# Tort Liability in the USA for Negligent Weather Forecasts

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#### 1. Introduction

In September 2002, after reading Millington (1986), I searched the Westlaw online database for court cases in the USA involving tort liability for allegedly negligent weather forecasts. This topic may *superficially* appear to be specious, for the following three reasons:

First, most weather forecasts in the USA are prepared by an agency of the U.S. Government. The Federal Tort Claims Act (FTCA) prohibits liability for any "misrepresentation" by employees of the U.S. Government. Furthermore, that Act also prohibits liability for any "discretionary function" of the government, which courts have interpreted to include weather forecasts.

Second, in general, there is no tort liability in the USA for negligence in providing information.

Third, it is a common perception that weather forecasts are neither accurate nor reliable. There is no warranty of accuracy in a weather forecast. In recent years, the National Weather Service has given forecasts of rain or snow as a probability, rounded to the nearest ten percent, which emphasizes that the forecast only conveys what might happen, not an absolutely certain prediction. Therefore, a reasonable person would not rely on a favorable weather forecast as being an absolute assurance that there will be no dangerous storms. However, perceptions about unreliable forecasts may be the result of bad experiences during the 1960s and 1970s, not necessarily appropriate for modern weather forecasts. And it is possible to have negligent forecasts that fail to warn people of possible imminent harm (e.g., tornado, hurricane, flood, lightning, storm at sea with high wave crests that might capsize boats, etc.), when the forecasters knew, or should have known, of the possibility of harm.

This essay summarizes each of the reported cases and provides a critical review of each decision. After reading and considering the reported cases, I am convinced, as explained below, that these cases involve some serious issues and are *not* specious.

The intended audience for this essay about tort liability for negligent weather forecasts includes:

- the general public,
- meteorology students and practicing meteorologists,
- people interested in either aviation law or maritime law, and
- attorneys who are interested in information torts.

Because airplane crashes and loss of sailors at sea often involve bad weather, parts of this essay will be of interest to airplane pilots and sailors.<sup>1</sup> This essay is intended only to present general

<sup>&</sup>lt;sup>1</sup> Cases and law involving airplane crashes are discussed below, beginning at page 24. Sailors will find the case of *Brown v. U.S.*, which is discussed below at page 11, of particular interest.

information about an interesting topic in law and is *not* legal advice for your specific problem. See my disclaimer at <u>http://www.rbs2.com/disclaim.htm</u>

The U.S. Government agency that provides weather forecasts was formerly called the Weather Bureau, and since 1970 is called the National Weather Service (NWS).

Finally, I have used metric units exclusively in both my professional life and my personal life since 1970. However, in this essay I mention

feet (1 foot = 0.30 m),

[statute] miles (1 mile = 1.6 km), and

knots (1 knot = 1.8 km/h = 0.5 m/s),

only because those units are used both in public reports of the NWS and in opinions of judges in the U.S.A. Because I make many long quotations from judicial opinions that contain conventional American units, it would be jarring if I were to use only metric units in my text, and tedious reading if I were to use both metric and American units. I mention this issue, because I do not want my colleagues in the scientific community to think I have abandoned my passionate preference for the metric system of units.

# 2. Reported Cases in the USA

The following is a summary and critical review of each of the reported cases in the USA involving an allegedly negligent weather forecast. To be clear, this is not a collection of *every* court case in the USA that involved an allegedly negligent weather forecast. Only a few decisions of federal trial courts in the USA are reported, so it is likely that there have been unreported cases on allegedly negligent weather forecasts that were not appealed, and thus produced no reported case.

I list the cases in chronological order in the citations in this essay, so the reader can easily follow the historical development of a national phenomenon. If I were writing a legal brief, then I would use the conventional citation order given in the *Bluebook*.

First, I present the cases that involve injuries or death to people on land or sailors at sea. Later, I present the cases that involve airplane crashes.

# Kansas 1951-54 National Mfg. Co. v. U.S.

Western Mercantile Co. v. U.S., 111 F.Supp. 799 (W.D.Mo. 1953) and Mid-Central Fish Co. v. U.S., 112 F.Supp. 792 (W.D.Mo. 1953), aff'd sub nom. National Mfg. Co. v. U.S., 210 F.2d 263 (8thCir. 1954), cert. den., 347 U.S. 967 (1954).

There was a great flood in Kansas City, Missouri in July 1951. A number of plaintiffs sued the U.S. Government and the trial court granted summary judgment to the defendant, the U.S. Government, in each case. Only two of the summary judgments were reported, in cases known as *Western Mercantile* and *Mid-Central Fish*. Plaintiffs in six cases appealed. The U.S. Court of Appeals consolidated the six cases with identical issue into one appellate case, known as *National Mfg. Co.* 

While *National Mfg. Co.* is the only opinion in these cases that is now frequently cited, it is of historical interest to read the two reported opinions of the trial courts. *Western Mercantile* is a trivially terse opinion that the "discretionary function" exception in the FTCA gives the court no jurisdiction to hear this case, then makes the gratuitous remark "it undoubtedly is a matter of common knowledge that no one in the Kansas City area can accurately forecast either the extent of precipitation or floods." 111 F.Supp. at 800. In reading all of the reported cases on alleged negligence in weather forecasts, I have found that it is rare for a judge to recognize the lack of accuracy in a forecast. *Mid-Central Fish* is a detailed opinion that recognizes both the "discretionary function" and "misrepresentation" exceptions in the FTCA as the basis for dismissing Plaintiff's complaint.

The plaintiffs did not sue the government for damages caused by the flood *per se*. Instead the plaintiffs alleged that employees of the U.S. Government had an obligation to collect information on the level of water in the river, to forecast rainfall, and to transmit that information to the public "whose property and lives might be affected by the flood waters ...." 210 F.2d at 266. Although the river had entered the flood stage on 9 July 1951, the plaintiffs alleged that the government was negligent or careless when it failed to warn people of the impending disaster that occurred on 13 July 1951. The plaintiffs alleged that the U.S. Government provided "assurances of safety", instead of accurate forecasts. *Id.* at 267. One plaintiff, Shipley, alleged "that if defendant had so warned plaintiff twenty hours before when such river stage became known to defendant, ... plaintiff could have removed all of its said property to a place of safety and avoided such loss." *Id.* at 269. The court tersely summarized the essence of plaintiff's Complaints:

It was not charged in either of the complaints here that the United States was liable to any of the plaintiffs because the Kansas River overflowed the banks, levees and works within which it was normally confined, but the allegations of the complaint in each of the consolidated cases were limited to the effect that the United States became liable because the Weather Bureau and other federal agencies (1) negligently assured the plaintiffs immediately prior to the flood that the river would not overflow and (2) negligently omitted and failed to give the plaintiffs notice and warning of the impending overflow in time for them to remove their movable property from the flood area.

210 F.2d at 269.

The appellate court affirmed the summary judgment by the trial court for three basic reasons:

- The Federal Flood Control Act, 33 USC § 702c, says "no liability of any kind shall attach to ... the United States for any damage from or by floods or flood waters at any place." 210 F.2d at 270.
- 2. The Federal Tort Claims Act, 28 USC § 2680(h), prohibits claims against the government for any kind of misrepresentation by government employees. 210 F.2d at 275-76.
- 3. The Federal Tort Claims Act, 28 USC § 2680(a), prohibits claims against the government for any harm from any "discretionary function" by government employees. The appellate court interpreted this section of the FTCA to give immunity to the government when the government's services "differ in essential character from those in which any comparable private enterprise are carried on." 210 F.2d at 277. The court also stated that the services of the Weather Bureau were "intended for the public at large" and is not a service rendered to one client. 210 F.2d at 277. This line of reasoning is amplified in a concurring opinion. 210 F.2d at 279-280 (Johnsen, J., concurring. Sanborn, J., agreeing with Johnsen.).

The discussion of the "discretionary nature" of the forecasts of flood waters is wrong. The Court of Appeals in *National Mfg. Co.* used a test that declared sovereign immunity applied if there was no comparable private service. Twenty-one months after *National Mfg. Co.* was decided, the U.S. Supreme Court invalidated this test for "discretionary function", so this part of *National Mfg. Co.* is now bad law. *Indian Towing Co. v. U.S.*, 350 U.S. 61, 67-68 (1955). Unfortunately, the Supreme Court's clarification of the law came too late for Plaintiffs in *National Mfg. Co.* 

In considering the appellate court's decision, my personal opinion is that:

- 1. The Federal Flood Control Act is not relevant here, since the plaintiffs allege that the proximate cause of the damage is *not* the flood water itself, but the failure of the government employees to issue accurate forecasts of the level of water in the river (and also the negligence of the government employees in issuing false assurances of safety), so that property could be moved to a safe location *before* the flood waters reached the property.
- 2. The FTCA does absolutely prohibit claims against the government for misrepresentation. I argue below, at page 44, that this part of the FTCA should be changed.

3. Because the test for "discretionary function" was later invalidated by the U.S. Supreme Court, I confine my comments on this test to a footnote.<sup>2</sup>

The amount of damages is *ir*relevant to deciding whether the U.S. Government is liable. That the appellate court twice mentioned the amount of damages in its opinion suggests to me that these judges were afraid of making the U.S. Government pay enormous damages that had allegedly been caused by the negligence of government employees in performing their official duties:

- 1. In five of the consolidated cases, damages totalled "about a million dollars", and in the sixth consolidated case (i.e., in which the Shipley Co. was the plaintiff) the damages allegedly totaled \$ 49,499. The appellate court then ominously says "... cases of like nature involving very great sums are awaiting the outcome of these appeals." *Id.* at 269.
- 2. At the end of the opinion, court said: the government employees "cannot be held liable for the nine hundred odd million dollars of damages said to have resulted from the Kaw River flood." *Id.* at 278. The US\$  $9 \times 10^8$  damage number is *not* part of the facts of the six cases in this consolidated appeal, in which the total damages were approximately US\$ 10<sup>6</sup>. The appellate judges were apparently afraid that if the six cases were allowed to proceed, more cases would be filed (i.e., the "floodgates of litigation" would open).

The U.S. Supreme Court refused to hear Plaintiffs' appeal.

<sup>&</sup>lt;sup>2</sup> In passing, *Mid-Central Fish* notes the Government attorney's position that "collection and dissemination of weather and flood data are governmental sovereign functions which a private citizen would never find himself discharging." 112 F.Supp. at 795. Indeed, the trial judge in *Mid-Central Fish* said the Government's assertion was "no valid ground for denying recovery under the" FTCA. *Id.* In my opinion, the Government's attorney confused two separate issues: (1) collection of data and (2) making forecasts. One reason that commercial organizations have not provided such a data collection and publication service is that a for-profit corporation can not compete with the free services in this area offered by the Government. However, examination of the advertisements in the back of the *Bulletin of the American Meteorological Society* at the time of this flood shows that there were then many private meteorologists who were competing with the U.S. Government's Weather Bureau for forecasting. The real issue in both *Mid-Central Fish* and *National Mfg. Co.* was the Weather Bureau's failure to warn, which is a forecast function, *not* a data collection function. Therefore, using the now-rejected test proposed by the Government's attorneys, the "discretionary function" exception should *not* apply to the Weather Bureau.

#### Louisiana 1957-64 Bartie v. U.S.

*Bartie v. U.S.*, 216 F.Supp. 10 (W.D.La. 1963), *aff*<sup>\*</sup>*d*, 326 F.2d 754 (5thCir. 1964), *cert. den.*, 379 U.S. 852 (1964).

The facts are relatively simple. The Plaintiff heard one radio or television broadcast at 22:00 on Wednesday, 26 June 1957, that relayed a forecast that hurricane Audrey would reach land on "late Thursday". Plaintiff and his family went to sleep on Wednesday night and were awakened at 04:30 Thursday by the hurricane. They were unable to flee, so they climbed on top of their house. Plaintiff watched as his wife and five children were washed away by the wind and water from the hurricane: his wife and five children all died in the hurricane. After his house disintegrated, Plaintiff was carried four miles by the water, where he was eventually rescued.

The plaintiff had packed on Wednesday "but was waiting for someone to come around and say 'we want all of your to move out of here.'" 216 F.Supp. at 13. The trial court tersely dealt with that issue:

To say that Whitney Bartie would have done this or that, had the advisories and warnings been worded more explicitly, is pure speculation. He did not read any of the warnings and heard only one. He was waiting for someone to say "we want you all to move out of here." No such duty was imposed on the Weather Bureau by statute or regulation.

216 F.Supp. at 17.

Plaintiff's attorney presented no evidence of negligence by the Weather Bureau, hence Plaintiff did not meet his burden of proof on his claim. The Weather Bureau had an expert witness, a professor of meteorology at Florida State University who had experience in research on hurricanes. That professor testified that the Weather Bureau's forecasts "were as accurate as could be expected at that time." The trial court accepted that expert testimony as a finding of fact. 216 F.Supp. at 15. Therefore, there was no negligence by the Weather Bureau. The fact that someone is harmed does not produce a valid tort: the plaintiff must also be able to prove that the defendant was responsible for the harm (i.e., show that the defendant had a duty of care to the plaintiff, that the defendant breached that duty, and that the breach caused the defendant's injury).

