

On July 14, 2022, at approximately 0052 UT, a Cessna 208B airplane, N877FE, was substantially damaged when it was involved in an accident at the Salt Lake City International Airport (SLC), Salt Lake City, Utah. The pilot sustained minor injuries.

In the official incident log, the pilot stated that during the flare for landing, the airplane encountered a windshear, and he was unable to maintain directional control and executed a go-around. He climbed the airplane to about 30 ft above ground level and then encountered a downdraft that pushed the airplane towards the runway. Subsequently, the airplane impacted terrain, off the right side of the runway, in a left-wing low attitude.

The following are the incident details provided by the Joint Air Traffic Operations Command (JATOC).

INCIDENT DETAILS:

Salt Lake City TRACON (S56) / Salt Lake City (SLC) ATCT – Thursday July 14, 0052 UT: (Air Spur) CPT7727/C208 was in communication with the Local Control Center (LCC) controller, and crashed while executing a pilot-initiated go-around on Runway 34R.

An SRT (services rendered telecon) was conducted and the event was color-coded “Yellow” with District follow-up required for both S56 and SLC. These were the main findings of the SRT:

- The S56 ATM reported the traffic volume and complexity as moderate. There were ten CPCs, one TMC, and one OS on duty. There were six CPCs, one TMC and one OS on position, with four controllers available. The OS was monitoring the operation and providing general supervision. This configuration did not meet the facility’s expectation for the weather and complexity. The involved controller had completed the pre-duty weather briefing. There were active equipment outages for intermittent weather depiction; however, the depicted weather was validated. There were thunderstorms, depicted areas of light to moderate precipitation in the vicinity, and reports of Low Level Wind Shear (LLWS). PIREPs and depicted weather were not disseminated as required.
- CPT7727 was in communication with the Final controller and vectored for the Visual Approach Runway 34R. The F controller disseminated a Wind Shear Advisory for a gain of 20 knots on final. The F controller issued CPT7727 a Traffic Advisory reference the preceding B757 landing on Runway 34R. CPT7727 reported the B757 in sight and was instructed to follow the B757. The F controller issued a Wake Turbulence Cautionary Advisory to CPT7727, cleared them for the Visual Approach to Runway 34R, and instructed them to contact SLC. The facility reported the F controller did not ensure CPT7727 had the current ATIS Information.
- The SLC ATM reported the traffic volume as moderate with moderate complexity. There were seven CPCs, one trainee, and one OS on duty. There were five CPCs and one OS on position, with two CPCs and one trainee

available. The OS was monitoring the operation and providing general supervision. This configuration was reported as normal for the time of day and volume of traffic. The involved controller had completed the pre-duty weather briefing. There were thunderstorms descending on the airport and multiple Low Level Wind Shear Alerts. The SLC ATM reported the facility expectations for Wake Turbulence Advisories, LLWS advisory phraseology, and the dissemination of PIREPs and LLWS advisories were not met.

- CPT7727 was in communication with the Local Control Center (LCC) controller and reported on the Visual Approach for Runway 34R. The LCC controller advised CPT7727 they were following a B757, issued the wind, and cleared them to land on Runway 34R. The LCC controller verified CPT7727 had the preceding B757 in sight and instructed them to maintain visual separation from the B757. CPT7727 responded in the affirmative. The LCC controller issued a Low Level Wind Shear Advisory for Runway 34R arrivals and departures with a loss of 15 knots. As CPT7727 crossed the threshold, they advised they were initiating a go-around. The LC controller issued CPT7727 go-around instructions; however, CPT7727 did not respond.

Please refer to Attachment 1 for an explanation of the data availability and playback function used for this report.

Attachment 2 provides 40 minutes of pictures of the ITWS display around the time of the accident

At the time of the accident, the TDWR and ITWS systems were fully operational as reported by Air Traffic and all system Remote Maintenance Monitoring reports. TDWR basedata was archived by SLC SSC personnel and sent to AJW-141 for analysis. The following are pictures of TDWR reflectivity and velocity, the ITWS situational display (SD) as it appeared in the tower and TRACON as well as Air Traffic Control and pilot conversation at various times before, during and after the accident. The microburst and gust front products pictured on the reflectivity and velocity images are generated by the TDWR and do not necessarily represent what ITWS detected and displayed to the controllers. Any windshear alert issued by the controllers was generated by ITWS.

