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Executive Summary
Title: PMV Alcohol Study, CODE 63 Project #11-002

Bottom Line Up Front:

- Starting in FY05, Navy fatality rates for persons between the ages of 21 to 34 killed by a driver with BAC of 0.01 or higher are increasing.
- Starting in FY05, Marine fatality rates for persons between the ages of 16 to 20 and 35 to 64 killed by a driver with a BAC of 0.01 or higher are decreasing.
- FY09 Navy alcohol related fatality rate was statistically significantly lower than the previous fiscal years rates
- FY09 Navy alcohol related lost work day rate was statistically significantly higher than the previous fiscal years rates.
- FY09 Marine lost work day rate was statistically significantly higher than the previous fiscal years rates.

Summary:

The focus of this study was to delve deeper into the alcohol related PMV mishap data in an effort to identify any trends that may be evident.

The analysis of the data was able to uncover the following trends:

- Navy fatality rates of alcohol related PMV mirrored the civilian fatality rate which statistically decreased in 1980 to 1989 compared to 1990 to 1999 but the rates from 2000 to 2009 had not statistically differed from the rates from 1990 to 1999.
- On average, Navy fatality rate from 2000 to 2009 for personnel between the ages of 21 to 34 and 35 to 64 has been statistically lower than the civilian community.
- On average, the FY00 through FY09 Navy fatality rates of persons between the ages of 21 to 34 years old killed by a driver having a BAC of 0.01 or higher have been statistically significantly higher than the Navy fatality rates of persons between the ages of 35 to 64 years old killed by a drive having a BAC of 0.01 or higher.
- Navy fatal crash rates for passenger cars and motorcycles tend to mirror the civilian community.
- The FY00-09 Navy fatal crash rates for passenger cars have statistically decreased from FY90-99 however there has not been a statistically significant decrease or increase when comparing FY00-04 to FY05-09.
- The fatal crash rate of Navy personnel whose BAC was 0.01 or higher driving a motorcycle has not statistically increased or decreased when comparing the rates

of twenty year span ranging from FY90 to FY09 in ten year years and has also not increased or decreased when comparing the rates of a ten year span ranging from FY00 to FY09 in five year segments.

- Drivers with a BAC of 0.01+ have a higher probability of being involved in a fatal crash at night than during the day.
- On average, alcohol related PMV mishaps for both the Navy and Marines were more likely to occur between 12:00am and 04:00am.
- On average, Navy and Marine fatal alcohol related PMV mishaps were more likely to occur on Saturday.
- On average, Navy Class C alcohol related PMV mishaps were most likely to occur on Saturday or Sunday but for the Marine Class C alcohol related PMV mishaps were more likely to occur on Saturday.
- On average, Navy and Marine Class D alcohol related PMV mishaps were most likely to occur on Sunday.
- Navy and Marine personnel under the age of 25 have a higher probability of being involved in an alcohol related PMV mishap.