.Y. 1969).

76. See 47 U.S.C. § 414 (1995). “Nothing in this Act [47 USCS §§ 151 *et seq.*] contained shall in any way abridge or alter the remedies now existing at common law or by statute, but the provisions of this Act [47 USCS §§ 151 *et seq.*] are in addition to such remedies.” *Id.*

77. *Weinberg v. Sprint Corp.*, 165 F.R.D. 431 (D. N.J. 1996).

78. *Vermont v. Oncor Communications*, 166 F.R.D. 313, 319 (D. Vt. 1996).

79. See *Cooperative Communications, Inc. v. Am. Tel. & Tel. Corp.*, 867 F. Supp. 1511 (D. Utah 1994).

basis to bring common law nuisance claims for electronic interference.⁸⁰ Nor have courts found some state law claims saved by the section.⁸¹ The question of whether the 1934 Communications Act completely preempts state common law tort actions against SDAR licenses has not been addressed.⁸² The Supreme Court interpreting a similar saving clause virtually identical to section 414 found a state common law tort action against an airline not preempted despite the extensive regulation by the Federal Aviation Administration in the industry.⁸³ In the words of the Supreme Court a “common-law right, even absent a saving clause, is not to be abrogated ‘unless it be found that the preexisting right is so repugnant to the statute that survival of such right would in effect deprive the subsequent statute of its efficacy; in other words render its provisions nugatory’.”⁸⁴

Apparently the venue for “saved” claims is a federal district court and not a state tribunal.⁸⁵ The federal district courts have concurrent jurisdiction with the FCC to afford remedies to those who are damaged by unjust, unreasonable or otherwise unlawful practices within the telecommunications industry under 47 U.S.C. §§ 201, 205, 206, and 207.⁸⁶ Only if the FCC “is better equipped ‘by specialization, by insight gained through experience, and by more flexible procedure’ to determine the lawfulness of the challenged practice, should this Court refer the matter to the FCC.”⁸⁷ At least one court concluded unfair and deceptive trade practices do not require specialized knowledge of the telecommunications industry and are within the competence of the courts.⁸⁸

80. See *Broyde v. Gotham Tower, Inc.*, 13 F.3d 994 (6th Cir. 1994) (involving allegation radio signal interfered with home electronics); *Blackburn v. Doubleday Broad. Co., Inc.*, 353 N.W.2d 550 (Minn. 1984) (deciding Act preempts nuisance claim against radio station for interference with reception of other stations).

81. See *In Re Long Distance Telecommunications Litigation*, 640 F. Supp. 997 (E.D. Mich. 1986) (preemption of state law claims of unfair competition and deceptive trade practices). See also *Am. Tel. & Tel. v. Central Office Tel.*, 524 U.S. 214, 227-8 (1998) (holding breach of contract and tortious interference with a contract claims against “common carrier” preempted by 1934 Communication Act’s filed-tariff requirements). “Section 414 copies the saving clause of the ICA, and we have long held that the latter preserves only those rights that are not inconsistent with the statutory filed-tariff requirements. *Adams Express Co. v. Croninger*, 226 U.S. 491, 507, 57 L. Ed. 314, 33 S. Ct. 148 (1913). A claim for services that constitute unlawful preferences or that directly conflict with the tariff—the basis for both the tort and contract claims here—cannot be ‘saved’ under § 414. ‘Th[e saving] clause . . . cannot in reason be construed as continuing in [customers] a common law right, the continued existence of which would be absolutely inconsistent with the provisions of the act. In other words, the act cannot be held to destroy itself.’ *Texas & Pacific R. Co. v. Abilene Cotton Oil Co.*, 204 U.S. 426, 446, 51 L. Ed. 553, 27 S. Ct. 350 (1907).” *Id.*

82. See *Avco Corp. v. Aero Lodge No. 735*, 390 U.S. 557 (1968) (doctrine of complete preemption applying to Labor Management Relations Act, 29 U.S.C. §185 (1994)). See also *Employee Retirement Income Security Act*, 29 U.S.C. § 1001 (1994); *Metropolitan Life Insurance Co. v. Taylor*, 481 U.S. 58 (1987). *But see Vermont v. American Frozen Foods, Inc.*, No. 89-CV-162 (D. Vt. Dec. 12, 1989) (holding Federal Meat Inspection Act did not preempt state’s consumer fraud action); *Franchise Tax Board of Cal. v. Construction Laborers Vacation Trust for Southern Cal.*, 463 U.S. 1 (1983) (holding action enforcing state tax levy did not arise under Employee Retirement Income Security Act of 1974, 29 U.S.C. §§ 1001 et seq. (1994)).

83. *Nader v. Allegheny Airlines, Inc.*, 426 U.S. 290, 298-300 (1976) (reasoning common law remedies not absolutely inconsistent with statutory scheme could coexist).

84. *Id.* at 298 (quoting *Texas & Pacific R. Co. v. Abilene Cotton Oil Co.*, 204 U.S. 426, 437 (1907)).

85. See *Nordlicht v. New York Tel. Co.*, 799 F.2d 859 (2d Cir. 1986) *cert. denied*, 479 U.S. 1055 (1987) (holding federal law preempts state law in area of interstate communications).

86. *Vermont v. Oncor Communications, Inc.*, 166 F.R.D. 313 (1996) (allowing claim for unfair and deceptive trade practices based on state law against long distance telephone company).

87. *Id.* at 304 (quoting *Far East Conference v. United States*, 342 U.S. 570, 575 (1952)). See also, *Kaplan v. ITT-U.S. Transmission Systems, Inc.*, 589 F. Supp. 729 (E.D.N.Y. 1984).

88. *Vermont v. Oncor Communications, Inc.*, 166 F.R.D. at 320.

