

1989

The Aviation Wire Strike Problem: The Duty to Warn of This Aerial Hazard

Peter Andrew Warrick

Recommended Citation

Peter Andrew Warrick, *The Aviation Wire Strike Problem: The Duty to Warn of This Aerial Hazard*, 54 J. AIR L. & COM. 857 (1989)

<https://scholar.smu.edu/jalc/vol54/iss3/7>

This Comment is brought to you for free and open access by the Law Journals at SMU Scholar. It has been accepted for inclusion in Journal of Air Law and Commerce by an authorized administrator of SMU Scholar. For more information, please visit <http://digitalrepository.smu.edu>.

THE AVIATION WIRE STRIKE PROBLEM: THE DUTY TO WARN OF THIS AERIAL HAZARD

PETER ANDREW WARRICK

[Pilots] relate their encounter with a wire in terms that bring to mind an apparition which appears out of nowhere and malevolently rushes at an airplane despite the pilot's best attempts to dodge. A pilot who flies into a tree remembers it that way; a pilot who flies into a wire contends *the wire hit him*.¹

I. INTRODUCTION

TRANSMISSION LINES, power lines, and other such wires create a serious safety hazard to general aviation aircraft² because transmission lines are virtually invisible to the pilot.³ Further, collisions with transmission or

¹ *Wire-Strike Accidents Taking Unobserved Toll*, AVIATION SAFETY, Mar. 1982, at 1.

² W. TURLEY, AVIATION LITIGATION § 2.44, at 130 (1986); K. FADLEY & K. MUSSELWHITE, *Wire and Bird Strike Cases: A Bird's Eye View*, in AIRCRAFT LITIGATION 132 (1984); Kennelly, *The Liability of Utility Companies in Respect to Collisions of Aircraft with Transmission Wires*, 17 TRIAL LAW GUIDE 45 (1973).

³ K. FADLEY & K. MUSSELWHITE, *supra* note 2, at 132 (asserting that "[i]n many cases, wires are not visible to the pilot until the last moment"); Kennelly, *supra* note 2, at 47 (recognizing that "[p]ower cables with their thin lines exposed to weathering become virtually invisible to pilots"); Pitzer, *When Aircraft Hit Utility Wires*, TRIAL, Aug. 1987, at 78, 80 (stating that "[p]ower lines are hazards because they are almost invisible to an aircraft"). The difficulty in perceiving wires is particularly acute with respect to static wires. Static wires serve only as a lightning arrester to protect the conductor wires strung beneath. *See* *Lea v. Baumann Surgical Supplies, Inc.*, 321 So. 2d 844, 849 (La. Ct. App. 1975), *writ denied*, 325 So. 2d 279 (La. 1976) (single engine airplane crashed after striking defendant's static wire while attempting a straight entry landing); *see also* *Florida Power & Light Co. v. Lively*, 465 So. 2d 1270, 1272 (Fla. Dist. Ct. App.), *petition for review denied*, 476 So. 2d 674 (Fla. 1985) (pilot's airplane, while in an emergency situation, collided with the utility company's static wires); *Walker v. Texas Elec. Serv. Co.*, 499

power lines are frequently disastrous to the aircraft and those on board.⁴ An increasing number of aviation accidents involve collisions of general aircraft with utility wires and transmission lines.⁵ There are approximately 250 aviation wire strike accidents annually in the United States.⁶ Wire strike accidents comprise seven to eight percent of all general aviation accidents.⁷ Wire strikes can occur when pilots attempt to land their aircraft,⁸ when pilots fly along rivers,⁹ over lakes¹⁰ and through canyons.¹¹

Courts and commentators who have recognized an affirmative duty to mark or otherwise warn of the presence of utility wires often balance the costs of disclosure with the toll on human life resulting from wire strike accidents.¹² In comparison to the benefit of saving a human life, the cost of adequate warning is negligible.¹³ After

S.W.2d 20, 25 (Tex. Ct. App. 1973) (pilot's airplane struck electric company's static wire as the pilot attempted to land at airport).

⁴ W. TURLEY, *supra* note 2, at 130 (recognizing that such "a collision frequently has disastrous consequences"); Pitzer, *supra* note 3, at 81 (stating that "[m]ost wire strikes result in death"); *see also* Lea, 321 So. 2d at 847 ("The plane . . . crashed to the ground after striking the wire. Both Decedent and [the passenger] were killed instantly."); *Yoffee v. Pennsylvania Power & Light Co.*, 385 Pa. 520, 123 A.2d 636, 638 (1956) (after striking defendants transmission line, "[t]he plane somersaulted into the water and [the pilot] sustained grave injuries from which he died three days later").

⁵ Kennelly, *supra* note 2, at 45.

⁶ Pitzer, *supra* note 3, at 79.

⁷ *Id.* at 79-80. Furthermore, eight to ten percent of the wire strikes occur over rivers and lakes, with most of the strikes occurring below 100 feet. *Id.* at 80.

⁸ *Smith v. Tennessee Valley Auth.*, 699 F.2d 1043, 1045 (11th Cir. 1983) (student pilot struck wire while practicing an emergency landing); *Lively*, 465 So. 2d at 1272 (pilot struck wire while attempting an emergency landing); *Lea*, 321 So. 2d at 847 (pilot struck wire while attempting a landing at a private grass field).

⁹ *Allnutt v. United States*, 498 F. Supp. 832, 834 (W.D. Mo. 1980) (pilot struck wire while flying up the Osage River); *Yoffee*, 385 Pa. at 520, 123 A.2d at 638 (pilot struck wire while flying along the Susquehanna River).

¹⁰ *McCauley v. United States*, 470 F.2d 137, 138 (9th Cir. 1972) (pilot struck wire while flying over the southeastern end of Lake Havasu).

¹¹ *Arizona Pub. Serv. Co. v. Brittain*, 107 Ariz. 278, 486 P.2d 176, 177 (1971) (helicopter pilot hit defendant's power line while maneuvering through Oro Belle Canyon).

¹² *See Yoffee*, 385 Pa. at 520, 123 A.2d at 650; *Judicial and Regulatory Decisions, Obstructions to Air Highways — Duty of Disclosure*, 24 J. AIR L. & COM. 362, 369 (1957).

¹³ *Yoffee*, 385 Pa. Ct. 520, 123 A.2d at 650 (stating that "[i]n comparison to the

balancing the value of human life with the relatively limited cost of disclosing the existence of power lines, these courts and commentators conclude that they must impose a common law duty on utility companies to mark or disclose the presence of power lines.¹⁴

Commentators have also analogized navigable airspace to surface highways.¹⁵ The pilot of a plane, like the driver of an automobile, has a duty to exercise due care so as not to injure the landowner's property.¹⁶ Conversely, the landowner must use his property so as to not interfere with the rights of the pilot to use the nation's airways unobstructed by aerial obstacles.¹⁷ The landowner, therefore, owes equivalent duties to the aviator and to the highway motorist.¹⁸ Hence, the landowner or occupier has a definite duty not only to those around him, but also to those above him.¹⁹

Utility companies on the other hand contend that the erection and maintenance of their transmission poles and lines constitute a beneficial and lawful use of their property.²⁰ They often view the pilot as a trespasser to whom

benefit of saving human life, the cost of a few cans of paint and a few electric bulbs would be negligible"). One commentator has contended that "[r]easonable and inexpensive means have been developed and are in use to give warning and notice of hazardous obstructions to pilots The expense of marking or painting supporting structures in attractive colors so as to stand out in the landscape is very small." Kennelly, *supra* note 2, at 51 (quoting T. Wolcott, *Collisions Between Aircraft and Power Cables Outside Federally Controlled Airways*, Proceedings of 19th Annual ATLA Convention, at 191 (1965)).

¹⁴ See Judicial and Regulatory Decisions, *supra* note 12, at 369.

¹⁵ *Id.* at 364, 367; see also Kim, *Torts: Responsibility of the Landowner to the Airplane Overhead*, 8 HASTINGS L.J. 230, 232-33 (1957).

¹⁶ Kim, *supra* note 15, at 232.

¹⁷ *Id.* at 232-33.

¹⁸ See *id.* at 233; see also Judicial and Regulatory Decisions, *supra* note 12, at 367.

¹⁹ Kim, *supra* note 15, at 233 (stating that "[t]he principles of reasonable care analogous to those applied to travel on the ground could be applied"); Kennelly, *supra* note 2, at 50 (quoting T. Wolcott, *Collisions Between Aircraft and Power Cables Outside Federally Controlled Airways*, Proceedings of 19th Annual ATLA Convention, at 191 (1965)) (stating that "[a]ny landowner or his lessee may make use of his land and the air space over his land so long as such use does not unreasonably interfere with another's right"); see also Judicial and Regulatory Decisions, *supra* note 12, at 364 (recognizing that "[i]t seems justifiable to qualify the landowner's right to utilize the air space above his property to a reasonable use").

²⁰ See *Walker*, 499 S.W.2d at 23 (the electric company alleged that its poles and

little or no duty is owed.²¹ Utility companies have consequently taken the position that if they meet the requisite Federal Aviation Regulations²² there is no affirmative duty to mark or otherwise warn of the presence of transmission lines.²³ Owners of power lines have further contended that, even if a common law duty exists, the possibility of a wire strike does not pose a reasonably foreseeable risk of harm²⁴ or, in the alternative, the pilot's negligence is to blame.²⁵

The question arises whether those who erect and maintain power and transmission lines have an affirmative duty to warn pilots of their presence. Such warning would involve marking, painting or otherwise illuminating power lines and towers.²⁶ The aviation wire strike problem requires balancing two competing interests. Power companies and other such entities have an interest in utilizing their property to its fullest extent without incurring excessive costs.²⁷ On the other hand, pilots have an interest in using the nation's navigable airspace free from the danger

wires constituted "a peaceful, beneficial and lawful use of the premises"); *see also Yoffe*, 385 Pa. at 520, 123 A.2d at 650 (power company contended that "[t]he social value of the electrical industry's contribution to the public interest is beyond computation or description even though it may exact a certain toll of human life as its price").

