



An MD-82 aircraft crash-landed at Miami International Airport, veering off the runway and skidding into a grassy area between the runway and a taxiway.

Guardian Fleet Services Airplane Crash Recovery

On June 21, 2022, Red Air flight 203 — an MD-82 aircraft with 140 people aboard — crash-landed at Miami International Airport. The airplane veered off the runway and skidded into a grassy area between the runway and a taxiway.

As the plane skidded, its left wing struck a box-shaped electrical structure and the right wing collided with a communication/radar tower, which caused a fire to erupt in the wing. After the aircraft came to a stop, the passengers and crew were evacuated as firefighters doused the fire.

American Airlines contacted Kauff's Transportation Systems, a Guardian Fleet Services subsidiary, at their Miami terminal.

A recovery team assembled from Guardian Fleet locations including Miami, Fort Pierce, Tampa, Orlando and Davie, Fla. Initially, the team staged equipment for the recovery of the approximately

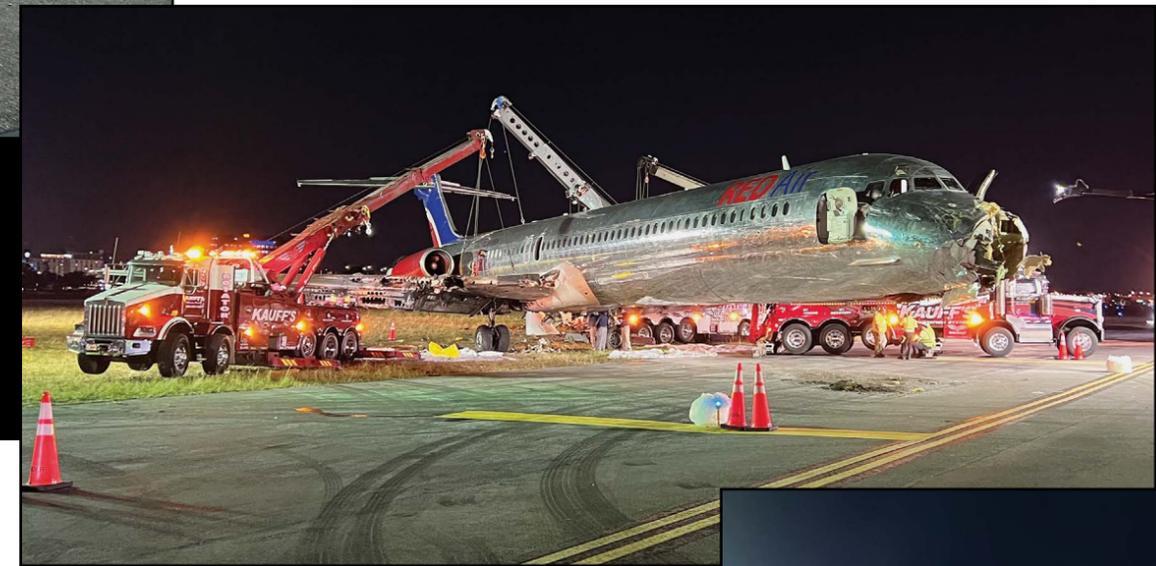
110,000-lb., 140-foot-long, 150-foot-wide aircraft. On scene was a Guardian Fleet Services 2022 Peterbilt with a Century M100, 100-ton rotator operated by Butch Van Dyken and Mike Swanson, a 2013 Kenworth T800 with a Century 1075 rotator operated by Raul Suarez Jr. of the Kauff's Miami location, a 2010 Peterbilt 379 with a 1075 Century rotator from the Kauff's Fort Pierce location operated by Josh Cordell, and a 2013 Kenworth T800 with a 1060 Century rotator from A Superior Towing operated by Justin Smith. Sean Loscalzo, president of A Superior Towing and vice president of Guardian Fleet Services, supervised the recovery team.

Officials on the scene included representatives from the National Transportation Safety Board, Department of Transportation, Miami-Dade Aviation Department, Dade County Fire Department, and the American Airlines recovery team.

The runway where the aircraft was located was shut



Guardian Fleet Services rotators are moved into position to lift the aircraft.