Judicial treatment of whether an FCC licensee may sue another to remedy economic harm caused by electrical interference is sparse.⁸⁹ The institution of judicial action resolving such a dispute appears a strong possibility. The savings clause of the 1934 Communications Act preserves certain private rights of action. The next section explores legal theories preserved through the savings clause and their suitability to the SDAR electrical interference situation.⁹⁰

D. Electronic Interference

The Act discusses electrical interference between stations in a number of places, but specifically addresses two types of interference: (1) between government stations and commercial stations and (2) willful and malicious interference.⁹¹ In the instance of interference between commercial and governmental stations, the Act provides the solution that the commercial stations will not transmit during the first fifteen minutes of every hour.⁹² The government station may transmit radio communications in response to a vessel's distress signal and request for information reading a vessel's own location.⁹³

The second instance refers to the prohibition of willful or malicious interference with radio communications.⁹⁴ The section has been interpreted as placing the burden on the FCC to prove such interference.⁹⁵ Inclusion of such a prohibition reflects the purpose of the Act to regulate wire and radio communications to avoid the chaos of interference that faced the Federal Radio Commission before the passage of the 1934 Act.

The above sections of the Act support a conclusion that the remedy for electrical interference caused by one licensee to another is regulatory.⁹⁶ The view is supported by the Commission's rule requiring wireless service providers to compensate other licensees for interference caused by wireless

89. Although, statute and case law strongly support a licensee's right to challenge an FCC rule or order. See 47 U.S.C. § 402(b) (1994) (right to appeal FCC decision); *Nat'l Broad. Co. v. FCC*, 132 F.2d 545 (D.C. Cir. 1942); *WOKO, Inc. v. FCC*, 109 F.2d 665, 667 (D.C. Cir. 1939) (who may appeal from FCC decision what showings necessary); *Yankee Network, Inc. v. FCC*, 107 F.2d 212 (1939) (necessity for showing of substantial injury to appeal FCC order); *Red River Broad., Inc. v. FCC*, 98 F.2d 282 (D.C. Cir. 1938) (affected individuals right to appeal FCC order under 47 U.S.C. § 303(f)). See also *Nat'l Broad. Co. v. United States*, 319 U.S. 190, 210-18 (1943); *FRC v. Nelson Bros. Bond & Mortg. Co.*, 289 U.S. 266 (1933).

90. The section is not intended as an exhaustive list of causes of action—many more may exist. The following is simply a few possible theories under the law of torts where a plaintiff could purpose to remedy the harm caused by SDAR interference. Additionally, these tort actions could be brought by class action of private individuals or possibly the companies affected.

91. 47 U.S.C. §§ 323, 333 (1994).

92. 47 U.S.C. § 323(a) (1994).

93. 47 U.S.C. § 323(b) (1994).

94. 47 U.S.C. § 333 (1994). Cf. FCC Safety and Special Radio Services, 47 C.F.R. § 90.403(e)-(g) (2001) (commissions rules paralleling and perhaps expanding 47 U.S.C. § 333).

95. *In Re Capitol Radiotelephone, Inc.*, 11 F.C.C.R. 2335, 2340 (1996) (“[T]he burden of proof of establishing . . . intent to deliberately cause malicious interference rested on the Bureau.”).

96. For suits brought against the FCC concerning the commission's electronic interference rules see *Metro Broad, Inc. v. FCC*, 497 U.S. 547 (1990); *Red Lion Broadcasting Co. v. FCC*, 395 U.S. 367, 389 (1969); *Carroll Broad. v. FCC*, 258 F.2d 440 (D.C. Cir. 1958); *Ashbacker Radio Corp. v. FCC*, 326 U.S. 327 (1945); *FCC v. Sanders Bros. Radio Station*, 309 U.S. 470, 474-6 (1940).

signal production.⁹⁷ In the same vein the FCC seeks to make a similar compensation method for SDAR operators who infer with wireless licensees. The next section deals with the possibility of other remedies beside regulatory action.

IV. TORT THEORIES OF LIABILITY

The purpose of tort law is to remedy those physical and economic injuries caused by another. Within traditional tort law concepts resides the idea of a remedy for intentional interference with either contract or prospective contractual relations. Under the rubric of interference with contractual relations are the two normative torts of intentional interference with contractual relations and interference with a party's own contract. Intentional interference with economic interests, along with the prima facie tort, provides causes of action to cure financial harms and possibly a remedy to the SDAR situation.⁹⁸

A. *Intentional Interference with Contractual Relations*

Intentional interference with contractual relations has a long history in the realm of tort law.⁹⁹ The seminal case defining the modern conception of the tort occurred in 1853 in England's Queen's Bench Division where the court held malicious enticement to breach a contract actionable in tort.¹⁰⁰ Although, some time passed before the tort gained acceptance in the United States, in 1923 at least the New York courts recognized a cause of action for such malevolent conduct resulting in injury.¹⁰¹

Central to the early life of the tort was the existence of a definite contract or an interest in property or right in rem good against the world.¹⁰² The requirement of a contract was not strict.¹⁰³ Any contract, although

97. FCC Miscellaneous Wireless Communications Services, 47 C.F.R. § 27.58 (2001) (financial liability of WCS to interfered MDS ITFS licensees).

98. The following discussion focuses on actions against private parties, since no action against the FCC under a tort theory will lie. The Federal Tort Claims Act, 28 U.S.C. §§ 1346(b), 2671 et seq. (1994), prohibits a tort action of interference with contractual relations against the United States. The same act retains immunity for all governmental conduct involving discretionary functions or duties. This discretionary immunity protects the federal government from suit brought for the implementation or failure to implement administrative regulations. Neither may a suit hold liable the government for execution of a statute. The FCC embodies the administration of the 1934 Communications Act and subsequent statutory enactments. See 28 U.S.C. § 2680(a), (h). See also *Emch v. United States*, 630 F.2d 523 (7th Cir. 1980) *cert. denied* 450 U.S. 966 (1981) (holding no liability for economic loss from governmental failure to regulate banking practices); *Loge v. United States*, 662 F.2d 1268 (8th Cir. 1981) *cert. denied* 456 U.S. 966 (1981) (polio vaccination administration government failure to regulate); *Dalehite v. United States*, 346 U.S. 15 (1953); Boger, Gitenstein, & Verkuil, *The Federal Tort Claims Act Intentional Torts Amendment: An Interpretive Analysis*, 54 N.C.L. REV. 497 (1976). But see *Am. Tel. & Tel. v. Cent. Office Tel., Inc.*, 524 U.S. 214 (1998) (describing filed-rate doctrine regarding telephone long distance agreements barring state law tortious interference with contract).