²¹ *See Walker*, 499 S.W.2d at 23 (electric company alleged that the pilot trespassed when he crashed into the company's wires); *Mills v. Orcas Power & Light Co.*, 56 Wash. 2d 807, 355 P.2d 781, 786 (1960) (power company vigorously contended that the pilot was a trespasser to whom it owed no duty). For further discussion of the pilot as trespasser see *infra* notes 162-171 and accompanying text.

²² *See infra* notes 45-66 and accompanying text for further discussion of federal regulations governing aerial obstructions.

²³ *See Lively*, 465 So. 2d at 1272-73 (power company contended it had no duty to warn of its power lines where it was in compliance with FAA regulations); *Lea*, 321 So. 2d at 852 (power company contended that it did not violate applicable FAA regulations); *Walker*, 499 S.W.2d at 25 (electric company contended that it was in compliance with the applicable federal regulations).

²⁴ *See infra* notes 145-155 and accompanying text.

²⁵ *See infra* notes 157-179 and accompanying text.

²⁶ *See infra* notes 63-70 and accompanying text for further discussion concerning the marking of overhead wires.

²⁷ *See Strother v. Pacific Gas & Elec. Co.*, 94 Cal. App. 2d 525, 211 P.2d 624, 627 (1949); *Kim*, *supra* note 15, at 232; *Judicial and Regulatory Decisions*, *supra* note 12, at 362.

of an undisclosed aerial hazard.²⁸ A conflict of interests, therefore, exists between the pilot's right of free flight and the property owner's right to the reasonable use of his property²⁹ and from this conflict arises the question of adequate warning.³⁰ This article reviews the applicable federal regulations,³¹ case law and relevant commentary pertaining to wire strikes.³²

II. FEDERAL REGULATION

A. *Navigable Airspace*

Generally, the issue in wire strike litigation is whether there is an affirmative duty to warn of power lines.³³ The determination of this question depends on whether the pilot is operating his aircraft in "navigable airspace."³⁴ Congress has effectively created a right of free travel within the country's navigable airspace.³⁵ The applicable federal regulation defines "navigable airspace" as the airspace at or above prescribed minimum flight altitudes, including the airspace needed for a safe takeoff and landing.³⁶

²⁸ See *Yoffee*, 385 Pa. at 520, 123 A.2d at 639; Kim, *supra* note 15, at 232-33.

²⁹ Kim, *supra* note 15, at 232; see *Judicial and Regulatory Decisions*, *supra* note 12, at 362.

³⁰ *Judicial and Regulatory Decisions*, *supra* note 12, at 363 ("[T]o what extent is the surface-user under a duty to disclose the existence of power lines or other artificial obstructions suspended within the air space above his property.").

³¹ See *infra* notes 35-75 and accompanying text for further discussion of the applicable federal regulations.

³² See *infra* notes 77-179 and accompanying text for further discussion of aviation wire strike cases.

³³ See *infra* notes 77-179 and accompanying text for a discussion of aviation wire strike case law.

³⁴ See *infra* notes 35-36 and accompanying text for a discussion of "navigable airspace."

³⁵ Civil Aeronautics Act of 1938, 52 Stat. 980, 49 U.S.C. § 403 (current version at 49 U.S.C. § 1304 (1982)) (providing that "[t]here is recognized and declared to exist in behalf of any citizen of the United States a public right of freedom of transit through the navigable airspace of the United States"). See *Yoffee v. Pennsylvania Power & Light Co.*, 385 Pa. 520, 123 A.2d 636, 639 (1956) (stating that "[t]he right of flight in navigable unused air space is now as constitutionally established as the right to walk through the public square"); see also *Judicial and Regulatory Decisions*, *supra* note 12, at 362.

³⁶ 14 C.F.R. § 1.1 (1988).

Generally the minimum altitude is 500 feet above the surface of the ground³⁷ except in situations involving emergency landings³⁸ or flight over "congested areas."³⁹ This minimum altitude, however, is subject to a further exception.⁴⁰ Where the pilot operates his airplane over "open water" or "sparsely populated areas," section 91.79 of the Federal Aviation Regulations prescribes no specific minimum altitude.⁴¹ For example, a pilot involved in a search and rescue mission may operate his airplane over open water at an altitude lower than 500 feet.⁴² However, even under this exception, the pilot may not operate his aircraft within 500 feet of any person, vessel, vehicle, or structure.⁴³ Under no circumstances may a pi-

³⁷ 14 C.F.R. § 91.79(c) (1988). This section provides that "[o]ver other than congested areas . . . [no person may operate an aircraft below] 500 feet above the surface except over open water or sparsely populated areas." *Id.*

³⁸ 14 C.F.R. § 91.79(a) (1988). This section provides that "no person may operate an aircraft below the following altitudes: (a) *Anywhere*. An altitude allowing, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface." *Id.*

³⁹ 14 C.F.R. § 91.79(b) (1988). When flying "[o]ver any congested area of a city, town, or settlement, or over any open air assembly of persons," no person may operate an aircraft below "an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft." *Id.*

⁴⁰ 14 C.F.R. § 91.79(c) (1988).

⁴¹ *Id.*; see *Yoffee*, 385 Pa. at 520, 123 A.2d at 640-42 (interpreting the "open water" exception).

⁴² Pitzer, *supra* note 3, at 80. One commentator has recognized:

There are many situations where an aircraft, whether an airplane or a helicopter, would be within the § 91.79(c) exception. Search and rescue, police patrol, aerial survey, lake patrol, amphibious operations, and patrol search for illegal aliens all require low level operations, as do private pilots operating within the 14 C.F.R. § 91.79(c) exception.

Id.; cf. Recent Cases, *Violation of CAB Minimum Altitude Regulation as Evidence of Contributory Negligence*, 105 U. PA. L. REV. 125, 129 (1956) (stating that "[t]he CAB recognizes that low flight, although not violating this regulation, may still be unsafe. The open-water and sparsely-populated-areas exceptions to the 500-foot rule were adopted to legalize low altitude flights necessary for utilitarian reasons.").

⁴³ 14 C.F.R. § 91.79(c) (1988); see *Allnutt v. United States*, 498 F. Supp. 832, 842-43 (W.D. Mo. 1980) (defendant offered testimony "to support the proposition that decedent violated § 91.79(c) by flying within 500 feet of a structure — in this case the Three Rivers power line."); cf. Recent Cases, *supra* note 42, at 128-29 (stating that "a recent unreported decision of the CAB ruled that: 'While the 500 feet distance must be maintained from substantial structures, such as multiwire

lot operate his aircraft in a careless or reckless manner thereby endangering the life or property of another.⁴⁴

B. *Obstructions*

In ascertaining whether an affirmative duty of disclosure should exist, a threshold issue is whether transmission lines and other aerial wires are sufficiently hazardous obstructions to warrant the costs of disclosure. The determination of whether an object constitutes an "obstruction" is governed by Part 77 of the Federal Aviation Regulations.⁴⁵ Part 77 also provides for aeronautical studies of such obstructions "to determine their effect on the safe and efficient use of airspace."⁴⁶

If a person proposes the construction or alteration of an object that may affect air navigation, the Federal Aviation Administration (FAA) may require that person to give "adequate notice."⁴⁷ The FAA uses these notices to determine the possible hazard to air navigation resulting from the proposed construction or alteration⁴⁸ and to determine appropriate measures to maintain safety of air

power lines which are supported on large steel bases, single (indeed, hardly visible) structures like a single wire strung from ordinary telephone or telegraph poles in a rural area, are not within the meaning of the section's prohibition.'").

⁴⁴ 14 C.F.R. § 91.9 (1988). This section provides that "[n]o person may operate an aircraft in a careless or reckless manner so as to endanger the life or property of another." *Id.*

⁴⁵ 14 C.F.R. pt. 77 (1988). "This part . . . [e]stablishes standards for determining obstructions in navigable airspace." 14 C.F.R. § 77.1(a) (1988).

⁴⁶ 14 C.F.R. § 77.1(c) (1988). Part 77 also provides "for public hearings on the hazardous effect of proposed construction or alteration on air navigation, . . . for establishing antenna farm areas," and "[s]ets forth the requirements for notice to the Administrator of certain proposed construction or alteration." 14 C.F.R. §§ 77.1(b), (d), (e) (1988).

⁴⁷ 14 C.F.R. §§ 77.11, .13, .17 (1988). "This subpart requires each person proposing any kind of construction or alteration described in § 77.13(a) to give adequate notice to the Administrator." 14 C.F.R. § 77.11(a) (1988). "Except as provided in § 77.15, each sponsor who proposes any of the . . . construction or alteration [provided for in section 77.13(a)(1)-(5)] shall notify the Administrator in the form and manner prescribed in § 77.17." 14 C.F.R. § 77.13(a) (1988).

⁴⁸ 14 C.F.R. § 77.11(b)(2) (1988). This section states that "[n]otices received . . . provide a basis for . . . [d]eterminations of the possible hazardous effect of the proposed construction or alteration on air navigation." *Id.*

navigation.⁴⁹ The FAA requires notice of proposed construction or alteration where the object to be erected or altered is 200 feet or more in height above ground level or where the object is in the proximity of a public airport.⁵⁰ Thus, a utility company or other entity planning to install or alter transmission towers and wires is only required to file a notice of construction with the FAA where the towers or wires are more than 200 feet above the ground or in the proximity of a public airport. The utility

⁴⁹ 14 C.F.R. § 77.11(b)(4) (1988). Section 77.11(b)(4) states that “[n]otices received . . . provide a basis for . . . [d]etermining other appropriate measures to be applied for continued safety of air navigation.” *Id.* Notices received under this subpart also provide a basis for “[r]ecommendations for identifying the construction or alteration” pursuant to the FAA Advisory Circular entitled “Obstruction Marking and Lighting” and for “[c]harting and other notification to airmen of the construction or alteration.” 14 C.F.R. §§ 77.11(b)(3), (5) (1988). For further discussion of charting wires see *infra* notes 56-59 and accompanying text.

