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Liability in the Aerial Application of Pesticides

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LIABILITY IN THE AERIAL APPLICATION OF PESTICIDES

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In an increasingly complex agricultural environment, tort law has witnessed the influx of various regulatory statutes and the employment of broadened notions of common law liability. Typical of this change are the laws controlling the aerial application of pesticides. This article considers the case law developments in the area of pesticide spraying through a discussion of the various theories of tort liability: negligence, nuisance, trespass, and strict liability. The author also reviews the statutory requirements imposed upon pesticide applicators that serve as additional grounds for potential tort liability.

INTRODUCTION

One of the most profound agricultural developments in the past century has been the introduction and use of pesticides to control various organisms harmful to crops and animal life. The development of practicable presticides has led to the development of allied industries concerned with the means of applying the pesticides. One of the largest to emerge is the "crop dusting" industry.[1]

Aircraft were being used in agriculture as early as 1919.[2] After World War II, however, the use of aircraft for agricultural purposes greatly increased, and has continued to do so.[3] In 1975, over 200 million acres were treated by professional pilots, at a cost to farmers of over $375 million. It is projected that that use of aircraft in agriculture will continue to increase.[4]

There are two areas of the law which must be of concern to every aerial applicator. The first is composed of the duties imposed on the applicator by the common law which governs him in the

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1. The aerial application of pesticides is referred to in the vernacular as crop dusting or crop spraying. Spraying and dusting are terms referring to the agent in which the chemicals are suspended for purposes of application. As used in this article, unless otherwise specified, the terms will be synonymous.

2. McGreen, *Legal Implications of Agricultural Aviation*, 18 J. AIR L. 399 (1951).

3. Annot., 37 A.L.R.3d 833, 837 (1971).

4. *How the Crop Dusters Make Yields Zoom*, BUS. WK., March 15, 1976, at 58. This article notes:

> In the U.S. last year, 3500 applicators employed 4700 professional pilots to fly 2 million hours and treat more than 200 million acres at a cost of $375 million to farmers.
>
> Dollar volume of the agricultural aviation industry, exclusive of aircraft sales, has grown 10% a year for the past three years . . . .

The increase is projected to be up to 50% in the next four years.

conduct of the activity. The second area consists of the various state and federal regulations with which he must comply.

The problem that has given rise to the development of case law in this area is that of "drift."[5] Drift is a phenomenon which occurs when air is the medium through which the pesticide is applied to the target area; it causes the pesticide to come into contact with areas outside the target. Drift is a function of various factors: the chemical nature of the pesticide, the physical state in which it is applied, the method of application, the volatility of the substance, and atmospheric conditions.[6] Drift is of special importance when aircraft are used for applying pesticides.

> Regardless of the pesticide formulation, the pattern of release from fixed-wing aircraft is from the craft into the air wake created by the wings. The wake carries the material outward to the wingtips, then drops it in a swath of about wingspan width. Two distinct vortices develop at the wingtips. The strong central propeller wash skews the wake to one side of the aircraft. The velocity of the particles is greater in the propeller wash than in the vortices. The wake which an aircraft produces is a function of the weight of the airplane and its load and the configuration of the wing and external applicating equipment . . . .
>
> The configuration of the particle movement behind a helicopter is similar to that of winged aircraft. Outer vortices develop but they are different in intensity due to the change in pitch of the rotor blades. The velocity of the particles is greater at the center of the rotor than in the wash created by the outer blades. Contrary to earlier opinion, the downwash of the helicopter rotor does not, at normal operating speeds, aid in the application of pesticides.

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5. *See, e.g.*, Walton v. Sherwin-Williams Co., 191 F.2d 277 (8th Cir. 1951); Motors Ins. Corp. v. Aviation Specialities, Inc., 304 F. Supp. 973 (W.D. Mich. 1969); Gainey v. Folkman, 114 F. Supp., 231 (D. Ariz. 1953); Sanders v. Beckwith, 79 Ariz. 67, 283 P.2d 235 (1955); Lundberg v. Bolon, 67 Ariz. 259, 194 P.2d 454 (1948); Sullivan v. Voyles, 249 Ark. 948, 462 S.W.2d 454 (1971); W.B. Bynum Cooperage Co. v. Coulter, 219 Ark. 818, 244 S.W.2d 955 (1952); Heeb v. Prysock, 219 Ark. 899, 245 S.W.2d 577 (1952); Kennedy v. Clayton, 216 Ark. 851, 227 S.W.2d 934 (1950); Chapman Chemical Co. v. Taylor, 215 Ark. 630, 222 S.W.2d 820 (1949); Burns v. Vaughn, 216 Ark. 128, 224 S.W.2d 365 (1949); Parks v. Atwood Crop Dusters, 118 Cal. App. 2d 368, 257 P.2d 653 (1953); Jeanes v. Holtz, 94 Cal. App. 2d 826, 211 P.2d 925 (1949); Miles v. A. Arena & Co., 23 Cal. App. 2d 680, 73 P.2d 1260 (1937); Binder v. Perkins, 213 Kan. 365, 516 P.2d 1012 (1973); Jones v. Morgan, — La. —, 96 So. 2d 109 (1957); Gotreaux v. Gary, 232 La. 373, 94 So. 2d 293 (1957); Olmstead v. Reedy, 387 P.2d 631 (Okla. 1968); Hiller v. Rist, 362 P.2d 678 (Okla. 1961); Young v. Darter, 363 P.2d 829 (Okla. 1961); Loe v. Lenhardt, 227 Ore. 242, 362 P.2d 312 (1961); Wieting v. Ball Air Spray, Inc., 84 S.D. 493, 173 N.W.2d 272 (1969); Pitchfork Land & Cattle Co. v. King, 162 Tex. 331, 346 S.W.2d 598 (1961); Aerial Sprayers, Inc. v. Yerger, Hill & Son, — Tex. —, 306 S.W.2d 433 (1957); Ford v. Shallowater Airport, 492 S.W.2d 655 (Tex. Civ. App. 1973); Boyd v. Thompson-Hayward Chemical Co., 450 S.W.2d 937 (Tex. Civ. App. 1970); McPherson v. Billington, 399 S.W.2d 186 (Tex. Civ. App. 1965); Vrazel v. Bieri, 294 S.W.2d 148 (Tex. Civ. App. 1956); Schultz v. Harless, 271 S.W.2d 696 (Tex. Civ. App. 1954).

6. U.S. DEP'T. OF HEALTH, EDUCATION & WELFARE, REPORT OF THE SECRETARY'S COMMISSION ON PESTICIDES AND THEIR RELATIONSHIP TO ENVIRONMENTAL HEALTH 114-15 (1969) [hereinafter cited as SECRETARY'S COMMISSION].

> In fact, above speeds of 15-25 mph forward speed, the helicopter does not exert any greater downwash than a winged aircraft. Only when the helicopter approaches hovering velocities does any significantly greater downwash occur. The spray pattern from helicopters is, however, better than that of an airplane due to the lack of a propeller wake.[7]

The vortices and wake left by aircraft tend to disperse the material into the air in a somewhat random fashion, where meteorological conditions can act on the substance to cause it to impact on areas far removed from the target area. Drift has caused pesticides to come into contact with the earth as far as one hundred miles from the area of application.[8]

Another problem area concerning aerial applicators is of more recent origin. This is the impact which recent federal and state pesticide regulation statutes will have on the applicator. While aerial applicators have long been subject to various regulatory statutes,[9] these new statutes more stringently define the requirements which must be met by both the applicator and the person employing him. These statutes also introduce new uncertainties into the law concerning the liabilities of the aerial applicator. The effect of these recent regulatory schemes will be examined in the third segment of this article.

