

by Roberta Klein

The *Fairwind* and *Sea Fever* both sailed out of Hyannis, Massachusetts, on November 2, 1980, for a week of lobster fishing. The National Weather Service's (NWS) marine weather forecast predicted good weather for the area. On November 3, a sudden and explosive storm, called a "bomb" by the courts, moved in. The *Fairwind* sank and three of her crew perished. One member of the *Sea Fever*'s crew was swept overboard.

Honour Brown, the wife of *Sea Fever*'s deceased crew member, and two other plaintiffs, sued the federal government for negligently failing to repair or replace a malfunctioning weather buoy. If the buoy had been functioning properly, she argued, it would have allowed the NWS to forecast the storm in time to save her husband.

When someone suffers a loss because of an inaccurate weather forecast, should the forecaster be liable? In this case, the trial court said "yes" and awarded Brown and the other plaintiffs \$1.25 million in damages. The judge concluded that the government had undertaken a responsibility to provide a reliable weather forecasting system for commercial fishermen and the fishermen did, in fact, rely on that system. Therefore, the government needed to make sure its weather forecasting system was working properly, a duty it breached.

The government appealed. According to the appeals court, government agencies such as the NWS are allowed to make political, social, and economic judgments—such as the decision not to repair the buoy or decisions about the level of resources they wish to invest in preparing weather forecasts—with judicial second-guessing. The appeals court noted that it would be particularly inappropriate for courts to get involved in deciding if weather forecasts were negligently made because such forecasts are a classic example of a prediction of indeterminate reliability, and a place peculiarly open to debatable decisions, including the desirable degree of investment of government funds and other resources. 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 [treasury] would be both unlimited and intolerable.

Further, as the concurring judge pointed out, the plaintiffs' case challenged the weather forecast itself, which at any given time is composed of several different factors, none of which is necessarily determinative.

If courts are to interfere so as to ensure that the weather service continues to maintain a given level or quality of prediction, which is made up of numerous and varied factors, in effect, courts would be assessing the adequacy of this government service, for who is to say what components are necessary to maintaining the previously set level of prediction.

The appeals court reversed the damages award and the plaintiffs received nothing.

## Sovereign Immunity

When someone such as Honour Brown sues the federal government, a legal doctrine known as "sovereign immunity" comes into play. Under this doctrine, which is based on the ancient English notion that "the King can do no wrong," the government cannot be sued without its consent. The federal government has, by statute, consented to be sued under some circumstances but not others. For example, it has not consented to be sued over how governmental agencies exercise discretion. Nor has it consented to be sued for misrepresentation. The judge assigned to hear the case decides whether the lawsuit is one of the types to which the government has consented.

Courts hearing lawsuits against the federal government based on its weather forecasts have generally concluded that the government has not consented to be sued for making those forecasts. The courts see these lawsuits as either challenges to the exercise of the forecasting agency's discretion or as claims that the forecast constituted a misrepresentation, or both. Even when the judge rules that the government had consented to be sued, the lawsuit still must be decided on its merits. In the small number of cases against the government that were not dismissed on the basis of sovereign immunity, the courts have refused to find the government liable simply because a weather forecast turned out to be wrong. As one court put it, "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." Rather, the courts would require a showing that the forecaster was negligent in preparing the forecast before imposing liability.

## Private-Sector Forecasting

Sovereign immunity only applies when the lawsuit is filed against the government. But today, more and more forecasts are provided by the private sector. Private-sector meteorology refers to all meteorology practiced by anyone for hire, such as a sole practitioner who provides meteorological forensic services without forecasting, a meteorologist employed in-house by a company, or a meteorologist who works for AccuWeather or WeatherData. Commercial meteorology is a subset of private-sector meteorology and includes companies that provide real-time forecasts, warnings, and other services to anyone who wishes to purchase them.

In most of the cases involving inaccurate weather forecasts, the defendant has been the federal government—not surprising, since historically the NWS or its predecessor has provided most weather forecasts. However, we may see cases filed against

private-sector forecasters if that sector continues to grow at the rate it has in recent years. Since private-sector forecasters will not be protected by sovereign immunity, courts hearing these cases will have to resolve important and potentially novel legal issues concerning liability for weather forecasts. *Brandt v. The Weather Channel* represents the kind of case that could be brought against private-sector meteorologists who provide weather forecasts. In June 1997, Charles Cobb, a resident of Big Pine Key, Florida, headed out on a boating trip with a friend. Cobb had watched a forecast on The Weather Channel the day before. The program had not announced a small craft warning. In fact, it had not predicted any bad weather for the following day. An unexpected storm moved in during Cobb's boating trip, throwing him from the boat. Cobb drowned. Cobb's estate sued for \$10 million, and the court dismissed the lawsuit. It reasoned that weather forecasting was not an exact science for which a broadcaster should be held liable. The court felt that imposing liability for an allegedly incorrect weather forecast would be contrary to public policy. In addition, the court observed that the mass media has no legal obligation to members of the general public who listen to their broadcasts. To find The Weather Channel liable in this instance could negatively affect the First Amendment rights of broadcasters. Further, because the plaintiff had not alleged the existence of an enforceable contract between Cobb and The Weather Channel, The Weather Channel owed no contractual duty to Cobb.

