Deadly Plane Crash at San Francisco Airport
San Francisco, CA
July 6, 2013

On July 6, 2013, Asiana Airlines Flight 214 crashed while attempting to land at the San Francisco International Airport. Three people have died as a result of the crash and around 180 others were injured, 13 critically. The cause of the crash is currently under investigation, but there were no obvious mechanical issues and the weather was near perfect.

1. Problem

   What: Plane crash, fatalities
   When: 07/06/13
   Where: San Francisco International Airport
   Differences: First time pilots had flown together, ??
   Impact to the Goals:
   - Safety: 3 fatalities
   - Safety: ~180 injured, 13 critically
   - Labor: Major investigation and accident clean up needed
   - Customer Service: Negative publicity for airline
   - Schedule: Airport schedule significantly impacted

2. Analysis

   - Safety Goal Impacted
     - 3 fatalities
     - 2 died from injuries from plane crash
   - Customer Service Goal Impacted
     - Negative publicity for airline
   - Labor Goal Impacted
     - Major investigation and accident clean up needed
   - Schedule Goal Impacted
     - Airport schedule significantly delayed
   - Evidence: NTSB is investigating the crash, but the results will not be available for quite some time. It’s not apparent yet what caused a jet with no obvious mechanical issues to crash in clear weather conditions.

   - Plane crashed while attempting to land
   - Driver unaware she was on ground
   - Girl was covered in foam
   - Firefighters had sprayed large quantities of foam
   - Reacting to large quantities of smoke
   - Equipment failure?
     - Autothrottle malfunctioned?
       - Fear jet fuel would ignite
       - Crash generated large quantities of smoke
     - Mismanaging of automated systems?
       - Crew not communicating effectively?
       - Crew unaware of the problem in time to take action?
       - Low-airspeed warning activated too late?
       - Evidence: The warning did activate, but it was too late to allow the pilots to take action to avoid crash landing.
   - Evidence: Records of pilots.

   - Planes came in too low and slow for safe landing
   - Equipment failure?
   - Autothrottle malfunctioned?
   - Mismanaging of automated systems?
   - Crew not communicating effectively?
   - Crew unaware of the problem in time to take action?
   - Low-airspeed warning activated too late?
   - Evidence: Records of pilots.

3. Solutions

The final step in the Cause Mapping process is to implement solutions that would help prevent the problem from reoccurring. This issue is still being investigated and it’s premature to talk about solutions until it is completed. Once all the relative information is known, the Cause Map could be expanded and used to develop solutions.