DEVELOPMENTS IN CASE LAW

The Factual Setting

Case law indicates two common factual settings out of which most crop spraying litigation arises. The first setting is one in which there is a distinct and obvious wrongful act. This act may consist of spraying the wrong field by mistake,[10] of flights over adjacent or nearby property with the spray valves open,[11] or of application of the wrong,[12] or a tainted substance[13] to the fields

7. SECRETARY'S COMMISSION, *supra* note 6, at 105-06. This report contains a detailed analysis of the environmental problems generated by the use of pesticides, as well as an extensive bibliography of the literature related to the various problems discussed. It should be referred to as a primer for any problem encountered in this area.

8. SECRETARY'S COMMISSION, *supra* note 6, at 132. The potential problems created by drift are obvious. Many of the cases to be discussed involved the use of 2-4-D, a selective herbicide which kills broad-leaved plants. This substance may be safely applied to wheat fields to rid them of broad-leaved weeds. Should the substance come into contact with another broad-leaved plant such as alfalfa, however, that plant will also be destroyed. Many cases involve the destruction of crops in adjacent fields through such occurrences. A similar problem can arise with the use of a defoliant to aid in the harvesting of a crop when the substance migrates to nearby fields containing crops not ready for harvest.

9. *See, e.g.*, S.D.C.L. §§ 38-21-1 to -13 (1967) (repealed by 1974 S.D. SESS. LAWS, ch. 255, § 35).

10. *See, e.g.*, Cross v. Harris, 230 Ore. 398, 370 P.2d 703 (1962).

11. *See, e.g.*, Pendergrass v. Lovelace, 57 N.M. 661, 262 P.2d 231 (1953); Burke v. Thomas, 313 P.2d 1082 (Okla. 1957).

12. *See, e.g.*, Bruenger v. Burkett, 364 S.W.2d 453 (Tex. Civ. App. 1963).

13. Yasukochi, Inc. v. McKibbin, 152 Cal. App. 2d 108, 312 P.2d 770 (1957); Rose v. Buffalo Air Service, 170 Neb. 806, 104 N.W.2d 431 (1960).

of the farmer who hired the applicator.

The second setting is more complex. In these cases there is obvious injury to plaintiff's property or person, and the injury can be, at least inferentially, linked to the spraying conducted by the defendant.[14] In these cases the wrongful act is more difficult to discern. There may be no direct evidence that the aircraft flew over the plaintiff's land, or that the spray was directly released onto the plaintiff's property.[15] Additionally, there may be no direct eyewitness accounts of the drift of the substance.[16]

Examination of the cases under both factual settings constitutes an enlightening study of both the liabilities of aerial applicators of pesticides and the reasoning of appellate courts. The case analysis will proceed by an examination of the cases appearing under each of the tort heads used by the courts as the basis for their decisions.

Theories of Liability

A. *Negligence*

The vast majority of actions brought against applicators and their employers have been grounded in negligence.[17] An early case generally described the duty of care required of an aerial applicator:

> There can be no doubt that farmers . . . have the right to use the many beneficial new dusts and sprays . . . and to assure the best possible product by dusts and sprays which eliminate weeds which would otherwise choke out or stunt growth. But such preventive measures cannot be used with absolute impunity. *Due care must be exercised in seeing to it that the weather conditions are right . . . and that they do not spread dust when the wind is so blowing as to float it to the crops of others . . . .* In other words, an owner of premises may be liable to damages for spreading poisonous dusts and sprays negligently.[18]

It is obvious that this statement is more a statement of general policy than a well articulated standard of conduct. An actor will usually be liable for damages caused by his negligence in carrying

14. *See, e.g.*, Wieting v. Ball Air Spray Inc., 84 S.D. 493, 173 N.W.2d 272 (1969). The court stated that "[a]n obvious inference from the defense testimony is that it is not prudent to spray when there is a 'stiff breeze'." *Id.* at 497, 173 N.W.2d at 274.

15. *See generally* cases cited note 5 *supra.*

16. *See, e.g.*, Ford v. Shallowater Airport, 492 S.W.2d 655 (Tex. Civ. App. 1973).

17. Comment, *Crop Dusting: Two Theories of Liability?*, 19 HASTINGS L.J. 476 (1968).

18. Faire v. Burke, 363 Mo. 562, —, 252 S.W.2d 289, 290 (1952) (quoting 12 A.L.R.2d 436, 438 (1950)) (emphasis added). *See also* Miles v. A. Arena & Co., 23 Cal. App. 2d 680, —, 73 P.2d 1260, 1262 (1937); Lawler v. Skelton, 241 Miss. 274, —, 130 So. 2d 565, 569 (Miss. 1961); Wieting v. Ball Air Spray, Inc., 84 S.D. 493, 495, 173 N.W.2d 272, 273 (S.D. 1969); 37 A.L.R.3d 833, 838 (1971).

on his activities, and is held accountable for those consequences of his actions which are foreseeable in light of all the existing circumstances.[19]

A better statement of the analysis to be applied is found in *Smith v. Okerson*:[20]

> Actionable negligence is the failure to use that degree of care that the circumstances of the case call for. The likelihood that the act will cause injury to another; the likelihood that the injury will be serious; the utility of the act itself; the feasibility of a substitution whereby the same benefits may be obtained at less hazard,—all these considerations enter into the question of what is reasonable care.[21]

Addressing the act of the defendant in the light of the risks inherent in the course of conduct presents a reasoned approach.[22] It also provides a framework for analysis of the court decisions concerning liability for aerial spraying activities.

An analysis of the decisions indicates that, either implicitly[23] or explicitly,[24] the courts which use the negligence theory as a basis for liability almost invariably impose a high degree of care upon the applicator. This is perhaps best evidenced by the cases in which the plaintiff sued both the applicator and the person who hired him.[25]

In a number of cases,[26] the defendant landholder attempted to assert the independent contractor status of the applicator as a shield to liability. This tactic was an almost universal failure.[27] Most courts faced with the question have found the substances applied

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19. *See generally*, W. PROSSER, HANDBOOK OF THE LAW OF TORTS, ch. 5 (4th ed. 1971) [hereinafter cited as PROSSER].

20. 8 N.J. Super. 560, 73 A.2d 857 (1950).

21. *Id.* at —, 73 A.2d at 859 (citations omitted).

22. For a general discussion of this type of analysis, *see* L. GREEN, THE LITIGATION PROCESS IN TORT LAW (1965).

23. *See, e.g.*, Kentucky Aerospray v. Mays, 251 S.W.2d 460, 462 (Ky. 1952).

24. *See, e.g.*, Binder v. Perkins, 213 Kan. 365, —, 516 P.2d 1012, 1016 (1973).

25. *See* notes 26-28 *infra* and accompanying text. *See also* Note, *Regulation and Liability in the Application of Pesticides*, 49 IOWA L. REV. 135, 146 (1963).

26. *See, e.g.*, Emelwon v. United States, 391 F.2d 9 (5th Cir. 1968); Motors Ins. Corp. v. Aviation Specialities, Inc., 304 F. Supp. 973 (W.D. Mich. 1969); S.A. Gerrard Co. v. Fricker, 42 Ariz. 503, 27 P.2d 678 (Ariz. 1933); Heeb v. Prysock, 219 Ark. 899, 245 S.W.2d 577 (1952); McKennon v. Jones, 219 Ark. 671, 244 S.W.2d 138 (1951); Hammond Ranch Corp. v. Dodson, 199 Ark. 846, 136 S.W.2d 484 (1940); Pannella v. Reilly, 304 Mass. 172, 23 N.E.2d 87 (1939); Lawler v. Skelton, 241 Miss. 271, 130 So. 2d 565 (Miss. 1961); Pendergrass v. Lovelace, 57 N.M. 661, 262 P.2d 231 (1953); Burke v. Thomas, 313 P.2d 1082 (Okla. 1957); Pitchfork Land and Cattle Co. v. King, 162 Tex. 331, 346 S.W.2d 598 (1961); Leonard v. Abbott, 357 S.W.2d 778 (Tex. Civ. App. 1962).