The broadcast allegedly included some opinions added by the radio or television station, such as "there is no need for alarm tonight" or "you can rest well tonight." 216 F.Supp. at 13. These opinions were intended for the audience in Lake Charles, Louisiana, where the radio or television station was located. However, the plaintiff lived on the coast of Louisiana, about 32 miles south of Lake Charles. 216 F.Supp. at 13, 16-17. The trial court noted that the U.S. Government "Weather Bureau does not own, control, or operate television, radio or newspapers." 216 F.Supp. at 14. Therefore, the defendant Weather Bureau was in no way

to blame for the editorial gloss added by the broadcasters.

As an additional reason for ruling for defendants, the judge held that the Weather Bureau was immune under the FTCA, because their forecasts were a "discretionary function". 216 F.Supp. at 20. Although the Government's attorney did not brief the issue of whether the Weather Bureau was also immune under the "misrepresentation" exclusion of the FTCA, the judge held that this immunity also applied to the Weather Bureau. 216 F.Supp. at 20-21. However, these opinions are *obiter dicta*, because Plaintiff could not prove negligence by the Weather Bureau, even if the Weather Bureau were not immune from liability.

Plaintiff appealed. The U.S. Court of Appeals, in a five-sentence *per curiam* opinion, affirmed the trial court on grounds that the Weather Bureau "was not negligent, and the deaths of the plaintiff's wife and children were not proximately caused by the conduct of defendant's employees". 326 F.2d 754. The U.S. Supreme Court refused to hear Plaintiff's appeal.

In my opinion, the courts reached the correct result. The Plaintiff apparently misunderstood what were reasonably clear warnings about the approaching hurricane. In 1957, it was not possible to always accurately predict when a hurricane would reach land, in part because the Weather Bureau had to rely on data from ships at sea and airplane flights about the location of the hurricane. Now, the situation is much different, with the images from satellites that provide pictures of clouds.

Incidentally, the second paragraph of the trial court's opinion mentions that this case was "one of several hundred wrongful death actions now pending as a result of this catastrophe." A total of more than 400 people died in this one hurricane. 216 F.Supp. at 11. Attorneys in many of these other cases had agreed to use *Bartie* as a test case, and *Bartie* was "fully litigated on the merits." When the Government won in *Bartie*, most of the other cases were withdrawn. One plaintiff offered additional evidence, including the opinion of a private meteorologist (who, however, testified that the Weather Bureau was *not* negligent in forecasting), but this additional evidence was *insufficient* to change the result. *Carrier v. U.S.*, 369 F.2d 322 (5thCir. 1966), *cert. den.*, 386 U.S. 1027 (1967).

# Texas 1969-73 *Chanon v. U.S.*

Chanon v. U.S., 350 F.Supp. 1039 (S.D.Tex. 1972), aff'd, 480 F.2d 1227 (5thCir. 1973).

The wooden fishing vessel Gulf Wind sank during a severe storm near the Galveston, Texas coast during the early morning of 14 Feb 1969. The storm was characterized by waves with a height between 20 and 30 feet, while the ship had a length of only 51 feet.

Plaintiff alleged that the two people aboard the Gulf Wind listened to, and relied on, weather forecasts that were produced by the U.S. Government Weather Service and transmitted by radio station KQP, a marine radio-telephone service operated by Southwestern Bell Telephone Company. Plaintiff further alleged that KQP did not transmit the weather forecast at 23:15, as was the KQP schedule.

After listening to expert witnesses for both sides, the judge concluded that "the methods used by the Weather Service (WSO Galveston having the responsibility here) in accumulating weather data appear to be completely reasonable under the circumstances. 350 F.Supp. at 1041. Further, "these weather forecasts were reasonably accurate". 350 F.Supp. at 1042.

Both people aboard the Gulf Wind died during that storm, so no one knows exactly what happened aboard that ship. Specifically, we do not know if the two sailors were listening to KQP at 23:15 or 24:00. The court decided that even if they had been listening to KQP, "it would have made no difference", because the sailors were then too far from land to reach a port before the storm hit them. 350 F.Supp. at 1042-43.

Plaintiff lost because there was no proof that the sailors listened to (or relied on) the forecast broadcast on KQP, "inadequate" proof that KQP did not broadcast the forecast, no proof that the Weather Service was responsible for KQP not broadcasting this forecast, and no proof that hearing the forecast at 23:15 would have saved the ship and two sailors (i.e., the alleged failure to broadcast the forecast was not the proximate cause of the injury). Hence, Plaintiff lost the case, because Plaintiff had no convincing evidence on many key issues.

The attorney for the U.S. Government asserted that the FTCA made the Government immune from suit because of the statutory bar for torts involving "misrepresentation" and also because the Weather Service had a duty "only to the public generally", not to the specific sailors who drowned. The trial court did not mention the FTCA and the appellate court said it was "unnecessary to address those legal defenses." 480 F.2d at 1228.

*Chanon* is remarkable for two incidental statements by the judge:

- The Weather Service "was under the duty to use due care in gathering weather information, forecasting and making available for broadcasting, up-to-date weather information."
   350 F.Supp. at 1041. The judge cited *Indian Towing Co. v. U.S.*, 350 U.S. 61 (1955) to support this finding of a legal duty.
- "Thus the government owed no duty to the two deceased seamen to directly broadcast the weather information at any time. But, we think it did have a duty to use due care in forwarding weather forecasts and warnings to the commercial radio stations in the area." 350 F.Supp. at 1042. Later, the judge repeated this finding: "... we believe the government had a duty to forward the available weather information to KQP." 350 F.Supp. at 1042.
   These statements might be persuasive authority in a future case.

Curiously, Plaintiff sued only the U.S. Government, *not* radio station KQP. The court concluded that, *if* the forecast were not broadcasted by KQP, then that forecast could have gone in the trashbasket *either* at the Weather Service *or* at KQP. 350 F.Supp. at 1043.

On the allegations in *Chanon*, one wonders about the legal duty of commercial radio stations. *If* commercial radio stations normally broadcast weather forecasts at regular times, then do those stations have a legal obligation to make such broadcasts? One might argue that past broadcasts by one radio station induce a justifiable reliance by the audience that the radio station will also broadcast weather forecasts in the future. Unfortunately, the failure to sue KQP, and the absence of facts about the alleged failure of KQP to broadcast the weather forecast, prevented the court from reaching this interesting issue.

# Washington 1977-87 Schinmann v. U.S.

*H.F. Allen Orchards v. U.S.*, 4 Ct.Cl. 601 (1984), *aff*<sup>°</sup>*d*, 749 F.2d 1571 (Fed.Cir. 1984), *cert. den.*, 474 U.S. 818 (1985). *Schinmann v. U.S.*, 618 F.Supp. 1030 (E.D. Wash. 1985), *aff*<sup>°</sup>*d without opinion*, 811 F.2d 1508 (9thCir. 1987), *cert. den.*, 484 U.S. 924 (1987).

A drought during the Fall of 1976 and early 1977 reduced the available water in the Yakima River basin. As a result of this drought, the U.S. Bureau of Reclamation announced on 7 Feb 1977 that landowners who held junior water rights "would receive, under the forecast, only 7% of their normal water supply." However, at the end of 1977, those who had junior water rights had actually received 83% of their normal water supply. 618 F.Supp. at 1032. Plaintiffs were "159 farmers and irrigation system users in the Yakima Valley" who suffered financial losses after planting fewer crops in reliance on this forecast of diminished water. 618 F.Supp. at 1031; 4 Ct.Cl. at 602.

Plaintiffs in *Allen Orchards* alleged a breach of contract claim. The U.S. Government in *Allen Orchards* moved for summary judgment, because the Government had no contractual obligation to make accurate forecasts and, furthermore, Plaintiffs could not sue as a third-party beneficiary to the contracts between the Government and the irrigation districts. The Court of Claims granted the Government summary judgment and the Court of Appeals affirmed.

Plaintiffs in *Schinmann* alleged that the forecast was negligent. The U.S. Government moved for summary judgment in *Schinmann*, because of the exceptions for "discretionary function" and "misrepresentation" in the FTCA, as well as "exculpatory clauses of the contracts between the United States and the irrigation districts." 618 F.Supp. at 1033. After a lengthy discussion, the trial court granted summary judgment because of the exceptions in the FTCA, which deprived the court of jurisdiction to hear the case.

Plaintiffs argued that the basis for their claim was the negligent calculation of the amount of water (i.e., "hydrological malpractice"), *not* the communication of the erroneous forecast. The trial court rejected this argument. 618 F.Supp. at 1036-37.

In my opinion, *Schinmann* should be distinguished from other weather forecast cases. In *Schinmann* the alleged negligent weather forecast covered a range of at least four months (i.e., from 7 Feb 1977 to June 1977, when it was forecast that those with junior water rights would receive 70% of their normal water supply). In 1977 it was not possible to accurately forecast the amount of rain that would fall over a period of many months. Hence, *Schinmann* is unlike other cases that involve the failure to forecast weather only one day in advance.

# Massachusetts 1980-86 Brown v. U.S.

*Brown v. U.S.*, 599 F.Supp. 877 (D.Mass. 1984), *damages determined*, 615 F.Supp. 391 (D.Mass. 1985), *rev'd*, 790 F.2d 199 (1stCir. 1986), *dismissed*, 795 F.2d. 76 (1stCir. 1986), *cert. den.*, 479 U.S. 1058 (1987).

*Brown* is important because it is the only reported case in which plaintiffs won that involved people on land or sailors at sea who were injured by a negligent weather forecast. However, the victory for Plaintiffs in the trial court was reversed by the appellate court. Nonetheless, *Brown* is the leading case on negligent weather forecasts in the USA.

This is a wrongful death action brought by the survivors of three lobster fishermen who were lost at sea during a severe storm on 22 Nov 1980 at Georges Bank, about 100 miles east of the coast of Massachusetts. The surviving captain of one boat testified that he monitored the radio broadcasts of the National Weather Service (NWS) before leaving port and during his time at sea, but the NWS failed to warn of the storm until after the boats had *already* encountered the storm.

The captains of the two boats each listened to the 11:20 marine forecast on 21 Nov 1980, before departing from port. That morning forecast called for wave heights between 6 and 12 feet that night. The forecast at 17:00 called for wave heights between 3 and 6 feet that night. The forecast at 22:39 called for wave heights between 5 and 10 feet that night and the following day. Despite these benign forecasts, at 04:40 on 22 Nov 1980 the actual wave heights were already 25 feet. By 11:00 that morning, the actual wave heights reached 50 to 60 feet. 599 F.Supp. at 880-81. For comparison, the boat that sunk had a length of 52 feet. 599 F.Supp. at 879.

The NWS made their weather forecasts for this region based on three meteorological buoys that transmitted wind speed, wind direction, sea-level pressure, air temperature, sea surface temperature, and wave height. One buoy was located in the Gulf of Maine, one buoy was located south of Georges Bank, and the most important buoy for this case was located on Georges Bank. 599 F.Supp. at 882 and n. 3.

The buoy on Georges Bank was installed in March 1977. It failed in May 1980. The NWS had it repaired three months later on 11 Aug 1980. Then the "entire wind sensor system failed on" 6 Sep 1980, but the NWS made "no further attempts to repair the buoy". 599 F.Supp. at 882.

Incidentally, the meteorological buoy in the Gulf of Maine had been "off station for about six months." 599 F.Supp. at 882.

On 21-22 Nov 1980, because of the absence of data from the buoy on Georges Bank, the NWS was unable to forecast the storm that killed the three fishermen. The trial judge stated:

Notwithstanding Winslow's [the meteorologist in charge of the Boston NWS office] admonition, and the NWS's awareness of the buoy's importance to a Georges Bank forecast, it was permitted to remain in disrepair for two and one-half months immediately prior to this incident. During that period, the buoy's wind information was so erratic that its transmission was blocked by the NWS. As a consequence, the NWS did not receive any Georges Bank wind information from what had been its most reliable source. Moreover, the NWS never informed the small vessel fishermen that the forecasts upon which they were relying were prepared without this crucial buoy data. 599 F.Supp. at 883.

Haggard's<sup>3</sup> opinion was that a storm warning should have been issued at 10:39 p.m. on November 21, 1980 and that, if the NWS had the wind speed and direction information from the Georges Bank buoy, a timely forecast could have been issued that would have accurately tracked both the intensity and location of the storm.

<sup>&</sup>lt;sup>3</sup> Haggard was a private meteorologist who was an expert witness for Brown.

[footnote omitted] The court is persuaded by Mr. Haggard's opinions, and therefore, adopts them as findings.

599 F.Supp. at 884.

In analyzing the duty, breach, and causation of Plaintiffs' injuries, the trial judge stated: Here, plaintiffs do not allege that the government was negligent merely because it issued an incorrect forecast. Rather, they argue that defendants were negligent in failing, for more than three months, to make any effort to repair a data buoy whose purpose was to provide information recognized as vital to a reliable forecast — or to even give warning that the critical buoy was essentially out of action. [footnote omitted] This court agrees. 599 F.Supp. at 887.

Plaintiffs contend that the government breached its duty of due care in deciding not to make any effort to repair the Georges Bank buoy in September merely because the buoy was scheduled to be replaced in January. Plaintiffs argue further that the government's failure to warn mariners that the Georges Bank buoy was not operational exacerbated its negligence. Again, this court agrees.

Under the circumstances here, the conscious decision not to repair the Georges Bank buoy in September merely because it was scheduled to be replaced in January was unreasonable. ....

