LIMITATIONS OF SEE AND AVOID CONCEPT AND DISTRACTED AIR TRAFFIC CONTROLLER

The National Transportation Safety Board of the US determined on 14th September that the probable cause of last year’s midair collision over the Hudson River that resulted in the deaths of all nine persons aboard the two aircraft were the inherent limitations of “see-and-avoid” concept and a Teterboro Airport air traffic controller’s nonpertinent telephone conversation at the time of the collision.

The see-and-avoid technique of averting mid-air collisions was not effective because of the difficulty the airplane pilot had in seeing the Helicopter until the final seconds before the collision. In addition, the Teterboro Airport local controller engaged in a personal telephone conversation, which distracted him from his air traffic control duties, including the timely transfer of communications for the accident airplane to the Newark Liberty International Airport (EWR) tower and correcting the airplane pilot’s incorrect read-back of the EWR tower frequency.

The Safety Board met on 14th February in a five-hour public meeting to determine the probable cause of the accident and issued five recommendations to the Federal Aviation Administration for improving the safety of the national airspace, and in particular, the airspace over the Hudson River near New York City. The Safety Board noted that contributing to the cause of the accident were the ineffective use by both pilots of their aircrafts’ electronic advisory system to maintain awareness of other air traffic, FAA’s procedures for transfer of communications among air traffic facilities near the Hudson River, and FAA regulations that did not provide for adequate vertical separation of aircraft operating over the Hudson River.

On 8th August 2009, a Piper PA-32R-300 airplane, N71MC, and a Eurocopter AS350BA helicopter, N401LH, operated by Liberty Helicopters, collided over the Hudson River near Hoboken, New Jersey. The airplane flight was operating under the provisions of 14 Code of Federal Regulations (CFR) Part 91, with a pilot and two passengers. The helicopter flight, which carried a pilot and five passengers, was conducting an air tour of the area under the provisions of 14 CFR Parts 135 and 136. No flight plans were filed or were required for either flight,
and visual meteorological conditions prevailed at the time of the accident.

“This collision could have been prevented,” NTSB Chairman Deborah A.P. Hersman said. She continued, “While traffic alerts go a long way in helping pilots see and avoid other aircraft, these technologies are not, in and of themselves, enough to keep us safe. Strong operating procedures, professionalism, and commitment to the task at hand – these are all essential to safety.”

As a result of the accident investigation, the NTSB made recommendations to the FAA regarding changes within the special flight rules area (SFRA) surrounding the Hudson River corridor; vertical separation among aircraft operating in the Hudson River SFRA; see-and-avoid guidance; and helicopter electronic traffic advisory systems.