2012-12-22

NPS Concludes Sleep Study aboard Jason Dunham

King, Deven
Monterey, California. Naval Postgraduate School

http://hdl.handle.net/10945/36402
USS JASON DUNHAM, At Sea (NNS) -- Sailors aboard guided-missile destroyer USS Jason Dunham (DDG 109) concluded their participation in a two-week sleep study, Dec. 17.

The study was conducted by personnel from the Naval Postgraduate School (NPS) who came aboard Jason Dunham to interview crewmembers about their watch rotations and monitor their sleep patterns, activity periods and reaction times.

Dr. Nita Shattuck, an associate professor with the NPS Operations Research Department, said Jason Dunham's crew were the perfect candidates for the study.

"We were looking for a deployed ship with many different watch schedules and a commanding officer willing to let us set up the study. Jason Dunham had all of that," said Shattuck.

At the beginning of the study, Sailors met with the NPS personnel, who issued wrist activity monitors and smart phones to track Sailors' reaction times by having them perform physical and mental tasks.

"Participants were given a number to watch for on the monitor and had to press a button when the number appeared on the monitor" said Shattuck. "This gauged their reaction time at the beginning and end of their watches. Together with the data from the activity monitors, we are able to determine how a Sailor's sleep pattern and watch rotation affects their readiness."

The study showed in favor of a watch rotation with three hours on and nine hours off, but Sailors had mixed reactions.

Operations Specialist 2nd Class David Allen, who participated in the study and stands six hours on and six hours off was in favor of the three on, nine off rotation.

"With my watch schedule, it's very difficult to get eight hours of sleep," said Allen. "You factor in eating meals, any training or drills that may happen and a little bit of personal time, and it's nearly impossible. Even if I do manage to get eight hours in a 24-hour period, it's broken up."

Fire Controlman 1st Class Jason Jacobs, who stands three hours on with nine hours off said a certain watch rotation may not be the answer.

"Some people get into a routine with their watch and adjust well, others don't. You're not going to make everyone happy," said Jacobs. "I like my watch rotation, but sometimes the ship's schedule and my collateral duties don't allow for a full night's sleep. I think the solution is more in the Sailor better managing their off time and the command helping them to do so."

Shattuck agreed with Jacob that time management on the Sailor's behalf is required but emphasized the purpose of the study.

"The goal is to find the best watch rotation to optimize the amount of sleep they are getting so they can be alert on watch," said Shattuck.

The study is being sponsored by the Office of Naval Research and the Office of the Chief of Naval Operations. The findings are scheduled to be published in an upcoming issue of Proceedings magazine. The Navy will use the results to provide guidance to commanding officers around the fleet.

Jason Dunham is deployed with the John C. Stennis Carrier Strike Group to the U.S. 5th Fleet Area of Responsibility conducting maritime security operations, theater security cooperation efforts and support missions for Operation Enduring Freedom.

NPS Concludes Sleep Study aboard Jason Dunham