Moreover, no attempt was made to notify mariners that the monitoring and prediction system was not functioning properly, particularly those mariners contemplating a venture to the Georges Bank area. It is unnecessary, therefore, to consider whether the government would have met its duty if it had notified mariners of the equipment failure. [citation omitted]

#### 599 F.Supp. at 887.

This court is persuaded by the evidence that the defendant's breach of its duty was a "substantial factor" in causing the deaths of fishermen here. [citations omitted] Two areas of evidence are of particular import. The first is the expert testimony of Mr. Haggard [footnote omitted] that the NWS forecast was significantly incorrect as of 7 a.m. on November 21, 1980, that a storm warning should have been issued no later than 10:39 p.m. that day, and that the lack of buoy data from Georges Bank was critical to the NWS error. The second is the testimony of Captain Brown that if he had received a proper storm warning by 11 p.m. on November 21, 1980 he would have turned around because of the danger, and would have been able to return safely to port. The court considers the testimony of both witnesses to be credible and persuasive. 599 F.Supp. at 887-88.

The trial judge cited the Restatements (Second) of Torts<sup>4</sup> § 323 as creating a duty of care, but the trial judge did not elaborate on how the Restatement should be applied in *Brown*. The trial judge then stated:

<sup>&</sup>lt;sup>4</sup> This section of the Restatement is quoted later in this essay, at page 41.

The legislative history leading to the creation of the NOAA demonstrates clearly that the government intended to undertake and meet the responsibility for providing a reliable weather monitoring and prediction system for the use of commercial fishermen.

••••

The NOAA, moreover, was on notice that weather forecasts were important to the safety of commercial fishermen and their vessels.

••••

Given that defendant undertook to provide a service that was necessary to the protection of plaintiffs, and that plaintiffs relied on that service, this court finds that defendant owed plaintiffs a duty to take reasonable care in maintaining its weather observation and prediction system.

The duty recognized here is a limited one, owed to an identifiable group of mariners that place special reliance on the accuracy of the NWS weather forecast. *DeBardeleben Marine Corp. v. United States*, [451 F.2d 140, 148-49 (5thCir. 1971).] ....

This court's conclusion that the mariners here were owed a duty of due care by the NOAA is supported by decisions of the Supreme Court, the First Circuit, and other district courts. The seminal case on the issue of duty is *Indian Towing Co. v. United States*, 350 U.S. 61, 76 S.Ct. 122, 100 L.Ed. 48 (1955).

••••

Consistent with the holding in *Indian Towing*, plaintiffs here do not argue that the NOAA had an obligation to provide a weather forecasting system, or that there was a duty to have a data buoy on Georges Bank. Rather, plaintiffs' position is that once the NOAA undertook to provide a forecasting system, and then induced reliance on that system, it was obligated to use due care in seeing to the system's proper maintenance or, at least, to give warning that the system was not functioning correctly.

599 F.Supp. at 884-86.

Later, in considering the Government's claim of immunity because of the exceptions in the FTCA, the trial judge stated:

Plaintiffs complaint is that, after inducing reliance on its selected weather system, the government negligently chose not to keep it in repair and failed to issue any warning concerning its disrepair to those relying on it. The law does not permit the government, under the guise of policy making, to negligently remove its proffered safety net without reasonable notice to those who risk their lives daily in reliance on it. For these reasons, the discretionary function defense must be rejected.

599 F.Supp. at 889.

In this case, the plaintiffs' claim is not based on the inaccurate weather forecasts but rather on the cause of their inaccuracy – the government's negligent failure to maintain the Georges Bank buoy.

599 F.Supp. at 890.

The trial judge ruled in favor of Plaintiffs and ordered the Government to pay damages to the Plaintiffs. The Government appealed.

#### the appellate opinion

The U.S. Court of Appeals reversed the trial judge's decision, because the "discretionary function" exception in the FTCA provided immunity to the Government. 790 F.2d. at 201-02.

I am particularly concerned that the Court of Appeals worried about burdening the Government if liability for negligent weather forecasts were permitted by the courts:

We believe, too, that the court failed to consider the pernicious consequences that could flow from its approach. With necessarily limited funds, and unable to afford three buoys, will a Coast Guard official place one and risk heavy damages (\$382,000 in *Eklof* [762 F.2d 200]), or place none at all and play it safe – from the government's standpoint? *Eklof* cuts to the heart of governmental discretion, and, in effect, could deprive navigators of half a loaf, usually thought better than none.

790 F.2d. at 202, n. 5.

In my opinion, that is a valid point-of-view from an attorney or judge worried *only* about liability, but that is *not* a valid point-of-view of a professional meteorologist who is concerned about having an adequate scientific basis for weather forecasts. Fortunately, meteorologists are not attorneys, so I am not worried about half a loaf being better than none. There are higher aspirations in life than minimizing one's liability.

We add that, from the standpoint of the government, the Weather Service is a particularly unfortunate area in which to establish a duty of judicially reviewable due care. .... Weather predictions fail on frequent occasions. If in only a small proportion parties suffering in consequence succeeded in producing an expert who could persuade a judge, as here, that the government should have done better, the burden on the fisc would be both unlimited and intolerable. What plaintiffs choose to disregard as a chamber of horrors in Judge Johnson's concurring opinion in *National Manufacturing Co. v. United States*, 210 F.2d 263, 280 (8thCir. 1954), *cert. denied*, 347 U.S. 967, 74 S.Ct. 778, 98 L.Ed. 1108, because he was speaking in terms of strict liability, is not to be so dismissed. ....

790 F.2d. at 204.

In their zeal to protect the Government from "unlimited and intolerable" liability, these appellate judges seem to have forgotten that successful plaintiffs will need to prove *both* negligence *and* proximate causation by the Weather Service. Most plaintiffs will be unable to meet that burden of proof, so there will probably not be many successful cases against the Weather Service. Further, I believe the job of a judge is to hear a dispute fairly and to do Justice, *not* to worry about burdening a defendant with large damages, and *not* to worry about opening the floodgates of litigation in future cases. Judges, quite properly, do not worry about bankrupting asbestos

manufacturers and other corporations that have caused immense harm. If defendants wish to avoid large damages, they should be consistently careful and avoid errors that harm people.

The U.S. Supreme Court refused to hear Plaintiff's appeal. However, in an unusual gesture, two of the nine justices on the Supreme Court wanted to hear *Brown*, to resolve an apparent split amongst Circuit Courts of Appeals.

#### South Carolina 1981-87 Springer v. U.S.

Springer v. U.S., 641 F.Supp. 913 (D.S.C. 1986), aff'd, 1987 WL 37510 (4thCir. 1987).

The NWS was found to be negligent, along with the Federal Aviation Administration, in causing the crash of a small plane, owing to failure to warn of low-level wind shear. My discussion of *Springer* is given below, beginning at page 29.

#### Illinois 1990-94 Bergquist v. U.S.

Bergquist v. U.S., 849 F.Supp. 1221 (N.D.Ill. 1994).

A tornado killed 29 people and allegedly caused more than US\$  $1.6 \times 10^8$  in property damage on 28 August 1990 in Illinois. Plaintiffs alleged that employees of the National Weather Service negligently failed to "adequately interpret ... radar signatures" and failed to issue tornado warnings, which would have caused local officials to turn on warning sirens. *Bergquist* is a consolidation of six separate cases with common issues.

The U.S. Government moved for summary judgment, because the FTCA immunized the government both for "misrepresentation" and "discretionary function" and also because the tort law of Illinois "does not impose liability under these circumstances." 849 F.Supp. at 1224-25.

The judge granted the Government's motion for summary judgment for all three reasons. The judge's opinion contains a detailed discussion of the "discretionary function" exception to the FTCA and a shorter discussion of the "misrepresentation" exception to the FTCA.

The judge never considered the merits of the claim about alleged negligent weather forecast, because summary judgment on the FTCA disposed of *Bergquist*. The Westlaw database contains no appellate decision for this case.

#### Florida 1999 Brandt v. The Weather Channel

Brandt v. The Weather Channel, 42 F.Supp.2d 1344 (S.D.Fla. 1999), aff'd without opinion, 204 F.3d 1123 (11thCir. 1999).

The U.S. Government is the sole defendant in nearly all cases involving an allegedly negligent weather forecast. *Brandt* is remarkable because the sole defendant is a commercial channel on cable television that broadcasts local weather information every ten minutes, and national/regional weather information in between. The Weather Channel makes its own forecasts from meteorological data that are provided by the U.S. Government. The opinion of the federal judge is unusually terse about the facts of this case, saying only:

This is a wrongful death action brought by the personal representative of the decedent who was a passenger on a friend's fishing boat and was drowned when adverse weather conditions caused him to be thrown from the boat. The Complaint alleges that the decedent monitored the Weather Channel in the morning before going out on the boat and that the Weather Channel had not issued a small craft warning for that day and no bad weather had been forecast.

42 F.Supp.2d at 1345.

Note that the date of the injury is missing. Plaintiffs asked for damages of "at least ten million dollars." 42 F.Supp.2d at 1345, n.1.

Plaintiffs' attorney originally filed the case in state court, where the Defendant removed it to federal court, on the basis of diversity jurisdiction. Although this removal was proper and commonly done, the attorney for the Plaintiff made a "meritless" Motion to Remand to state court. 42 F.Supp.2d at 1345. There is also a terse mention of a "baseless" motion by Plaintiffs' attorney to challenge the jurisdiction of the court. 42 F.Supp.2d at 1345, n.2.

- The judge then granted Defendant's Motion to Dismiss, first with a parade of horribles: In this case, the Plaintiffs seek a novel and unprecedented expansion of the scope of tort law: to impose on a television broadcaster of weather forecasts a general duty to viewers who watch a forecast and take action in reliance on that forecast. As the Defendant points out, if the court were to impose such a duty under either a breach of contract or tort theory, the duty could extend to farmers who plant their crops based on a forecast of no rain, construction workers who pour concrete or lay foundation based on the forecast of dry weather, or families who go to the beach for a weekend based on a forecast of sunny weather. The court further notes that if it were to impose a duty upon a weather broadcaster for a faulty broadcast, such a duty could be extended to non-weather related broadcasts such as traffic reports upon which individuals rely to arrive timely to scheduled events.
- 42 F.Supp.2d at 1345-46.

This parade of horribles is purely propaganda. One could imagine a judge saying that if courts imposed legal obligations on physicians to be competent and to obtain informed consent from their patients, then the whole practice of medicine would disintegrate. One could imagine saying that if courts imposed legal obligations on manufacturers to make safe products, then modern society with its many appliances and tools would vanish and we would return to the stone age. The fact is that corporations and professionals are generally legally responsible for their decisions and actions, and life continues.

The real basis for dismissing the Complaint is contained in two terse sentences, supported by four citations:

It is clear that to impose such a duty would be to chill the well established first amendment rights of the broadcasters. It is well established that mass media broadcasters and publishers owe no duty to the general public who may view their broadcasts or read their publications. *First Equity Corp. v. Standard & Poor's Corp.*, 869 F.2d 175 (2dCir. 1989) (publisher of financial information not liable under Florida law to subscriber for negligent misrepresentation); *Winter v. G.P. Putnam's Sons*, 938 F.2d 1033, 1038 (9thCir. 1991) (publisher owed no duty to mushroom enthusiasts who became violently ill after eating wild mushrooms deemed safe by publisher's book); *Jones v. J.B. Lippincott Co.*, 694 F.Supp. 1216, 1218 (D.Md. 1988) (publisher of medical textbook not liable under products liability theory to nursing student injured when following treatment prescribed by textbook); *Cardozo v. True*, 342 So.2d 1053, 1056 (Fla.App.2d Dist. 1977) (publisher of cookbook not liable to purchaser of book for breach of warranty for failure to warn of dangers of poisonous ingredients in recipe).

42 F.Supp.2d at 1346.

None of these citations involved the duty of a television network (which was the defendant in this case) and none involved the analogous duty of radio/television stations, newspapers, or other contemporary sources of weather information when reporting either news or weather information.

The judge's opinion then contains a paragraph that says: "Because prediction of weather is precisely that – a prediction, a weather forecaster should not be subject to liability for an erroneous forecast." The judge cited *Brown v. U.S.*, 790 F.2d 199, 204 for that proposition and then concluded broadly: "... this court declines, as a matter of law, to create a heretofore nonexistent 'forecaster's duty." 42 F.Supp.2d at 1346. The judge made a stealthy shift here: the real issue in *Brandt* is whether there was a negligent forecast, *not* whether there was an erroneous forecast. To prove negligence requires proof of a minimum standard of care and proof that the defendant's conduct was below the minimum acceptable standard of care.

Finally, the court raised a privity of contract issue:

Furthermore, the court finds that the decedent was merely a viewer of a television broadcast and the Plaintiff has not alleged the existence of an enforceable contract between the decedent and the Defendant. Because the Complaint is devoid of allegations supporting an enforceable express or implied contract, the Weather Channel was not in privity with the decedent and owed no actionable, contractual duty to the decedent. 42 F.Supp.2d at 1346.

The judge's perfunctory comments quickly disposed of a possible contract<sup>5</sup> between the decedent and The Weather Channel. Any legal obligation of the Defendant in *Brandt* would be under tort law. Later in this essay, beginning at page 40, I quote some rules of tort law that are applicable to negligent weather forecasts.

The U.S. Court of Appeal affirmed the decision of the trial court, without providing any reasons. In reading the trial judge's opinion, and the nonexistent appellate court opinion, I get the impression that these judges wanted to avoid grappling with the difficult issues in *Brandt*.