27. *See* text accompanying note 102 *infra*. The independent contractor defense has been successful in aerial applicator cases only in Texas. *See* Pitchfork Land & Cattle Co. v. King, 162 Tex. 331, 346 S.W.2d 598 (Tex. 1961).

inherently dangerous and have held that an employer of an aerial applicator cannot escape liability by asserting the independent contractor status of the applicator.[28] The most obvious question that arises under this statement of the law is: What is an inherently dangerous substance, and what is an inherently dangerous activity? The courts are generally agreed that the application of 2-4-D is an inherently dangerous activity, and the same reasoning has been applied to other pesticides.[29] The finding of an inherently dangerous activity is difficult, however; the crux of the finding lies not in the activity per se,[30] but rather, in the foreseeable harmful results that inevitably follow from a miscarriage in the conduct of the activity. It will also turn on the extent and type of harm to be expected. For example, it is inevitable that 2-4-D drifting onto a broad-leaved crop will cause extensive damage to that crop, no matter what precautions are taken. Thus, the finding of inherent danger in the activity turns on the substance applied. While a court may readily find aerial application of pesticides inherently dangerous, it does not necessarily follow that aerial application of other substances, such as seeds, will be found inherently dangerous, although it may in fact give rise to substantial damage.

It is apparent, however, that the reasoning of the courts which allows a finding of inherent danger in the aerial application of pesti-

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28. In this context it is especially interesting to note two federal cases. In Emelwon v. United States, 391 F.2d 9 (5th Cir. 1968), the United States was sued under the Federal Tort Claims Act for damages caused by negligent crop spraying. The court held the government liable. The court first noted the general rule that the government cannot be strictly liable ("liable without fault"). It also noted that the negligence of an independent contractor cannot be imputed to the United States. The court held, however, that under Florida law, the plaintiff would be allowed to prove "that the private employer of an independent contractor failed to exercise reasonable care in a situation in which (a) the activity contracted for was inherently dangerous, or (b) the employer knew that the contractor had created a dangerous condition." *Id.* at 12. Under the Federal Tort Claims Act the government is liable "in the same manner and to the same extent as a private individual under like circumstances." *Id.* Therefore, the court found that directing a verdict for the government was reversible error. For a detailed examination of the *Emelwon* decision, *see* Note, *Aerial Spraying of Herbicides and Insecticides*, 32 A.T.L. L.J. 733 (1968).

In Motors Ins. Corp. v. Aviation Specialities, Inc., 304 F. Supp. 973 (W.D. Mich. 1969), the government was also held liable for negligence in crop spraying. The court found that the government employees had breached their duty by failing to warn the nearby landholders of the proposed spraying, and by failing to properly instruct the applicator. The acts were found to be of an operational character, and therefore not subject to governmental immunity under 28 U.S.C.A. § 2680(a).

29. *See, e.g.*, Loe v. Lenhardt, 227 Ore. 242, —, 362 P.2d 312, 315 (Ore. 1961).

30. *See, e.g.*, Little v. McGraw, 250 Ark. 766, 467 S.W.2d 163 (1971), where the court was faced with the problem of sorting out the specific element of the activity which was inherently dangerous. An unlicensed pilot killed a flagman during a crop dusting operation, and the appellant attempted to charge the pilot's employer with liability on the basis of the inherently dangerous nature of the spraying activity. The court refused to accept this theory, stating: "Although the spreading of 2-4-D by air is unduly hazardous to nearby crops, it does not follow that an airplane in flight is inherently dangerous to a person standing on the ground." *Id.* at —, 467 S.W.2d 164-65.

cides also supports the imposition of a greater duty of care on the actor.[31] This conclusion is also supported by the cases imposing forms of strict liability.[32] Thus, the element of duty in the traditional tort framework is much more strict in these areas than would at first glance appear.

Like any other negligence case, an action against an aerial applicator of pesticides requires proof of causation as a matter of fact. Courts are willing to allow proof through circumstantial evidence.[33] The injuries are usually obvious, and in most cases can be linked to a specific product or chemical.[34] Most pesticides leave sufficient residues, or other identifying marks, which facilitate identification.[35] Other factors which have been used to link the defendant with the injuries caused include establishing the fact of the spraying activity in the vicinity as the only source of the chemical within the time frame in question,[36] observations of eyewitnesses,[37] and meteorological data establishing the weather conditions when the operation was undertaken.[38]

The most intriguing aspect of the crop spraying cases involves the proof of a negligent breach of the duty imposed upon the aerial applicator. All prior commentators,[39] and some courts,[40] have

31. A finding of inherent danger in the activity necessarily requires a more exacting burden on the actor. *See, e.g.*, Binder v. Perkins, 213 Kan. 365, 516 P.2d 1012 (1973).

32. *See* Gotreaux v. Gary, 232 La. 373, 94 So. 2d 293 (1957); Young v. Darter, 363 P.2d 829 (Okla. 1961); Loe v. Lenhardt, 227 Ore. 242, 362 P.2d 312 (Ore. 1961).

33. Miller v. Naples, 278 S.W.2d 385 (Tex. Civ. App. 1954); McPherson v. Billington, 399 S.W.2d 186 (Tex. Civ. App. 1965); Hernandez v. Western Farmers Ass'n, 76 Wash. 422, 456 P.2d 1020 (Wash. 1969).

Causation is an element of the negligence action which is generally easily demonstrated in these cases. This statement represents a conclusion of the author. It is based on the relative ease with which the injuries, at least to plants, can be linked to a pesticide. *See generally* SECRETARY'S COMMISSION, *supra* note 6.

34. In most cases, expert testimony is introduced to establish the chemical which has given rise to the damage. *See, e.g.*, Jones v. Morgan, — La. —, 96 So. 2d 109 (1957); Dallas County Flood Control Dist. v. Fowler, 280 S.W.2d 336 (Tex. Civ. App. 1955).

35. For example, 2-4-D causes the stem of a plant to twist and the leaves to curl. *See* W.B. Bynum Cooperage Co. v. Coulter, 219 Ark. 288, 244 S.W.2d 955 (1952); Young v. Darter, 363 P.2d 829 (Okla. 1961). *But see* Wall v. Trogden, 249 N.C. 747, 107 S.E.2d 757 (1959).

36. *See, e.g.*, Binder v. Perkins, 213 Kan. 365, 516 P.2d 1012 (1973); Jones v. Morgan, — La. —, 96 So. 2d 109 (1957).

37. *See, e.g.*, Burke v. Thomas, 313 P.2d 1082 (Okla. 1957); Wieting v. Ball Air Spray, Inc., 84 S.D. 493, 173 N.W.2d 272 (1969).

38. Binder v. Perkins, 213 Kan. 365, 516 P.2d 1012 (1973).

39. Birmingham & Kyl, *Legal and Practical Aspects of Pesticide Spraying Cases*, 37 INS. COUNS. J. 585 (1970); Carsey, *Crop Dusting—The Evolution and Present State of the Law*, 6 F. 12 (1970); McBreen, *Legal Implications of Agricultural Aviation*, 18 J. AIR. L. 399 (1951); Comment, *Crop Dusting: Legal Problems in a New Industry*, 6 STAN. L. REV. 69 (1953); Comment, *Crop Dusting: Two Theories of Liability?*, 19 HASTINGS L.J. 476 (1968); Note, *Regulation and Liability in the Application of Pesticides*, 49 IOWA L. REV. 135 (1963); Note, *Aerial Spraying of Herbicides and Insecticides*, 32 A.T.L. L.J. 733 (1968); Note, *Landowners' Rights in Airspace—Crop Dusting—Liability for Trespass*, 31 J. AIR L. 265 (1965); Note, *Liability for Crop-Dusting*, 17 J. AIR. L. 364 (1950); Note, *Liability for Chemical Damage for Aerial Crop Dustings*, 43 MINNESOTA L. REV. 531 (1959).