99. Tortious acts resulting in economic damage, as a basis for liability, has existed since Roman law. See WILLIAM PROSSER, LAW OF TORTS, 1st ed., 975-80 (1941) [hereinafter PROSSER, LAW OF TORTS].

100. *Lumley v. Gye*, 118 Eng. Rep. 749 (1859). See also RESTATEMENT (SECOND) OF TORTS § 766, cmt. b (1979).

101. *Campbell v. Gates*, 141 N.E. 914 (N.Y. 1923)

102. *Raymond v. Yarrington*, 73 S.W. 800 (Tex. 1903). See *S.C. Posner Co. v. Jackson*, 119 N.E. 573 (N.Y. 1918).

103. PROSSER, LAW OF TORTS, *supra* note 98, at 980.

unenforceable at law, would suffice to establish the legal duty the breaching party was under.¹⁰⁴

Today an intention to cause interference with an existing contractual relationship must be coupled with a determination that the means employed were improper or made improper by the surrounding circumstances.¹⁰⁵ The Restatement subjects the interfering party to liability if and only if the means or purpose of the interference was improper.¹⁰⁶ Whether interference is improper depends on a number of considerations.¹⁰⁷ The Restatement suggests a number of factors to consider in deciding the interference improper.¹⁰⁸

Essential to the tort is intentional interference causing a genuine particular harmful result.¹⁰⁹ Proof of the defendant's actual knowledge of the injured party's affected interests is required.¹¹⁰ Additionally, the defendant must have caused the nonperformance of the contract.¹¹¹ Whether intermeddling causing incidental interference rises to the level of tortious conduct is doubtful.¹¹² Though, cases explicating this tort refused to remedy negligent interference causing purely economic harm.¹¹³

104. *Id.* See also *Jackson v. Stanfield*, 36 N.E. 345 (Ind. 1894) (no requirement of contract enforceable under statute of frauds); *Salter v. Howard*, 43 Ga. 601 (1871) (formal defects in contract do not prevent recovery); *Rich v. N.Y. Centr. & H.R.R. Co.*, 87 N.Y. 382 (1882) (contract lacking consideration still basis for tort action); *Moran v. Dunphy*, 59 N.E. 125 (Mass. 1901) (Holmes, J.) (contract lacking in mutuality actionable in tort); *Aalfo Co. v. Kinney*, 144 A. 715 (N.J. 1929) (uncertainty of terms no bar for tort action on interference with contract).

105. There exists, however, authority for allowing recovery when the defendant pursues his own ends cognizant his conduct will bring about the nonperformance of the plaintiff's contract, but lacks any intent or primary desire to interfere. See *Stevens v. Siegel*, 239 N.Y.S.2d 827 (N.Y. 1963); *Bentley v. Teton*, 153 N.E.2d 495 (Ill. App. 1958); *Gregory v. Dealer's Equip. Co.*, 300 S.W. 563 (Tenn. 1958); *Lancaster v. Hamburger*, 71 N.E. 289 (Ohio 1904).

106. See PROSSER, LAW OF TORTS, *supra* note 98, at 980.

107. Additionally, inducement to breach contract is accomplished by a variety of means, but may not be required to recover if interference is unjustified and results in harm. See *International Union United Auto, Aircraft, and Agricultural Implement Workers of America v. Russell*, 356 U.S. 634 (1958) (inducement to breach by defendant's threats); *Sumwalt Ice & Coal Co. v. Knickerbocker Ice Co.*, 80 A. 48 (Md. 1911) (inducement by economic threats where refusal to deal unless contract broken); *Lichter v. Fulcher*, 125 S.W.2d 501 (Tenn. App. 1938) (persuasion inducing breach).

108. The nature of the defendant's conduct, the defendant's motive, the interests of the party interfered with, the advancement of the interests of the defendant, the social interests in protecting the freedom of action of the defendant and the contractual interests of the plaintiff, the proximity of the defendant's conduct to the interference, and the relations between the parties. See RESTATEMENT (SECOND) OF TORTS § 767 (1979).

109. RESTATEMENT (SECOND) OF TORTS § 766 (1979). Without intent there is no liability. See *Snowden v. Sorensen*, 75 N.W.2d 795 (Minn. 1956); *Augustine v. Trucco*, 268 P.2d 780 (Cal. App. 1954); *Kenworthy v. Kleinberg*, 47 P.2d. 825 (Wash. 1935); *Thompson v. Sparkman*, 55 S.W.2d. 871 (Tex. Civ. App. 1932); *Kerr v. Du Pree*, 132 S.E. 393 (Ga. App. 1926); *Fowler V. Harper*, *Interference with Contractual Relations*, 47 Nw. U. L. REV. 873 (1953); Charles E. Carpenter, *Interference with Contractual Relations*, 41 HARV. L. REV. 728 (1928).

110. Satisfying the knowledge requirement in older cases occurred when the defendant possessed at least enough factual information for a reasonable man to know of the existence of the plaintiff's interests. See *Twitchell v. Nelson*, 148 N.W. 451 (Minn. 1914); *Twitchell v. Glenwood-Inglewood Co.*, 155 N.W. 621 (Minn. 1915).

111. RESTATEMENT (SECOND) OF TORTS § 766 (1979).

112. But officious meddling for the purpose to interfere with a contract is actionable in tort. See *Sidney Blumenthal & Co. v. United States*, 30 F.2d 247 (2d Cir. 1929).

113. RESTATEMENT (SECOND) OF TORTS § 766C (1979). See also *McNary v. Chamberlain*, 34 Conn. 384 (1867) (deliberate damage to highway plaintiff under contract to repair); *Cue v. Breland*, 29 So. 850 (Miss. 1901); Note, *Negligent Interference with Contract*, 63 VA. L. REV. 813 (1977).