Approximately 5 minutes prior to the accident, CPT7727 was on a downwind leg preparing for an approach to runway 34R. There were thunderstorms in the terminal area with 20 knot windshear southwest of the airport and on approach to runway 34L. At 004721 UT, an aircraft reported a 20 kt gain windshear on 8 to 9 mile final approach. The runway location of the windshear was not able to be determined upon review of the voice recording.

At 004831 UT, ATC issued a windshear alert of 15 kt loss on 3 mile final to runway 34L. This is confirmed in Figures 1 and 2.

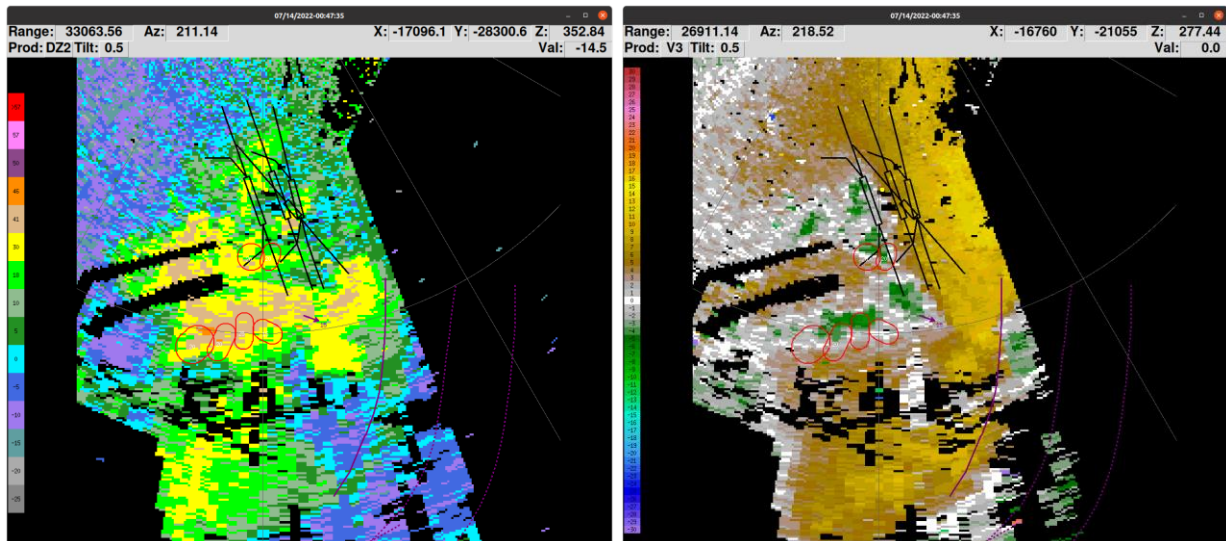


Figure 1. TDWR reflectivity and velocity at 004735 UT.