⁵⁰ 14 C.F.R. § 77.13(a) (1988). Section 77.13(a) provides, in relevant part, that notice is required for any of the following constructions or alterations:

- (1) Any construction or alteration of more than 200 feet in height above the ground level at its site.
- (2) Any construction or alteration of greater height than an imaginary surface extending outward and upward at one of the following slopes:
 - (i) 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport specified in paragraph (a)(5) of this section with at least one runway more than 3,200 feet in actual length, excluding heliports.
 - (ii) 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of each airport specified in paragraph (a)(5) of this section with its longest runway no more than 3,200 feet in actual length, excluding heliports.
 - (iii) 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of each heliport specified in paragraph (a)(5) of this section
- (5) Any construction or alteration on any of the following airports (including heliports):
 - (i) An airport that is available for public use and is listed in the Airport Directory of the current Airman's Information Manual or in either the Alaska or Pacific Airman's Guide and Chart Supplement.
 - (ii) An airport under construction, that is the subject of a notice or proposal on file with the Federal Aviation Administration, and, except for military airports, it is clearly indicated that airport will be available for public use.
 - (iii) An airport that is operated by an armed force of the United States.

Id.; see W. TURLEY, *supra* note 2, at 130.

company's duty to provide the FAA with notice of proposed construction near airports, however, does not apply to private airports which are not federally licensed.⁵¹

Notices also provide a basis for charting the proposed construction or alteration.⁵² For example, a power line generally will be charted if it is of landmark value or is considered an obstruction to air navigation.⁵³ Most wires, however, will not appear on an aeronautical chart.⁵⁴ Therefore, the pilot operating his plane at an altitude below 200 feet should not expect to rely safely on an aeronautical chart to indicate where wires are located.⁵⁵

Section 77.23 of the Code of Federal Regulations establishes standards for determining whether an object is an obstruction to air navigation.⁵⁶ Height and landmark value are the major factors involved in this determination.⁵⁷ Generally, an existing or future object is an obstruction to air navigation if it is more than 500 feet above

⁵¹ See W. TURLEY, *supra* note 2, at 132 (stating that "[t]he utility company's duty to notify the FAA of proposed construction near airports does not apply to private landing strips which are not licensed airports under federal law"); see also *Lea v. Baumann Surgical Supplies, Inc.*, 321 So. 2d 844, 851-52, 855 (La. Ct. App. 1975), *writ denied*, 325 So. 2d 279 (La. 1976) (concluding that part 77 does not apply to private airports).

⁵² 14 C.F.R. § 77.11(b)(5) (1988).

⁵³ K. FADLEY & K. MUSSELWHITE, *supra* note 2, at 132-33; see also *Allnutt v. United States*, 498 F. Supp. 832, 840 (W.D. Mo. 1980). "[A]ny surface feature that is useful for navigational purposes when flying according to visual flight rules (VFR) is something of landmark value." *Id.* at 840 n.11.

⁵⁴ *Wire-Strike Accidents*, *supra* note 1, at 4. "Most wires will not be charted. Because powerlines cross our sectional charts regularly, we may be lulled into thinking every powerline is depicted. In fact, the powerlines that are present are those likely to be useful for navigation (i.e., the ones which can be seen from a safe altitude)." *Id.*

⁵⁵ *Id.* at 5.

⁵⁶ 14 C.F.R. § 77.23 (1988). The standards for determining obstructions under section 77.23 apply to "existing and proposed manmade objects, objects of natural growth and terrain" and those objects requiring notice under section 77.13(a). 14 C.F.R. § 77.21 (1988). Since notice is not required for private airports under section 77.13(a), the obstruction standards should also not apply to private airports. See *supra* notes 50-51 and accompanying text.

⁵⁷ See K. FADLEY & K. MUSSELWHITE, *supra* note 2, at 136; see also *Columbia Helicopters, Inc. v. United States*, 314 F. Supp. 946, 947 (D. Or. 1969) (stating that "[t]ransmission lines which are suspended at exceptionally high elevations, over large rivers, or near airports are obstructions").

ground level⁵⁸ or is within close proximity of a public airport.⁵⁹

Further, the FAA may conduct an aeronautical study to determine whether the effect of the proposed construction or alteration of an object would constitute a hazard to air navigation.⁶⁰ Once the FAA has concluded that a particular object is a hazard, the FAA will recommend that the obstruction be marked and/or lighted.⁶¹ The FAA, however, cannot require the marking of these hazardous obstructions.⁶²

An Advisory Circular describes the FAA standards for marking and lighting obstructions identified by Federal Aviation Regulations (FAR) Part 77.⁶³ According to this

⁵⁸ 14 C.F.R. § 77.23(a)(1) (1988). Section 77.23(a)(1) provides that "[a]n existing object, is, and a future object would be, an obstruction to air navigation if it is greater than . . . [a] height of 500 feet above ground level at the site of the object." *Id.*

⁵⁹ 14 C.F.R. § 77.23(a)(2) (1988). Section 77.23(a)(2) provides that an object is an obstruction if it is greater than:

A height that is 200 feet above ground level or above the established airport elevation, whichever is higher, within 3 nautical miles of the established reference point of an airport, excluding heliports, with its longest runway more than 3,200 feet in actual length, and that height increases in the proportion of 100 feet for each additional mile of distance from the airport up to a maximum of 500 feet.

Id.

⁶⁰ 14 C.F.R. §§ 77.31, 77.33 (1988). The FAA conducts an aeronautical study when the sponsor requests such notice, when notice is submitted for construction or alteration under section 77.13(a) or "[w]hen the FAA determines it appropriate." 14 C.F.R. § 77.33 (1988). "When reviewing a decision of the FAA to classify an obstruction as a hazard, the court only will reverse a determination if there is substantial evidence against the decision. While reviewing the evidence, the court will be 'mindful of the FAA's expertise in these matters.'" K. FADLEY & K. MUSSELWHITE, *supra* note 2, at 137.

⁶¹ K. FADLEY & K. MUSSELWHITE, *supra* note 2, at 137.

⁶² *Id.* As a practical matter, "the agreement to mark and/or light a hazard may be 'negotiated' as part of a no-hazard determination. Additionally, the Federal Communications Commission may refuse to issue construction permits for unmarked/unlighted obstacles." *Id.* at 137 n.38.

⁶³ FEDERAL AVIATION ADMINISTRATION ADVISORY CIRCULAR 70/7460-1G, OBSTRUCTION MARKING AND LIGHTING i (1985) [hereinafter ADVISORY CIRCULAR]. For the installation of markers, the Advisory Circular provides:

(a) *Spacing.* Spherical markers should be spaced equally along the wire at intervals of 200 feet (61m), or fraction thereof. *More markers should be used in critical areas such as on power lines near approach and departure ends of runways.* The spheres should be displayed on the high-

Circular, the owner of any object that exceeds a height of 200 feet or exceeds any Part 77 obstruction standard should mark and/or light such object to assure that it is sufficiently conspicuous.⁶⁴ The Circular further indicates that the owner of an object which does not exceed a Part 77 obstruction standard may, nevertheless, have to mark and/or light the object because its particular location creates a danger to aviation safety.⁶⁵ Thus, the Advisory Circular recognizes that a utility company or other such entity might have an affirmative duty to mark its power lines not only where such lines constitute an obstruction under Part 77, but also where, in light of their location, the wires may impair aviation safety.⁶⁶

Under the Advisory Circular, where marking is recommended, spherical markers are normally displayed on overhead wires.⁶⁷ For extensive catenary wires suspended across canyons, lakes and rivers, the diameter of the

est wire, or by another means at the same height as the highest wire. Where there is more than one wire at their highest point, the spheres may be installed alternately along each wire if the distance between adjacent spheres meets the spacing standard. This method will allow the weight and wind loading factors to be distributed.

(b) *Pattern.* An alternating color scheme provides the most conspicuity against all backgrounds. Mark overhead wires by alternating solid colored spheres of aviation orange, white, and yellow. Normally an orange sphere is placed at each end of a line and the spacing is adjusted (not to exceed 200 feet) to accommodate the rest of the spheres. When less than four spheres are used, they should all be aviation orange.

Id. at 9 (emphasis added).

⁶⁴ *Id.* at 3. According to this Circular, “[t]o assure aeronautical conspicuity, any temporary or permanent object, or portion thereof, that exceeds an overall height of 200 feet . . . or exceeds any obstruction standard contained in FAR Part 77 . . . should normally be marked and/or lighted.” *Id.*

⁶⁵ *Id.* The Circular provides that “[a]n object that does not exceed any Subpart C standard may indicate, by its particular location, a need to be marked and /or lighted in order to promote aviation safety.” *Id.* However, “an FAA aeronautical study may reveal that the absence of such marking and/or lighting will not impair aviation safety.” *Id.*

⁶⁶ *Id.* Further, “Advisory Circulars may be admissible as evidence of a standard of care for the owner of an obstruction.” K. FADLEY & K. MUSSELWHITE, *supra* note 2, at 137-38.