# Florida 1998-2001 *Monzon v. U.S.*

Monzon v. U.S., 253 F.3d 567 (11thCir. 2001), cert. den., 122 S.Ct. 1792 (2002).

On 17 May 1998 Plaintiff's wife and three children went to the beach. One of Plaintiff's "daughters was caught in a rip current. While attempting to rescue her daughter, Plaintiff's wife died by drowning." 253 F.3d at 569.

While "it was not a routine practice of the NWS to publish information on rip currents[,] .... the NWS was engaged in an experimental project with the St. Johns County Beach Patrol to determine if rip current activity could be predicted. .... On May 17, 1998, an agent from NWS contacted the St. Johns County Beach Patrol to inform it that the experimental computer model suggested that the beach would soon experience increased rip current activity. This information was never communicated to Plaintiff's wife." 253 F.3d at 569.

Plaintiff filed a wrongful death action against the U.S. Government which alleged that the Government "breached its duty to warn" Plaintiff's wife "of the hidden dangers of the rip currents in the surf at the beach on that date." 253 F.3d at 569.

The Government moved for summary judgment, because of the "discretionary function" exception in the FTCA. The judge of the trial court granted the Government's motion, the U.S. Court of Appeals affirmed, and the U.S. Supreme Court refused to hear Plaintiff's appeal. Because summary judgment was granted on a matter of subject matter jurisdiction, none of these courts dealt with the merits of *Monzon*.

<sup>&</sup>lt;sup>5</sup> There was certainly no written contract between the decedent and The Weather Channel, but there is still the possibility of an implied contract. A discussion of contract law in *Brandt* would eventually come to the issue of whether there is an implied warranty for accurate and/or complete weather forecasts. In my opinion, there is probably no warranty for accuracy of a forecast, and so, Plaintiff loses under a contract theory. A warranty for completeness is a more interesting question, but there are not enough facts in this case to even speculate on such a warranty.

#### my opinion on Monzon

It would seem that, *if* anyone had an obligation to publish the experimental forecast, then that obligation would be on the St. Johns County Beach Patrol. Unlike radio stations that broadcast to everyone, the Beach Patrol is in a position to communicate directly to those affected by rip currents. And the Beach Patrol had actual knowledge of the prediction by the NWS of the rip currents. However, Plaintiff's attorney did not sue the Beach Patrol.

*Monzon* involves a different issue than the other weather forecast cases. Ignoring the exceptions in the FTCA, I suggest that the NWS has no obligation to distribute an *experimental* forecast service, because this experimental service has not yet been scientifically verified as a reliable service. Distributing an experimental forecast that is based on unverified methods could be viewed as negligent, since a false prediction of safety could lure more people into dangerous rip currents.

There is also a difficult issue of proximate causation here. If the NWS had publicized its experimental forecast in the usual way for weather forecasts (e.g., by notifying radio and television stations), would Plaintiff's wife have heard such broadcasts? We do not know if Plaintiff's wife listened to a broadcast weather forecast before she departed for the beach, en route to the beach, or while at the beach. We can not ask Plaintiff's wife what she did, because she is dead. Even if Plaintiff's wife had heard the forecast about the rip current, it is well known that adults often ignore warnings.<sup>6</sup>

In this case, the Plaintiff's *daughter* entered the water and encountered the rip current first. Even if Plaintiff's wife had instructed her daughter *not* to enter the water, the daughter might have either disobeyed her mother or forgotten the prohibition.

Finally, we come to the least pleasant aspect of *Monzon*. The daughter went into the ocean and experienced the rip current first. The injury in this litigation (i.e., the death of Plaintiff's wife) occurred during the rescue of her daughter. Certainly, the mother would go into the water to attempt to rescue her daughter, *even if* the mother knew it was unsafe. Hence, it would be difficult to prove that a hypothetical broadcast of the rip current forecast would have saved Plaintiff's wife.

For all of these reasons, there was no negligence by the NWS and Plaintiff also would be *un*likely to prove causation.

<sup>&</sup>lt;sup>6</sup> Some people disregard weather warnings, as shown by many men who play golf during a local thunderstorm, and some of whom are struck by lightning. Despite warning of icy roads and high winds, many people drive their automobiles in these hazardous conditions and are blown off the road. And many people refuse to evacuate a coastal area that is threatened by a hurricane. So it is well known that adults often ignore warnings.

#### Utah 1996-2001 *Taylor v. U.S.*

Taylor v. U.S., 139 F.Supp.2d 1201 (D.Utah 2001).

This is a wrongful death action in which plaintiffs alleged that the NWS was negligent in failing to issue a warning to airplane pilots about rime icing conditions in the clouds. The judge granted summary judgment to the U.S. Government, because of the discretionary function exception in the FTCA.

The judge also found that there was no liability under state law "for a private party for the alleged negligent issuance of a weather forecast." This ruling had the effect of being an additional reason to dismiss the litigation, because the FTCA only permits liability for the Government when a private person would be liable. 139 F.Supp.2d at 1204.

This opinion is remarkable for a terse, gratuitous statement by the judge, with no supporting reasons and no citations to authority:

The Court finds, as a matter of public policy, that to open the National Weather Service to lawsuits for alleged negligent weather forecasts would ultimately destroy the National Weather Service and its efficacy. The highly unpredictable business of forecasting the weather under such circumstances would result in forecasts that were either so general or so broad as to become useless to both the general public and the aviation community.

139 F.Supp.2d at 1204.

This paragraph, which is quoted in its entirety, is *obiter dicta*, because the judge had already disposed of the case by holding that the discretionary function exception in the FTCA gave the Government immunity from suit. Any value of *Taylor* is confined to this one quoted paragraph.

Because *Taylor* was decided on a motion for summary judgment, the court never considered the merits of the alleged negligent weather forecast. The Westlaw database contains no appeal in *Taylor*.

While *Taylor* is an airplane crash case, I have included it in this section of this essay involving harm to either people on the ground or sailors at sea, because Plaintiffs in *Taylor* alleged negligence by the NWS, *not* the FAA, so this case does not involve the usual issues in an airplane crash.

# **Cases in State Courts**

The FTCA requires that *all* claims against the U.S. Government (e.g., National Weather Service or Federal Aviation Administration) be filed in federal court. 28 USC § 1346. However, litigation that alleges a negligent weather forecast by an meteorologist employed by a state government or by a private meteorologist could be filed in state court. My search of the Westlaw database for cases in state courts involving alleged negligent weather forecasts found only one case, *Connelly v. California*, which is discussed below.

There are also several cases in state courts involving a National Weather Service notice about local severe weather, in which a city or county employee failed to alert people, with subsequent injury to a plaintiff:

- *Griffin v. Rogers*, 653 P.2d 463 (Kan. 1982)(Sheriff had no duty to warn a showboat on a lake in a state park of a severe weather forecast.)
- *Litchhult v. Reiss*, 566 N.Y.S.2d 834 (Orange County. 1991), *rev'd*, 583 N.Y.S.2d. 671, *leave to appeal dismissed*, 610 N.E.2d 381 (N.Y. 1992)(County failed to inform school about tornado watch by NWS. Trial court refused to grant summary judgment.)
- *Bradley v. Butler County.*, 890 P.2d 1228 (Kan.App. 1995)(Police attempted to activate town's warning siren when notified of tornado warning by NWS, but siren failed to function.)
- *Caldwell v. Let the Good Times Roll Festival*, 717 So.2d 1263 (La.App. 1998), *cert. den.*, 729 So.2d 566 (La. 1998)(Police dispatcher delayed 25 to 30 minutes in transmitting a severe thunderstorm warning from the NWS. Warning was received by policemen too late to evacuate a festival tent and prevent injuries from a microburst with wind gusts of 75 miles/hour.)

In each of these cases, state appellate courts held that the city or county government was immune from liability. Further, some of these cases hold that any duty to warn was a general duty owned to the public-at-large, not to a particular individual.

In addition to the above cases involving employees of a city or county government, there are a number of reported cases involving property damage by severe weather, subsequent to a warning from the NWS, in which the property was in the custody of a private corporation. Most of these cases involve either boats docked at a marina or airplanes parked and tied down at an airport.

Furthermore, there are many reported cases of death or injuries by lightning, in which plaintiffs alleged either failure to warn of an imminent thunderstorm or failure to provide a shelter that would adequately protect people from lightning. The defendant in such cases can be either a government (e.g., which owns a beach, park, or golf course), a private corporation, or an employer.

A particularly interesting case involving the failure of a corporation to warn of severe weather was decided by the Wyoming Supreme Court in 1987. While people were watching a movie in an

indoor theater in a shopping mall, the mall management informed the theater that the NWS had issued warnings of severe thunderstorm, flash flood, and tornadoes, and that "local emergency management officials demanded that citizens stay indoors". The theater failed to inform its patrons, so after the movie was over, the patrons exited the theater and drove home. One patron drowned when her automobile was stalled by flood waters on her way home, which produced a wrongful death case. This case was dismissed by the trial court, because the longstanding rule is that a landowner has a duty to warn people of non-obvious dangers on the premises, but in this case, the danger was outside the premises, and the drowning occurred two miles from the theater. In a controversial 3 to 2 decision, the Wyoming Supreme Court held that the theater did have a duty to warn its patrons about weather hazards that were both known to the theater and could foreseeably cause injury. The majority opinion also mentions the "minimal burden placed" on the theater in fulfilling this duty. *Mostert v. CBL & Associates*, 741 P.2d 1090, 1096 (Wyo. 1987). There is no further opinion in the Westlaw database for *Mostert*, so I do not know the result of any trial or settlement.

#### Connelly v. California

Connelly v. California, 84 Cal.Rptr. 257 (Calif.App. 1970).

Plaintiff operated marinas on the Sacramento River. During heavy rains, Plaintiff called the State Department of Water Resources to obtain the forecast for the height of the river. On 22 Dec 1964, Plaintiff was told that

the river was expected to rise to a maximum of 24 feet. Relying on this information, [Plaintiff] set his marina docks so they would float at a maximum river height of 26 feet; within four hours the river rose to 29 feet. It is alleged that by this time it was dark and [Plaintiff] was unable to do anything to save his docks and apartment structures from extensive damage as the river remained at flood stage of 29 feet for two weeks.

84 Cal.Rptr. at 258-259.

Plaintiff then sued the state government, alleging negligence in river height forecasts.

The attorneys for the state of California whined about how

a recipient of a weather forecast cannot, as a reasonable person, rely upon its accurateness because it is common knowledge that weather forecasts of future conditions are not statements of fact. It is understood that such predictions are subject to the vagaries of nature and that the caprice of the elements occasionally cause a weatherman's predictions to go awry.

84 Cal.Rptr. at 259.

The appellate court rejected this argument as irrelevant, because Plaintiff had alleged "specific acts of negligence in the gathering and evaluation of known facts", not merely that the forecast was erroneous. 84 Cal.Rptr. at 259.

The appellate court then grappled with the issue of whether the forecast was a discretionary act and thus immune from liability under California state law. The appellate court produced an amazingly articulate discussion of discretionary vs. ministerial acts and whether the forecast was a misrepresentation, then concluded that the state was *not* immune from liability for the allegedly negligent forecast. Unfortunately, the discussion and result only applies to the state of California, *not* to the federal government.

There is no further opinion in the Westlaw database for this case, so I do not know the final result of a settlement or trial in *Connelly*.

#### 3. Aviation Cases

Alimonti (1995) has written an interesting article about tort liability in the USA for the failure of government agencies to provide accurate weather information to pilots of aircraft, when the alleged negligence caused an airplane crash. Pilots in the U.S.A. commonly receive weather information before departing on a flight, as well as en route to their destination, from employees of the Federal Aviation Administration (FAA). In a typical case of this type, the FAA knew (or should have known) that the weather was bad, but failed to pass that information to the pilot, who relied on the FAA to both provide accurate weather information and warn of hazards.

I have done my own search of the Westlaw database of cases in all federal courts involving airplane crashes that were allegedly caused by negligently providing weather information. Surprisingly, most of the reported cases alleging negligently provided weather information that caused an airplane crash were heard between the years 1965 and 1988. I do not understand why there is a burst of cases in this 24 year interval.

In the cases mentioned above, which involve people on the ground or sailors at sea, the plaintiff always lost. In contrast, there are some cases involving airplane crashes in which the U.S. Government was found by a court to be negligent and ordered to pay damages. Because the topic of this essay is liability for negligent weather forecasts, *not* liability for airplane crashes, I have chosen only a few aircraft cases to discuss below. The cases that I have chosen to discuss involve *both* a win by plaintiff *and* remarks by the judge that may be helpful to plaintiffs in future cases involving negligent weather forecasts.

# Hartz v. U.S.

*Hartz v. U.S.*, 249 F.Supp. 119 (N.D. Ga. 1965), *rev'd*, 387 F.2d 870 (5thCir. 1968), *aff'd in part after remand*, 415 F.2d 259 (1969).

This is a wrongful death action brought by the widow of a small single-engine aircraft that took off, from the Atlanta airport, behind a DC-7, a large commercial passenger airplane with four engines. Large airplanes, like the DC-7, create two large trailing vortices in the atmosphere as a result of the wing-tips slicing through the air. When the small aircraft encountered one vortex, the small aircraft flipped over and crashed, killing both occupants.