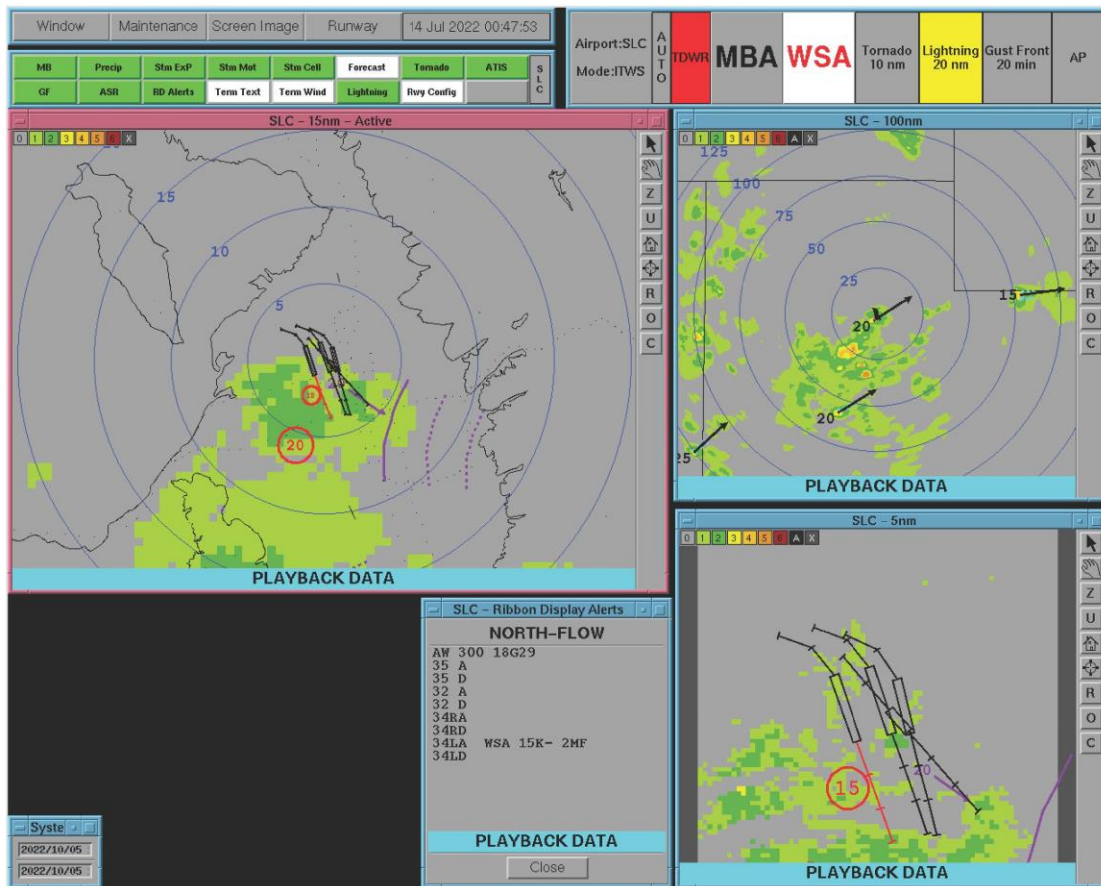


Figure 2. ITWS SD at 004753 UT

At 005056 UT, a Delta 757 aircraft that had just landed on 34R issued a PIREP reporting windshear of +10/-10 kts on final. The location on final was not indicated. The Figure 3 velocity plot shows an area of windshear on the runways. Figure 4 shows a 15 kt windshear on runways 34L and 34R at 005058 UT as issued by ITWS. At 005107 UT, a windshear alert for 15 kt loss was issued for approach and departure on runway 34R. Figure 5 shows windshear on the runway. The windshear on the runway is highlighted by the yellow circle in Figure 5. The windshear alert that was issued was generated by ITWS as indicated in Figure 6.

