

## USS Enterprise Fire January 14, 1969

### Step 1. Outline

<b>What</b>	Problem(s)	Rocket exploded, explosions, fires
<b>When</b>	Date	January 14, 1969
	Time	8:19 a.m.
	Different, unusual, unique	Aircraft start unit mounted to tow tractor
<b>Where</b>	State, city	75 miles from Pearl Harbor, Hawaii
	Facility, site	USS Enterprise (CVN-65)
	Unit, area, equipment	MK-32 Zuni rocket
	Task being performed	?

### Impact to the Goals

<b>Safety</b>	27 killed, >300 injured	
<b>Environmental</b>	?	
<b>Cust. Service</b>	Delay in deployment	
<b>Production-Schedule</b>		
<b>Property, Equip, Mtls</b>	15 aircraft destroyed	
<b>Labor, Time</b>	Repairs to ship required	?
	This incident	\$0
<b>Frequency</b>	?	
	Annualized Cost	\$0

On January 13, 1969, 31 years ago, fires and explosions broke out on the USS Enterprise (CVN-65). The crewmembers spent three hours fighting the fire. When the smoke cleared, 27 crewmembers were killed and 314 were injured. Additionally, 15 aircraft were destroyed and the carrier was severely damaged.

We can address the impacts to the U.S. Navy's goals in a problem outline as the first step of the Cause Mapping process. There was an impact to the safety goal because crewmembers were killed and injured. There was an impact to the property goal because of the 15 planes that were damaged, and the repairs that were required to the ship. (This is also an impact to the labor goal, because of the labor required for the repairs.) Additionally, the ship's deployment was delayed, which is an impact to both the customer service and production/schedule goals.

After we've completed the outline, we build our Cause Map beginning with the goals that were impacted. The goals were impacted by a series of explosions and fires across the ship. These explosions and fires were fueled by jet fuel and bombs that were found on the planes on the flight deck of the carrier. The initiating event was the explosion of a Mk-32 Zuni rocket, which exploded when it overheated due to being put in the exhaust path of an aircraft starting unit.

After the incident, the Navy performed an investigation to review the causes of the incident, and made changes to improve safety. Repairs to the Enterprise were completed, and the ship is now the oldest active serving ship in the U.S. Navy.

### Step 2. Cause Map High Level