⁶⁷ ADVISORY CIRCULAR, *supra* note 63, at 8. Markers should be a solid color such as “aviation orange, white or yellow.” *Id.*

spherical markers should not be less than thirty-six inches.⁶⁸ The owner of less extensive power lines or power lines in an airport's approach path is permitted to install smaller twenty inch spheres.⁶⁹ Where marking is necessary, the owner of the wires should mark them in a manner sufficiently conspicuous to warn pilots on a potential collision course with the lines of their presence during daylight hours.⁷⁰

The Code of Federal Regulations resolves the conflict between the pilot and the landowner⁷¹ by establishing restrictions on the landowner's right to use his land⁷² and the aviator's right of free flight.⁷³ Under certain circumstances, however, both the pilot and the landowner or utility company may be in literal compliance with the minimum federal standards when a wire strike occurs. For example, a pilot, while operating his aircraft over "open water" or a "sparsely populated area," may collide with a utility company's transmission line suspended at an altitude of 150 feet. Under such a scenario, both the pilot and the power company are in compliance with the applicable federal statutes,⁷⁴ yet a definite conflict still exists.

Furthermore, Part 77, concerning obstruction marking and lighting, may not apply to private airports.⁷⁵ As a result, a foreseeable danger or conflict exists between the utility company, whose transmission wires adjoin a private

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ *Id.* at 5, 8.

⁷¹ See *supra* note 29 and accompanying text for further discussion of the conflict of interests between utility companies and pilots.

⁷² See *supra* notes 45-70 and accompanying text for further discussion of federal regulations governing aerial obstructions.

⁷³ See *supra* notes 34-44 and accompanying text for further discussion of navigable airspace.

⁷⁴ See *supra* notes 40-42 and accompanying text for further discussion of the "open water" and "sparsely populated areas" exception to the minimum altitude requirement. The power company's line would not constitute an existing obstruction; thus the utility would not have to provide notice of its construction or alteration to the FAA. See 14 C.F.R. §§ 77.23(a), 77.13(a) (1988). For further discussion of federal regulations governing aerial obstructions see *supra* notes 45 and 70 and accompanying text.

⁷⁵ See *supra* notes 51 and 56.

airport, and the local pilot, who requires airspace sufficient to takeoff and land. In light of these examples, it is clear that current federal regulation, at least on its face, does not provide a comprehensive answer to the wire strike problem. The courts, therefore, have attempted to fashion a common law answer to the problem.⁷⁶

III. AVIATION WIRE STRIKE CASES

A. *Liability*

1. *Primary Liability*

Wire strike accidents have generated a large amount of litigation.⁷⁷ Plaintiffs most often bring negligence actions

⁷⁶ See *infra* notes 77-179 for further discussion of the aviation wire strike case law.

⁷⁷ See *Smith v. Tennessee Valley Auth.*, 699 F.2d 1043 (11th Cir. 1983) (action for injuries flight instructor sustained when his plane hit transmission lines while he and a student were engaged in emergency landing procedures); *McCauley v. United States*, 470 F.2d 137 (9th Cir. 1972) (action on behalf of passenger and pilot when their aircraft collided with transmission lines suspended over a lake); *El Paso Natural Gas Co. v. United States*, 343 F.2d 145 (9th Cir. 1965) (owner of airplane sued the United States for the loss of airplane which collided with an aerial span maintained by the Coast Guard); *United States v. Washington*, 351 F.2d 913 (9th Cir. 1965) (state brought action against United States to recover the amount the state had paid to survivors of its employee who died when his plane flew into transmission lines spanning a river valley); *Hahn v. United States*, 535 F. Supp. 132 (D.S.D. 1982) (administratrix of estate of airplane guest brought action where the airplane in which decedent was flying struck transmission line at night); *Allnut v. United States*, 498 F. Supp. 832 (W.D. Mo. 1980) (pilot's survivors brought action when pilot's small plane struck transmission lines suspended over a river); *Columbia Helicopters, Inc. v. United States*, 314 F. Supp. 946 (D. Or. 1969) (action for contribution against United States where passengers on plaintiff's helicopter collided with transmission line suspended over a small creek); *Arizona Pub. Serv. Co. v. Brittain*, 107 Ariz. 278, 486 P.2d 176 (1971) (wife of helicopter pilot brought action for the wrongful death of her husband whose helicopter struck power lines suspended over a canyon); *La Com v. Pacific Gas & Elec. Co.*, 132 Cal. App. 2d 114, 281 P.2d 894 (1955) (action to recover damages incurred when pilot, who was attempting to land his airplane, crashed into electric wires); *Florida Power & Light Co. v. Lively*, 465 So. 2d 1270 (Fla. Dist. Ct. App.), *petition for review denied*, 476 So. 2d 674 (Fla. 1985) (pilot brought action for injuries sustained when his plane collided with static lines while he endeavored to make an emergency landing); *Weber v. Southwestern Bell Tel. Co.*, 209 Kan. 273, 497 P.2d 118 (1972) (action to recover for injuries passenger sustained when airplane's landing gear struck utility's telephone lines while pilot attempted to land at a private airport); *Lea v. Baumann Surgical Supplies, Inc.*, 321 So. 2d 844 (La. Ct. App. 1975), *writ denied*, 325 So. 2d 279 (La. 1976) (widow brought action when

for failure to warn pilots of the presence of utility wires.⁷⁸ These plaintiffs generally contend that the utility company breached a common law⁷⁹ or statutory duty⁸⁰ in failing to physically mark or otherwise warn of the presence of utility wires. Plaintiffs usually contend that the wire creates an unreasonable and foreseeable risk of harm to the unwary pilot, and plaintiffs have brought successful actions for failure to physically mark or otherwise warn of the presence of utility wires.⁸¹

the airplane in which her husband was a passenger struck a transmission wire while pilot was attempting to land at a grass airstrip); *Gunn v. Edison Sault Elec. Co.*, 24 Mich. App. 43, 179 N.W.2d 680 (1970) (action on behalf of passenger who died when the airplane in which he was flying collided with electric wires stretching across a river); *Hughes v. Mississippi Power Co.*, 244 Miss. 326, 141 So. 2d 539 (1962) (plaintiff brought action to recover value of aircraft which was substantially destroyed when it struck a power line while attempting to land on a drag strip); *Dunbeck v. Exeter & Hampton Elec. Co.*, 119 N.H. 4, 396 A.2d 1101 (1979) (helicopter passenger brought action for injuries sustained when helicopter crashed after becoming entangled in wires maintained across a pond); *Yoffee v. Pennsylvania Power & Light Co.*, 385 Pa. 520, 123 A.2d 636 (1956) (administrator of pilot's estate brought action for death of pilot whose airplane struck a transmission line erected by defendant over the Susquehanna River); *Walker v. Texas Elec. Serv. Co.* 499 S.W.2d 20 (Tex. Ct. App. 1973) (joint owners of damaged airplane brought action when their airplane crashed after coming in contact with transmission lines while attempting to land); *Mills v. Orcas Power & Light Co.*, 56 Wash. 2d 807, 355 P.2d 781 (1960) (executrix of decedent's estate brought action for wrongful death of deceased whose plane became entangled in power lines suspended adjacent to airport's runway).

⁷⁸ W. TURLEY, *supra* note 2, at 130.

⁷⁹ See, e.g., *Smith*, 699 F.2d at 1043 (plaintiff sued Tennessee Valley Authority for negligence in failing to mark its line); *Lively*, 465 So. 2d at 1270 (plaintiff claimed utility company had a common law duty to place markers on its static lines); *Mills*, 56 Wash. 2d at 807, 355 P.2d at 781 (plaintiff sued power company for negligence in failing to paint or mark its poles or wires).

⁸⁰ See, e.g., *Allmutt*, 498 F. Supp. at 832 (plaintiff contended the United States was negligent in failing to depict the transmission line on an aeronautical chart in violation of IACC specifications); *Lea*, 321 So. 2d at 844 (plaintiff alleged that power company was negligent in failing to properly mark its wires as required by applicable federal regulations); *Strother v. Pacific Gas & Elec. Co.*, 94 Cal. App. 2d 525, 211 P.2d 624 (1949) (plaintiff contended power company was negligent in constructing and maintaining its power lines contrary to the rules of the United States Civil Aeronautics Administration). For further discussion of the wire strike cases see *infra* notes 82-179 and accompanying text.

⁸¹ See *infra* notes 82-143 and accompanying text for discussion of plaintiffs' successful wire strike actions.

a. *Utilities*

*Yoffee v. Pennsylvania Power & Light Co.*⁸² is perhaps the leading case imposing a common law duty upon a power company to mark lines to warn aircraft pilots of their existence. In *Yoffee*, a pilot, while flying his Piper Cub southward along the Susquehanna River in Pennsylvania, struck the defendant's power line at a point 185 feet above the river.⁸³ The plaintiff, the administrator of the pilot's estate, contended that the defendant had suspended its wires across the river in a manner that made them invisible to pilots.⁸⁴ The plaintiff further contended that the supporting towers were hidden behind trees and other vegetation rendering them imperceptible to pilots approaching the defendant's transmission line.⁸⁵ As a result of the collision, the plane crashed into the water and the pilot suffered serious injuries from which he subsequently died.⁸⁶

The plaintiff instituted a wrongful death action against the defendant power company, but the trial court entered a non-suit against the plaintiff.⁸⁷ The trial court concluded that the defendant owed no duty to the plaintiff.⁸⁸ The trial court further concluded that the plaintiff was contributorily negligent, in violation of state and federal law, in flying in an area where he had no reason to be at

⁸² 385 Pa. 520, 123 A.2d 636 (1956).

⁸³ *Id.* at 520, 123 A.2d at 638. The defendant, Pennsylvania Power & Light Company, used the elevations on either side of the river for the construction of steel towers from which it suspended an electrical transmission line. *Id.* The forty-foot high towers were "planted, respectively, atop the eastern hill which is 680 feet high, and on the western hill which is 657 feet high." *Id.* The copper line was 5,515 feet in length and, since the distance between the towers was only 5,366 feet, a sag in the line brought it to a low point of 125 feet above the river. *Id.*

⁸⁴ *Id.* at 520, 123 A.2d at 642. The administrator of the pilot's estate brought an action in trespass against the Pennsylvania Power & Light Company. *Id.* at 520, 123 A.2d at 639.