40. *See* Loe v. Lenhardt, 227 Ore. 242, 362 P.2d 312 (1961).

noted that the theories applied in these cases are sometimes unclear. As noted earlier, some of the cases involve acts which can obviously be labelled negligent within the traditional tort framework. Every commentator on the subject, however, has observed that in some cases the court espouses negligence as the basis for liability, while apparently applying a variation of "strict liability" to the facts.[41]

As noted by Prosser, the standard of conduct to which an actor is held accountable is a complex amalgam of the various risks and benefits involved in the undertaking.[42] Negligence is nothing more than a deviation from a judicially created norm of social conduct. While the benefits of the ability to apply pesticides by air are obviously great, so too is the risk of serious damage from the activity. As a result, the reasoning and language of the courts, when applying negligence in these "questionable" cases, may represent nothing more than the application of a strict duty of care.

The risk of danger to nearby landholders from chemical drift provides an illustration of this idea. The courts have held applicators accountable for knowledge of the propensities of the substance to be applied, and of the characteristics of the application vehicle. As stated by one court:

> The duty resting upon the defendants to exercise that degree of care "commensurate with the known danger" must be construed with other language used by the Court; and this . . . would be the danger they actually knew of, or the danger factor they would have found if, as reasonable men with the information admitted or shown by the proof, had they made inquiry.[43]

Negligence, in some cases, has been predicated on failure to fully investigate the propensities of the substance to be employed.[44] Parties have been held negligent for not anticipating the drift of 2-4-D,[45] for failing to conduct tests into the nature of the chemical,[46] and for failure to foresee that application of a strong mixture of a pesticide would generate fumes which would linger for two or three days, allowing a wind shift to carry the fumes to adjoining property.[47] Undoubtedly, some of these cases appear to be result oriented.[48] It seems rash to assume, however, that these courts are

41. *See* note 39 *supra.*
42. PROSSER, *supra* note 19, § 31, at 149.
43. Kennedy v. Clayton, 216 Ark. 851, —, 227 S.W.2d 934, 938 (1950).
44. *See* Chapman Chemical Co. v. Taylor, 215 Ark. 630, 22 S.W.2d 820 (1949), where a manufacturer was held strictly liable for failure to conduct tests into the possibility the 2-4-D would drift when applied aerially.
45. *Id. See also* Kennedy v. Clayton, 216 Ark. 851, 227 S.W.2d 934 (1950); *but see* Walton v. Sherwin-Williams Co., 191 F.2d 277 (8th Cir. 1951).
46. Chapman Chemical Co. v. Taylor, 215 Ark. 630, 222 S.W.2d 820 (1949).
47. Binder v. Perkins, 213 Kan. 365, 516 P.2d 1012 (1973).
48. *See, e.g.*, Kentucky Aerospray v. Mays, 251 S.W.2d 460, 462 (Ky. 1952), where the court made this statement: "[i]f appellant allowed the

not applying negligence theory. The result may be the product of the imposition of a strict duty of care, although the precise standard of care was not stated. It appears from the cases in some jurisdictions that traditional negligence is, in fact, applied.[49] As one court stated emphatically:

> The duty of care imposed upon the crop sprayer . . . is a matter for the courts, and the trial court in this case has characterized 2-4D as a dangerous instrumentality, handling of it as a hazardous activity, and has imposed upon the one handling it a duty to prevent its escape. This is the outline of a high degree of care, not liability without fault.[50]

In the other jurisdictions, this may in fact be the thinking underlying the decisions, although not stated explicitly.

As a theory of recovery, negligence has been generally successful. Many courts appear to freely infer a negligent act from the results coupled with a strict duty. There are other courts, however, that have not been so generous.[51] It is in these jurisdictions that alternative theories of recovery have developed.

B. *Nuisance*

A few cases, particularly early ones, imposed liability upon aerial applicators on a theory of nuisance.[52] The courts relied on the common law maxim *"sic utere tuo ut alienum non laedas"*[53] and, in some instances, on *Fletcher v. Rylands*,[54] to impose liability.

The cases all apply the concept of private nuisance. Private nuisance is essentially an interference with the use and enjoyment of the land. "The ownership or rightful possession of land necessarily involves the right not only to the unimpaired condition of the property itself, but also to some reasonable comfort and convenience in its occupation."[55] Liability for nuisance may be based upon either intentional or negligent invasion of the plaintiff's interest, or upon conduct which is abnormal and out of place in its

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chemical compound to fall and settle in the pond in the spraying operation so that the minnows were poisoned, appellant was guilty of negligence."

49. The cases in Texas exemplify a strong adherence to the traditional negligence approach. *See* Texas cases cited in note 5 *supra*.

50. Binder v. Perkins, 213 Kan. 365, —, 516 P.2d 1012, 1016 (1973).

51. For example, the Texas courts require allegation and proof of a specific act of negligence. These courts also accept the independent contractor defense. The only mitigation of this comparatively harsh approach lies in the fact that the court will accept a cause of action asserted in trespass, so long as an actual trespass is demonstrated. *See* Schronk v. Gilliam, 380 S.W.2d 742 (Tex. Civ. App. 1964).

52. *See, e.g.*, Miles v. A. Arena & Co., 23 Cal. App. 2d 680, —, 73 P.2d 1260 (1937); Gainey v. Folkman, 114 F. Supp. 231 (D. Ariz. 1953).

53. The literal translation of this phrase is "So use your own as not to injure others [property]." Gainey v. Folkman, 114 F.Supp. 231, 232 (D. Ariz. 1953).

54. 1868, L.R. 3 H.L. 330.

55. PROSSER, *supra* note 19, § 89, at 591.

surroundings.[56] It is this latter basis for liability which the courts have seized upon when dealing with an aerial applicator of pesticides.[57]

The benefit of this theory for the plaintiff is that there is no requirement of proof of a negligent act.[58] The law is settled that any damage caused by conduct which is abnormal and out of place in its surroundings gives rise to an action against the landholder conducting the activity.[59] The burden of proof on the plaintiff is shifted from one of showing causal negligence to one of demonstrating actual damage resulting from an activity which was "abnormal and out of place in its surroundings."[60]

The cases indicate that a possible explanation for the use of nuisance has been a desire by the courts to circumvent the harsh results of negligence theory in aerial applicator damage actions. As stated by the court in *Gainey v. Folkman*:[61]

> This case [*Fletcher v. Rylands*] was the starting point of a theory of liability which sought to depart from the old rule which postulated liability only upon the existence of fault or negligence. It envisaged situations where, despite the absence of fault or negligence, the use of one's property might be detrimental to others. Today the trend is to fasten liability if the result of the use constitutes a nuisance as to the adjoining owner.[62]

The courts applying nuisance theory in this context, however, have not discussed whether strict liability, which is also developmentally linked to *Fletcher v. Rylands*, might not provide the same results through a less circuitous route.

C. *Trespass*

The nuisance action just described is similar in appearance to the cause of action in trespass. The distinction between the theories lies in the interests of the plaintiff that are protected. This distinction is well stated by Prosser: "The distinction which is now accepted is that trespass is an invasion of the plaintiff's interest in the exclusive possession of his land, while nuisance is an interference with his use and enjoyment of it."[63] Trespass, like nuisance, will provide a means for recovery without the necessity of establishing negligence.[64]

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56. *Id.* The latter part of the standard is in essence the holding of Fletcher v. Rylands, 1868, L.R. 3 H.L. 330.
57. Miles v. A. Arena & Co., 23 Cal. App. 2d 680, 73 P.2d 1260 (1937).
58. PROSSER, *supra* note 19, § 87, at 583.
59. *Id.*
60. *Id.*
61. 114 F. Supp. 231 (D. Ariz. 1953).
62. *Id.* at 233.
63. PROSSER, *supra* note 19, § 89, at 594-95.
64. *Id.* § 13.

