Collision Over The Hudson
Search crews try to recover evidence.

Correction
A previous Web version of this story incorrectly stated that aircraft flying in the Hudson River corridor could be doing so without electronic transponders. In fact, transponders are required in the area.

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Saturday's deadly midair collision of a helicopter and small plane over the Hudson River mirrors many reports of near midair-collisions filed by pilots, according to an NPR analysis of Federal Aviation Administration data.

The crash, which killed nine people, occurred in a freewheeling, low-altitude flight corridor outside the jurisdiction of air traffic control towers and below the flight paths of major New York-area airports.

In the so-called Class E airspace, pilots stay under 1,100 feet and aren't required to file flight plans. They find their way according to what federal regulators call "visual flight rules."

Justin Green, a pilot and aviation lawyer with the Kreindler & Kreindler law firm in Manhattan, calls the Hudson River flight corridor "remarkably informal" considering that it is adjacent to New York City and "within probably the busiest airspace in the world." Green, who has flown the corridor himself, says pilots abide by some agreed-upon rules to stay safe. They announce their presence on a particular radio channel and note their position by pointing out landmarks like the George Washington Bridge and Statue of Liberty as they pass them.

And pilots stick to one side of the river or another, depending on their direction of travel.

Informal rules notwithstanding, it's the less regulated portions of the nation's airspace where aircraft have most often come close to colliding in midair. That's according to an NPR analysis of some 1,800 near midair-collision reports made to the FAA from 1998 through 2008.

Perhaps pointing to the limitations of flying mostly by one's eyes, three-quarters of the incidents involved visual flight rules, or "VFR" flights. More than half the incidents happened in airspace where VFR pilots operate without intervention by air traffic control.

On a fair weekend day, the Hudson River is often crowded with sightseeing planes and tour helicopters. Sometimes fixed-wing aircraft fly low to get a good view of the city, potentially conflicting with low-flying helicopters.

To stay far enough away from each other, pilots must apply the traditional "see and avoid" technique, but that becomes more difficult as the skies get more crowded and can be challenging when climbing or turning.

"Airplanes are just like your cars — there are blind spots," says Chris Meigs, a former commercial airline captain and an associate professor at Embry-Riddle Aeronautical University. The Hudson River corridor "is very dense airspace, and it's a challenge" to fly in, Meigs says. "Unless you're really skilled you can get yourself in trouble."

Despite all the apparent hazards, midair collisions are rare. Most involve two small, noncommercial aircraft. In 119 midair collisions that killed 162 people since 1999, none involved a major air carrier, according to the National Transportation Safety Board.

The last time a major U.S. carrier was involved in a midair collision was in 1978, according to the agency. A Mexican airliner was also involved in a midair collision over California in 1986.

The difficulty of monitoring heavy surrounding traffic is clear to Pat Veillette, a former fighter pilot who now flies business jets. Veillette says that without the sophisticated traffic detection system on his planes, he would find it difficult to see all of the traffic when flying into an area congested with general aviation flights.

"The little [traffic monitoring] screen will be full of little blue dots indicating other aircraft," he says, "and you will visually look out there at
where some of these dots are, and your eye just can't see them."

Green says the FAA should consider setting rules that restrict the routes of helicopters and fixed-wing aircraft to keep them apart.

The National Transportation Safety Board plans to look into the congestion issue in the area, Chairman Debbie Hersman told The Associated Press on Sunday.