When the local controller cleared the small plane for takeoff, he made the cryptic remark "watch the prop-wash". The trial court ruled that the crash was the fault of the pilot of the small airplane (1) for not delaying his takeoff (at a busy airport!) and (2) for requesting a take-off from the middle of the runway, instead of from the end, which request put less distance between the DC-7 and the small airplane. The appellate court overruled the trial court's decision. The appellate court found that:

1. The controller had a duty to warn the pilot.

Clearly, the controller was the one better qualified by training, experience and vantage position to estimate time and distance and it was his duty to direct and guide the Bonanza [Hartz's airplane] in a manner consistent with its safety and the safety of all who might be affected by its operation. It was the controller's responsibility to appropriately warn Hartz of the possible danger of wing tip vortices from the large commercial airliner which was departing immediately ahead of him.

387 F.2d at 873.

- 2. The warning about "prop-wash" was "neither sufficient under the manual nor adequate to caution Hartz of a possible danger which was known to the controller." 387 F.2d at 874.
- "The controller's breach of duty clearly was a proximate cause of the crash ...." 387 F.2d at 874.

Although *Hartz* has nothing to do with weather, it is important because it was one of the first cases to hold clearly that employees of the federal government do have a legal duty to warn pilots of hazards. There are two other cases with facts and holdings similar to *Hartz*:

• Furumizo v. U.S., 245 F.Supp. 981 (D.Hawaii 1965), aff'd, 381 F.2d 965 (9thCir. 1967);

• *Yates v. U.S.*, 370 F.Supp. 1088 (D.New Mex. 1973), *aff'd*, 497 F.2d 878 (10thCir. 1974). It is a straightforward matter to apply the holdings of these cases to future cases involving failure of FAA employees to warn pilots about current weather.

#### Ingham v. U.S.

Ingham v. U.S., 373 F.2d 227 (2dCir. 1967), cert. den., 389 U.S. 931 (1967).

*Ingham* involved the crash of an Eastern Air Lines DC-7 passenger airplane on 30 Nov 1962 at Idlewild International Airport (now called Kennedy International Airport) in New York City, in which 4 crew members and 21 passengers were killed and approximately 30 people were injured. The airplane was "engulfed in swirling ground fog" when it crashed at the airport. 373 F.2d at 229. The DC-7 aircraft is not supposed to land when the horizontal visibility is less than 0.5 mile. 373 F.2d at 231.

The air traffic controller advised the pilot of the airplane at 21:33:57 that visibility was 1.0 mile, more than one minute after it was known to the controller that worsening fog had reduced the visibility to 0.75 miles. 373 F.2d at 233. The Weather Bureau had an electronic device near the threshold to the runway that measured the actual visibility as less than 0.2 miles, but this device had been "declared inoperative" earlier on the night of the crash, and that measurement was never communicated to the pilot. 373 F.2d at 234. A Weather Bureau observer at ground level measured the visibility at 0.25 mile, but that measurement was never communicate to the pilot. 373 F.2d at 234. The judge in the trial court found that the controller's failure to communicate accurate weather information was negligence by the Government. The appellate court characterized the reported visibility of 1.0 mile as "deceptive"<sup>7</sup> and agreed that not only had the Government had been negligent, but also that the Government's negligence was a proximate cause of the accident. 373 F.2d at 235-37. The horizontal visibility "at the top of the control tower" was longer than the horizontal visibility at the ground level, which explains the discrepancy between the 0.75 mile value reported by the tower to the aircraft and the approximately 0.2 mile value measured on the ground by the Weather Bureau. 373 F.2d at 234.

The appellate court said the following about the Government's duty to report the weather conditions.

Moreover, we can give little weight to the government's claim that since its initial decision to provide weather information was a gratuitous one, it could proceed with impunity to violate its own regulations and act in a negligent manner. ....

It is now well established that when the government undertakes to perform services, which in the absence of specific legislation would not be required, it will, nevertheless, be liable if these activities are performed negligently. Thus, for example, though the government may be under no obligation in the absence of statute to render medical care to discharged veterans, when it decides to provide such services and does so negligently, it has been held liable under the Tort Claims Act. *United States v. Brown*, 348 U.S. 110,

<sup>&</sup>lt;sup>7</sup> 373 F.2d at 235.

75 S.Ct. 141, 99 L.Ed. 139 (1954).

... the decision [of the FAA] to provide such [weather] information would lead carriers and their pilots normally to rely on the government's performance of this service. The carriers, relying on the FAA to keep their pilots informed of current weather conditions, would be likely to reduce both the quantity and quality of their own weather reporting. In light of this reliance, it is essential that the government properly perform those services it has undertaken to provide albeit voluntarily and gratuitously. In any event, the failure of the government to inform the crew that the visibility had dropped from one mile to three-quarters of a mile was a violation of § 265.2's command<sup>8</sup> that "subsequent changes, as necessary, shall be transmitted," and Judge Abruzzo [of the trial court] properly concluded that this omission constituted negligence on the part of the government. [footnote omitted] See *Citrola v. Eastern Air Lines*, [264 F.2d 815 (2dCir. 1959)]; *Danbois v. New York Cent. R.R. Co.*, [189 N.E.2d 468 (N.Y. 1963)]
373 F.2d at 236.

The *Ingham* case was one of the rare airplane crash cases in which the Government's attorneys tried to avoid liability by asserting the exceptions in the FTCA for "discretionary function" or "negligence". The appellate court ruled against the Government on both exceptions:

The government also argues that reporting weather changes to incoming flights when the visibility is above the minimums is a "discretionary" function and therefore under [28 USC] § 2680(a) it cannot serve as the basis for imposing tort liability. This argument also lacks merit. When the government decided to establish and operate an air traffic control system, that policy decision was the exercise of 'discretion' at the planning level, and could not serve as the basis of liability. See *Dalehite v. United States*, [346 U.S. 15 (1953)]. But once having made that decision, the government's employees were required thereafter to act in a reasonable manner. A failure to do so rendered the government liable for the omission or commission. *Indian Towing Co. v. United States*, 350 U.S. 61, 76 S.Ct. 122, 100 L.Ed. 48 (1955). Thus, it has been decided that the government can be held liable for the negligence of its air traffic controllers. See *Eastern Air Lines v. Union Trust Co.*, 95 U.S.App.D.C. 189, 221 F.2d 62, *aff'd sub nom.*, *United States v. Union Trust Co.*, 350 U.S. 907, 76 S.Ct. 192, 100 L.Ed. 796 (1955).

#### 373 F.2d at 238.

Nevertheless, the government's reading of the misrepresentation exception is much too broad, for it would exempt from tort liability any operational malfunction by the government that involved communications in any form.

The government concedes there are diverse kinds of negligence which could be said to involve an element of misrepresentation but which Congress did not intend to be encompassed by the exception contained in [28 USC] § 2680(h). The government refers

<sup>&</sup>lt;sup>8</sup> This citation refers to section 265.2 of the FAA Air Traffic Control Procedures Manual.

us, however, to the *National Mfg. Co.* case, supra, in which the Eighth Circuit held that the failure of government employees to warn of a coming flood, was conduct that came within the misrepresentation exception. But the heavy reliance of the government on that case is misplaced in view of the Supreme Court's subsequent opinion in *United States v. Neustadt*, [366 U.S. 696 (1961)].

••••

Where the gravamen of the complaint is the negligent performance of operational tasks, rather than misrepresentation, the government may not rely upon § 2680(h) to absolve itself of liability. [citations omitted]

373 F.2d at 239.

The U.S. Supreme Court refused the Government's request to hear Ingham.

# Martin v. U.S.

Martin v. U.S., 448 F.Supp. 855 (E.D.Ark. 1977), aff'd in part, 586 F.2d 1206 (8thCir. 1978).

Martin was the pilot of a twin-engine Cessna airplane that departed from New Orleans, Louisiana to Pine Bluff, Arkansas. En route to their destination, at 18:30 CST Martin was given a weather briefing by an FAA employee that indicated that "all weather in the state [of Arkansas] was near or below the minimums of visibility which would permit a landing on instruments." 448 F.Supp. at 861-62. At 19:21 CST, as Martin was approaching the Pine Bluff airport, the controller at that airport gave him an altimeter setting of 29.90 inches of mercury. 448 F.Supp. at 864. About six minutes later, the airplane clipped the tops of some "fog-enshrouded trees" and crashed about 1.5 miles from the end of the runway, killing all four people aboard. 448 F.Supp. at 865, 870.

The altimeter setting given by the controller at Pine Bluff was 0.10 inches of mercury higher than the correct value. The erroneous value "caused the pilots to believe the airplane was 100 feet higher than its actual altitude above the ground." 448 F.Supp. at 867, 870. Admitted/Undisputed Fact Nr. 12.

There was also a failure of the controllers at both Little Rock Approach and Pine Bluff airport to inform Martin that the horizontal visibility at ground level had decreased to 0.75 mile and the cloud ceiling had decreased to essentially zero. If Martin had known about such conditions at the Pine Bluff airport, he would have almost certainly chosen to land at another airport. 448 F.Supp. at 867.

The trial judge found the air traffic controllers were negligent and proximately caused the crash of Martin's airplane. There was no negligence by Martin. 448 F.Supp. at 871-72. The judge ordered the Government to pay damages totalling approximately US\$  $3 \times 10^6$  to the Plaintiffs.

The Government appealed. The appellate court affirmed the trial judge's opinion, except for a minor change in the amount of damages. The appellate court stated: "Under the circumstances here, the controllers were certainly under a duty to immediately correct the visibility information." 586 F.2d at 1210. The appellate court said that the other findings of the trial judge were not "clearly erroneous." 586 F.2d at 1211.

The Government did not appeal to the U.S. Supreme Court.

#### Springer v. U.S.

Springer v. U.S., 641 F.Supp. 913 (D.S.C. 1986), aff'd, 1987 WL 37510 (4thCir. 1987).

A small airplane took off from the Rock Hill, South Carolina airport sometime between 18:00 and 18:15 on 1 Dec 1981, turned right while climbing, then suddenly and unexpectedly encountered severe wind shear that upset the airplane. The airplane crashed and killed both occupants, approximately 60 to 70 seconds after takeoff. 641 F.Supp. at 915-18 and 932. The widow of the pilot, named Springer, brought this wrongful death litigation against the U.S. Government.

Springer had checked the weather forecast before filing a flight plan in the afternoon of the day of departure. The forecast did *not* mention any low-level wind shear. 641 F.Supp. at 916-20, Findings of Fact Nrs. 8, 14, 17, 20, and 46-47.

The surface wind speed at both the Rock Hill and nearby Charlotte airports was about 7 knots, "essentially calm". 641 F.Supp. at 921, Finding of Fact Nrs. 24-25. However, numerous airplane pilots had been reporting wind speeds of 60 to 70 knots at an altitude of 3000 to 4000 feet. 641 F.Supp. at 922-23, Finding of Fact Nr. 30. At 18:06, Wheeler Airlines flight 304 landed at Charlotte and reported an "incredible' tail wind on final [approach] had persisted until [the aircraft] was about a mile from the runway." On a standard glide slope, one mile from the end of the runway corresponds to an altitude of 333 feet. 641 F.Supp. at 924, Finding of Fact Nr. 35(c). Based on these facts, "the court finds that a severe and dangerous low-level wind shear condition existed above Rock Hill at the time of Springer's departure". 641 F.Supp. at 925, Finding of Fact Nr. 36.

*If* Springer had known of the existence of low-level wind shear, then he would have climbed in a straight line, instead of turning to the right while climbing after departure from the airport. 641 F.Supp. at 932, Findings of Fact Nr. 71-72. Turning while climbing made his airplane more vulnerable to wind shear.

After an eight-day trial, the judge concluded that the U.S. Government's negligence has caused the crash. The weather forecast was wrong for two reasons:

- The FAA personnel who heard the reports from pilots of strong winds aloft never communicated those reports to the NWS personnel. 641 F.Supp. at 925, Finding of Fact Nr. 38. NWS personnel testified that *if* they had known of such reports, then they would have amended their forecast to warn of low-level wind shear. 641 F.Supp. at 925, Finding of Fact Nr. 35(g).
- A warm front was clearly shown on the 16:00 EST surface pressure map approximately 100 statute miles from its forecasted location. "...the NWS failed to correct its forecast even after information became available that the existing forecast was inaccurate."
   641 F.Supp. at 927, Finding of Fact Nr. 44. Warm fronts are associated with wind shear.

Despite the erroneous forecast, Springer had a final opportunity to learn of the strong low-level winds from the air traffic controller at Charlotte who cleared Springer for takeoff. That controller knew that strong low-level winds had been reported by many pilots in the area. However, Springer was *not* informed of these low-level winds when he received his takeoff clearance at 17:56. 641 F.Supp. at 925-26, Findings of Fact Nr. 38-41.

The finding of negligence by the Government was emphasized by the trial court:

... the court finds that the air traffic controllers on duty on December 1, 1981 displayed a serious lack of training and understanding of wind shear. .... The court finds that the Charlotte TRACON personnel's failure to comprehend low-level wind shear phenomena unquestionably accounted for the personnel's failure to impart this weather information to a FSS, NWS office, or to Springer.

641 F.Supp. at 926, Finding of Fact Nr. 42.

The court emphasized this point further:

The court concludes as a matter of law that it was negligence for no employee at the Charlotte TRACON to replay the pilot reports of the strong low-level southwest winds to the FSS in Greer, South Carolina. It was also negligence for these controllers to fail to relay this information to any other FAA or NWS facility or Springer. The FAA and its air traffic controllers owed the aviation community and, in particular, Springer, the duty to conform their conduct to their own manuals and to provide adequate and complete information about severe weather, including wind shear. The air traffic controllers' breach of this duty to warn of low-level wind shear was a proximate cause of the crash of N5339Y [i.e., Springer's airplane] and the death of Springer.