Three standards exist to assess this particular tort. The first is the malice standard applied in the early existence of the tort.¹¹⁴ Soon this evaluation lost prominence because of its stringent requirement of actual malice. A new standard developed assigning liability for any intentional interference resulting in ascertained harm.¹¹⁵ Here the defendant bore the burden of arguing justification for the interference, while the plaintiff proved the existence of interference and damages.¹¹⁶ Ambiguous as to the definition of justified inference, this standard gave rise to the Restatement formulation.¹¹⁷ The Restatement defines the tort as when one intentionally and improperly interferes with the performance of a contract between another and a third person by inducing or otherwise causing the third person not to perform the contract.¹¹⁸

The hurdle arises when the defendant was privileged in his interference.¹¹⁹ The defendant possessing a valid justification for intentional interference will be absolved of his conduct and no action in tort will lie.¹²⁰ A disinterested motive laudable in character justifies interference by the defendant.¹²¹ The measure of privilege is reasonable and proper means.¹²² The determination of whether the defendant's conduct meets this standard follows a similar evaluation as the use of reasonable force in defense of one's property.¹²³

1. The tort applied to the SDAR situation

Under this tort wireless providers, like AT&T Wireless, bring suit against either one or both of the SDAR operators. First, the providers must prove interference.¹²⁴ The interference with a contract occurs when the blanket technological interference causes the wireless subscribers to withhold

114. Pure malicious interference is required for liability. See *Bowen v. Hall*, 50 L.J.Q.B. 305 (1881); *Temperton v. Russell*, 62 L.J.Q.B. 412 (1893).

115. Ill will or spite are not required for liability. See *Aikens v. Wisconsin*, 195 U.S. 194 (1904) (Holmes, J.); *Minico v. Craig*, 94 N.E. 317 (Mass. 1911); *Connors v. Connolly*, 86 A. 600 (Conn. 1913); *Berry v. Donovan*, 74 N.E. 603 (Mass. 1905). See also *Malice in Law of Torts*, 21 MOD. L. REV. 484 (1958); *Theorems in Anglo-American Labor Law*, 31 COLUM. L. REV. 1104, 1123 (1931); *Gordon Stoner, The Influence of Social and Economic Ideals in the Law of Malicious Torts*, 8 MICH. L. REV. 468 (1910).

116. See *Felsen v. Sol Café Mfg. Corp.*, 249 N.E.2d 459 (N.Y. 1969) (discussing where plaintiff established tortious interference defendant's burden of proving justification).

117. See *Top Serv. Body Shop, Inc. v. Allstate Ins. Co.*, 582 P.2d 1365 (Ore. 1978) (Linde, J.) (criticizing difficulty in determining justification). See also *Dan Dobbs, Tortious Interference with Contractual Relations*, 34 ARK. L. REV. 335, 345-6 (1980) (arguing lack of delineable justification unjust).

118. RESTATEMENT (SECOND) OF TORTS § 766, 767 cmts. b, k (1979).

119. A plaintiff must plead lack of justification. See *Swager v. Couri*, 395 N.E.2d 921 (Ill. 1979) (failure in pleading lack of justification therefore judgment for defendant).

120. Yet, inference may be determined improper under the circumstances when defendant knew his conduct interferes with plaintiff's contract, despite peaceable persuasive means. See *Smith v. Ford Motor Co.*, 221 S.E.2d 282 (N.C. 1976).

121. Protection of the public interest, one's own economic interest, and purely competitive interests are all justified. See, e.g., *Legris v. Marcotte*, 129 Ill. App. 67 (1906) (prevention of disease in public interest interference justified); *Ford v. C.E. Wilson & Co.*, 129 F.2d 614 (2d Cir. 1942) (retrieving security from debtor justified); *Fed. Auto Body Works, Inc. v. Aetna Cas. & Sur. Co.*, 447 A.2d 377 (R.I. 1982) (insurer's interest in lower cost car repair justified interference with prospective business of repair shop).

122. See RESTATEMENT (SECOND) OF TORTS § 767 (1979).

123. See PROSSER, LAW OF TORTS, *supra* note 98, at 996-1001.

124. The defendant must be shown to be the cause of both the interference and the loss. See *Lingard v. Kiraly*, 110 So.2d 715 (Fla. App. 1959); *Wahl v. Strous*, 25 A.2d 820 (Pa. 1942).

contractually mandated monthly payments for cellular service. These subscribers fail to pay the contract price per month for the use of the service because the technological interference renders cellular phones inoperable.¹²⁵ In a sense the SDAR operator have induced a breach of the contract by their conduct.¹²⁶

The wireless providers must then establish the interference is improper by its means or purpose. Applying the Restatement factors leads to the following results: (1) the conduct of SDAR operators is the use of repeaters rendering cellular devices ineffective; (2) the motive of the operators is to provide digital audio service to its subscribers through a satellite network, and by such service profit; (3) the interests of the wireless providers are to operate and sell a cellular phone network for profit, while the interests of SDAR operators is to earn profit from delivery of CD quality sound to personal receivers while increasing the number of subscribers; (4) the social interests in protecting the wireless service providers is the ability of private and business individuals to place and receive calls in various locations, and allow more people at a low cost to use a phone, while SDAR permits continuous commercial free broadcast supplying minority segments of the population radio programming and the opportunity for radio service to reach the entire country; and (5) the proximity of SDAR operators to the interference is direct. They cause the technological situation that induces the nonperformance of the wireless customer's contract. Finally, the parties are licensees operating services on particular frequencies and under specific regulations promulgated by the FCC.

Improper motives must be fused with SDAR operators' knowledge of the wireless providers' interests. Lengthy objections filed with the FCC to the alteration of SDAR licenses in conjunction with comments upon the grant of special authority to operate the repeaters furnish SDAR operators with an awareness of wireless providers' interests. The awareness should constitute explicit knowledge of the interests possessed by wireless providers.

The intention to interfere is shown by SDAR operators continued use of repeaters causing electrical interference to wireless providers. The repeaters cause blanket interference rendering the wireless providers' unable to perform their contracted cellular telephone service. Under the Special Temporary Authority Order, wireless providers must notify SDAR operators of interference. If notice was given, and SDAR repeater operation continued, then intention to interfere would clearly be established.

