

## **Executive Summary**

**Title:** Off Duty Recreational All Terrain Vehicle (ATV) Study, CODE 63 Project #11-017

### **Bottom Line Up Front:**

- ATV mishaps comprise 2% of the RODs mishaps.
- Naval personnel under the age of 25 have a higher probability of being involved in an ATV related off duty recreational mishap.
- On average, an ATV related off duty mishaps are more likely to occur on Saturday or Sunday between the hours of 12:00pm and 8:00pm.
- No Statistically significant increase or decrease in the Naval FY10 ATV related injury rate of 4.79 per 100,000 persons compared to the FY05-09 injury rates.
- No statistically significant difference between civilian fatal ATV related injury rates and Naval fatal ATV related injury rates.
- Naval ATV related non-fatal injury rates are statistically significantly lower than civilian ATV related non-fatal injury rates.

### **Summary:**

The focus of this study was to delve deeper into the ATV related RODs 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 FY10 ATV related off duty recreational injury rate of 5.47 per 100,000 persons was not statistically significantly different.
- Marine FY10 ATV related off duty recreational injury rate of 3.69 per 100,000 persons was statistically significantly lower. The contributing injury types were fatal, permanent total disability, and permanent partial disability.
- No seasonal trends.
- Marine ATV related mishaps were more likely to occur on Saturdays.
- California was the top states to have an ATV related off duty recreational mishap to have occurred and the actual number of mishaps to occur in California was statistically significantly higher than the expected number of mishaps.
- Fractures were the most common injury for non-fatal injuries with the arm being the most affected body part.
- Intracranial injuries and injuries to internal organs was the top injury diagnosis for fatal injuries for both Marines and Navy. In addition, fractures and other injuries also topped the most common fatal injury list for the Marines.
- On average, Navy personnel will statistically significantly lose more work days from an ATV related off duty recreational mishap as compare to Navy personnel involved in a non-ATV related off duty recreational mishap.