641 F.Supp. at 936, Conclusion of Law Nr. 7.

The trial court found no negligence by Springer. 641 F.Supp. at 927-930, Finding of Fact Nr. 62.

The trial court's Conclusion of Law Nr. 8 emphasized the breach of duty by the air traffic controllers at Charlotte:

The duty of the Charlotte air traffic controllers (FAA) to warn Springer of the

unusually high winds, and specifically, the wind shear, when he called for his final clearance for take-off, was even further enhanced by the fact that the air traffic controllers knew, or should have known, that they were the exclusive source of this information since they had failed and neglected to transmit the PIREPs [pilots' reports of weather] to any weather service facility or other FAA facility.

641 F.Supp. at 936.

Because of the importance of the trial judge's finding of negligence by the NWS, I quote most of the findings of law regarding the duty of care and breach of that duty by the NWS.

Duty of Care for the National Weather Service (NWS)

The legislative history leading to the creation of the NWS demonstrates clearly that the government intended to undertake and meet the responsibility for providing a reliable weather monitoring and protection system for persons it knew would rely upon it. See *Brown v. United States*, 599 F.Supp. 877, 884 (D.Mass. 1984). Given that defendant undertook to provide a service that was necessary for the protection of Springer, and that Springer relied on that service, the court finds that defendant owed Springer the duty of reasonable care in operating its weather observation and aviation forecast system. See *Brown*, 599 F.Supp. at 885.

641 F.Supp. at 936-37, Conclusion of Law Nr. 9.

Area forecasts should be amended by NWS whenever the weather improves or deteriorates. The synopsis of the area forecast should be amended when a significant change in the synoptic patterns develops or is expected to develop. [footnote omitted] 641 F.Supp. at 937, Conclusion of Law Nr. 11.

- The court concludes that the location of the warm front, through Piedmont rather than Coastal South Carolina, was such a significant change in the synoptic pattern as to require an amendment to the area forecast and, more particularly, AIRMET VICTOR 1, which was itself an amendment to the area forecast as originally issued. [footnote omitted]
- 641 F.Supp. at 937, Conclusion of Law Nr. 12.

Terminal forecasts should be amended whenever the responsible forecaster considers it advisable in the interest of safe and efficient aircraft operations. First consideration should be given to provide an advance warning of developing weather that will affect the safety of en route aircraft in the terminal area. [footnote omitted] A total review of terminal forecasts is required every four hours, to amend them as needed. However, this does not preclude issuance of amended terminal forecasts at any other time, if warranted by developing/changing conditions.

641 F.Supp. at 937, Conclusion of Law Nr. 13.

Breach of Duty by the National Weather Service (NWS)

The court concludes that the location of the warm front through the Piedmont area rather than the Coastal South Carolina area became apparent to the NWS after the issuance of the 4 p.m. Surface Weather Map. Further, this fact was a development significant to the safety of en route aircraft in the Charlotte area and, therefore, the Charlotte terminal forecast should have been amended. Where the criteria for issuing a weather warning for existing phenomena are clearly met, and the information to issue the warning is available, the failure to issue a warning is negligence, and is distinguishable from an erroneous prediction of longer term phenomena. *Brown*, 599 F.Supp. 877.

641 F.Supp. at 937, Conclusion of Law Nr. 14.

Further, the court concludes that the failure to issue an amendment to the area forecast, or to issue a SIGMET, was a proximate cause of the crash. The court has concluded that the crash was caused by the plane's encounter with low-level wind shear. Had an amendment in the form of a SIGMET been issued, Springer would have had the information to select a flight path that would safely have traversed the shear zone, or to abort the flight.

641 F.Supp. at 937, Conclusion of Law Nr. 15.

The trial judge in *Springer*, 641 F.Supp. at 936-37, cited the opinion of the *Brown* trial court three times as persuasive authority. Because the *Brown* trial court decision was later reversed by an appellate court, it is *uncertain* whether this section of the *Springer* opinion is still valid law. The *Springer* decision *might* be valid, because an unpublished decision of the U.S. Court of Appeals for the Fourth Circuit affirmed the *Springer* trial court opinion and the decision of the *Brown* appellate court in the First Circuit is not binding on *Springer* in the Fourth Circuit. There appears to be a split between different Circuit Courts of Appeals that needs to be resolved in a future case heard by the U.S. Supreme Court. Alternatively, it is possible that there is a factual distinction between *Brown* and *Springer*, for example, *Brown* involved sailors at sea, while *Springer* involved an airplane crash. I mention below that there appears to be a distinction made by the judges depending on whether the victim was in an airplane crash or not.

The trial court found that low-level wind shear was known to be hazardous to aircraft and the existence of such wind shear was known from information in the possession of the Government, yet the Government failed to warn Springer. The trial court then awarded Springer's widow US\$  $1.3 \times 10^6$ , plus the value of the airplane and funeral expenses.

The Government appealed, apparently contesting only the admission of some testimony from expert witnesses and the related findings of fact. The U.S. Court of Appeals, in an *un*published decision, found "no error in the proceedings below" and affirmed the judgment of the trial court. The Government did not appeal to the U.S. Supreme Court.

The *Springer* case is remarkable because the judge found the NWS was negligent in failing to use information from the surface pressure map to properly locate the warm front and amend its forecast. However, the more important negligence in *Springer* was that the air traffic controllers ignored pilots' reports of significant low-level winds.

#### 3.B. Compare land/sea cases with airplane crash cases

In the cases of alleged negligent weather forecasts that involve people on the ground or sailors at sea, the plaintiff always lost. In contrast, there are some cases involving airplane crashes in which the U.S. Government was found by a court to be negligent and ordered to pay damages. The obvious question is why do widows of people killed on land or sea always lose litigation against the Government for a negligent weather forecast, while widows of people in airplane

crashes sometimes win litigation against the Government? I suggest some answers to this question below at page 36, after reviewing some of the law in airplane crash cases.

In the alleged negligent weather forecast cases that involve people on the ground or sailors at sea, the government's attorneys commonly mentioned the exceptions in the FTCA for "discretionary function" or "misrepresentation" and the judges consistently ruled<sup>9</sup> that the government had no liability because of these exceptions. So it is surprising that the government's attorneys rarely mentioned these exceptions in the FTCA in cases involving airplane crashes that were allegedly caused by a misrepresentation or an omission about the current weather.

#### no discretion to be negligent

A landmark U.S. Supreme Court case, *Indian Towing Co. v. U.S.*, 350 U.S. 61 (1955), involved a defective lighthouse to guide and warn sailors. The Supreme Court held that the Government had the discretion whether or not to install a lighthouse:

The Coast Guard need not undertake the lighthouse service. But once it exercised its discretion to operate a light on Chandeleur Island and engendered reliance on the guidance afforded by the light, it was obligated to use due care to make certain that the light was kept in good working order; and, if the light did become extinguished, then the Coast Guard was further obligated to use due care to discover this fact and to repair the light or give warning that it was not functioning. If the Coast Guard failed in its duty and damage was thereby caused to petitioners, the United States is liable under the Tort Claims Act.

Indian Towing Co., 350 U.S. at 69.

In other words, the "discretionary function" exception in the FTCA is *not* a license for the Government to commit negligence in providing services on which people relied. Cases involving airplane crashes have recited this holding in *Indian Towing Co.* and consistently applied it to hold that the Government is liable for negligent air traffic controllers.

The following cases are those that I have found that reject the "discretionary function" exception in the context of the Government's liability for negligent FAA employees in causing an airplane crash:

- *Eastern Air Lines v. Union Trust Co.*, 221 F.2d 62, 77 (D.D.C. 1955)("... discretion was exercised when it was decided to operate the tower, but the tower personnel had no discretion to operate it negligently."), *aff'd without opinion sub nom. U.S. v. Union Trust Co.*, 350 U.S. 907 (1955);
- Aero Enterprises v. American Flyers, 167 F.Supp. 239, 246 (N.D.Tex. 1958)(Conclusion of Law Nr. 3), rev'd on other grounds sub nom. U.S. v. Schultetus, 277 F.2d 322 (5thCir. 1960), cert. den., 364 U.S. 828 (1960);
- United Air Lines v. Wiener, 335 F.2d 379, 392-398 (9thCir. 1964), cert. dismissed sub nom. United Air Lines v. U.S., 379 U.S. 951 (1964);

<sup>&</sup>lt;sup>9</sup> With the exception of the trial judge in *Brown*, who was later reversed by an appellate court.

- Ingham v. U.S., 373 F.2d 227, 238 (2dCir. 1967), cert. den., 389 U.S. 931 (1967);
- *Stork v. U.S.*, 278 F.Supp. 869, 882 (S.D.Calif 1967)("The Government's function to operate the tower is discretionary[,] but it does not have the discretion to operate it negligently."), *aff'd* 430 F.2d 1104 (9thCir. 1970); and
- *Tinkler v. U.S.*, 982 F.2d 1456, 1462, 1464 (10thCir. 1992).

In each of these cases, except *Wiener*, the judges quickly ruled the Government's "discretionary function" defense as meritless, unlike the protracted reasoning with a contrary result in the cases involving an allegedly negligent weather forecast that harmed either people on land or sailors at sea.

# Is failure to give accurate/complete information *not* a misrepresentation ?

In the context of the Government's liability for negligent FAA employees in causing an airplane crash, the "misrepresentation" exception in the FTCA is mentioned by the Government's attorneys less commonly than the "discretionary function" exception. The following cases are those that I have found that mention the misrepresentation exception in the FTCA:

- United Air Lines v. Wiener, 335 F.2d 379, 398 (9thCir. 1964)("The government's reliance upon 28 USC § 2680(h) relating to exemption from the Tort Claims Act of causes of action predicated upon misrepresentation is misplaced. .... Here the gravamen of the action is not misrepresentation[,] but the negligent performance of operational tasks, although such negligence consisted partly of a failure of a duty to warn."), *cert. dismissed sub nom. United Air Lines v. U.S.*, 379 U.S. 951 (1964);
- Ingham v. U.S., 373 F.2d 227, 239 (2dCir. 1967)("... the government's reading of the misrepresentation exception is much too broad, for it would exempt from tort liability any operational malfunction by the government that involved communications in any form. .... Where the gravamen of the complaint is the negligent performance of operational tasks, rather than misrepresentation, the government may not rely upon § 2680(h) to absolve itself of liability."), *cert. den.*, 389 U.S. 931 (1967);

In each of these cases, the judges quickly ruled the Government's "misrepresentation" defense as meritless, unlike the protracted reasoning with a contrary result in the cases involving an allegedly negligent weather forecast that harmed either people on land or sailors at sea.

While I personally favor holding the Government liable for both negligent air traffic control and negligent weather forecasts, one must wonder why the clear exception for "misrepresentation" in the FTCA is ignored by courts in the context of airplane crash litigation, while that same exception is honored in the context of allegedly negligent weather forecasts that harm people on the ground or sailors at sea.

#### reliance by pilot

As noted by Alimonti (1995), one of the fundamental principles of aviation law is that "the pilot-in-command of an aircraft is directly responsible for, and is the final authority as to, the operation of that aircraft." 14 CFR § 91.3. "Each pilot in command of an aircraft is, during flight time, in command of the aircraft and crew and is responsible for the safety of the passengers, crewmembers, cargo, and airplane." 14 CFR § 121.533(d). See also *U.S. v. Schultetus*, 277 F.2d 322, 328 (5thCir. 1960), *cert. den.*, 364 U.S. 828 (1960). However, the cases involving the negligence of an FAA employee that caused an airplane crash have often held that:

Nonetheless, before a pilot can be held legally responsible for the movement of his aircraft he must know, or be held to have known, those facts which were then material to the safe operation of his aircraft.

Hartz v. U.S., 387 F.2d 870, 873 (5thCir. 1968);

American Airlines v. U.S., 418 F.2d 180, 192-193 (5thCir. 1969);

Harris v. U.S., 333 F.Supp. 870, 873 (N.D.Tex. 1971) (Conclusion of Law Nr. 2);

Todd v. U.S., 384 F.Supp. 1284, 1291 (M.D.Fla. 1974), aff'd, 553 F.2d 384 (5thCir. 1977);

Springer v. U.S., 641 F.Supp. 913, 935 (D.S.Car. 1986).

Another statement of this legal principle, which specifically mentions weather information, is: ... before a pilot can be held legally responsible, he must be supplied with those pertinent facts that he is not in a position to know for himself. Those pertinent facts which the air

traffic controllers were expected to provide to pilots included current weather information.

Martin v. U.S., 448 F.Supp. 855, 865 (E.D.Ark. 1977);

Himmler v. U.S., 474 F.Supp. 914, 929 (E.D.Penn. 1979);

In re Air Crash Disaster at JFK Airport, 635 F.2d 67, 74 (2dCir. 1980).

Several courts have mentioned that the *undertaking* by FAA employees to provide current weather information has induced *reliance* by pilots and therefore created a *duty* for the FAA to supply both accurate and complete information. For example,

Because the FAA has undertaken to advise requesting pilots of weather conditions, thereby inducing [or "thus engendering"] reliance on its FSS facilities, it owes

[or "was under"] a duty to see that the information which it furnishes is accurate and complete.