Showing knowledge, intention, improper means, and nonperformance of the contract, wireless providers' need only address the possibility of SDAR operators asserting a bona fide defense.¹²⁷ SDAR operators could argue their

125. Here we speak of both the interference caused to the wireless installations as well as consumer equipment. XM radio seeks a rule limiting liability to only installations. See Comments of XM Radio IB Docket No. 95-91 (filed Dec. 14, 2001).

126. Inducement by the defendant's intentional act or even reasonable foreseeable risk of inducing breach of contract is clearly within the limits of proximate cause. *Tubular Rivet & Stud Co. v. Exeter Boot & Shoe Co.*, 159 F. 824 (1st Cir. 1908); *Heath v. American Book Co.*, 97 F. 533 (C.C.D. W. Va. 1899).

127. The act of interference by SDAR operators may result from a mixed motive. After adoption of the FCC rule-making tolerable interference may be permitted. The action of the operators would then be privileged or justified, yet the technological interference could remain. In this case the motive of the SDAR operators

action was justified because they acted in good faith to further a legally protected interest. This bona fide defense vilifies the wireless providers' action.¹²⁸ But the defense should fail under scrutiny because the determination of improper means creates an actionable liability.

Concluding SDAR operations caused an improper interference, the plaintiff must elect to either pursue her cause in equity or at law. Equitable injunctive relief results in an order preventing SDAR operators from using the interfering repeaters.¹²⁹ Proceeding at law forces the plaintiff to prove actual damages or a basis for restitution to sustain the action. Damages on the contract would be limited, if the loss were substantial as it would be here, to those contemplated by the parties at the formation of the contract.¹³⁰ A court at law could also impose tort damages, limited to those damages proximately caused by SDAR interference, upon the SDAR operators.¹³¹ The court may assess intentional tortious damages including unforeseen expenses and punitive damages.¹³² Punitive damages are assessed by analogy to intentional harm to an individual or property.¹³³

Under the restitution remedy the wireless providers present the amount of lost under each cellular contract incurred by the interference. The wireless providers may encounter a problem in proving the reason for loss on each contract. Some explanation of each customer's reason for nonpayment is needed. There must exist probable evidence that corroborates the amount of contractual damages sought with the actual or most likely number of customers who discontinued payment to have recovery under this tort theory.

B. Interference with the Execution of the Party's own Contract

A separate, but related tort is interference with the execution of the party's own contract.¹³⁴ The tort relates to the situation where the interference prevents one of the parties to the contract from performance because the execution is made more expensive or burdensome.¹³⁵ Here a cause of action sounds for a plaintiff who could perform, has not forfeited performance, but faces an economic hardship in completing the contract. The cost of performance must

may be mixed and the predominant motivation must be tested to gauge whether the contractual interference is improper. The test of dominant motivation is enunciated in *Alyeska Pipeline Service Co. v. Aurora Air Service*, 604 P.2d 1090 (Alaska 1979).

128. See RESTATEMENT (SECOND) OF TORTS § 773 (1979).

129. Ordinary grounds for equitable relief must be shown in conjunction with an affirmative showing that there is a threat of future repeated harm. See *Adler, Barish, Daniels, Levin and Creskoff v. Epstein*, 393 A.2d 1175 (Pa. 1978), *cert. denied*, 442 U.S. 907 (1979). See also *Azar v. Lehigh Corp.*, 364 So.2d 860 (Fla. App. 1978).

130. See, e.g., *McNutt Oil & Refining Co. v. D'Ascoli*, 281 P.2d 966 (Ariz. 1955); *R and W Hat Shop v. Sculley*, 118 A. 55 (Conn. 1922); *Mahoney v. Roberts*, 110 S.W. 225 (Ark. 1908).

131. See *Anderson v. Moskovitz*, 157 N.E. 601 (Mass. 1927).

132. On recovery for unforeseen expenses see *Horchheimer v. Prewitt*, 268 P. 1026 (N.M. 1928). Cf. *Blum v. William Goldman Theaters*, 69 F. Supp. 468 (E.D. Pa. 1946), *modified*, 164 F.2d 192 (3d Cir. 1947).

133. *Burgess v. Tucker*, 77 S.E. 1016 (S.C. 1913). *But see* OLIVER WENDELL HOMES, *The Path of Law*, in COLLECTED LEGAL PAPERS, 167, 175 (1920) (arguing recovery only on amount of contract interfered with or breached and no more).

134. See RESTATEMENT (SECOND) OF TORTS § 776A (1979).

135. See *id.*

be made greater than at the time of contract's execution because of intentional improper interference.

As with the tort of intentional interference with a contract, improper intention, purpose, and means must be established. Following the same analysis as utilized with interference with contractual relations, when SDAR operators continue to operate repeaters in contravention of the FCC Special Temporary Order, they possess an improper intention to interfere with the performance of wireless contracts. The purpose of continued repeater operation is to provide service to SDAR subscribers, while harming wireless providers. The means SDAR operators use are improper because they are contrary to a FCC order.

Finally, as stated above, the wireless providers' performance under their contracts with their customers becomes substantially burdensome. SDAR operators cause technological interference with wireless providers rendering the cellular devices inoperable. The wireless providers contracted to provide cellular service to these cellular devices. SDAR repeaters force the wireless providers to either alter their operational frequency or make their wireless devices able to operate despite the repeater interference. Alteration of frequency could prove economically quite costly especially if existing cellular devices could not receive the new signal. If the cellular devices could work on a different frequency, without the need for major changes in the originating station's signal, then the change would only cost the FCC application fees. Yet, with the limited available space of usable spectrum, an alteration of frequency would trigger examination of international agreements and the possible need to reallocate other noncommercial devices relating to research. While such a drastic change in the spectrum structure may be impossible, no doubt the process would raise considerable cost to wireless providers waiting for frequency reallocation to occur.