⁸⁵ *Id.* at 520, 123 A.2d at 642. The defendant denied both of these contentions.

⁸⁶ *Id.* at 520, 123 A.2d at 638-39.

⁸⁷ *Id.* at 520, 123 A.2d at 639. The Court of Common Pleas of Dauphin County asserted that the "plaintiff failed to prove the defendant negligent and that the evidence showed the decedent to have been guilty of contributory negligence." *Id.* at 520, 123 A.2d at 639.

⁸⁸ *Id.* at 520, 123 A.2d at 645.

such an unusually low altitude.⁸⁹ On appeal, the Pennsylvania Supreme Court reversed.⁹⁰

The Pennsylvania Supreme Court in *Yoffee* initially concluded that federal law "would predominate" over Pennsylvania law and, therefore, the applicable regulation was section 60.17 of the Civil Air Regulations.⁹¹ The court, contrary to the lower court's decision, further concluded that the pilot was flying over "open water" and was within the section 60.17(c) navigable airspace exception.⁹² The Pennsylvania Supreme Court concluded that the controverted facts rendered it impossible for the trial court to decide as a matter of law that the decedent's low altitude was the proximate cause of the collision.⁹³

According to the court, the defendant power company owed the pilot more than a negative duty.⁹⁴ The court recognized that a transmission line is a dangerous instrumentality requiring its owner to exercise a high degree of care.⁹⁵ In light of the plaintiff's evidence concerning the

⁸⁹ *Id.* at 520, 123 A.2d at 639-43.

⁹⁰ *Id.* at 520, 123 A.2d at 650. For further discussion of *Yoffee* see Recent Cases, *supra* note 42.

⁹¹ *Yoffee*, 385 Pa. at 520, 123 A.2d at 640. The *Yoffee* court stated that "[i]f there were conflict between the Pennsylvania regulations and the Federal regulations the latter would predominate." *Id.* at 520, 123 A.2d at 640. However, "aside from the superiority of Federal regulations," the *Yoffee* court recognized that "the facts in the case specifically adapt themselves to the Federal regulations since the pilot at the time of the fatal mishap was flying over 'open water,' the situation described under Subsection (c) of Regulation 60.17." *Id.* at 520, 123 A.2d at 640.

⁹² *Id.* at 520, 123 A.2d at 640-42. Section 60.17(c), in relevant part, stated that "no person shall operate an aircraft below . . . [a]n altitude of 500 feet above the surface, except over open water or sparsely populated areas." *Id.* at 520, 123 A.2d at 640. Section 60.17(c) is almost identical to current section 91.79(c). See 14 C.F.R. § 91.79(c) (1988). For further discussion of section 91.79(c), see *supra* notes 37-43 and accompanying text.

⁹³ *Yoffee*, 385 Pa. at 520, 123 A.2d at 642.

⁹⁴ *Id.* at 520, 123 A.2d at 645 ("the duty not to improperly use its property so as to injure him"). The trial court had accepted defendant's contention that the decedent was a trespasser and, as a trespasser, owed the decedent no affirmative duty to mark or otherwise warn of the presence of its lines. *Id.* at 520, 123 A.2d at 644-45. For further discussion of the pilot as trespasser, see *infra* notes 159-168 and accompanying text.

⁹⁵ *Yoffee*, 385 Pa. at 520, 123 A.2d at 645. The *Yoffee* court stated, "[t]hat a transmission line is a dangerous instrumentality is recognized everywhere. No matter where located it is a source of grave peril and the law requires that the possessor

location of the transmission wire,⁹⁶ past collisions with the defendant's line⁹⁷ and the relative invisibility of the towers and transmission wires,⁹⁸ the Pennsylvania Supreme Court reversed the lower court's ruling.⁹⁹

Helicopters, as well as airplanes, have been the subject of aviation wire strike litigation.¹⁰⁰ In *Arizona Public Service Co. v. Brittain*,¹⁰¹ the Arizona Supreme Court held the utility company liable for its failure to mark a copper transmission wire suspended in the Oro Belle Canyon. In *Brittain*, a helicopter pilot undertook a charter flight to the Lone Silver Mine.¹⁰² In the Oro Belle Canyon area, the helicopter struck the wires of the defendant's distribution power line.¹⁰³ The evidence disclosed that the wires had

of such an instrumentality exercise a high degree of care." *Id.* at 520, 123 A.2d at 645.

⁹⁶ *Id.* at 520, 123 A.2d at 646.

⁹⁷ *Id.* at 520, 123 A.2d at 648-49. The plaintiff produced evidence that on October 7, 1947, an airplane struck defendant's transmission line, and the plaintiff further offered to show that on December 5, 1950, another accident occurred when a helicopter collided with the defendant's line. *Id.* at 520, 123 A.2d at 648-49.

⁹⁸ *Id.* at 520, 123 A.2d at 646-48. The *Yoffe* court stated that "[i]f, in fact, its towers and transmission line were invisible to aviators using their normal faculties for detection, and if as a result of that invisibility or difficulty of detection, the pilot . . . lost his life, the company would be responsible" *Id.* at 520, 123 A.2d at 648.

⁹⁹ *Id.* at 520, 123 A.2d at 650. The Pennsylvania Supreme Court, in summarizing its position, stated:

If the owner of any instrumentality, equipment, or device has reason to believe or expect that an airplane will use the legalized unoccupied air space above his installation and he erects or permits to exist an obstruction which, without fault on the part of the aviator, will do damage to the pilot or his aircraft, the owner of the installation will be as responsible for the damage done the aircraft and its passengers as if he had shot down the aircraft.

Id. at 520, 123 A.2d at 648.

¹⁰⁰ See *Columbia Helicopters, Inc. v. United States*, 314 F. Supp. 946 (D. Or. 1969) (holding that government had no duty to mark transmission line suspended over creek); *Arizona Pub. Serv. Co. v. Brittain*, 107 Ariz. 278, 486 P.2d 176 (1971); *Dunbeck v. Exeter & Hampton Elec. Co.*, 396 A.2d 1101 (N.H. 1979) (holding that electric company's failure to comply with regulatory provisions pertaining to wires had no causal connection to helicopter passenger's accident). For further discussion of *Brittain*, see *infra* notes 101-109 and accompanying text.

¹⁰¹ 107 Ariz. 278, 486 P.2d 176 (1971).

¹⁰² *Id.* at 278, 486 P.2d at 177.

¹⁰³ *Id.* at 278, 486 P.2d at 177. The line was on an approximately 700 foot span of 0.220 inch copper weld wire which was a part of a 1939 distribution line run to

faded over time and readily blended in with the countryside making them difficult to see from the air.¹⁰⁴ The pilot and one of his passengers died as a result of the seventy to one-hundred foot fall following the collision.¹⁰⁵

The defendant asserted that it owed no duty to the deceased as a matter of law because the pilot's collision with its transmission lines was not sufficiently foreseeable.¹⁰⁶ The *Brittain* court concluded, however, that the question of foreseeability was for the trier of fact, especially under the unique circumstances.¹⁰⁷ The court further indicated that the jury could reasonably conclude the accident was foreseeable where the evidence revealed that the utility company had knowledge of a helicopter's unique performance characteristics, that these performance characteristics were especially adaptable to remote areas, that helicopters had been seen operating in the area in question, that the defendant used helicopters in such remote areas for the maintenance of its lines and that three years prior to the present accident a helicopter had collided with a power line in the same general area.¹⁰⁸ Under these circumstances, the court concluded that the jury's judgment holding the defendant negligent was correct.¹⁰⁹

b. *Federal Government*

Courts have also held the federal government liable for

the Ora Belle area to provide electricity to local mines. *Id.* at 278, 486 P.2d at 177.

¹⁰⁴ *Id.* at 278, 486 P.2d at 177. "The evidence indicated that the wires had turned a dull gray color and the poles a dull reddish-brown. The testimony indicated that both the wire and the poles readily blended with the countryside which made them difficult to see from the air." *Id.* at 278, 486 P.2d at 177.

¹⁰⁵ *Id.* at 278, 486 P.2d at 177.

¹⁰⁶ *Id.* at 278, 486 P.2d at 178. The defendant argued that their motions for directed verdict should have been granted because the plaintiff failed to show a duty on the part of the defendant to the deceased. *Id.* at 278, 486 P.2d at 177-78.

¹⁰⁷ *Id.* at 278, 486 P.2d at 178. The *Brittain* court based this conclusion on the "fact that the wire was extremely small, had turned a color similar to the background as viewed from the air, and the irregular pole pattern." *Id.* at 278, 486 P.2d at 178.

¹⁰⁸ *Id.* at 278, 486 P.2d at 179.

¹⁰⁹ *Id.* at 278, 486 P.2d at 181.

failing to mark or warn of transmission lines.¹¹⁰ In *McCauley v. United States*,¹¹¹ the pilot and his passenger died when their plane collided with transmission lines suspended over the southeastern end of Lake Havasu.¹¹² The wire was about ninety-four feet above the water at its lowest point.¹¹³ The facts showed that one other plane had hit the lines prior to this pilot's collision.¹¹⁴ The district court concluded that the government was negligent in failing to mark the lines and the government appealed.¹¹⁵

The government's main argument in defense was that the deceased pilot was negligent as a matter of law for flying in violation of 14 C.F.R. 91.79(c).¹¹⁶ The facts indicated that the pilot operated his plane below 500 feet while in the vicinity of a pleasure boat on the lake.¹¹⁷ The Ninth Circuit, however, concluded that the jury had the right to consider whether the pilot's alleged negligence (in flying too near the boat) was the proximate cause of the subsequent collision between the airplane and the

¹¹⁰ See *Smith v. Tennessee Valley Auth.*, 699 F.2d 1043 (11th Cir. 1983) (there was sufficient evidence for the jury to conclude that TVA had a duty to warn pilots of its transmission line); *McCauley v. United States*, 470 F.2d 137 (9th Cir. 1972) (for discussion of *McCauley* see *infra* notes 111-119 and accompanying text); *United States v. Washington*, 351 F.2d 913 (9th Cir. 1965) (the fact that the pilot knew of the existence of the government's transmission lines did not immunize the government from liability for the death of a passenger).