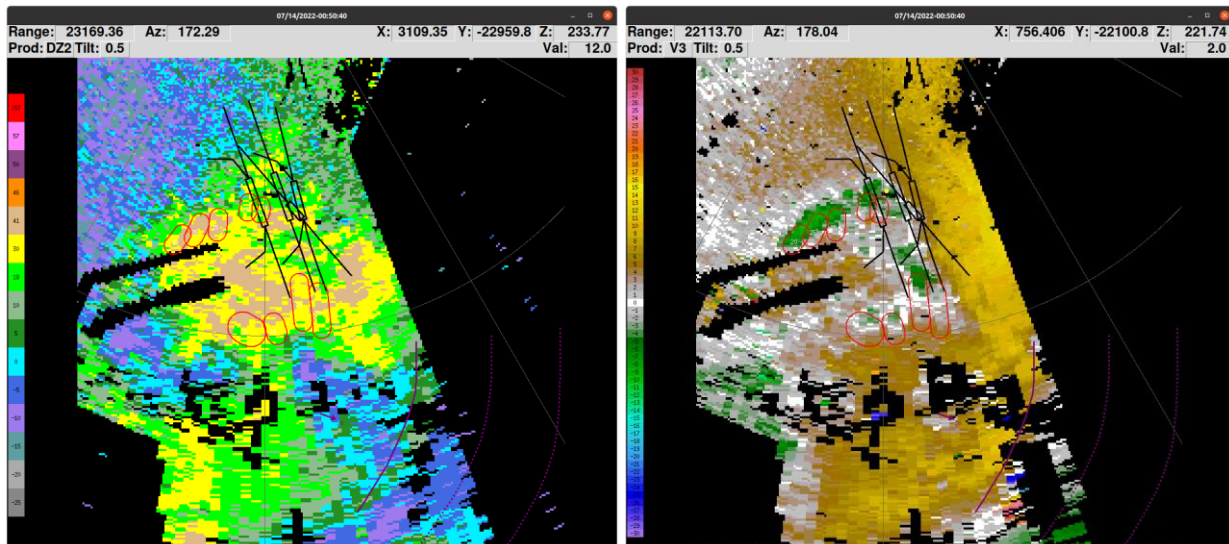


Figure 3. TDWR reflectivity and velocity at 005040 UT

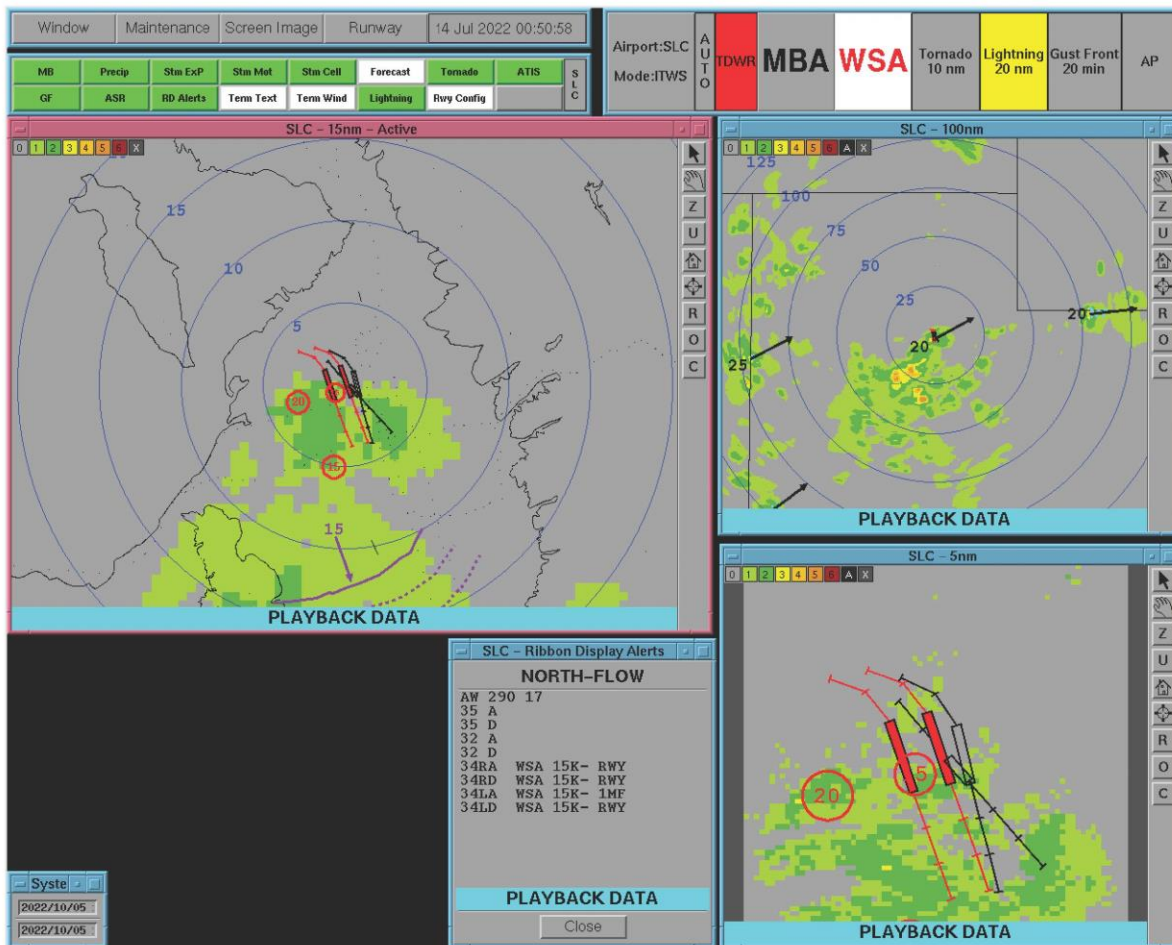


Figure 4. ITWS SD at 005058 UT.