The second option, contracting with cellular phone makers to construct shielded devices, involves considerable expense to wireless providers. First, the providers need to negotiate new contracts with cellular device manufactures, impliedly causing them to either breach exclusive dealership agreements with the same companies or accept and pay for useless devices. The manufactures may choose to give their business to another. The result is a tremendously high performance cost to the wireless providers causing substantially burdensome performance of the original contracts.

Finding improper intention, purpose, and means the SDAR operators should be susceptible to an action under interference with the execution of the party's own contract tort theory. The operators again would be responsible for damages. Once more the wireless providers would choose whether to proceed at law or in equity.

B. Interference with Prospective Economic Advantage

Turning from contractual tort claims, the focus shifts to a tort sounding for interference with prospective economic advantage.¹³⁶ The expectancies protected by this tort are future contracts obtainable based on a fair estimate of the success and likelihood of consummating a contractual relationship.¹³⁷ An example of such expectancy is the opportunity to obtain new customers. The crux of the tort is the principle of bona fide competition for prospective advantage.¹³⁸ If the competition is fair there exists a privilege for the action, but if the competition is deemed unfair no privilege exists and tort liability attaches.¹³⁹

The foundational case in this area of tort comes from England where the court extended liability for intentional interference with a contract to potentially advantageous future contractual relations.¹⁴⁰ The tort continues to be grounded in intent, and no case at present has held liable a defendant who intended incidental interference through proper means.¹⁴¹ Nor does an action sound for acquiring a business rival's prospective customers.¹⁴² This is the privilege of competition, which is so respected by the common law as the design of free enterprise.¹⁴³

Whether competition is privileged depends on the motivation to compete. If the motive is bona fide then the competition is protected.¹⁴⁴ Ulterior malicious desires, such as opening up a rival barbershop to drive the other shop out of business, cause abandonment of the privilege.¹⁴⁵ The measure of damages results from the compilation of business experience and estimation of the likely worth of additional customers obtained had no interference occurred.¹⁴⁶

The Restatement places the burden of proof upon the plaintiff to establish interference. Interference consists of inducing or otherwise causing a third person not to enter into or continue the prospective relation, as well as, preventing the other from acquiring or continuing the prospective relation

136. RESTATEMENT (SECOND) OF TORTS § 766B (1979).

137. The plaintiff must prove achievement of contract or economic benefit absent defendant's interference. See *Optivision, Inc. v. Syracuse Shopping Center Assoc.*, 472 F. Supp. 665 (N.D.N.Y. 1979).

138. See RESTATEMENT (SECOND) OF TORTS § 768 (1979).

139. *Id.* See also Franklin D. Jones, *Historical Development of the Law of Business Competition*, 35 YALE L.J. 905, 36 YALE L.J. 42 (1926); Bruce Wyman, *Competition and the Law*, 15 HARV. L. REV. 427 (1902).

140. *Temperton v. Russell*, 1 Q.B. 715 (1893).

141. Usually this tort may not be grounded on a negligent act. *Woodbridge Manufacturing Co. v. United States*, 235 F.2d 513 (D.C. Cir. 1956) (holding no remedy for negligent delay in producing a report caused plaintiff loss of contract). *But see J'Aire Corp. v. Gregory*, 598 P.2d 60 (Cal. 1979) (permitting recovery for negligence through balancing test assessing foreseeability and moral blame). *Contra* RESTATEMENT (SECOND) OF TORTS § 766C (1979).

142. PROSSER, *LAW OF TORTS*, *supra* note 98, at 1021.

143. See *Martell v. White*, 69 N.E. 1085 (Mass. 1904) (claiming free competition in best interests of society).

144. See RESTATEMENT (SECOND) OF TORTS § 768 (1979).

145. *Tuttle v. Buck*, 119 N.W. 946 (Minn. 1909). See also *Dunshee v. Standard Oil Co.*, 132 N.W. 371 (Iowa 1911) (malicious intent to injure business rival vitiates competition privilege).

146. *Rager v. McClosky*, 111 N.E.2d 214 (N.Y. 1953).

through improper intentional conduct.¹⁴⁷ Most jurisdictions follow this rule, but a minority place the persuasive and productive burden upon the defendant.¹⁴⁸

Applying this tort theory to SDAR operators yields the following result. SDAR operators intentionally interfere with the prospective contractual relations of the wireless providers by using repeaters that completely render the cellular devices inoperable. People, desiring cellular service, will choose another cellular provider having devices that work despite the repeaters. The affected provider suffers the loss of these would be customers. Not only are SDAR operators liable for those who choose another provider, but also for those existing customers who decide not to renew their contract.

Once improper intentional conduct is found the elasticity of the tort provides the wireless provider with a more than adequate remedy. Showing wrongful conduct, SDAR operators become liable for a tremendous amount of loss. Notice the difficulty in succeeding under the tort if the FCC rules governing repeaters authorize tolerable interference. In that situation SDAR operators may raise the bona fide defense of honestly and in good faith complying with these rules.

SDAR is not competing with cellular service. SDAR provides radio, while wireless providers offer the means to communicate via cellular telephone. If a court could define competition in regards to spectrum allotment, then a grievance with the FCC would lie. The court would be powerless other than to send the litigants to the FCC only to have them return on an appeal from an unfavorable decision to scrutinize the license denial or change of frequency.

Proof of damages under this theory may be a hard task for wireless providers. To establish subscribers failed to renew their contract as a result of the interference takes evidence. The sufficiency of simply asserting subscribers failed to renew on the sole basis of the SDAR interference is questionable. A determination of customer loss due to reasonable competition from other wireless providers would mitigate the loss. To prove a non-renewing customer's reason for doing so would require a solicitation and receipt from each subscriber as to the reason for leaving the provider. The proof of profits lost from prospective customers may be easier, given that an ascertainable amount of new subscribers could be calculated. The projection is subject to dispute on the grounds of accuracy, and experts may battle over the appropriate amount of loss—leaving a jury to believe the more persuasive one.