¹¹¹ 470 F.2d 137 (9th Cir. 1972).

¹¹² *Id.* at 138.

¹¹³ *Id.*

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ *Id.* at 139. For further discussion of section 91.79(c) see *supra* notes 40-43 and accompanying text. Although the government argued on appeal that it was not negligent, the Ninth Circuit concluded that this issue was properly resolved by the trier of fact and, thus, there was no basis for reversal on this point. *Id.* at 138-139. The government also contended that the pilot, if not negligent as a matter of law, was negligent as a matter of fact. *Id.* at 139. However, the Ninth Circuit concluded that, because the question of proximate cause was a question for the trier of fact, this argument, too, must fail. *Id.*

¹¹⁷ *Id.* The Ninth Circuit recognized that "[s]ince it was undisputed that the plane flew below 500 feet while in the vicinity of a pleasure boat on the lake, a regulation intended to protect boats from annoying overflights may indeed have been violated." *Id.*

government's unmarked power line.¹¹⁸ On the basis of facts presented, the Ninth Circuit affirmed the district court's judgment.¹¹⁹

2. Secondary Liability

Where a utility has notified the FAA of its power line construction in close proximity to an airport, the government assumes a duty to warn pilots and other airport users of this potential aerial hazard.¹²⁰ While the government's negligence in failing to warn of this hazard may be considered an intervening and superseding cause of a subsequent wire strike accident,¹²¹ the utility is not necessarily relieved of its duty to warn.¹²² In *Mills v. Orcas Power & Light Co.*,¹²³ the Washington Supreme Court held that, although the proprietors of a public airport had the primary duty to warn of wires suspended adjacent to the airport, the power and telephone companies had a secondary duty to reasonably warn of such lines.¹²⁴ In *Mills*, a pilot was landing when his plane's landing gear caught in the defendants' power and telephone lines.¹²⁵ The pilot died as a result of the collision.¹²⁶

The executrix of the pilot's estate brought a wrongful death action against the Orcas Power and Light Company

¹¹⁸ *Id.* The Ninth Circuit stated that "the trier of fact had the right to consider whether this negligence, if it was negligence, with reference to a boat, was the proximate cause of the subsequent collision between the aircraft and an unmarked power line suspended 94 feet above open water." *Id.*

¹¹⁹ *Id.*

¹²⁰ W. TURLEY, *supra* note 2, at 131.

¹²¹ *Id.*

¹²² *Id.*; see also *Mills v. Orcas Power & Light Co.*, 56 Wash. 2d 807, 355 P.2d 781 (1960).

¹²³ 56 Wash. 2d 807, 355 P.2d 781 (1960).

¹²⁴ *Id.* at 807, 355 P.2d at 791.

¹²⁵ *Id.* at 783. The air strip extended north and south and the south end of the strip was located about 100 feet from the north shoulder of a public highway. *Id.* at 807, 355 P.2d at 783. The power and telephone lines were strung along the highway, which runs east and west, at thirty and twenty feet respectively. *Id.* at 807, 355 P.2d at 783. The angle of the pilot's approach was normal and customary. *Id.* at 806, 355 P.2d at 783.

¹²⁶ *Id.* at 807, 355 P.2d at 783.

and the Inter Island Telephone Company.¹²⁷ The plaintiff alleged the defendants were negligent in failing to mark the poles or the lines.¹²⁸ The trial court dismissed the plaintiff's action, concluding the defendants had no duty to mark the lines.¹²⁹ From this adverse judgment, the plaintiff appealed.¹³⁰

The Washington Supreme Court concluded that the issue on appeal was whether the respondents had a duty as a matter of law to mark the lines.¹³¹ The court initially decided the primary duty of marking the poles and lines was upon the owners and operators of the airport.¹³² When the airport's proprietors failed to meet this duty, the question therefore was whether a secondary duty had passed to the telephone and power companies.¹³³ The respondents contended that the pilot was a trespasser and, as a trespasser, they owed him no duty.¹³⁴ The Washington Supreme Court rejected this argument concluding

¹²⁷ *Id.* at 807, 355 P.2d at 782-83.

¹²⁸ *Id.* at 807, 355 P.2d at 783. The defendant's alleged negligence was that "neither the poles nor the wires had been painted or marked in any manner, and, by the weather process of many years, had faded into a neutral color" rendering them "invisible, or, at least, . . . difficult to observe from a plane . . ." *Id.* at 807, 355 P.2d at 783. The plaintiff's complaint further alleged that the defendants "knew the conditions of the lines endangered planes approaching the field from the south and [had] failed in their duty to mark the lines." *Id.* at 807, 355 P.2d at 783.

¹²⁹ *Id.* at 807, 355 P.2d at 782-83.

¹³⁰ *Id.* at 807, 355 P.2d at 782.

¹³¹ *Id.* at 807, 355 P.2d at 783-84. "Did the respondents, after receiving notice of the hazard, have a duty to correct it?" *Id.* at 807, 355 P.2d at 783.

¹³² *Id.* at 807, 355 P.2d at 784. The *Mills* court explained this primary duty, as follows:

A public airfield extends an implied invitation to aircraft. . . . The law thus places upon proprietors of airfields the obligation to see that the airport is safe for such aircraft as are entitled to use it, and to give proper warning of any danger of which they know or should have known It is the airport operator's duty to warn landing or departing planes as to any structures, manmade or natural, which obstruct the proper general take-off or landing flight way.

Id. at 807, 355 P.2d at 784-85.

¹³³ *Id.* at 807, 355 P.2d at 787. "Was there a secondary duty upon the respondents, so that, when it became clear that the airport had failed in its duty, there devolved upon respondents an obligation to warn landing aircraft of the obstructions?" *Id.* at 807, 355 P.2d at 787.

¹³⁴ *Id.* at 807, 355 P.2d at 786.

that, if the respondents were negligent in causing the pilot to come in contact with the wires, the pilot was not a trespasser.¹³⁵ The court further concluded that, once the respondents acquired knowledge of the danger created by their wires,¹³⁶ they were obligated to request the airport operator to install sufficient warnings.¹³⁷ If the operator refused, the respondents had a duty to mark the lines.¹³⁸ Since the respondents were aware of the dangerous situation,¹³⁹ the Washington Supreme Court held the power and telephone companies had a secondary duty to reasonably mark their wires.¹⁴⁰ On the basis of this holding, the Washington Supreme Court reversed the trial court's judgment.¹⁴¹

These cases indicate that a plaintiff may bring a successful action against a utility company for failure to mark or otherwise warn of the presence of wires. The criteria for imposing a duty to warn are the same as those for imposing a common law duty of care: a foreseeable risk of harm, knowledge of this harm, and the probability of injury aris-

¹³⁵ *Id.* at 807 P.2d at 787. The *Mills* court concluded that "[t]he issue of whether the actual contact was a trespass or not cannot be resolved until the issue of negligence is decided. . . . Thus, if respondents negligently caused the airplane to come into contact with the wires, then there was no trespass upon the wires." *Id.* at 807, 355 P.2d at 787.

¹³⁶ *Id.* at 807, 355 P.2d at 787. The *Mills* court, however, asserted:

From the time immediately after the construction of the airport to such time as respondents acquired knowledge, actual or constructive, of the danger created by the poles and lines, they were entitled to assume that, if the lines did constitute a hazard, the airport would have performed its duty, and that, since the airport did not make any attempt to place warning markers, the lines were not dangerous.

Id. at 807, 355 P.2d at 787.

¹³⁷ *Id.* at 807, 355 P.2d at 787.

¹³⁸ *Id.* at 807, 355 P.2d at 787-88. The court concluded that "[i]f the airport operator refused respondents' requests, then respondents had the duty to place the markers for the safety of incoming aircraft, and could recover their expenses from the airport." *Id.* at 807, 355 P.2d at 787-88.

¹³⁹ *Id.* at 807, 355 P.2d at 790. The court stated that "[r]espondents were fully aware that an airplane coming into contact with its wires was not merely in a dangerous situation, but in one almost surely calamitous." *Id.* at 807, 355 P.2d at 790.

¹⁴⁰ *Id.* at 807, 355 P.2d at 791.

¹⁴¹ *Id.* at 807, 355 P.2d at 791.

ing therefrom.¹⁴² When a utility company places transmission lines or wires in an approach path to an airport or when other planes have collided or nearly collided with the same wires or similar wires located in the same general area, a utility company may have a common law duty to warn of these wires.¹⁴³ Transmission line owners, however, are not liable in all wire strike accidents. Successful defenses are frequently available.¹⁴⁴

B. *Defenses*

1. *No Duty*

Courts have concluded that if a wire or transmission line does not pose an unreasonable or foreseeable risk of harm to air traffic and its presence complies with the Federal Aviation Regulations and any applicable ordinances, the utility company has no duty to warn of its presence.¹⁴⁵

¹⁴² *Id.* at 807, 355 P.2d at 787; *see also* Pitzer, *supra* note 3, at 81 (recognizing that “[i]t is elementary tort law that, as the gravity of the harm increases there is a greater burden of precaution and foresight, even though the likelihood of harm may be small”).

¹⁴³ *See supra* notes 81-141 and accompanying text; *see also* Kennelly, *supra* note 2, at 82.

¹⁴⁴ *See infra* notes 145-179 and accompanying text for further discussion of successful defenses.