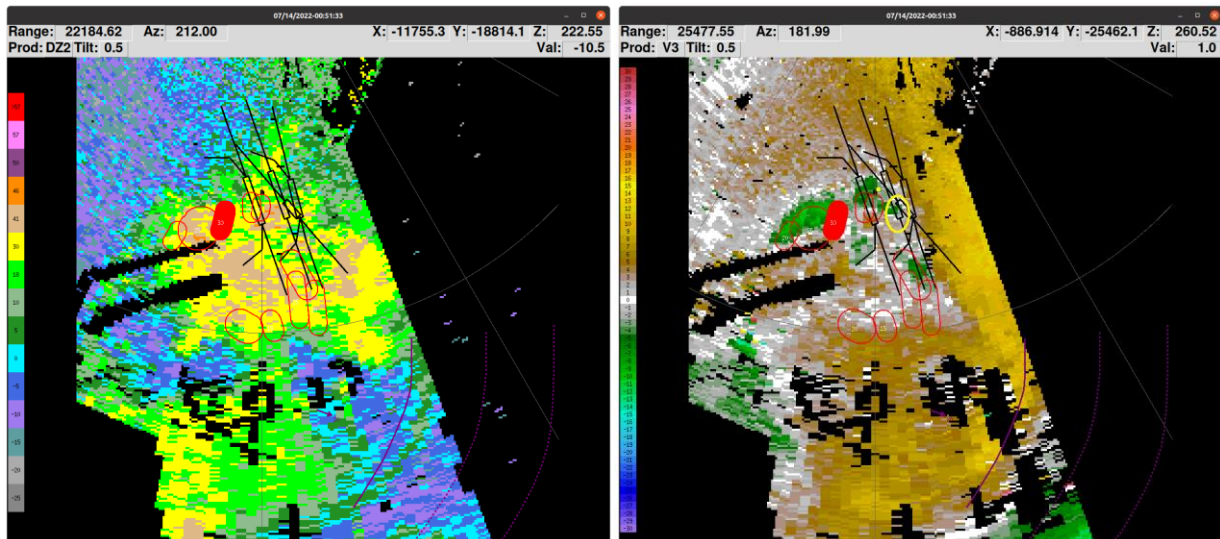


Figure 5. TDWR reflectivity and velocity at 005133 UT.