At one time, there was an imposition of strict trespass liability imposed for trespass in the airspace superadjacent to plaintiff's property.[65] Prosser notes that "strict liability" for all types of trespass has been of decreasing importance in recent years: "The present prevailing position is that of the Restatement of Torts, which finds liability for trespass only in the case of an intentional intrusion, or negligence, or some 'abnormally dangerous activity' on the part of the defendant."[66] Similarly, the importance of the concept of "air trespass" has waned. It is now universally recognized that mere overflight will not give rise to an action in trespass; something more must be shown.[67]

The cases applying trespass to aerial applicators illuminate two different theories of trespass. One theory is that of negligent trespass. In *Schronk v. Gilliam*, [68] the Texas Court of Civil Appeals affirmed the liability of an aerial applicator whose aircraft passed physically into the airspace over plaintiff's land while continuing to release the damaging spray. The court based liability on the fact of the trespass giving rise to actual damage, and held that negligence in spraying the substance need not be shown.[69]

The other theory is denominated "unintentional trespass." It is stated in section 165 of the Restatement of Torts (second) as follows:

> One who recklessly or negligently, or as a result of an abnormally dangerous activity, enters land in the possession of another or causes a thing or third person so to enter is subject to liability to the possessor if, but only if, his presence or the presence of the thing or the third person upon the land causes harm to the land, to the possessor, or to a thing or third person in whose security the possessor has a legally protected interest.[70]

The theory is essentially one of strict liability, and is a derivative of the *Fletcher v. Rylands* concept of abnormally dangerous activities,[71] at least as applied in the aerial applicator cases.

The landmark case under this theory is *Loe v. Lenhardt*.[72] In *Loe*, the court based its decision on a finding that the aerial application of pesticides was an "extra hazardous" activity. The basis

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65. *Id.* § 13, at 69-73.
66. *Id.* at 64-65.
67. Note, LANDOWNERS' RIGHTS IN AIRSPACE—CROP DUSTING—LIABILITY FOR TRESPASS, 31 J. AIR L. 265 (1965).
68. 380 S.W.2d 743 (Tex. Civ. App. 1964).
69. *Id.* at 745.
70. RESTATEMENT (SECOND) OF TORTS § 165 (1965).
71. "[T]he rule of Rylands v. Fletcher is that the defendant will be liable when he damages another by a thing or activity unduly dangerous and inappropriate to the place where it is maintained, in the light of the character of that place and its surroundings." PROSSER, *supra* note 19, at 508.
72. 227 Ore. 242, 362 P.2d 312 (1961).

of the liability was held to be "the voluntary taking of the risk . . . rather than the intention to invade the plaintiff's land . . . ."[73]

Although *Loe* was followed by the Oregon court one year later in *Cross v. Harris*,[74] this is the only jurisdiction to adopt this particular approach. While this theory may allow the circumvention of proving negligence, it is again questionable why the court did not apply, or even discuss, the more traditional forms of strict liability.

D. *Strict Liability*

Strict liability, as a separate classification of tort liability, is essentially a "no-fault" tort. The concept is of ancient origin, and at first was tied to activities involving abnormal risks of harm to persons other than the actor.[75] The current tendency is to apply the concept as a means of shifting risks and burdens of loss in areas of high risk of injury. Where an activity gives rise to unpreventable and uncontrollable risks, the court must balance not only the utility of the activity against the inherent risks of harm, but must also consider which party can best bear and distribute the loss when damages can be expected to result through no "fault" of either party.

> This new policy frequently has found expression where the defendant's activity is unusual and abnormal in the community, and the danger which it threatens to others is unduly great—and particularly where the danger will be great even though the enterprise is conducted with every possible precaution. *The basis of the liability is the defendant's intentional behavior in exposing those in his vicinity to such risks.*[76]

The basis of the defendant's liability in these cases, therefore, becomes a matter of adjustment of social policies.

Only two jurisdictions have applied strict liability, as such, to aerial applicators of pesticides. In *Gotreaux v. Gary*,[77] the Louisiana court held that the basis for liability should be strict liability, finding that "Although the use of the spraying operation was lawful, it was carried out in such a manner as to unreasonably inconvenience plaintiff and deprive him of the liberty of enjoying his farm."[78] Subsequent cases in Louisiana have followed *Gotreaux*.[79]

Oklahoma adopted strict liability for aerial applicators of pesticides in 1961. The reasoning behind this decision may be summarized by this quotation from *Young v. Darter*:[80]

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73. *Id.* at —, 362 P.2d at 318.
74. 230 Ore. 283, 370 P.2d 703 (1962).
75. PROSSER, *supra* note 19, ch. 13.
76. *Id.* § 75 at 494 (emphasis added).
77. 232 La. 373, 94 So. 2d 293 (1957).
78. *Id.* at —, 94 So. 2d at 294.
79. Jones v. Morgan, — La. —, 96 So. 2d 109 (1957); Hero Lands Co. v. Texaco, Inc., 310 So. 2d 93, 97 (La. 1975).
80. 363 P.2d 829 (Okla. 1961).

> The use, by the defendant, of a poison on his land, which, if it escaped, would cause damage to plaintiff, was done at defendant's peril. He is responsible for its drifting and thereby trespassing on plaintiff's land where it damaged the cotton. *Any precautions defendant's agent may have taken* to prevent the injuries to plaintiff's cotton, *in view of the results, do not serve to extinguish his liability.* The question in general is not whether defendant acted with due care and caution, but whether his acts occasioned the damage.[81]

Although the court speaks of trespassing chemicals, the basis of the liability did not require the proof of a technical trespass; rather, plaintiff was merely required to prove damages and that they were caused by the defendant.

Although these states are the only ones to adopt strict liability by name, it is at least arguable that those jurisdictions applying concepts of unintentional trespass and nuisance are in fact applying strict liability. It has also been argued that many courts which speak in terms of negligence in these cases in actuality apply strict liability principles.[82]

Analysis of the Cases

Analysis of the existing case law leads to the inevitable conclusion that the law of aerial crop spraying liability is in great disarray. If anything can be synthesized from the cases, it is that there are two divergent views of the duty to be placed upon aerial applicators and those that hire them.

The cases to this point can be separated into three classifications. First are the cases that both espouse and apply traditional negligence principles.[83] In these cases, the applicator is held to a duty of due care under the circumstances; and although this duty may be a greater than ordinary duty, owing to the nature of the enterprise, the defendant will not be held liable if he can estabish due care under the circumstances. Thus, the defenses of unavoidable accident and contributory negligence may be available.[84]

The second group of cases contains those which impose strict liability, both directly or under the framework of unintentional trespass or nuisance.[85] In these cases, the courts find that the en-

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81. *Id.* at 833-34 (emphasis added).

82. *See, e.g.*, Comment, *Crop Dusting: Legal Problems in a New Industry*, 6 STAN. L. REV. 69 (1953); Comment, *Crop Dusting: Two Theories of Liability?*, 19 HASTINGS L. J. 476 (1968).

83. *See, e.g.*, Binder v. Perkins, 213 Kan. 365, 516 P.2d 1012 (1973).

84. Sanders v. Beckwith, 79 Ariz. 67, 283 P.2d 235 (1955); Lenk v. Spezia, 95 Cal. App. 2d 296, 213 P.2d 47 (1949); Vrazel v. Bieri, 294 S.W.2d 148 (Tex. Civ. App. 1956).

85. *See, e.g.*, Young v. Darter, 363 P.2d 829 (Okla. 1961); Cross v. Harris, 230 Ore. 283, 370 P.2d 703 (1962); Loe v. Lenhardt, 227 Ore. 242, 362 P.2d 312 (1961).

terprise is sufficiently freighted with risk of serious harm that those engaging in it should bear full responsibility for any damages caused by the activity. Although framed in different terms by different courts, the result is uniform. If the defendant's activity is sufficiently dangerous, and in the conducting of that activity some harm is caused to plaintiff, through any means direct or indirect courts adopting strict liability will hold the defendant accountable.

