Putting airliners into Flight.

describes how a Las Vegas-based company supplied the airframes for the latest Hollywood blockbuster.

Above • Due to time restraints, a crane was used to position the wing for filming rather than using other supports that may have caused visual problems when editing the film

Below • Film studio technicians prepare the crashed SouthJet airliner for the next scene in the Paramount Pictures production Flight.

he new Paramount Pictures feature film *Flight*, starring Denzel Washington and Don Cheadle, was nominated for two academy awards - Best Actor (Washington) and Best Screenplay (John Gatins). The film is a riveting mystery thriller that has Washington playing veteran airline captain Whip Whitaker who successfully deals with a catastrophic in-flight emergency with a miraculous crash landing. Whitaker's

skill in landing the plane and saving the crew and all of the passengers is at first hailed.....and then called into question. Director Robert Zemeckis, best known for his films Forrest Gump and Cast Away, came up with a fictitious airline and aircraft type for *Flight*. The carrier is called SouthJet and the aircraft dubbed a JR-88. SouthJet Flight 227 encounters bad weather, then loses its hydraulic system, resulting in a loss of vertical control and in turn in a rapid

descent. Captain Whitaker's piloting skills intuitively take over and from there the story of the airline pilot and the fallout from his actions unfold. Many aviation enthusiasts will draw parallels between the fictitious story of SouthJet's Flight 227 and Alaska

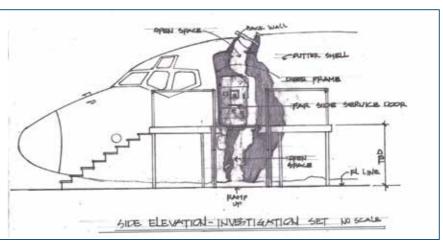
Airlines' Flight 261, which crashed into the ocean off Southern California on January 31, 2000, with the loss of five crew and 83 passengers. Flight 261 was flying from Puerto Vallarta, Mexico,

en route to Seattle, Washington, with a planned stop at San Francisco. As the McDonnell Douglas MD-83, N963AS (c/n 53077) neared Los Angeles, the aircraft suffered an in-flight failure of its jackscrew nut on the horizontal stabiliser's trim system. N963AS made two uncontrolled dives, and the MD-83 was known to have been flying inverted as the crew tried to gain control of the aircraft. It is interesting to see how screenwriter Gatins and

director Zemeckis incorporated parts of the Alaska Airlines accident and the challenges the crew must have faced into the new film.

How it was done

The aircraft aspects of *Flight* were brought to life by J Douglas Scroggins, of Scroggins Aviation, Las Vegas, Nevada. Doug was previously a member of the camera operators' union and a producer of television documentaries







and films. He went on to build his business as a commercial aircraft parts source, dismantler, and salvage recovery operation. The business, which also has a satellite location at Mojave Airport in California, then developed into supplying commercial aircraft mockups to the film and television industry. In the last couple of years, the company has built the cockpit section used in filming the TV show Pan Am, provided aircraft for NBC/Universal's The Event, >>

> Left • Set directors from Flight provided Scroggins Aviation with precise drawings on how the aircraft section were to look for filming. (Paramount Pictures)

Middle • Scroggins Aviation supplied three MD-80 series aircraft sections for Fliaht Ex-American Airlines MD-82, N442AA, provided the main fuselage for the crash mock-up. The company also had to bring in a more complete nose for filming, and chose ex-Delta Air Lines MD-88, N901DL.

Right • MD-82 N16807 was reassembled and placed on scaffolding to mimic the jetliner at the gate. The jetway and part of the terminal were fabricated out of wood for the terminal and inflight cabin scenes

Below • N16807 is shown at Mojave with a sec-tion of its mid-fuselage removed. The cockpit and one more midsection was removed and used for all the live action studio scenes.

Below right • Doug Scroggins on set in Atlanta, Georgia, for the crash scene of Flight. Workers shovel dirt onto the cockpit section of ex-Delta MD-88 (N901DL), to give more effect to the impact area. The remainder of the jet is from an American Airlines MD-82 (N442AA). Note the wooden winglets added to the mock-up.



and also the film Final Destination 5. For *Flight*, the company provided two whole aircraft and the cockpit of a third along with all of the interior fittings from instruments and seats to galleys. "The film studio provided us with drawings on exactly how they wanted the jetliners cut, so they could be positioned on set," said Doug. "We took it to the next level and were involved in making sure of the accuracy of the aircraft interiors, from the main cabin to the cockpits."

