SAFETY CORNER

CORPORATE AIR NEWSLETTER

JUNE 2017

NEXTGEN AVIATION SAFETY - STRATEGIES AND SOLUTIONS OF A SAFETY MANAGEMENT SYSTEM

MONEYBALL IN SMS

Moneyball is a movie based on a baseball team where players for the team are picked based on their on-base percentage. By getting players with a higher average of on-base percentages, the team manager executes a plan to build a competitive team at a lower cost and eliminate the subjective and often flawed process of picking high-impact team members. This approach brought a baseball team to the playoffs with only a salary budget of about 33% of the highest salary team. Statistical Process Control (SPC) and SMS are profit makers when applied to desired operational results. When applying SPC to Aviation Safety, an Enterprise has established measurable parameters.

PARAMETERS

Identified parameters set the stage for greater profit margin. However, precision application is what makes the difference.
Moneyball in SMS is to know what an Enterprise's values are and what the undesired outcomes are. In the Moneyball movie the value is to win games and the undesired outcome is to play high salary players. This process is an uphill battle since it is not a conventional approach and it is a battle to receive cooperation from other managers.

SAFETY POLICY

A Safety Policy should be written for application of measurable results. An Enterprise's Safety Policy that is measurable could state something like this: "Our Enterprise operates with zero tolerance to compromise aviation safety". Every aspect of operation is then measurable against "zero tolerance".

Didrik Strand
Director of Safety

Phone: (406) 461-7560
strandb@corporateair.net

- A failed process may impact the system more than a complete system failure.
- There are several ways to improve safety, but assuming the system is OK is not one of them.

"I cannot imagine any condition which would cause a ship to founder. I cannot conceive of any vital disaster happening to this vessel. Modern shipbuilding has gone beyond that."
    - Captain Edward Smith of the Titanic

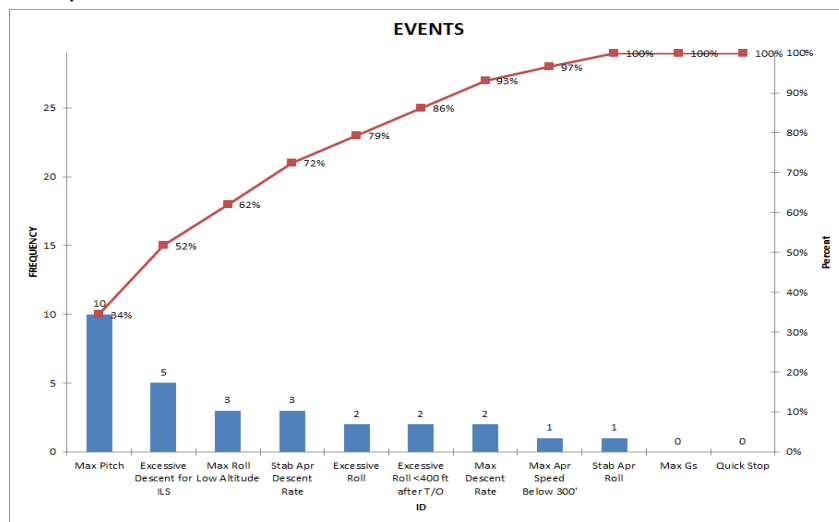Hazard, Incident, Accident, Issue Reporting Form

MEASURE

A measurable objective could be to increase profit margin by. When a measurable objective is established, the Enterprise establishes measurable goals. A measurable goal could be that the profit margin is increased by reducing hazard costs.

COST OF HAZARD

After a goal is established, the parameters are established. A parameter is a variable given a specific measurable factor that sets the conditions of its operation, and could be to apply the hazard cost spent in processing hazard reports received, time spent on preliminary risk assessment and time spent processing into hazard registry. When the cost parameter is set the hazard is assigned a cost-account and it doesn't matter to whom, or to what level in the Enterprise the task is assigned. A goal gives directions of action. However, arriving at the goal is what makes it measurable.
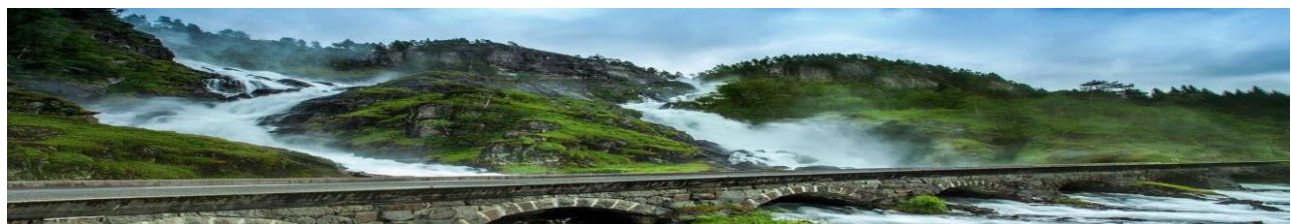
STATISTICAL PROCESS CONTROL (SPC)

An Operator applying SPC strategy to their SMS has direct and measurable links from Parameter – to Goal – to Objective – to Policy. The increased profit margin is based on a safety policy with "zero tolerance to compromise aviation safety". SPC is the tool to ensure SMS processes are in control.

THIS MONTH IN HISTORY

Air Canada Flight 797 was on a flight from DWF to YUL- Canada. On 2 June 1983, the McDonnell Douglas DC-9-32 developed an in-flight fire behind the washroom that spread between the outer skin and the inner decor panels, filling the plane with toxic smoke. The spreading fire also burned through crucial electrical cables that knocked out most of the instrumentation in the cockpit, forcing the plane to divert to Cincinnati/Northern Kentucky Int'l Airport, Boone County, Kentucky. Ninety seconds after the plane landed and the doors were opened, the heat of the fire and fresh oxygen from the open exit doors created flashover conditions, and the plane's interior immediately became engulfed in flames. 23 passengers were fatally injured.

Data is a constant flow to be analyzed.

Hazard, Incident, Accident, Issue Reporting Form