In the third category are those cases in which negligence is stated as the basis for liability, but the result more closely resembles the application of strict liability principles.[86] As aptly noted by the court in *Loe v. Lenhardt*,[87] in these cases "it is difficult to detect what theory the court was following." In this classification are those cases where a finding of negligence was based on allowing the spray to drift,[88] or upon spraying in a "breeze."[89] While statements such as these appear to express adherence to the traditional form of negligence analysis, these appearances may be deceiving. These cases fail to analyze foreseeability and control aspects of the tort, and often fail to adequately deal with the duty to be placed upon the applicator.[90] Cases in this category more properly belong in one of the first two classifications discussed.

THE PREFERRABLE BASIS FOR LIABILITY

If a court is faced with a choice between negligence and strict liability as bases for recovery, which theory should be applied? The choice of theory depends on the underlying social policies to be served. Negligence is grounded on the principle that a person should bear the cost of the breach of a duty which the law has placed upon him for the benefit of society, so long as the breach is wrongful or negligent.[91] In this sense, it must be remembered that "[n]egligence is conduct, and not a state of mind."[92] A negligent breach of duty occurs when the actor's conduct falls below the norm set as "reasonable" for one acting under those circumstances. Strict liability, on the other hand, holds the actor liable for the consequences of his activity.[93] Intent is totally disregarded, and conduct is important only as the underlying basis of the risk which gives rise to the imposition of strict liability. The duty of care to which the defendant is held is absolute. He may conduct the activity if that is his desire, but any harm that may come of it will be borne by him. He may act with the utmost care or with total impunity, the result will be the same.

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86. *See, e.g.*, Kentucky Aerospray v. Mays, 251 S.W.2d 460 (Ky. 1952).
87. 227 Ore. 242, —, 362 P.2d 312, 314 (1961).
88. *See generally* cases cited note 5 *supra*.
89. *E.g.*, Wieting v. Ball Air Spray, Inc., 84 S.D. 493, 173 N.W.2d 272 (1969).
90. *See, e.g.*, Kentucky Aerospray v. Mays, 251 S.W.2d 460 (Ky. 1952).
91. PROSSER, *supra* note 19, § 31.
92. *Id.* at 145, quoting Terry, *Negligence*, 29 HARV. L. REV. 40 (1915).
93. PROSSER, *supra* note 19, § 75.

The essential difference between those situations calling for the imposition of strict liability and those giving rise to traditional negligence applications lies in the extent of risk involved in the activity. Strict liability arose out of situations considered "abnormally dangerous" or "ultrahazardous." The cases seem to require, normally, that the work be both abnormal and dangerous. For example, driving an automobile is undoubtedly a dangerous activity. The risk of injury to both person and property is great. But the conduct is not in the least abnormal. Strict liability is not applied in this setting.[94]

A similar argument can be raised regarding the aerial application of pesticides. As discussed earlier, crop spraying is a very common activity in agricultural areas, and in some parts of the country it is the predominant means of treating fields.[95] Thus, it can be argued that crop spraying, while perhaps extremely hazardous, is not abnormal or out of place in its surroundings. This argument was addressed in *Loe v. Lenhardt*.[96] The court conceded that crop spraying was accepted practice in many parts of the country, and was of common usage. The court, however, stated that mere frequency of use did not eliminate the ultrahazardous nature of the activity, and that this was the determining element in the definition.

> However common may be the practice of spraying chemicals by airplane, the prevalence of the practice does not justify treating the sprayer and the "sprayee" as the law of negligence treats motorists, leaving each to fend for himself unless one can prove negligence against the other.[97]

The Oregon court felt that the most important consideration was the balancing of the risks and benefits of the undertaking. The inherent risk of uncontrollable, serious damage was felt to far outweigh the commonplace nature of the activity. This is what, in essence, made the activity "abnormally dangerous" or "ultrahazardous."

The essential test, therefore, becomes one of social policy. Some courts state that strict liability makes an actor an insurer of all the consequences arising from his conduct; and that in all but the most exceptional circumstances, this standard is exceedingly harsh, and contrary to the principles underlying the common law of torts.[98] They maintain that there should be no liability absent a

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94. R. KEETON, VENTURING TO DO JUSTICE 126-47 (1969).

95. For example, the court in Gainey v. Folkman, 114 F. Supp. 231 (D. Ariz. 1953) noted that, at the time that case was decided, 90% of the cotton in Arizona and in Maricopa County was treated by aerial applications of pesticides. *Id.* at 235.

96. 227 Ore. 242, 362 P.2d 312 (1961).

97. *Id.* at —, 362 P.2d at 318.

98. Smith v. Okerson, 8 N.J. Super. 560, 73 A.2d 857 (1950); Vrazel v. Bieri, 294 S.W.2d 148 (Tex. Civ. App. 1956).

showing of fault.[99]

The proponents of strict liability assert it as a means through which hazardous enterprises can bear and distribute the risks created by them.[100] It is felt that it is more equitable to place the burden of mishap on the parties benefiting from the activity than on the unfortunate injured party. The costs that must be absorbed by the enterprise can then be spread across a larger population in the form of higher prices and insurance.

The ultimate choice of theory, of course, rests with the courts. It should be stressed, however, that one should not be unwilling to argue a strict liability theory in any jurisdiction which has not expressly denied application of the concept in total.[101] Many courts have been willing to find the aerial application of pesticides inherently dangerous for purposes of defeating an independent contractor defense.[102] The same principles essential to this finding, if not directly on point, are sufficiently analogous to those which form the basis for the application of strict liability to permit their application.[103]

When faced with a jurisdiction which has explicitly rejected strict liability, an alternative approach is to attempt proof of either trespass or nuisance. Neither of these theories, as they have been applied in the aerial applicator cases, requires proof of causal negligence. While proof of the tortious act requires different elements under these theories, there may be times when they will provide a more advantageous basis for suit than negligence.

STATUTES AND REGULATIONS

In recent years, there has been increasing concern over the effects of pesticides on man's environment, and upon man himself.[104] This increased concern has generated a myriad of state and federal laws and regulations governing pesticides, from production through their application. These laws address the pesticide applicator, and usually the aerial applicator specifically. The requirements of these

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99. Smith v. Okerson, 8 N.J. Super. 560, 73 A.2d 857 (1950); Vrazel v. Bieri, 294 S.W.2d 148 (Tex. Civ. App. 1956).

100. PROSSER, *supra* note 19, § 75.

101. The only jurisdiction at this point expressly rejecting the application of strict liability in cases involving aerial applicators of pesticides is Texas. *See* Vrazel v. Bieri, 294 S.W.2d 148, 152 (Tex. Civ. App. 1956). *Also note* Comment, *Crop Dusting: Two Theories of Liability?*, 19 HASTINGS L.J. 476, 482 (1968).

102. *See* Note, *Regulation and Liability in the Application of Pesticides*, 49 IOWA L. REV. 135, 146 (1963).

103. As noted earlier in the text, both standards derive from Fletcher v. Rylands, 1868, L.R. 3 H.L. 330. If an activity is inherently dangerous in one context, it is unclear to this writer why it could not be argued that it is inherently dangerous for all purposes of the law of torts.

104. Birmingham & Kyl, *Legal and Practical Aspects of Pesticide Spraying Cases*, 37 INS. COUNS. J. 585 (1970); *see generally* SECRETARY'S COMMISSION, *supra* note 6.

enactments, and the case law construing them, will be the subject of discussion in this section.

Federal Statutes and Regulations

The federal statute most pertinent to the pesticide applicator is the Federal Insecticide, Fungicide and Rodenticide Act, as amended by the Federal Environmental Pesticide Control Act of 1972 (FIFRA).[105] The aerial applicator is also governed by Part 137 of Title 14 of the Code of Federal Regulations.