¹⁴⁵ *See* W. TURLEY, *supra* note 2, at 131; *see also* Hahn v. United States, 535 F. Supp. 132 (D.S.D. 1982) (court concluded the government had no duty to warn of its transmission line where there was no reason to believe the line posed a hazard to air traffic); Columbia Helicopters, Inc. v. United States, 314 F. Supp. 946 (D. Or. 1969) (court concluded the government had no duty to mark its line where the line was suspended at a low elevation, over a small creek which was miles from any regular flight path and the FAA did not consider it an obstruction); Florida Power and Light Co. v. Lively, 465 So. 2d 1270 (Fla. Dist. Ct. App.), *petition for review denied*, 476 So. 2d 674 (Fla. 1985) (for discussion of *Lively* see *infra* notes 146-156 and accompanying text); Lea v. Baumann Surgical Supplies Inc., 321 So. 2d 844 (La. Dist. Ct. App. 1975), *writ denied*, 325 So. 2d 279 (La. 1976) (court concluded the power company had no duty, statutory or otherwise, to mark its line where the pilot attempted a landing in violation of fundamental principles of safe flying); Hughes v. Mississippi Power Co., 244 Miss. 326, 141 So. 2d 539 (1962) (court concluded the power company owed no duty to the plaintiff pilot where the court concluded the accident was due to the sole negligence of the pilot); Walker v. Texas Elec. Serv. Co., 499 S.W.2d 20 (Tex. Ct. App. 1973) (court concluded the electric company had no duty to mark its wires when the plaintiffs were aware of their existence).

In *Florida Power & Light Co. v. Lively*,¹⁴⁶ the Florida District Court of Appeals concluded as a matter of law that the utility company had no duty to mark its transmission lines. In *Lively*, the plaintiff's single engine airplane collided with the defendant's static wires while attempting an emergency landing.¹⁴⁷ The plaintiff admitted seeing the transmission towers and their heavy transmission lines, but asserted that he could not see the static wires attached to the top of the defendant's transmission towers.¹⁴⁸ While attempting to land on a city street, the plaintiff collided with the defendant's static wires.¹⁴⁹ The plaintiff claimed that the defendant should have foreseen the danger to airplanes created by its power lines and, therefore, had a duty to mark the lines to make them more visible to approaching pilots.¹⁵⁰ On the other hand, the defendant contended as a matter of law that it owed no duty to the pilot.¹⁵¹

The *Lively* court, in light of current authority, concluded that no duty existed as a matter of law where: (1) the height and location of the power lines are in compliance with applicable ordinances and FAA regulations; (2) no record or notice of similar prior accidents involving the power lines exists; and, (3) the construction of the power lines does not create an unreasonable risk of harm.¹⁵² Based on these facts, the court held the defendant had no duty to the plaintiff and, therefore, was not the legal cause

¹⁴⁶ 465 So. 2d 1270 (Fla. Dist. Ct. App.), *petition for review denied*, 476 So. 2d 674 (Fla. 1985).

¹⁴⁷ *Id.* at 1272. The pilot believed his plane was suffering from a fuel starvation problem and decided, while at an altitude of 100 feet, to land on a nearby road. *Id.*

¹⁴⁸ *Id.*

¹⁴⁹ *Id.* The plaintiff admitted that all flight manuals establish that a pilot must stay clear of transmission poles on the assumption that there are wires strung between them. *Id.*

¹⁵⁰ *Id.*

¹⁵¹ *Id.* at 1273. Since the wires were only 102 feet off the ground, failing to mark the static lines did not violate any specific FAA regulations. *Id.* For further discussion of the FAA regulations governing obstructions to navigable airspace see *supra* notes 45-70 and accompanying text.

¹⁵² *Lively*, 465 So. 2d at 1274.

of the plaintiff's injury.¹⁵³

The *Lively* case fairly reflects the rationale of the no duty decisions.¹⁵⁴ As the *Lively* court indicated, courts have been unwilling to conclude the utility has a common law duty where the plaintiff is unable to demonstrate the utility's noncompliance with applicable FAA regulations, prior wire strike accidents involving the lines in controversy or similar lines, a high quantity of aviation activity in the area of the lines, or a construction of the power lines that does not give rise to an unreasonable risk of harm.¹⁵⁵ The plaintiff's negligence has also provided a frequently successful defense.¹⁵⁶

2. Contributory Negligence

The question of contributory negligence is generally present in aviation wire strike litigation because the pilot has the primary responsibility to avoid obstructions.¹⁵⁷

¹⁵³ *Id.* at 1276. The *Lively* court found the evidence indicated the following: (1) "[t]he height and location of the static lines were fully in compliance with FAA regulations;" (2) the plaintiff was the first pilot injured by the power line; (3) under applicable FAA regulations, the plaintiff was required to be at least 500 feet above the towers; and, (4) the accident occurred as a result of "a totally unanticipated emergency." *Id.* at 1274-75. The *Lively* court stated:

Any other result would require all persons and entities lawfully using their land within the approximately 140 square mile airport zoning area to anticipate every possible type of emergency which might occur involving an airplane and guard against it. Telephone lines, guy wires and even clothes lines would have to be marked in anticipation of a possible emergency situation. This is not the law. *One need not anticipate and guard against a happening which would not have arisen but for exceptional or unusual circumstances . . .*

Id. at 1274. The dissenting opinion, however, found the collision to be "entirely foreseeable." *Id.* at 1281. The dissent concluded:

[T]he defendant FPL breached its duty of due care to the plaintiff . . . by failing to mark its non-visible static wires in this case and in arranging its visible transmission wires in trap-like fashion below these static wires — thereby creating an unreasonable risk of harm to low-flying aircraft negotiating an emergency landing in the area.

Id. at 1282.

¹⁵⁴ See *id.* at 1273-74 (reviewing prior case law).

¹⁵⁵ See *supra* note 145 listing relevant case law.

¹⁵⁶ See *infra* notes 157-174 and accompanying text for a discussion of the pilot's contributory negligence as a successful defense.

¹⁵⁷ See W. TURLEY, *supra* note 2, at 131; see also 14 C.F.R. § 91.3(a) (1988) (pro-

Further, where the wires are suspended at a low altitude and not in a well established flight path, the pilot's contributory negligence is often a successful defense.¹⁵⁸ In some earlier decisions, the courts considered the pilot a trespasser and, as a trespasser, the pilot was contributorily negligent as a matter of law.¹⁵⁹

For example, in *La Com v. Pacific Gas & Electric Co.*,¹⁶⁰ the California District Court of Appeals concluded that when the pilot's plane crashed into defendant's electric wire, the pilot was a trespasser and contributorily negligent as a matter of law. In *La Com*, the pilot was attempting to land his airplane at a public airport when he crashed into the defendant's electric poles and wires.¹⁶¹ The plaintiffs, the owner and the pilot of the plane, sued the utility company for damage to the plane and for the pilot's personal inju-

viding that "[t]he pilot in command of an aircraft is directly responsible for, and is the final authority as to, the operation of that aircraft").

¹⁵⁸ See *W. TURLEY*, *supra* note 2, at 131; see also *El Paso Natural Gas Co. v. United States*, 343 F.2d 145 (9th Cir. 1965) (court concluded that pilot, who operated his aircraft at an altitude of 100 feet when within 2,000 feet of a congested area, was contributorily negligent when he collided with the government's aerial span); *La Com v. Pacific Gas & Elec. Co.*, 132 Cal. App. 2d 114, 281 P.2d 894 (1955) (court concluded that the pilot was a trespasser and, therefore, was guilty of contributory negligence as a matter of law); *Strother v. Pacific Gas & Elec. Co.*, 94 Cal. App. 2d 525, 211 P.2d 624 (1949) (court concluded pilot was a trespasser); *Allnutt v. United States*, 498 F. Supp. 832 (W.D. Mo. 1980) (court concluded that, in light of decedent's experience as a commercial pilot and the recognized hazard of low level flight, decedent's conduct in flying at 100 feet over a winding river at 100 m.p.h. constituted contributory negligence); *Mills v. Inter Island Tel. Co.*, 1 Wash. App. 651, 463 P.2d 277 (1969) (court concluded pilot, whose landing approach was unusually low and fast, was contributorily negligent when he crashed into telephone company's wires).

¹⁵⁹ *La Com*, 132 Cal. App. 2d at 114, 281 P.2d at 896 (concluding that the pilot "being a trespasser was guilty of contributory negligence as matter of law"); *Strother*, 94 Cal. App. 2d at 525, 211 P.2d at 627 (concluding that "[b]eing trespassers, the owner of the land owed plaintiff no duty to warn them of the hazard of the wires"). *But see* *Judicial and Regulatory Decisions*, *supra* note 12 at 364 n.13 (recognizing that "the landowner should be regarded as the trespasser to the person of the flyer, rather than the flyer to the property of the landowner"); see also *Mills v. Orcas Power & Light Co.*, 56 Wash. 2d 807, 355 P.2d 781, 788 (1960) (concluding that "to apply the traditional restrictive legal categories of trespasser, licensee, and invitee to an airplane traveling in the space above a person's land is like trying to squeeze a square peg into a round hole").

¹⁶⁰ 132 Cal. App. 2d 114, 281 P.2d 894 (1955).

¹⁶¹ *Id.* at 114, 281 P.2d at 895.

ries.¹⁶² The plaintiffs alleged that the defendant failed to mark its poles and wires and, in this unmarked condition, they constituted a hazard to airplanes using the airport.¹⁶³ The trial court rejected this argument, sustained the defendant's demurrer and entered judgment for the defendant.¹⁶⁴

The issue stated by the court on appeal was whether the electric company was liable as a matter of law for the plaintiff's damages because of the danger created by its wires.¹⁶⁵ The court initially concluded that, in operating his plane at an altitude which was dangerous to those on the ground, the pilot was a trespasser.¹⁶⁶ The court further presumed that, because the wires were lawfully installed prior to the construction of the airport and were presumably visible to an approaching pilot, the pilot deliberately collided with them.¹⁶⁷ Since the pilot was a trespasser, the court held him contributorily negligent as a matter of law and affirmed the lower court's decision.¹⁶⁸

In the more recent case of *Allnutt v. United States*,¹⁶⁹ the district court concluded the pilot was contributorily negligent in operating his plane below levels where an experienced commercial pilot would recognize wires could be suspended. In *Allnutt*, the "Eagle Project" hired the decedent to pilot a 1974 Piper aircraft for the purpose of track-

¹⁶² *Id.* at 114, 281 P.2d at 895. Initially, the plaintiffs jointly sued the airport and the utility company. *Id.* at 114, 281 P.2d at 895. The trial court, however, sustained the defendant's demurrers without leave to amend and the plaintiffs did not appeal this order. *Id.* at 114, 281 P.2d at 895. Subsequently, the plaintiffs filed an amended complaint against the utility alone. *Id.* at 114, 281 P.2d at 895.