Pierce v. U.S., 679 F.2d 617, 621 (6thCir. 1982);

Lombard v. U.S., 601 F.Supp. 10, 13 (E.D.Mo. 1984)(Conclusion of Law Nr. 5);

Springer v. U.S., 641 F.Supp. 913, 935 (D.S.Car. 1986);

Norwest Capital v. U.S., 828 F.2d 1330, 1333 (8thCir. 1987);

Buden v. U.S., 15 F.3d 1444, 1449, n. 8 (8thCir. 1995).

If those weather statements include either false information or omission of an essential fact, then the employee who made the statement may be negligent. Such negligent statements by employees of the FAA can be the proximate cause of airplane crashes, with subsequent tort

liability for the U.S. Government.

#### inconsistencies between land/sea and airplane crash cases

The application of the "discretionary function" and "misrepresentation" exceptions in FTCA by judges appears to be inconsistent, depending on whether the victim was in an airplane crash or not. Further, courts often hold that airplane pilots are entitled to rely on weather information from employees of the U.S. Government, but people on the ground or sailors at sea are *not* entitled to rely on weather information, which appears to be another inconsistency in the common law.

It may be that no one has previously noticed these inconsistencies, because airplane crash cases tend to be litigated by attorneys who specialize in aviation law, while cases involving an allegedly negligent weather forecast are an obscure and tiny<sup>10</sup> part of general tort law.

The reason for these inconsistencies seems to be that the U.S. Congress has established a definite public policy favoring safety of airplane flights and there are specific sentences in the Code of Federal Regulations that establish a duty of FAA employees to pilots. In contrast, court cases involving negligent weather forecasts that harmed people on land or at sea simply assert the exceptions in the FTCA and ignore whether there might be Federal Regulations or legislative history that would establish a duty of the NWS to people on land or to sailors at sea.

In this context, it is worth mentioning that the trial judge in *Brown v. U.S.*, 599 F.Supp. 877, 884-885 (D.Mass. 1984) did recite some legislative history to show that the U.S. Congress intended that the NWS have a duty of care to sailors at sea. The trial judge stated that the NWS "undertook to provide a service that was necessary to the protection of plaintiffs, and that plaintiffs relied on that service, this court finds that defendant owed plaintiffs a duty to take reasonable care in maintaining its weather observation and prediction system." *Brown* at 885. In the context of airplane crash cases, the trial judge's decision would have been mainstream law, but *Brown* involved sailors at sea. Or maybe Massachusetts, where *Brown* was heard, is in a Circuit that has apparently split with other U.S. Circuit Courts of Appeals over the proper interpretation of the "discretionary function" exception in the FTCA. The appellate court overturned the trial judge's decision in *Brown*, because the appellate court believed the "discretionary function" exception in the FTCA did exempt the NWS from liability. 790 F.2d 199 (1stCir. 1986).

<sup>&</sup>lt;sup>10</sup> As shown on pages 4 to 20 above, there are only eight reported cases from *National Mfg. Co.* to *Monzon* in federal courts that allege a negligent weather forecast that involved victim(s) on land or at sea. This paucity of reported cases means that most litigators will never consider a negligent weather forecast case. This is an *in*significant area of tort law, except to people who are either interested in meteorology, interested in information torts, or harmed by a negligent weather forecast.

There is another possible way to distinguish cases involving airplane crashes from cases involving people on land or sea. The allegedly negligent forecast cases involving people on land or sailors at sea contain a false prediction of future weather or a failure to warn of a possible future hazard, while the airplane crash cases often involve a false statement or omission about the current weather. One *should* distinguish a forecast (i.e., prediction) of future weather from a factual statement about the current weather. Predictions of future weather are uncertain and unlike factual statements about the current weather. However, only a few court opinions have mentioned the distinction between prediction of future weather and factual description of current weather.<sup>11</sup> On the other hand, it is important that we distinguish *scientific* predictions, which are extrapolations according to mathematical laws of nature, from mere opinions or speculations about the future (e.g., "I believe a particular political candidate will perform better than his opponent.").

Still another possible explanation for the inconsistent results, is that courts have erred in applying the discretionary function exemption in FTCA to cases involving failure to warn people on the ground, or sailors at sea, about hazardous weather. A venerable torts textbook mentioned the test, used in *Indian Towing Co.*, that distinguishes between planning and operational decisions, as a common basis for deciding if the discretionary function exception in the FTCA applies. This textbook then stated:

The distinction between planning and operational errors does not assist judgment in all cases. If the weather bureau negligently fails to report that floods are on their way and people are killed or property destroyed because of the failure, all but the most cynical would prefer to think that the decision was an operational blunder, not the result of government planning. But courts have held that the weather service's failure is discretionary nonetheless. [footnote citing *National Mfg. Co.* and *Bartie*] (Prosser, Keeton, et al., 1984, § 131, p. 1041, n. 91)

All this may be a way of saying that courts have confused the issues of duty and negligence on the one hand with the issue of the discretionary immunity on the other. .... The discretionary immunity issue, often viewed as jurisdictional, is usually resolved on motion to dismiss or on summary judgment motion — in other words, resolved without a full trial on the merits. If this device is in fact used to decide negligence and duty issues, the judge is likely to be acting without adequate factual development.

(Prosser, Keeton, et al., 1984, § 131, p. 1042-43)

One of the weaknesses of a court system that depends on precedents (e.g., the courts in the USA) is that if the first several cases involving a particular fact pattern are wrongly decided, in the future when judges encounter cases with similar issues, the later judges will simply copy the wrong decision of the earlier judges.

<sup>&</sup>lt;sup>11</sup> Brown v. U.S., 790 F.2d at 204 (1986); Springer v. U.S., 641 F.Supp. at 937 (1986); Connelly v. California, 84 Cal.Rptr. 257, 259 (Calif.App. 1970).

In a footnote Prosser & Keeton made the tantalizing remark:

Nonliability for weather forecasts is inexplicable as a discretionary immunity, but may be reconcilable with the general rule that publishers are not liable to the public generally, at least for economic harm.

(Prosser, Keeton, et al., 1984, § 131, p. 1043, n. 12)

*Brandt v. The Weather Channel* is apparently the only reported case in which the judge explicitly mentioned the absence of liability for publishers. I make some additional remarks at page 39 below about information torts.

A judge decides one case at a time, so the early evolution of the common law (i.e., tort law) will naturally have some inconsistencies. However, after an inconsistency has been recognized, the inconsistency should be removed by appellate court(s), so that similarly situated people are treated in similar ways.

## 4. Summary of Current Law in the USA

In each of the reported cases mentioned above involving litigation on negligent weather forecasts, the individual meteorologist(s) who were allegedly negligent were *not* named as defendants in the litigation. Instead, plaintiff's attorneys sued the employer of the meteorologists (typically the U.S. Government, but The Weather Channel was sued once), under the legal doctrine of *respondeat superior*. The advantage to the plaintiffs is that the employer will have much larger assets (or much higher limits on an insurance policy) from which a judgment can be paid to plaintiff, compared to an individual meteorologist, who has a small salary and probably no professional liability insurance. Furthermore, employees of the federal government have "absolute immunity for ordinary torts committed within the scope of their jobs." *Spencer, New Orleans Levee Board*, 100 F.R.D. 30, 33 (E.D.La. 1983), *aff'd*, 737 F.2d 435, 437 (5thCir. 1984). In 1988, Congress put into statute this immunity for any employee of the U.S. Government who "was acting with the scope of his office or employment at the time of the incident out of which the claim arose". 28 USC § 2679(d).

There is currently no liability for the U.S. Government or its employees for negligence in a weather forecast that harms either people on the ground or sailors at sea, because the Federal Tort Claims Act (FTCA) provides absolute immunity to the Government on claims of misrepresentation, both negligent misrepresentation and intentional misrepresentation. 28 USC § 2680(h); *U.S. v. Neustadt*, 366 U.S. 696, 702 (1961). Further, amongst courts that have considered the issue, there is also uniform agreement that the "discretionary function" exception in the FTCA, 28 USC § 2680(a), also gives absolute immunity to the Government for negligent or erroneous weather forecasts that harm either people on the ground or sailors at sea.

I emphasize that an erroneous weather forecast is *not* automatically negligent.<sup>12</sup> Before the National Weather Service can be found negligent, plaintiff must prove that the meteorologist's collection or analysis of data was below the minimum acceptable professional standard. Examples of negligence might include continued use of known defective meteorological instruments, failure to warn of known hazards, using untested computer software that contains serious errors, using uncalibrated instruments, using unscientific methods, etc. Furthermore, the plaintiff must also prove that the defendant's negligence was the cause of harm to plaintiff.

Furthermore, in most reported cases that went to trial, plaintiff's attorney was *not* able to prove negligence by the National Weather Service. I have found only two reported cases<sup>13</sup> that were tried in court on the merits in which the plaintiffs' attorneys made a convincing proof of negligence by the National Weather Service. I suspect that negligence by the National Weather Service that causes serious injury to people<sup>14</sup> is rare.

There has been only one reported case involving alleged negligence by a private meteorological service<sup>15</sup> and the judge hastily disposed of that case without a thoughtful discussion of the complex issues. Hence, it is still uncertain whether there can be liability for private corporations that forecast the weather in the USA. In general, there is currently no liability for information in the USA. For more information on this fascinating subject, see my separate essay, *Infotorts*, at http://www.rbs2.com/infotort.htm

When a meteorologist prepares a forecast, he/she should look for the *possibility* of hazardous weather. The possibility of hazardous weather, even only a 5% chance, should be communicated to the public, to warn people to be alert for possible hazards, and to encourage people to monitor weather forecasts more frequently than usual. Failure to warn of hazardous weather that actually occurs is much more serious than warning of possible hazardous weather that does not actually occur. Therefore, when in doubt, a meteorologist should always warn.

<sup>14</sup> Note that *both* negligence *and* causation of serious injury are necessary for a successful tort case.

<sup>15</sup> *Brandt v. The Weather Channel,* 42 F.Supp.2d 1344 (1999). See my discussion and analysis, beginning on page 17, above.

<sup>&</sup>lt;sup>12</sup> Chanon v. U.S., 350 F.Supp. 1039, 1041 (S.D.Tex. 1972)("... a forecast that turns out to be an erroneous forecast, standing alone, should not be considered as any evidence of fault on the part of the Weather Service."). Cited with approval in *Brown v. U.S.*, 599 F.Supp. 877, 887 (D.Mass. 1984), later reversed on other grounds.

<sup>&</sup>lt;sup>13</sup> Brown v. U.S., 599 F.Supp. 877 (victory for Plaintiff was later reversed by an appellate court); *Springer v. U.S.*, 641 F.Supp. 913 (affirmed in an unpublished appeal). See my discussion and analysis of *Brown* and *Springer*, beginning on pages 11 and 29, above.

The trend towards using computers to automatically collect data from meteorological instruments, and the continuing use of computers to process this data and prepare extrapolations useful to human forecasters, will mean fewer opportunities for humans to make mistakes. This use of computers should make weather forecasts more reliable, as well as provide fewer opportunities for negligence.

There is an interesting issue in the history of science and technology here. Scientific weather forecasts began in the 1940s and the accuracy of forecasts improved with the use of high-speed digital computers, data from weather satellites, and Doppler radar. It may be that accurate weather forecasts are too recent a technology for judges to have created stable and reasonable law. Inconsistent or unsatisfactory features of the law in the USA for allegedly negligent weather forecasts may be a result of the fact that law requires many tens of years to adapt to changes in technology, a point that I made in my 1997 essay, *Response of Law to New Technology*, http://www.rbs2.com/lt.htm

## **NWS Policy on Notices About Severe Weather**

The National Weather Service has a policy on the issuance of notices about severe weather (e.g., flood, fog, hurricane, ice storm, snow, tornado, thunderstorm). In general, there are three kinds of notices:

- 1. an *Advisory* is the lowest level warning issued by the NWS, an Advisory indicates likely inconvenience.
- 2. a *Warning* gives notice of a significant threat to life or property.
- a Watch gives hours of advance notice of the possibility of severe weather, so that people can monitor weather forecasts more frequently and make preparations for the severe weather. A Winter Storm Watch typically gives between 12 and 36 hours of advance notice of snow or ice.

A detailed list of the criteria for these notices has been posted by the NWS Forecast Office in Massachusetts: <u>http://www.erh.noaa.gov/er/box/warningcriteria.shtml</u> A national map that shows the current severe weather notices is displayed at: <u>http://www.spc.noaa.gov/products/wwa/</u>

# 4. B. View of the Restatements

The Restatements of the Law are a codification of well-established common law (i.e., law made by judges in their decisions) in the USA. The Restatements are laboriously written by a distinguished panel of judges, law professors, and practicing attorneys, so the Restatements are highly respected secondary sources of law. There are several sections of the current Restatement of Torts that could be applied to negligent weather forecasts in the USA.

#### § 323 Negligent Performance of Undertaking to Render Services

One who undertakes, gratuitously or for consideration, to render services to another which he should recognize as necessary for the protection of the other's person or things, is subject to liability to the other for physical harm resulting from his failure to exercise reasonable care to perform his undertaking, if

(a) his failure to exercise such care increases the risk of such harm, or

(b) the harm is suffered because of the other's reliance upon the undertaking. Restatement (Second) of Torts, § 323 (1965).