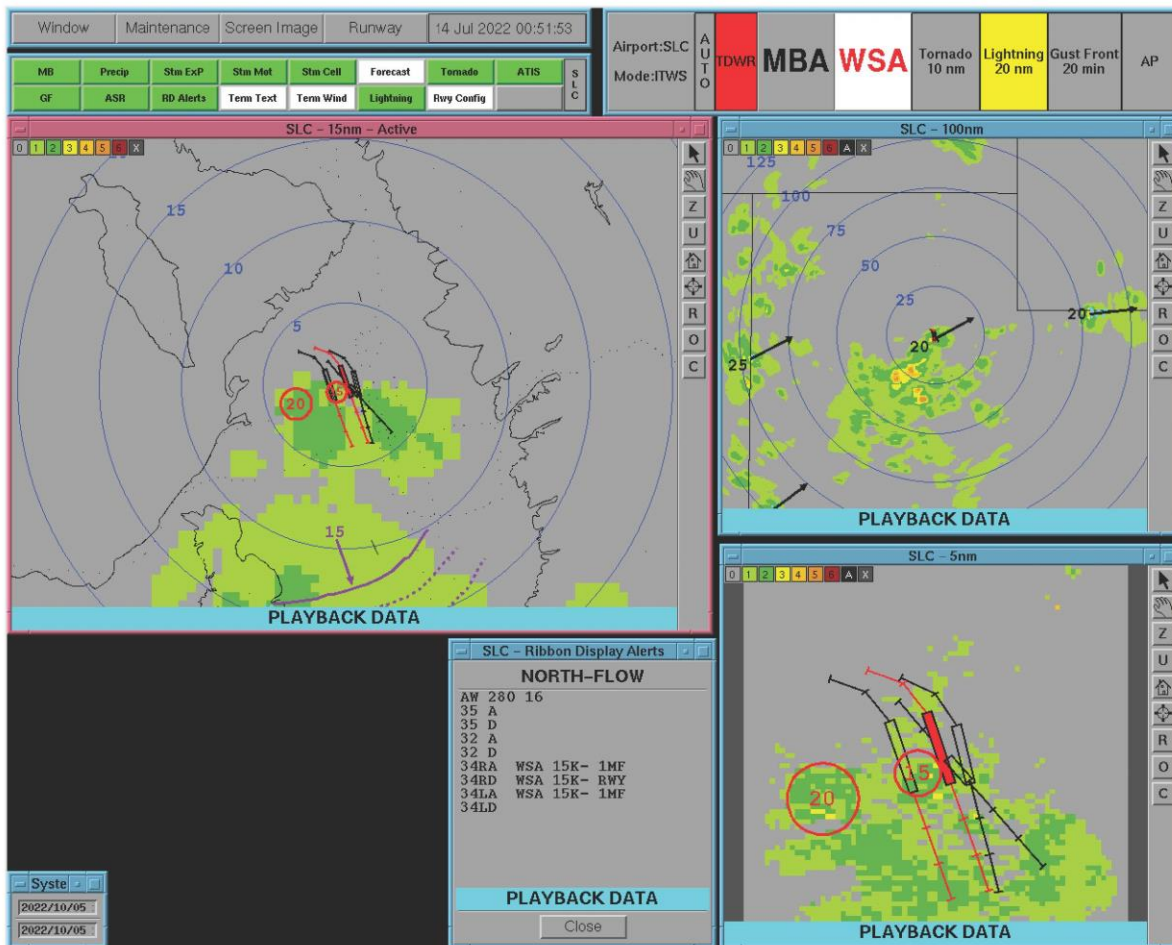


Figure 6. ITWS SD at 005153 UT.

At 005208 UT, CPT7727 requested a go around and was approved. At 005240 UT, the controller reported that CPT7727 had crashed off the runway. The windshear that the aircraft most likely encountered is highlighted in yellow in Figure 7

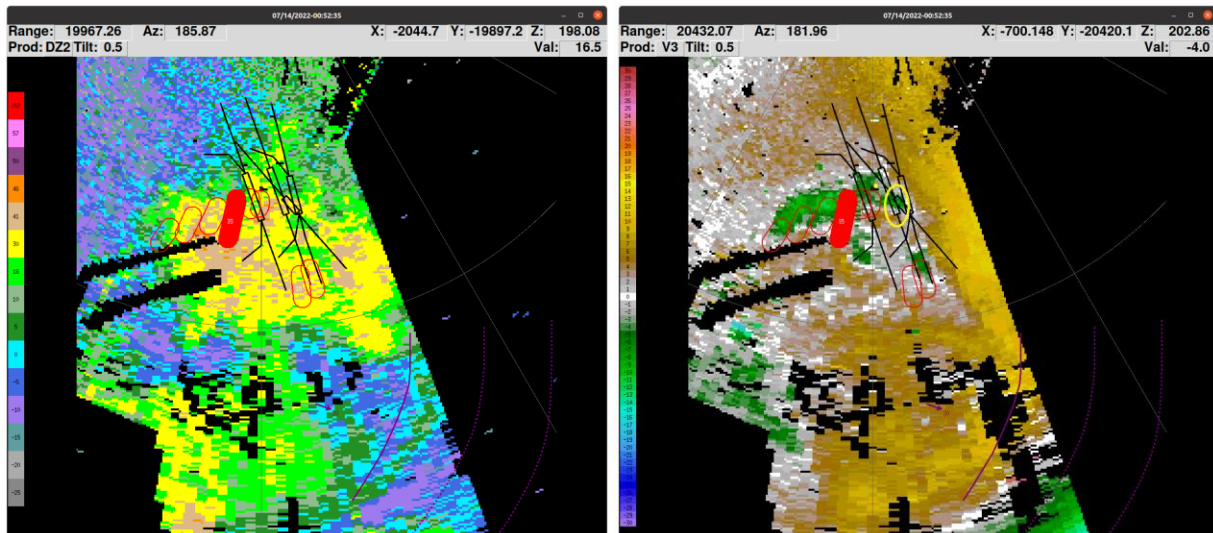


Figure 7. TDWR reflectivity and velocity at 005235 UT.