The first airliner seen in the film is ex-Continental MD-82, N16807 (c/n 49261). This aircraft made is first flight on July 20, 1984, and flew with the carrier until it was retired to Mojave for storage in October 2002. After years of inactivity, Scroggins Aviation acquired the twin-jet for TV and movie work. For *Flight*, the fuselage was cut under the floor section then the cockpit was detached and the fuselage separated into three pieces.

The aircraft pieces were then shipped

from Mojave across the United States to EUE/Screen Gems' facility in Atlanta, Georgia. Here, N16807 was installed on a sound stage where a jet bridge was built and the fuselage was reassembled and outfitted with seats, galleys, flight attendant folding seats, and every detail down to the SouthJet magazine in the seat back pockets. The fuselage was assembled on a platform that enabled film technicians to move the cabin up or down as much as 3ft (1m) to simulate in-flight turbulence.

For the scenes where Captain Whitaker rolls the SouthJet in an effort to gain control of the aircraft, sections of N16807 were installed into a 'rotisserie' that could turn the aircraft cabin through 360 degrees. When the fuselage section was installed in the rotisserie, the cabin was open at both ends to enable a camera on a jib boom to be moved in and out without obstruction. Up to 14 people were seated in the fuselage section, which was then rolled upside-down, for two minutes at a time. Fully loaded, the fuselage sections weighed nearly 12,000lb (5,443kg). The cockpit was also fitted into the rotisserie



for scenes of Captain Whitaker and First Officer Ken Evans (played by Brian Geraghty) as the jetliner is rolled.

"We had to remove all of the cockpit glass and replace it with Plexiglas for the interior scenes," said Scroggins. "When we reinstalled the Plexiglas, they sealed the windows very tight so we were able to create all the scenes of the jetliner flying through rain. The windows could not have any bend in them at all because the film crew was using a green-screen outside so they could later add ground, sky, and debris flying past the windows." Flight's crash scenes involved

components of two jetliners positioned in a field owned by Green Valley Farms of Covington, Georgia. A church facade was built on the edge of the field, the steeple of which SouthJet Flight 227 clips as it is brought in for a crash landing. The two aircraft used in the crash scenes were ex-American Airlines MD-82, N442AA (c/n 49468), which provided the fuselage, wings and tail sections and the cockpit of ex-Delta Air Lines MD-88, N901DL (c/n 49532). The MD-82 was trucked to the set in Atlanta from storage at Roswell, New Mexico, while the cockpit of N901DL came from Mojave. The winglets were made of wood, and the starboard wing was positioned, standing nearly straight up, using forklifts or a crane.

"We also provided the jackscrew used in the closing arguments scene in the movie," said Scroggins. "It's actually from a Convair CV-880, but no one would ever know the difference. We didn't have time to bring an MD-series jackscrew, that was sitting on our shelves in our stores." In the United States, *Flight* has been



a success on the big screen and will soon be released on DVD and to cable channels. To save the film-makers money, N442AA was scrapped on site, while N16807 and N901DL were trucked back to Mojave to be used in future TV and movie productions.

What's next on the silver screen for Scroggins Aviation? The company



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The crash scene at Atlanta Georgia



recently provided the fuselage of Airbus A320-321, N369MX (c/n 369), to Chermin Entertainment. It is to be used for the film adaptation of the science fiction graphic novel Oblivion starring Tom Cruise and Morgan Freeman. The fuselage was converted into a spaceship for the film. *Oblivion* is slated for an April 2013 release in the United States.

Left • The tail from N442AA (c/n 49468) being separated from the aft fuselage section. (All images Scroggins Aviation unless stated)

left • Two forward fuselage sections from N442AA are placed onto flatbed trailers for the trip from Roswell, New Mexico, where the aircraft was dismantled. to the Atlanta, Georgia, area for filming of the crash scenes.

Below • The next project using aircraft provided by Scroggins Aviation is the late spring release titled Oblivion, staring Tom Cruise and Morgan Freeman. Ex-Mexicana Airbus A320-321, N369MX (c/n 369), was converted into a spaceship for the sci-fi thriller.

