

# 1 Problem

<b>What</b>	Problem(s)	Air traffic disrupted, air-traffic control outage
<b>When</b>	Date	April 30, 2014
	Different, unusual, unique	U-2 flying in area
<b>Where</b>	Facility, site	LAX Airport
	Unit, area, equipment	ERAM system malfunctioned
	Task being performed	Monitoring air-traffic

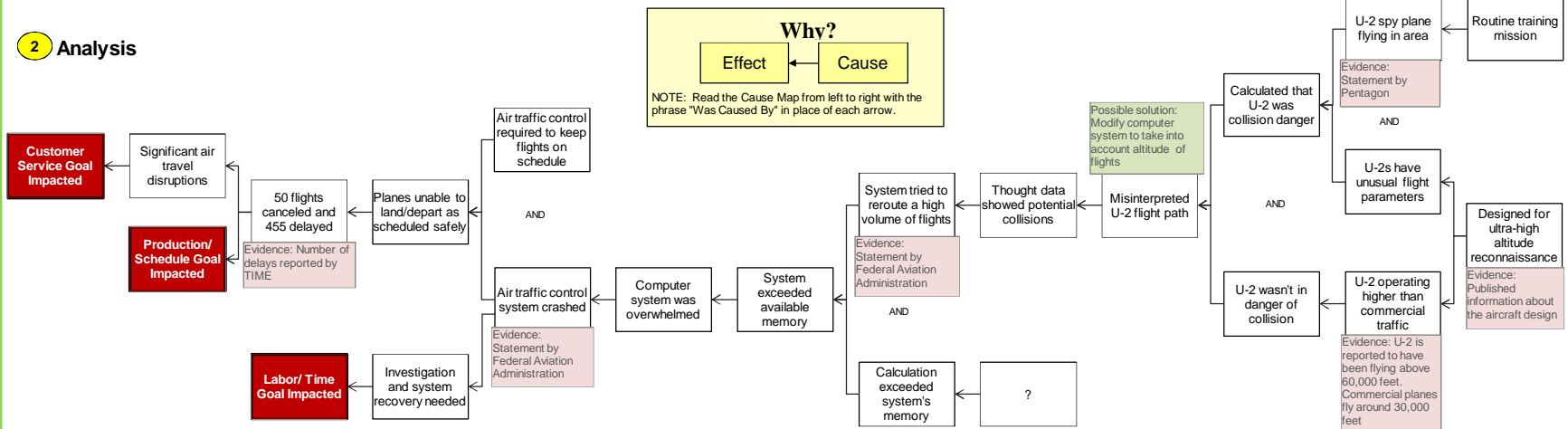
## Impact to the Goals

<b>Customer Service</b>	Significant air travel disruptions
<b>Production/ Schedule</b>	50 flights canceled and 455 delayed
<b>Labor/ Time</b>	Investigation and system recovery needed

# Hundreds of Flights Disrupted After Air-Traffic Control System Confused by U-2 Spy Plane

Hundreds of flights were disrupted in the Los Angeles area on April 30, 2014 when the air traffic control system En Route Automation Modernization system, known as ERAM, crashed. It's been reported that the presence of a U-2 spy plane played a role in the air traffic control issues.

# 2 Analysis



Cause Mapping is a Root Cause Analysis method that captures basic cause-and-effect relationships supported with evidence.

# 3 Solutions

The final step in the Cause Mapping process is to develop and implement solutions to reduce the risk of the problem from happening again.

In this example, it took several hours to sort out the problem, but then the Federal Aviation Administration was able to implement a short term fix relatively quickly and get the ERAM system back online. The ERAM system is being evaluated to ensure that no other fixes are needed to ensure that a similar problem doesn't occur again.



### CAUSE MAPPING

Problem Solving • Incident Investigation • Root Cause Analysis

<b>Step 1</b>	<b>Problem</b>	What's the Problem?
<b>Step 2</b>	<b>Analysis</b>	Why did it happen?
<b>Step 3</b>	<b>Solutions</b>	What will be done?

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