Tort law does not require a contractual relationship between plaintiff and defendant. However, § 323 of the Restatement was developed in connection with services such as providing transportation, medical treatment, or rescues from harm. It remains to be seen if courts in the USA will apply this section of the Restatement to negligently providing or omitting information. In the context of weather forecasts, this section of the Restatements literally makes a forecaster liable for negligent services, once the victim has relied to his/her detriment on those services, even if there is no payment by the victim for those services. The trial judge in *Brown*, 599 F.Supp. at 884 (D.Mass. 1984) quoted § 323, asserting that this section established that the NWS owed a duty of care to the Plaintiffs, but the trial judge did not elaborate on his assertion, and the appellate court overturned the trial judge's decision in *Brown*, without commenting on § 323.

Another section of the Restatements covers negligent misrepresentations that risk either bodily injury to people or physical damage to property.

#### § 311

(1) One who negligently gives false information to another is subject to liability for physical harm caused by action taken by the other in reasonable reliance upon such information, where such harm results

- (a) to the other, or
- (b) to such third persons as the actor should expect to be put in peril by the action taken.

(2) Such negligence may consist of failure to exercise reasonable care

- (a) in ascertaining the accuracy of the information, or
- (b) in the manner in which it is communicated.

Restatement (Second) of Torts, § 311 (1965).

A person "would be fully justified" in relying on "the statement of one who purports to have special knowledge of the matter."<sup>16</sup> In the context of weather forecasting, people act reasonably when they rely on statements either from the NWS or from meteorologists who are certified by the American Meteorological Society. However, one must distinguish a false statement of fact (e.g., measurement of the current air temperature) from a false extrapolation (e.g., a forecast of tomorrow's air temperature). As discussed above at page 37, a scientific forecast is *not* the same

<sup>&</sup>lt;sup>16</sup> Restatement (Second) of Torts, § 311, comment c (1965).

as a mere opinion or speculation.

There are two comments on the second sentence in § 311 that are relevant to tort liability for weather forecasting:

- (a) The person who provides the information "is required to exercise the care of a reasonable man under the circumstances to ascertain the facts" or to discover an error in the information.<sup>17</sup> In the context of weather forecasts, it is important to recognize that students in science and engineering are taught to check their results for plausibility. A scientist can not simply accept every number that is spewed out by a computer or calculator.
- (b) The person who provides the information "must also exercise reasonable care to bring to the understanding of the recipient of the information the knowledge which he has so acquired."<sup>18</sup> In the context of weather forecasts, this probably means that the forecast or warning must be in plain English that is both easy to comprehend and *not* misleading.

Section 311 of the Restatement may apply to private meteorologists, but can not apply to the NWS, because of the exception in the FTCA for "misrepresentation".

Note that tort law holds the defendant liable for either gratuitous information<sup>19</sup> or gratuitous services provided by the defendant. There is no duty to provide gratuitous services,<sup>20</sup> but, once the services have begun, the provider must not abandon the services in a way that puts the victim "in a worse position that he was in before" the services began.<sup>21</sup>

There is another section of the Restatements (Second) Torts, § 552, that involves negligent misrepresentations that cause a "pecuniary loss", such as a purchase or sale of property or a financial investment. Section 552 is probably *not* relevant to torts involving negligent weather forecasting or failure to warn of hazardous weather.

- <sup>18</sup> Restatement (Second) of Torts, § 311, comment e (1965).
- <sup>19</sup> Restatement (Second) of Torts, § 311, comment c (1965).
- <sup>20</sup> Restatement (Second) of Torts, § 314 (1965).
- <sup>21</sup> Restatement (Second) of Torts, § 323, comment c (1965).

<sup>&</sup>lt;sup>17</sup> Restatement (Second) of Torts, § 311, comment d (1965).

## 5. Disclaimers

#### National Weather Service's Disclaimer

Despite the fact that the exceptions in the FTCA have consistently been an absolute bar to tort claims by victims on land or sea against the U.S. Government for allegedly negligent weather forecasts, the forecast webpages posted on the Internet by the National Weather Service (NWS) in February 2003 have a link to a disclaimer that includes the following paragraph:

The user assumes the entire risk related to its use of this data. NWS is providing this data "as is," and NWS disclaims any and all warranties, whether express or implied, including (without limitation) any implied warranties of merchantability or fitness for a particular purpose. In no event will NWS be liable to you or to any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of this data.

I find the content of this disclaimer strange: it looks like something that was mindlessly copied from a products liability formbook. The stock phrases "implied warranties of merchantability or fitness for a particular purpose" come from the Uniform Commercial Code, which applies to products, but *not* to services.

## The Weather Channel's Disclaimer

The forecast webpages posted on the Internet by The Weather Channel (TWC), a commercial meteorological service, in February 2003 have a link to terms of service that includes the following paragraphs:

4. Disclaimer of Warranty; Limitation of Liability

- A. You expressly agree that use of the site is at your sole risk. Neither TWC, its affiliates nor any of their respective employees, agents, third party content providers or licensors warrant that the site will be uninterrupted or error free; nor do they make any warranty as to the results that may be obtained from use of the site, or from the information contained therein, or as to the accuracy or reliability of any information, service or merchandise provided through the site.
- B. The site is provided on an "as is" basis without warranties of any kind, either express or implied, including, but not limited to, warranties of title or implied warranties of merchantability or fitness for a particular purpose, other than those warranties which are implied by and incapable of exclusion, restriction or modification under applicable law. Additionally, there are no warranties as to the results obtained from the use of the site.
- C. This disclaimer of liability applies to any damages or injury caused by any failure of performance, error, omission, inaccuracy, interruption, deletion, defect, delay in operation or transmission, computer virus, communication line failure, theft or destruction or unauthorized access to, alteration of, or use of this site, whether for breach of contract, tortious behavior (including strict liability), negligence, or under any other cause of action, to the fullest extent permissible by law. This does not affect any statutory rights which may not be disclaimed. You specifically acknowledge that TWC is not liable for the defamatory, offensive or illegal

conduct of other users or third-parties over which it has no control.

D. To the fullest extent permissible by law, in no event shall TWC's total liability to you for all damages, losses and causes of action whether in contract, tort (including its own negligence) or under any other legal theory (including strict liability) exceed the amount paid by you, if any, for accessing this site. This does not affect any statutory rights which may not be disclaimed.

The disclaimer of TWC is more comprehensive than the disclaimer of the NWS. However, the reader is cautioned that disclaimers are *not always* legally enforceable. I would be concerned about a disclaimer written by only one party, without any negotiations with the other party, that attempts to avoid any and all liability for negligence. However, this is not the place to discuss the law regarding legally enforceable disclaimers. I simply note that if a plaintiff in future litigation regarding an alleged negligent weather forecast gets beyond summary judgment, then the plaintiff may need to attack the validity of a disclaimer, in addition to proving negligence and proximate causation.

Private meteorologists should consult with their attorney about the inclusion of a suitable disclaimer in the meteorologist's written contract with each of their clients, *and* purchase liability insurance. (Klein & Pielke, 2002, p. 1805).

## 6. My Opinion

The material in this section is my personal opinion and is not the current law in the U.S.A.

People who have been harmed by negligence of U.S. Government employees performing their official duties are currently unable to sue the U.S. Government, because of exceptions in the FTCA. The U.S. Congress, in passing the current FTCA, has effectively allowed the Government to provide incompetent services that harm citizens (most of them taxpayers) without the Government being required to compensate those harmed by its negligence.

It is often said (mostly by tort attorneys) that tort liability for negligence encourages corporations and professionals to be careful. If true, such care would be a good thing. In contrast, the absence of tort liability for the Government means there is little consequence, aside from temporary adverse publicity, for carelessness, negligence, or even intentional torts by employees of the Government who act within the scope of their official duties.

If the Government engages in providing some service, then it ought to perform that service competently and non-negligently.<sup>22</sup> If one can not rely on information, then that information is worthless, except as a suggestion to make an independent determination.

I believe the exception in the FTCA for "misrepresentation" is outrageous and should be deleted by the U.S. Congress. Further, the exception in the FTCA for "discretionary function" is not only overbroad, but also judges have struggled to find the precise meaning of this two–word phrase. Hence, "discretionary function" should be replaced with something both narrower in scope and more specific. With these two changes, the U.S. Government would be potentially<sup>23</sup> liable for:

- 1. negligent weather forecasts,
- 2. false assurances of safety,
- 3. failure to pass known information about hazards to people who need that information to avoid harm, and
- 4. violation of written rules, procedures, or policies of the NWS, when that violation causes serious injury.

With these hypothetical changes in the FTCA, what changes would have occurred in the above–mentioned reported cases about injuries on land or sea?

- 1. *National Mfg. Co.* and *Bergquist* would have proceeded to trial, to see if Plaintiffs could prove negligence by the U.S. Government.
- 2. Plaintiff's win in the *Brown* trial court might have been the affirmed by the appellate court.
- 3. The plaintiffs failed to prove negligence in each of the other cases mentioned above in which the U.S. Government, so the court reached the correct result (i.e., plaintiff lost).

Following the terrorist attacks on the World Trade Center in New York City and on the Pentagon near Washington, DC on 11 September 2001, the U.S. Congress had no difficulty in appropriating money to compensate the survivors for the death of victims. The U.S. Government was *not* to blame for the criminal acts of the terrorists. Even if the Government's negligence had been a proximate cause of the deaths and injuries, the Government would be immune, because of the exceptions in the FTCA. The other possible proximate cause of the attacks was the airport security checkpoints that allowed Arab terrorists armed with box cutters to board four civilian airplanes, but – at that time – airport security was a function provided by private corporations under contract to local airports, *not* a function of the U.S. Government. Despite the fact that the

<sup>&</sup>lt;sup>22</sup> This was approximately the holding in a U.S. Supreme Court case, *Indian Towing v. U.S.*, 350 U.S. 61, 69 (1955), as discussed above at page 33. However, despite the clarity of *Indian Towing*, there appears to be a split amongst U.S. Circuit Courts of Appeal in how to apply the "discretionary function" exception in the FTCA.

<sup>&</sup>lt;sup>23</sup> I say "potentially" because liability also requires the plaintiff to prove negligence and causation.

U.S. Government clearly had no legal responsibility for these terrorist attacks, the U.S. Congress appropriated more than a billion dollars for compensation of victims. One must wonder why victims of terrorists attacks are worthy of compensation by the U.S. Government, but *not* victims of negligence by the National Weather Service, when the Government is *not* to blame for the terrorists attacks, but the Government is to blame for negligence by the Weather Service.

The U.S. Congress apparently needs to establish a definite public policy for warning about hazardous weather both people on land (e.g., from hurricanes, tornadoes, floods, etc.) and sailors at sea (e.g., from storms with high wave crests). Such a public policy would assist judges in finding that the NWS owes a duty of care to people on land and sailors at sea.

People on land need to be responsible for their own safety, and like airplane pilots, people on land need to know warnings about future hazardous weather. Sailors at sea are in a similar position to people aboard aircraft: indeed, aviation law is descended from maritime law. As the accuracy of weather forecasts increases, the time will come when the Government should be held responsible for failing to warn about hazardous weather or other aspects of a negligent weather forecast. Indeed the time may already have come, and we simply wait for a courageous judge who will break with tradition and precedent to make new law.

## 7. Bibliography

The primary sources of information are the cases cited above. Because this essay will be of interest mostly to nonattorneys, I have used the conventional scholarly format of bibliographic citation, instead of the conventional legal format.

Frederick P. Alimonti, "Death by Misinformation? Governmental Liability for Faulty FAA Weather Information," *The Journal of Air Law and Commerce*, Vol. 60, pp. 961-996, May 1995.

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William L. Prosser, W. Page Keeton, Dan B. Dobbs, Robert E. Keeton, David G. Owen, *Prosser and Keeton on The Law of Torts*, West Publishing Co., Hornbook version, Fifth Edition, 1286 pp., 1984.

## 8. Conclusion

There is currently no liability for the U.S. Government or its employees for negligence in a weather forecast, when the harm occurs to people on land or at sea. However, there are cases that hold the Government liable when the victims are in an airplane crash.

There have been only two reported cases that went to trial in which the plaintiffs made a convincing proof of negligence by the National Weather Service.

The most common issue in the reported cases about liability for weather forecasts is *not* an erroneous forecast, but rather that the meteorologists had actual knowledge of imminent or current severe weather but failed to warn people.

I suggest that the Federal Torts Claims Act (FTCA) be amended by the U.S. Congress to permit the Government to be sued in tort for misrepresentation by its employees, who are acting within the scope of their official duties. Furthermore, the inconsistent interpretations of the "discretionary function" exception in the FTCA needs to be clarified by either Congress or the U.S. Supreme Court, to allow litigation over allegedly negligent weather forecasts to proceed on the merits.

Finally, I hope that this essay encourages people not to ignore warnings from the National Weather Service. These warnings can save lives.

## About the Author

I took several classes in atmospheric physics and one class in synoptic meteorology while I was in graduate school during 1971-76, although my emphasis was in general physics. I did scientific research in atmospheric electricity and lightning during 1971-79 and earned a Ph.D. in physics in 1977. The drastic decrease in the U.S. Government's financial support for scientific research in atmospheric electricity caused me to change fields in 1982 from basic scientific research to practical engineering research on protection of electronic equipment from transient overvoltages, such as caused by lightning. When financial support for research in all of my areas of science and engineering was annihilated in 1990, I began to change careers to law. Since 1998, I have been an attorney in Massachusetts.

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