The rotators lifted the plane and suspended it as a specialized trailer cushioned with large, wheeled loader tires was backed under the fuselage.

down until the plane could be removed. The recovery plan was to lift the aircraft with the rotators, back a specialized trailer underneath the plane and transport it to a section of the airport so the runway could be re-opened and the crash investigation could continue. After the investigation, the plane would be dismantled and scrapped.

Day One

Day one of the recovery was to lift the plane onto the trailer. It began with a safety briefing, the first of many during the recovery. Loscalzo describes the phases of the recovery as "fluid," as the approach to the many facets of the recovery were sometimes altered or changed based on input from cooperating agencies during the process.

The damaged electrical box and crumpled tower were removed from the aircraft's wings. One of the first considerations was the aircraft's center of gravity when lifting it and loading it on the trailer. The MD-82's wings were set back on the fuselage with a long front section, resulting in the aircraft being heavier at the rear than the front. For the lift, the operators followed the detailed procedures of an existing lifting plan that the American Airlines recovery team used specifically for aircraft. Access panels were removed and four special lifting tubes were connected to the wing's lift points. The team also marked the exact areas of the aircraft where straps could be positioned.



Three rotators would lift the plane — the two 75-ton rotators were positioned at each wing, while the M100 lifted the rear with a 26-foot-long, 12-inch-wide lifting strap. The 60-ton rotator was in a support and standby mode in case the front of the aircraft needed to be lifted.

To support the plane once it was lowered onto the 53-foot stretch flatbed trailer pulled by a 2005 Peterbilt 379 driven by Hector Williams of Orlando's Ace Towing, dozens of large, front-end loader tires were brought to the scene and loaded and positioned onto the trailer with a forklift.

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The aircraft was towed at walking speed approximately two miles to an area of the airport where it could be parked and secured.

The tires would provide cushioning for the belly of the aircraft, and disperse the plane's weight. After the rotators slowly lifted the plane, the trailer was backed underneath as the tires were carefully arranged to offer maximum support when the plane was lowered.

Once the plane was lowered onto the trailer, there was concern that the tractor and trailer might become stuck in the grassy area. To ensure the trailer would reach the nearby runway, it was winched to the runway by the 1060 rotator. Once the trailer and plane were on the runway — around midnight after a 17-hour day — the recovery was shut down until the following morning.

Day Two

Day two was the transport phase of the recovery. Airport officials were concerned that if the plane's weight shifted on the trailer or a wind gust compromised the plane's stability, there should be back-up support for the aircraft's wings. It was decided that two additional tractors and transport trailers would accompany the aircraft, one under each wing for additional support as it was transported to its new location. The large, front-end loader tires were arranged on the trailers under the wings to provide cushioning. Under one wing was a 2017 Western Star 4900 tractor with a 53-foot Manac flatbed trailer driven by Bruce Richards of Kauff's Towing. Under the other was a 2020 Volvo VNR tractor with a 53-foot Manac flatbed trailer driven by Kevyn Lee of Alligator Towing.

With the aircraft secured and the escort trailers ready, the recovery team slowly drove the aircraft and its entourage approximately two miles at walking speed from the southeast sector of the airport to the northwest side, constantly monitoring the plane and in constant communication with

all agencies. Upon reaching their destination and with the runway re-opened, the recovery operation ceased until the following morning.

Day Three

Day three began with a safety briefing before the final phase of the recovery — lifting the plane off the trailer and lowering it onto special aircraft support stands supplied by the airport crews. The recovery team again positioned the rotators to lift the aircraft. Before placing the aircraft on the stands, the recovery team was asked for assistance in manually lowering the nose landing gear, which was jammed into the raised position. The operators were supplied with a Jaws of Life hydraulic tool, which was used to open a nose gear compartment, and the gear was winched to the down position.

The aircraft was then lifted, the trailer was removed from underneath, and the support stands were placed at points at the nose, wings and rear. The plane was lowered onto the stands and secured with tie-down chains.

Although the aircraft recovery was sometimes painstaking and technically challenging, the recovery worked flawlessly, Loscalzo says, due to the training, experience, patience and team effort of everyone involved.



Once at its destination, the rotators lifted the aircraft and placed it on special aircraft support stands.



The recovery team, which included members from Guardian Fleet Services, the National Transportation Safety Board, and the American Airlines recovery team, is pictured on the final day of the recovery.