Section 4(a)(1) of FIFRA empowers the administrator to prescribe standards for the certification of pesticide applicators.[106] This section's impact is modified, however, by Section 4(a)(2), which allows states to establish certification systems, subject to approval by the administrator.[107] Many states, including South Dakota,[108] have chosen this option. Allowing the states to certify applicators tends to reduce the direct federal control over standards, but the requirement of federal approval of the state plans assures at least substantial compliance. Because of the similarity of state regulatory systems to that created under FIFRA, the federal system will be examined as a model. The conclusions drawn and the provisions discussed should be generally applicable to all state systems.

The regulations promulgated under Section 4(a) of FIFRA detail the procedure for pesticide applicator certification.[109] Applicators are first categorized by the type of work to be conducted.[110] All applicators are required to take a written proficiency examination for certification,[111] and in some instances performance tests may be required.[112] All applicants must pass an examination demonstrating knowledge of specific factors relevant to pesticide application procedures.[113] They must demonstrate a knowledge of labelling, safety factors, environmental impacts, pests, pesticides, equipment to be used, application techniques, and state and federal laws and regulations.[114] Furthermore, an applicant for licensing must demonstrate additional knowledge related to the specific category for which he seeks certification.[115]

Compliance with the federal certification requirements is made mandatory by Section 14 of FIFRA.[116] This section provides both

105. 7 U.S.C. §§ 135-49 (Supp. 1974).
106. *Id.* § 136b(a)(1).
107. *Id.* § 136b(a)(2).
108. S.D.C.L. §§ 38-31-14 to -55 (Supp. 1975).
109. 40 C.F.R. §§ 171.7-171.10 (Supp. 1975).
110. *Id.* § 171.3.
111. *Id.* § 171.4(a).
112. *Id.*
113. *Id.* § 171.4(b).
114. *Id.* § 171.4(b)(1).
115. *Id.* § 171.4(c).
116. 7 U.S.C. § 1361 (Supp. 1974).

civil[117] and criminal[118] penalties for violations of provisions of the Act.

An aerial applicator must also comply with 14 CFR 137, which governs "Agricultural Aircraft Operations." These regulations provide that no one may conduct an agricultural aircraft operation without an "agricultural aircraft operator certificate."[119] Application for this certificate is made to the Federal Aviation Administration.[120] The regulations require that before the license will be granted, a commercial operator must have available at least one pilot with a current United States commercial or airline transport pilot certificate.[121] Further, the applicant must have at least one equipped and certified aircraft.[122] Finally, the applicant must also pass a written examination.[123] Once certified, the regulations impose extensive operating rules[124] and record keeping requirements.[125]

State Statutes and Regulations

Under the auspices of FIFRA, many states have imposed regulations on pesticide applicators. Most of these statutes parallel the federal act in all important respects. They generally include certification and licensing requirements, mandatory testing, and procedures for renewal and revocation of certifications.[126]

The South Dakota statute[127] is typical of these laws. It closely parallels the federal act in both its form and provisions. It also contains provisions which do not appear in FIFRA, but that are commonly found in state enactments. Typical of these are the provisions requiring the reporting of pesticide accidents to the Secretary of the Department of Agriculture,[128] and the provisions relating to the insurance or bonding which the applicator must obtain as a condition precedent to certification.[129]

Effects of the Statutes on the Case Law

Statutes regulating aerial applicators have been considered in

117. *Id.* § 1361(a).
118. *Id.* § 1361(b).
119. 14 C.F.R. § 137.11 (Supp. 1975).
120. *Id.* § 137.15.
121. *Id.* § 137.19(c).
122. *Id.* § 137.19(d).
123. *Id.* § 137.19(e).
124. *Id.* §§ 137.29-.59.
125. *Id.* §§ 137.71-.77.
126. For a listing of many of these state statutes, *see* Birmingham & Kyl, *Legal and Practical Aspects of Pesticide Spraying Cases*, 37 INS. COUNS. J. 585 (1970).
127. S.D.C.L. §§ 38-21-14 to -55 (Supp. 1975); *see also* 1976 A.R.S.D. art. 12:56.
128. S.D.C.L. §§ 38-21-16, -46 to -49 (Supp. 1975); 1976 A.R.S.D. § 12:56:01.
129. S.D.C.L. § 38-21-19 (Supp. 1975); 1976 A.R.S.D. §§ 12:56:05:08 to 12:56:05:12.

numerous cases.[130] Statutory requirements have given rise to evidentiary inferences,[131] to limitations on the right to sue,[132] and to conclusive presumptions on liability.[133]

Recordation requirements have facilitated placing certain applicators at the scene of the damage.[134] These requirements also preserve evidence of atmospheric conditions prevailing at the time of the application, and of the chemicals applied.[135] The most interesting applications of these statutes, however, arise under the requirements of filing damage claims with the state prior to commencement of an action in court.

In *Olmstead v. Reedy*,[136] the court addressed a statute requiring the filing of a statement of damage with the state prior to the commencement of an action for damages. The plaintiff had filed a statement listing certain damages, but at trial he included a prayer for damages not listed in his initial filing with the state. The defendant contended that damages for items not listed in the initial state filing could not be recovered. The court found that the statute required filing as a condition precedent to suit, but that the intention of the legislation was not to limit the rights of the injured party. Rather, the court concluded, the statute was enacted to prevent undue delay in reporting of alleged damages, thus limiting the ability of the defendant to investigate the charge. The court found that substantial compliance with the statute was sufficient, so long as the claim filed gave notice to the defendant of the damages.[137]

A similar statute was construed by the Oregon court in *Cross v. Harris*.[138] As in *Olmstead*, the defendant in *Cross* argued that the statute was mandatory, and not directory. It was therefore asserted that compliance with the express terms of the statute was

130. Little v. McGraw, 250 Ark. 766, 467 S.W.2d 163 (1971); Andreen v. Escondido Citrus Union, 93 Cal. App. 182, 269 P. 556 (1928); Binder v. Perkins, 213 Kan. 365, 516 P.2d 1012 (1973); Christensen v. Midstate Aerial Applicators, Inc., 166 N.W.2d 386 (N.D. 1969); Olmstead v. Reedy, 387 P.2d 631 (Okla. 1963); Hiller v. Rist, 362 P.2d 678 (Okla. 1961); Young v. Darter, 363 P.2d 829 (Okla. 1961); Cross v. Harris, 230 Ore. 283, 370 P.2d 703 (1962); Loe v. Lenhardt, 227 Ore. 242, 362 P.2d 312 (1961); Aerial Sprayers Inc. v. Yerger, Hill & Son, 306 S.W.2d 433 (Tex. 1957).

131. Little v. McGraw, 250 Ark. 766, 467 S.W.2d 163 (1971); Young v. Darter, 363 P.2d 829 (Okla. 1961); Aerial Sprayers, Inc. v. Yerger, Hill & Son, 306 S.W.2d 433 (Tex. 1957).

132. Christensen v. Midstate Aerial Applicators, Inc., 166 N.W.2d 386 (N.D. 1969); Omstead v. Reedy, 387 P.2d 631 (Okla. 1963); Cross v. Harris, 230 Ore. 283, 370 P.2d 703 (1962); Loe v. Lenhardt, 227 Ore. 242, 362 P.2d 312 (1961).

133. Andreen v. Escondido Citrus Union, 93 Cal. App. 182, 269 P. 556 (1928).

134. Aerial Sprayers, Inc. v. Yerger, Hill & Son, 306 S.W.2d 433 (Tex. 1957).

135. 1976 A.R.S.D. § 12:56:07:01.

136. 387 P.2d 631 (Okla. 1963).

137. *Id.* at 633.