The liability of a private-sector forecaster who is not part of the media but who does have a professional relationship with a client has not yet been addressed in any reported court decisions. But we can gain some insight through court cases against professionals outside of the weather context. In these cases, professionals have been required to exercise what in legal terminology is called "a reasonable degree of care ordinarily exercised by other members of their profession under similar circumstances." According to Ronald B. Standler, an attorney and physicist who has analyzed all of the reported court cases involving negligent weather forecasts, a plaintiff suing a weather forecaster would have to 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.

It is important to reiterate that a forecaster should not be found at fault simply because his or her forecast is erroneous. Negligence must be established by showing that the forecast error would have been avoidable using accepted meteorological practices.

## As a Result

The *Brown* and *The Weather Channel* decisions indicate that courts may be reluctant to impose liability for incorrect weather forecasts. Part of this reluctance may be due to factors other than legal standards. According to Standler, plaintiffs have lost nearly all of the reported court cases involving negligent weather forecasting. Thus, perhaps "the plaintiff always loses" is the real "rule of law" that can explain these results. But is this outcome good policy? What would be the consequences of holding government or private-sector forecasters liable for inaccurate forecasts? And how do forecasters protect themselves?

One of the primary arguments supporting sovereign immunity is that governmental liability could be extensive if the government had to compensate every person who suffered some harm because he or she relied on a faulty weather forecast. Fears of liability for forecasts could force the government to substantially curtail its forecasting activities. Stanley Changnon of the Illinois State Water Survey, a state agency that conducts research and provides weather-related services, reported that his agency was advised to "stay away" from weather predictions because state attorneys were concerned about liability.

Liability could drive private-sector forecasters who provide valuable services out of business as well. As Michael R. Smith, CEO and founder of WeatherData, pointed out, "Commercial meteorology is a low-margin business (we are competing both against a 'free' NWS version of our product and against the opinion of many that weather information is a 'societal good' and should be free) and simply does not have enough profit to sustain the cost of legal defenses, let alone judgments." On the other hand, perhaps the fear of liability serves a valuable purpose. According to Standler in an article on tort liability for negligent weather forecasts, "It is often said (mostly by tort attorneys) that tort liability for negligence encourages corporations and professionals to be careful." Another concern about imposing liability is that, while weather forecasting has become increasingly reliable over the years, it is not an exact science. Changnon noted that forecasters can protect both users and themselves by presenting forecasts as alternatives with assigned probabilities such as "a 60 percent chance the temperature will be above average, a 32 percent chance it will be average, and an 8 percent chance it will be below average." But as WeatherData's Smith noted, "Probabilities only protect users if there is a long enough track record to see if the probabilities are reliable—that is, that when something is forecast to occur 40 percent of the time, it occurs approximately 4 times in 10. If not, they are just [covering themselves]."

Proving that a private-sector forecaster was negligent may be difficult, but the history of lawsuits against the NWS indicates that it is likely someone will try. Private-sector forecasters may try to protect themselves from the threat of liability through carefully drafted contract clauses or by purchasing insurance. However, the best insurance for both public- and private-sector forecasters may be to verify forecast skill and clearly match advertised skill with actual practice. According to Roger Pielke, Jr., a professor in the Environmental Studies Department at the University of Colorado, even if imperfect, weather forecasts are of known accuracy. Pielke said that enough forecasts are made to develop an understanding of the uncertainty in forecasts. "This is a double-edged sword," Pielke said. "On the one hand, this understanding allows forecasters to know what claims can appropriately be made about expected accuracy. On the other hand, it allows those seeking to hold forecasters accountable to identify those forecasts that are oversold or scientifically unjustified." Thus, he suggested that forecasters in the public and private sectors rigorously verify the accuracy of their forecast products and keep claims of accuracy in line with that

verification.

Elliot Abrams, senior vice president and chief forecaster for AccuWeather, acknowledges that weather forecasting is not an exact science, and accuracy levels typically decline as the time between the present and the forecast lengthens. However, as Abrams pointed out, “The public and our customers understand that but appreciate the valuable service that we provide. By recognizing and disclosing uncertainties, we offer excellent guidance for a wide spectrum of users. But as with many things in life, there are no absolute guarantees.”

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