PILOT'S CAMERA CAUSES DIVE

Cause Map

1 Problem

What	Problem(s)	Aircraft dive, injuries
When	Date	February 9, 2014
	Time	1549
	Different, unusual, unique	Copilot left seat; turbulence prior to dive
Where	Facility, site	Royal Air Force (RAF) Brize Norton
	Unit, area, equipment	Airbus A330-243 Voyager tanker
	Task being performed	Air transport flight

Impact to the Goals

Safety	Significant potential for fatalities
	Minor injuries to >30 passengers, crew
Customer Service	Steep dive of plane
Regulatory	Court-martial of pilot
	Lawsuits against Ministry of Defense (10)
Production/ Schedule	Plane grounded for 12 days
Property/ Equipment	Potential for loss of plane
Labor/ Time	Investigation

	This incident	?
Frequency	1st incident of type in 190M flight hours	

Incident results in injury, eventual court-martial

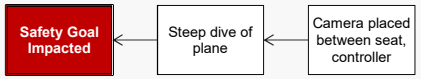
On February 9, 2014, a Royal Air Force Voyager was transporting 189 passengers and a crew of 9 towards Afghanistan when the plane suddenly entered a steep dive. Many passengers were unrestrained, and were injured by striking the ceiling or other objects. Other passengers were injured by flying objects or spills of hot liquid. More than 30 passengers and crew reported injuries, all considered minor.

"On this occasion, the A330 automatic self-protection systems likely prevented a disaster of significant scale. The loss of the aircraft was not an unrealistic possibility."

- Air Marshal Richard Garwood, previous director general of the UK's Military Aviation Authority (MAA)

2 Analysis

Basic Level Cause Map - Start with simple Why questions.

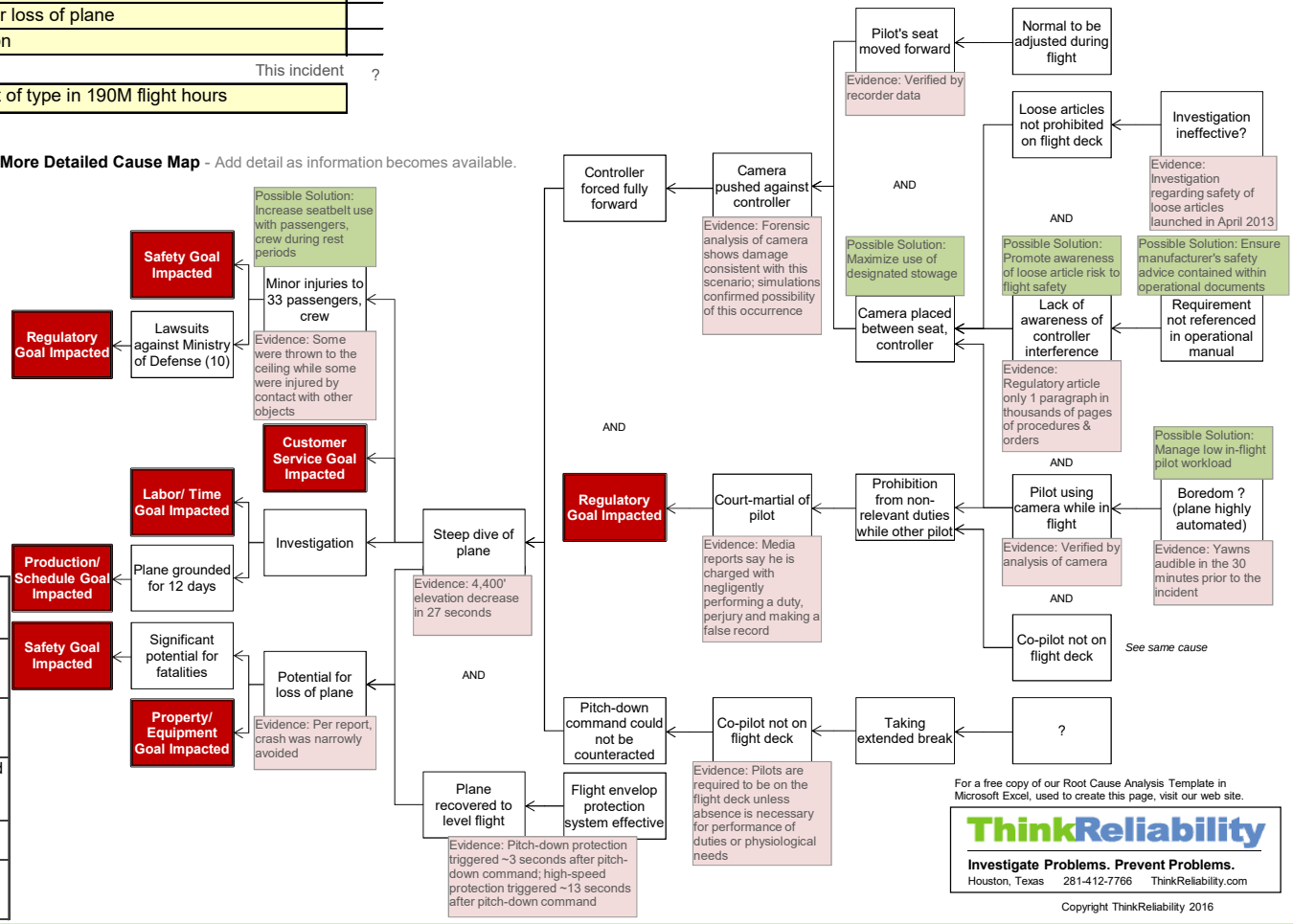


Why?

Effect ← Cause

NOTE: Read the Cause Map from left to right with the phrase "Was Caused By" in place of each arrow.

More Detailed Cause Map - Add detail as information becomes available.



3 Solutions

No.	Action Item	Cause
1	Increase seatbelt use with passengers, crew during rest periods	Minor injuries to 33 passengers, crew
2	Promote awareness of loose article risk to flight safety	Lack of awareness of controller interference
3	Ensure manufacturer's safety advice contained within operational documents	Requirement not referenced in operational manual
4	Maximize use of designated stowage areas	Camera placed between seat, controller
5	Manage low in-flight pilot workload	Boredom ?

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