138. 230 Ore. 283, 370 P.2d 703 (1962).

a condition precedent to suit. The court, however, analogized the statute to a statute of limitations, which might be waived.[139] The court distinguished statutes modifying common law rights of action and those which purported to create rights which would not otherwise exist. The court then cited the following language derived from *Gellenbeck v. City of Mobridge*,[140] a 1918 South Dakota case, as controlling:

> Where, however, the statutory requirement for notice of injury is made applicable to an action to enforce a common law right it is held in many cases and, we think, correctly, that the requirement is in the nature of a statute of limitation and the same rules apply, namely, that if the defect appears on the face of the complaint it must be taken advantage of by demurrer, otherwise, by answer, and that if failure to give the notice is not pleaded by the defendant it is waived.[141]

From this case it can be argued that the giving of notice is a condition precedent to a claim for damages from aerial application of pesticides under statutes of this nature, but that the defendant must assert the alleged non-compliance in order to take advantage of the defense.

The final case on this point is *Christensen v. Midstate Aerial Applicators Corp.*[142] In this case, suit was brought against an applicator by the farmer who had employed him to spray his fields with a pesticide for negligence in the spraying. The applicator attempted to assert a provision of the North Dakota Law which required reporting of pesticide damage to the state as a condition precedent to suit. The court construed the statute on notice to apply only to third parties injured by the spraying, and held that a party to a spraying contract need not comply with the statute as a condition precedent to suit.[143]

From these cases it may be concluded that the notice requirement will affect the substantive rights of the parties. Although liberally construed,[144] the statutes must be complied with at least substantially. While the South Dakota statute[145] does not contain an express provision making compliance with it a condition precedent to suit, the language of the statute is mandatory.[146] It is at least arguable that this statute will be given the same effect as the statutes discussed in the three preceding cases. Furthermore, the South Dakota statute may be even more stringent than those

139. *Id.* at —, 370 P.2d at 705.
140. 40 S.D. 157, 166 N.W. 631 (1918).
141. 230 Ore. at —, 370 P.2d at 706.
142. 166 N.W.2d 386 (N.D. 1969).
143. *Id.* at 388.
144. Loe v. Lenhardt, 227 Ore. 242, —, 362 P.2d 312, 320 (1961).
145. S.D.C.L. §§ 38-21-16, -46 to -49 (Supp. 1975).
146. *See, e.g., Id.* § 38-21-46. This section provides: "Any person claiming damages from a pesticide application shall file . . . ." (emphasis added).

discussed. South Dakota only provides 30 days within which to report.[147] This 30 day period runs from the date of the damage.[148] It is unclear whether this will be construed to mean the date the chemical came in contact with the crop, or the date of discovery. Undoubtedly the best rule would be to start the running of the statute on the date of discovery, as certain types of damage may not be immediately apparent.[149]

Another typical statutory provision requires that the applicator be bonded or insured.[150] This type of statute was examined in *Hiller v. Rist*.[151] In *Hiller*, suit was brought against an aerial applicator for damages resulting from a spraying activity. The applicator's insurer was joined as a party defendant on the basis of the bond furnished as a statutory prerequisite to the issuance of a state permit to engage in aerial spraying. The court held that the statutory provisions requiring the bond were read into, and became a part of, the bond.[152] The court further held that this insurer was liable to the plaintiff in the amount of the bond, stating:

> The general purpose of the statute, viewed in its entirety, is protection to the public. The only benefit derived by [the applicator] from the filing of the bond was the issuance to him of a permit to engage in the pesticide spraying business. Otherwise the bond was for the benefit of persons injured by the pesticide application or drift to plants, animals or property. The liability of [the insurer] arose by reason of the statute after it had filed its bond.[153]

From this decision it may be concluded that any insurer or surety furnishing the bond or insurance required by the South Dakota statute[154] may be properly held liable to the extent of the bond furnished.

Another way in which the statutes may affect the rights and liabilities of the parties is when the existence of the statute is asserted to establish either a duty or an act of negligence. One case making use of statutes in this manner was *Young v. Darter*.[155] In *Young*, the court was faced with a tort action alleging damage to

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147. *Id.*
148. *Id.*
149. For example, contact of a pesticide with livestock may not become apparent until it is noticed that they are not filling out normally. At this point it may still be possible to link their condition conclusively to a pesticide applied in the area, but under the strict reading of the statute, if the injury is not noticed within 30 days, recovery will be precluded.
150. Jeans v. Holtz, 94 Cal. App. 2d 826, 211 P.2d 925 (1949); Andreen v. Escondido Citrus Union, 93 Cal. App. 182, 269 P. 556 (1928); Olmstead v. Reedy, 387 P.2d 631 (Okla. 1963); Young v. Darter, 363 P.2d 829 (Okla. 1961); Hiller v. Rist, 362 P.2d 678 (Okla. 1961); Leonard v. Abbott, 357 S.W. 2d 778 (Tex. Civ. App. 1962).
151. 362 P.2d 678 (Okla. 1961).
152. *Id.* at 679.
153. *Id.* at 680.
154. S.D.C.L. § 38-21-19 (Supp. 1975); 1976 A.R.S.D. §§ 12:56:05:08 to 12:56:05:12.
155. 363 P.2d 829 (Okla. 1961).

plaintiff's crops as a result of defendant's spraying activities. The court examined the state statutes governing aerial applicators of pesticides for an exemplification of the state's policy toward pesticide application activities. The court concluded:

> These statutes are not asserted here as affording the basis for any relief to either of the parties . . . . However, they do, we believe, reflect that the promiscuous spraying of poisonous substances in a manner calculated to endanger the rights of one's neighbors is an activity not commonly regarded as consonant with the principles of natural and common justice.[156]

Although the court's language seems to indicate discussion of an intentional tort, the issue addressed was one normally viewed as falling within the purview of negligence. In this case, however, the court applied strict liability.

In *Little v. McGraw*,[157] suit was brought against an applicator and the farmer who hired him for the wrongful death of a flagman who was hit by the aircraft in the course of the spraying. The plaintiff asserted that the farmer should be held liable for failure to use due care in the selection of the applicator. The court agreed. They stated that the farmer knew that an aerial applicator needed a special state license, and that he also knew that the pilot he hired did not have such a license. The court held that this fact alone was sufficient to make the granting of summary judgment to defendant reversible error.[158]

CONCLUSION

Numerous conclusions can be drawn from this examination of the cases and statutes. Primarily, it is clear that a plaintiff in an action against an aerial applicator of pesticides, under the common law theories, stands a good chance of recovery. Most, if not all, courts are willing to accept theories of action which do not require proof of negligent conduct.

Secondly, the landholder, or other employer of the applicator will also be subject to suit in most jurisdictions. This will even be true of the federal government acting in its capacity as an employer. In those few jurisdictions which accept the independent contractor defense in these cases, an attack on the employer's duty to select the contractor with care, or to take action to prevent damage once he has knowledge of it should suffice.

The third conclusion must temper the first two. It is unclear at this point what role the new statutes regulating applicators will play in actions against the applicator for damages. While the stat-

156. *Id.* at 833.
157. 250 Ark. 766, 467 S.W.2d 163 (1971). *See* note 30 *supra*.
158. *Id.* at —, 467 S.W.2d at 165.

utes appear to be generally beneficent to the injured third party, there are some traps that must be noted. The importance of the filing of damage claims with the state cannot be overemphasized. A timely filing, categorizing the damages as well as possible, should effectively insulate the injured party from any defense based on the statute. On the other hand, a person employing an aerial applicator should carefully check to be sure that the applicator has complied with all applicable state and federal requirements. Failure to do this will pose potential liability for failure to use due care in the selection of the independent contractor.

Finally, an attorney should not be reluctant to attempt to assert strict liability as a basis for recovery in these actions. The courts appear to be willing to fashion a heavy burden of care for the applicator under a negligence framework. It is a short step from most of the decisions to the imposition of strict liability. If the courts of the jurisdiction are reluctant to apply strict liability as such, resort may also be had to theories of unintentional trespass or private nuisance to obtain essentially the same results.