C. The Prima Facie Tort

An examination of the applicability of the prima facie tort to the SDAR situation concludes the survey of tort causes of action.¹⁴⁹ The constitutive elements of the tort vary in different jurisdictions. There are two leading formulations. The first is an intentional lawful act by the defendant done with

147. RESTATEMENT (SECOND) OF TORTS § 766B (1979).

148. See *Alyeska Pipeline Service Co. v. Aurora Air Service Inc.*, 604 P.2d 1090 (Alaska 1979) (maintaining burden on plaintiff to prove interference improper).

149. On the history of the prima facie tort see generally Jack E. Brown, *The Rise and Threatened Demise of the Prima Facie Tort Principle*, 54 NW. U. L. REV. 563 (1959).

the purpose to cause injury resulting in harm to the plaintiff performed without justification.¹⁵⁰ The other is an infliction of intentional harm causing damage to the plaintiff by an act or series of acts which otherwise would be lawful lacking excuse or justification.¹⁵¹ In both formulations the tort will not lie if another normative tort satisfies the evidence presented.¹⁵² Yet, a litigant may plead the prima facie tort in the alternative to other conventional torts.¹⁵³

The formulation of the tort arose through the opinion of Justice Holmes in *Aikens v. Wisconsin*¹⁵⁴ where Holmes articulated, “the infliction of temporal damage is a cause of action, which as a matter of substantive law, whatever may be the form of the pleading, requires a justification if the defendant is to escape.”¹⁵⁵ Holmes relied on the English precedent of *Mogul Steamship Co. v. McGregor, Gow & Co.*¹⁵⁶ where Lord Bowen pronounced where one “intentionally [does] that which is calculated in the ordinary course of events to do damage, and which does, in fact, damage another in that other’s property or trade, is actionable if done without just cause or excuse.”¹⁵⁷ Formulation of the tort is pivotal to the cause of action.¹⁵⁸ Much criticism berates the tort as an attempt to state the entirety of tort law in a simple phrase.¹⁵⁹ Despite arguments over the validity of the theory, courts and scholars approvingly hold the tort as a legitimate cause of action.¹⁶⁰

The crucial element of the prima facie tort is the defendant’s motivation to injure the plaintiff by his act.¹⁶¹ Remedy on this theory rests on proving the

150. *Porter v. Crawford & Co.*, 611 S.W. 265 (Mo. App. 1980); *Plant v. Woods*, 57 N.E. 1011, 1014 (1900) (describing lawful unlawful act distinction).

151. *ATI, Inc. v. Ruder & Finn, Inc.*, 368 N.E.2d 1230, 1232 (N.Y. App. 1977). See also *Langan v. First Trust & Deposit Co.*, 59 N.E.2d 424 (N.Y. App. 1944); *Beardsley v. Kilmer*, 140 N.E. 203 (N.Y. App. 1923) (legally recognized justification necessary). See generally W.E. Shipley, Annotation, *Prima Facie Tort*, 16 A.L.R.3d 1191, 1220-7 (2001).

152. *Bandag of Springfield, Inc. v. Bandag, Inc.*, 662 S.W.2d 546, 552 (Mo. App. 1983) (holding where plaintiff’s evidence established normative tort no prima facie recover also).

153. See *Burns Jackson Miller Summit & Spitzer v. Linder*, 451 N.E.2d 459 (1983) (announcing double recovery not possible under prima facie and normative tort); *Board of Educ. of Farmingdale Union Free School Dist. v. Farmingdale Classroom Teachers Assn., Inc.*, 343 N.E.2d 278 (1975) (same).

154. 195 U.S. 194 (1904).

155. *Id.* at 204.

156. 23 Q.B.D. 598 (1889) *aff’d* 1892 A.C. 25 (H.L.).

157. *Id.* at 613.

158. At least one court held wrongful conduct need not reside strictly within the bounds of prima facie tort. The plaintiff may recover on the misconduct regardless of whether prima facie is proved. *Penn-Ohio Steel Corp. v. Allis Chambers Mfg. Co.*, 184 N.Y.S.2d 58, 62 (1959). See also *Morrison v. Nat’l Broad. Co.*, 266 N.Y.S.2d 406 (1965), *rev’d on other grounds*, 280 N.Y.S.2d 641 (1967) (allowing prima facie recovery for conduct not clearly within normative torts); *Ratcliffe v. Evans*, 2 Q.B. 524 (1892) (holding false statement inducing plaintiff’s cession of business prima facie tortious).

159. See Dan Dobbs, *Tortious Interference with Contractual Relations*, 34 ARK. L. REV. 335, 345 (1980).

160. Sir Frederick Pollock held the doctrine as validating that all willful harmful deeds are actionable. FREDRICK POLLOCK, *POLLOCK’S LAW OF TORTS; A TREATISE ON THE PRINCIPLES OF OBLIGATIONS ARISING FROM CIVIL WRONGS IN THE COMMON LAW* 17-18 (P.A. Landon ed., 15th ed. 1951). See also *Tuttle v. Buck*, 119 N.W. 946 (1909); Joseph w. Glinn, Note, *Prima Facie Tort*, 11 CUM. L. REV. 113 (1980); Morris D. Forkosch, *An Analysis of The “Prima Facie Tort” Cause of Action*, 42 CORNELL L.Q. 465 (1957); Note, *The Prima Facie Tort Doctrine*, 52 COLUM. L. REV. 503 (1952); Oliver Wendell Holmes, *Privilege, Malice and Intent*, 8 HARV. L. REV. 1 (1894).