¹⁶³ *Id.* at 114, 281 P.2d at 897.

¹⁶⁴ *Id.* at 114, 281 P.2d at 895.

¹⁶⁵ *Id.* at 114, 281 P.2d at 895.

¹⁶⁶ *Id.* at 114, 281 P.2d at 895. The *La Com* court decided that "[m]anifestly the plane here having been operated at an altitude which was dangerous 'to persons or property lawfully on the land' was a trespasser on the land." *Id.* at 114, 281 P.2d at 895.

¹⁶⁷ *Id.* at 114, 281 P.2d at 895-96. The court stated that "we must presume that the plaintiff *La Com* 'knew of the dangerous character of the wires and their exact location and condition, and deliberately moved . . . into them . . .'" *Id.* at 114, 281 P.2d at 896.

¹⁶⁸ *Id.* at 114, 281 P.2d at 896.

¹⁶⁹ 498 F. Supp. 832 (W.D. Mo. 1980).

ing the movement of bald eagles in the mid-Missouri region.¹⁷⁰ The pilot was conducting low level "contact" flying up the Osage River at an altitude of approximately 100 feet when his plane struck the defendant's four power lines.¹⁷¹ The pilot and his two passengers died when the aircraft crashed into the water below.¹⁷²

Since the defendant's power line was not depicted on the pilot's chart, the plaintiffs contended that the United States acting through its sub-agency, the Aeronautical Chart Division (ACD), was negligent in failing to mark the defendant's power lines.¹⁷³ The defendant, on the other hand, contended that it was in complete conformity with the established specifications for inclusion of obstacles on sectional aeronautical charts.¹⁷⁴ The United States further asserted that, even if it was negligent, the decedent was contributorily negligent in operating the aircraft in a careless and negligent manner.¹⁷⁵

In response to the plaintiff's argument, the district court concluded that, since the power lines were not of "landmark value" or above 200 feet, the defendant was not negligent in failing to include the lines on the pilot's chart.¹⁷⁶ On the issue of the decedent's contributory neg-

¹⁷⁰ *Id.* at 834.

¹⁷¹ *Id.* Although there was some controversy in the record regarding the exact height of the defendant's power line, no party asserted that, at its highest point, the power line was higher than 200 feet. *Id.* at 834 n.1.

¹⁷² *Id.* at 835.

¹⁷³ *Id.* The evidence indicated that it was the decedent's practice to review aeronautical charts prior to piloting an airplane and that the defendant's power line was not depicted on the decedent's chart. *Id.* The plaintiff's theory was that there was "operational negligence within the ACD by cartographers who failed to include the Three Rivers power line over the Osage River in violation of the IACC [Inter-Agency Air Cartographic Committee] specifications." *Id.* at 837.

¹⁷⁴ *Id.* The defendant's testimony indicated that "the administrative construction of these IACC specifications presented a consistent view that power lines are only included 1.) if they have landmark value, and/or 2.) if they are above 200 feet in height thereby becoming an obstacle." *Id.* at 839.

¹⁷⁵ *Id.* at 835.

¹⁷⁶ *Id.* at 838-42. Although the court observed that the United States "has a duty . . . to accurately represent those features it attempts to portray" on aeronautical charts, the court concluded that, since the line was below 200 feet in height and was not of "landmark value," the United States was not required to include

ligence, the defendant raised two theories: (1) the decedent was in violation of 14 C.F.R. § 91.9 and § 91.79(c) in operating his aircraft at 100 feet over the Osage River; and (2) the decedent, in flying 100 feet over the Osage River, showed a clear lack of due care regarding a foreseeable risk.¹⁷⁷ As to the defendant's first theory, the district court concluded that a violation of a federal aviation regulation did not constitute negligence as a matter of law.¹⁷⁸ However, as to the defendant's second theory, the district court concluded, in light of the decedent's experience as a commercial pilot and the recognized hazard of wire strikes at low level flights, the decedent was contributorily negligent.¹⁷⁹

IV. A PROPOSAL FOR CONFLICT RESOLUTION

The risk of a wire strike is a recognized hazard of low-level flying and the pilot should carefully consider this risk before he engages in such flight.¹⁸⁰ The pilot of an airplane or helicopter clearly bears primary responsibility for

the line on the chart. *Id.* at 838, 840-41; *see supra* note 53 for further discussion of "landmark value."

¹⁷⁷ *Allnutt*, 498 F. Supp. at 842-43; *see supra* notes 40-44 for further discussion of 14 C.F.R. §§ 91.9, 91.79(c). With regard to section 91.79(c), the defendant proposed that the decedent violated this section "by flying within 500 feet of a structure — in this case, the Three Rivers power line." *Allnutt*, 498 F. Supp. at 843. In regard to the second theory of contributory negligence, the defendant offered testimony indicating that "the risk of a 'wire strike' at low altitudes is, among pilots, a well known hazard of low level flying" and, further, that "an altitude below the 'wire level' — constituted reckless and careless behavior endangering [the pilot] and the lives of his passengers." *Id.*

¹⁷⁸ *Id.* The court stated that "[i]t is to be considered along with all of the other evidence of negligence and proximate causation." *Id.*

¹⁷⁹ *Id.* at 844. The district court concluded:

[I]n light of decedent's great experience as a commercial pilot and the generally recognized extreme hazard of low level flight below levels where wires could be suspended, decedent's conduct in flying the aircraft at 100 feet over the winding Osage River at a speed of approximately 100 m.p.h. was careless and reckless behavior sufficient to find decedent contributorily negligent in the accident

Id.

¹⁸⁰ *See Wire-Strike Accidents*, *supra* note 1, at 4 (recognizing that "[i]f pilots knew the score, they would probably forego the flights along rivers and low over land that precipitate roughly half of all wire strike accidents and two-thirds of all fatal ones"); *see also Allnutt v. United States*, 498 F. Supp. 832, 843-44 (W.D. Mo. 1980)

the operation of his aircraft.¹⁸¹ The pilot, therefore, has a duty of care not only to the landowner below, but also to himself and his passengers. While there are occasions where flight at less than 500 feet is permitted under current federal regulations,¹⁸² flying at this altitude endangers not only the landowner, but the pilot and his passengers as well.¹⁸³ Where not required for utilitarian purposes,¹⁸⁴ flight below 500 feet arguably represents a careless and reckless operation of the pilot's aircraft.¹⁸⁵ Therefore, where the pilot engages in low-level flight for a nonutilitarian reason and intentionally exposes himself to this known risk, he should bear the burden of a resulting wire strike accident.

Wires located in the proximity of airports, however, create a different problem. The potential for harm is foreseeably high. This is true for private as well as public airports. Although pilots who collide with wires while attempting to land are often at fault, wires suspended adjacent to an airport pose an unnecessary additional risk to a pilot's safe landing.¹⁸⁶ Thus, where wires are located near or adjacent to an airport, the owner of the wires should bear a secondary,¹⁸⁷ if not a primary duty to bury the wires or warn of these aerial obstructions.

Power lines, transmission lines, and other such wires

(holding in light of the generally recognized hazard of low level flight, pilot's conduct of flying at 100 feet over river constituted careless and reckless behavior).

¹⁸¹ See *supra* note 157 discussing 14 C.F.R. § 91.3(a), which places the primary responsibility on the pilot.

¹⁸² See *supra* notes 40-42 and accompanying text for further discussion of the "open water" and "sparsely populated areas" exception.

¹⁸³ See *Recent Cases, supra* note 42, at 129 (recognizing that "flight at less than 150 feet as permitted by the regulation in question, while not endangering persons or property on the surface, might still endanger the pilot").

¹⁸⁴ See *supra* note 42 for discussion of utilitarian reasons for low level flight; see also *Wire Strike Accidents, supra* note 1, at 2.

¹⁸⁵ See *Wire-Strike Accidents, supra* note 1, at 2-5.

¹⁸⁶ *Id.* at 5 (stating that "[w]ires within sight of airports are not so easily dismissed. Although our data overwhelming[ly] convince us that a pilot blunder is almost always necessary to strike wires near an airport, there are times when the wires pose an unnecessary extra risk to aviators.").

¹⁸⁷ See *supra* notes 124-141 and accompanying text for further discussion of a secondary duty to warn.

represent a serious hazard to pilots flying in our nation's navigable airspace. The wire strike problem represents a conflict of interests between the property owner or utility and the pilot.¹⁸⁸ The utility's duty to warn must be balanced with the pilot's corresponding duty to the landowner, himself, and his passengers. The federal regulations and the courts have recognized at least a limited duty on the part of the utility or other such entity to warn or disclose of this aerial hazard without expressing a conclusive answer to this current conflict of interests. Existing federal regulations do not provide a comprehensive answer to the wire strike problem.¹⁸⁹ Further, the court's common law duty to warn is at best a post-conflict solution to the wire strike problem. This proposal, it is hoped, provides at least a partial answer to this continuing concern.

¹⁸⁸ See *supra* note 29 and accompanying text for further discussion of the conflict of interests.

¹⁸⁹ See *supra* notes 71-76 and accompanying text.

