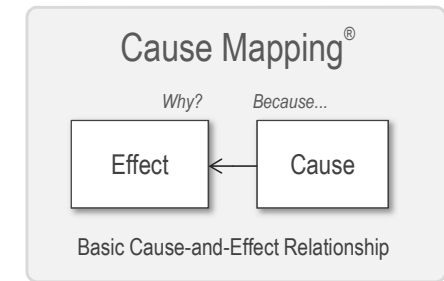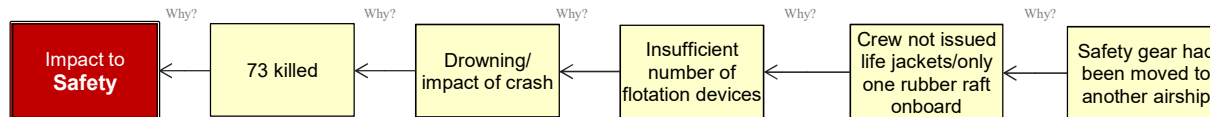# USS Akron Crash: The deadliest airship disaster

The Hindenburg crash was a terrible disaster that claimed 35 lives in 1937, but the deadliest airship crash occurred four years earlier when the USS Akron crashed into the Atlantic Ocean and sank, killing 73 people. The Akron was a rigid helium-filled airship operated by the US Navy between 1931 and 1933.
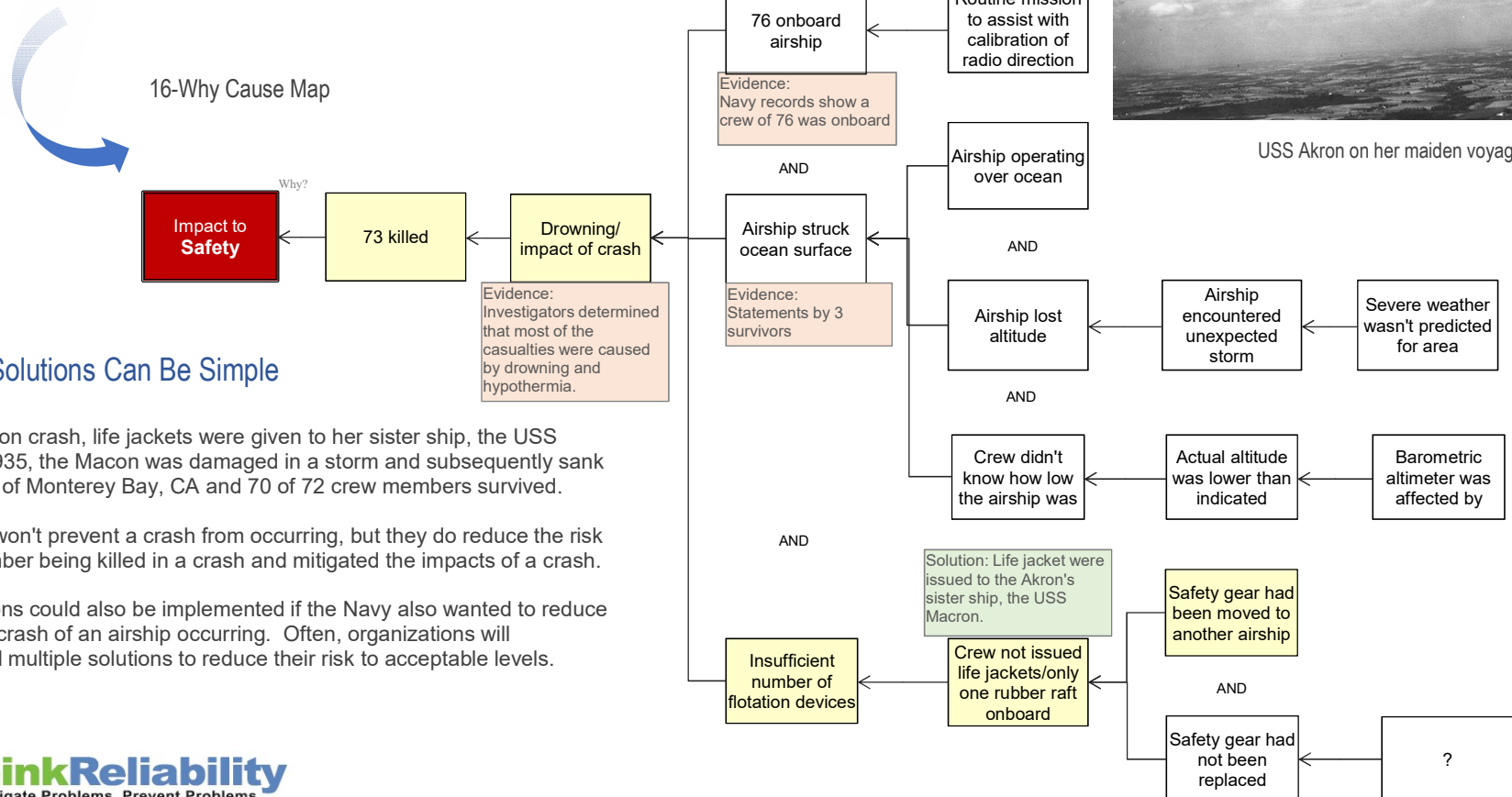
Cause Mapping®

Why?   Because...

Effect ← Cause

Basic Cause-and-Effect Relationship

5-Why Cause Map

Impact to **Safety** ← *Why?* ← 73 killed ← *Why?* ← Drowning/impact of crash ← *Why?* ← Insufficient number of flotation devices ← *Why?* ← Crew not issued life jackets/only one rubber raft onboard ← *Why?* ← Safety gear had been moved to another airship

Start Simple   An investigation can start with a simple 5-why Cause Map that can be expanded as needed by asking "why" questions.

USS Akron on her maiden voyage.

16-Why Cause Map

Impact to **Safety** ← *Why?* ← 73 killed ← Drowning/impact of crash

Evidence: Investigators determined that most of the casualties were caused by drowning and hypothermia.

← Airship struck ocean surface

Evidence: Statements by 3 survivors

← 76 onboard airship ← Routine mission to assist with calibration of radio direction

Evidence: Navy records show a crew of 76 was onboard

AND

Airship struck ocean surface ← Airship operating over ocean

AND

Airship lost altitude ← Airship encountered unexpected storm ← Severe weather wasn't predicted for area

AND

Crew didn't know how low the airship was ← Actual altitude was lower than indicated ← Barometric altimeter was affected by

AND

Insufficient number of flotation devices ← Crew not issued life jackets/only one rubber raft onboard ← Safety gear had been moved to another airship

AND

Safety gear had not been replaced ← ?

Solution: Life jacket were issued to the Akron's sister ship, the USS Macron.

Effective Solutions Can Be Simple

After the Akron crash, life jackets were given to her sister ship, the USS Macon. In 1935, the Macon was damaged in a storm and subsequently sank off the coast of Monterey Bay, CA and 70 of 72 crew members survived.

Life jackets won't prevent a crash from occurring, but they do reduce the risk of crew member being killed in a crash and mitigated the impacts of a crash.

Other solutions could also be implemented if the Navy also wanted to reduce the risk of a crash of an airship occurring. Often, organizations will implemented multiple solutions to reduce their risk to acceptable levels.

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