161. See *Burns Jackson Miller Summit & Spitzer v. Linder*, 451 N.E.2d 459 (1983) (asserting proof of disinterested malevolence necessary); *Marcella v. Arp Films, Inc.*, 778 F.2d 112 (2d Cir. 1985) (explaining presence of other motives, profit, self-interest, business advantage, vacates prima facie claim).

defendant's sole desire was harm to the plaintiff.¹⁶² If conflicting or additional motives exist the action fails.¹⁶³ Of equal importance is whether the act of the defendant is lawful.¹⁶⁴ An unlawful act of the defendant nullifies the prima facie tort.¹⁶⁵

This tort theory covers the situation where the FCC codifies rules governing terrestrial repeaters and interference continues to result. An exploration of the motivation of SDAR operators must first be undertaken. SDAR operates repeaters in compliance with FCC regulations. Their motivation is first to conduct a service providing satellite radio to their subscribers. Yet, SDAR operators are aware of the interference caused to the wireless providers. Repeater operators continue to operate and SDAR providers make no effort to mitigate the technological interference. The motivation for operation of repeaters on a corporate level is to provide service, and without the repeaters a considerable amount of customers would not obtain service. SDAR operators, therefore, use their repeaters implicitly to injure the wireless providers. Without the repeaters wireless providers could conduct business as usual, but SDAR operators would not be able to broadcast their service to large urban centers without repeaters. Therefore SDAR operators utilize repeaters to intentionally interfere with wireless device operation with the motivation to harm the wireless providers by rendering their devices inoperable.

With SDAR operators' motivation, intent, and harm established, a discussion of justification follows.¹⁶⁶ Justification or excuse posits an absolute defense to a prima facie tort action.¹⁶⁷ SDAR operators' lawful action is neither a justification nor excuse. Action for the public interest is a justification for the intentional harmful act. The amorphous public interest standard is the same paradigm used in determining the grant of an FCC license. If the FCC granted a license for the operation of SDAR, then its continued functioning must be in compliance with the public interest. Yet, the harm caused to wireless providers, whom also have an FCC license declaring their service in the public

162. See *Benton v. Kennedy-Van Saun Mfg. & Eng. Co.*, 152 N.Y.S.2d 955 (1956); *Glenn v. Advertising Publications*, 251 F. Supp. 889, 906 (S.D.N.Y. 1966).

163. See *Korry v. International Tel. & Tel. Corp.*, 444 F. Supp. 193 (1978) (no prima facie tort where other motive exists).

164. See *Bandag of Springfield, Inc. v. Bandag, Inc.*, 662 S.W.2d 546, 554 (Mo. App. 1983) (stating prima facie tort first element proving intentional lawful act); *Morrison v. Nat'l Broad. Co.*, 266 N.Y.S.2d 406 (1965), *rev'd on other grounds*, 280 N.Y.S.2d 641 (1967).

165. See *Opera on Tour, Inc. v. Weber*, 34 N.E.2d 349 (1941). See generally *Skinner & Co. v. Shew & Co.*, 1 Ch. 413 (1893).

166. New York requires a showing of special damages. See *Nichols v. Item Publishers*, 132 N.E.2d 860 (N.Y. App. 1956) (requiring presentation of detailed specific catalog of damages); *Brandt v. Winchell*, 141 N.Y.S.2d 674 (1955) (acknowledging \$200 per week loss wages and revocation of private investigator license sufficient special damages). *But see* *Advance Music Corp. v. American Tobacco Co.*, 70 N.E.2d 401 (N.Y. App. 1946) (holding no special damage required). *Cf.* *Dale System v. Time, Inc.*, 116 F. Supp. 527 (D. Conn. 1953) (reading *Advance Music Corp.* as maintaining special damage, but relaxing strict common-law pleading).

167. See *Lucci v. Engel*, 73 N.Y.S.2d 78 (1947) (otherwise libelous statements justified because spoken in adoption proceeding); *Brandt v. Winchell*, 141 N.Y.S.2d 674 (1955) (addressing impact of injunction as insulating defendant from causing special damages); *Bono Sawdust Supply Co. v. Hahn & Golin*, 159 N.Y.S.2d 725 (1957) (ruling issuance of subpoena executing judgment justifies delivery of instrument and levy of funds).

interest, is substantial. The benefits of SDAR are outweighed by the economics involved in the injury to the wireless providers in urban areas.

The concept of justification relies heavily upon issues of policy, which one prominent jurist believed within the sole discretion of the legislature.¹⁶⁸ In ascertaining whether an action constitutes a privilege or is justified a weighing of legal and policy considerations results. Here SDAR operators may justify their actions on the basis of pursuing a legitimate business interest for economic gain. Lord Bowen found the conspiracy of merchants to offer unprofitable rates in addition to rebating shippers for the purpose of preventing new competition justified.¹⁶⁹ The determination of justification resides in a court with proper jurisdiction weighing the societal benefits of SDAR with those of wireless providers. Taking into account the specific nature of action along with the surrounding factual considerations a court could reason SDAR actions are not justified.

V. CONCLUSION

Looking at the problem from a global perspective the FCC faces a situation similar to the early days of radio where the elimination of interference is paramount to serving the public interest. The FCC must be apprised of the possible private consequences of its actions upon SDAR licensees. Diversity in mass media benefits the entire populace in providing them with programming and viewpoints representative of their desires, yet the price paid for this diversity in the case of SDAR repeaters is tremendous.

Whether a regulatory remedy will adequately address the amount of revenue lost by wireless providers is questionable. The cost of utilizing SDAR technology is the use of wireless services free from interference. The two licensees must be able to co-exist within the electronic spectrum so the populous benefits from both technologies. The locus for a resolution of SDAR interference may not be within the confines of FCC regulations, but within the exercise of private litigation to vindicate the rights of wireless services providers.

The regulation of the electromagnetic spectrum remains the chief duty of the FCC. These private suits enable the wireless service licensees to protect their economic rights while avoiding recourse solely to a regulatory body. For the rights at common law of an individual or corporation should never be completely subsumed within a federal statute or code. Perhaps the proposed tort theories are not the proper focus of litigation for the SDAR situation, but some common law remedy must be appropriate to allow the exercise and protection of those economic rights inherent in corporate and private activity.

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168. See Holmes, *Privilege, Malice and Intent*, 8 HARV. L. REV. 1, 3 (1894).

169. *Mogul Steamship Co., Ltd. v. McGregor*, 23 Q.B.D. 598 (1889), *aff'd*, 1892 A.C. 25 (H.L.).

* On November 21, 2001 a draft copy of this article was submitted to the FCC in response to a Public Notice IB Docket No. 95-91 soliciting comments to the proposed rule-making concerning Satellite Digital Audio Radio Service use of repeaters.

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