SAFETY ADVISORY BULLETIN 97-2

Washington State Board of Pilotage Commissioners

December 1997

The National Transportation Safety Board has requested that the Washington State Board of Pilotage Commissioners (and similar Boards in other states) advise all pilots about the effects of fatigue on performance and about sleeping disorders such as sleep apnea. This advisory arises from the grounding of the passenger vessel *STAR PRINCESS* in Alaska.

Description of the Accident:

On June 23, 1995, the passenger vessel *STAR PRINCESS* carrying 2207 passengers and crew grounded on the submerged Poundstone Rock in Lynn Canal, about 21 miles northwest of Juneau, Alaska. Poundstone Rock was marked with a buoy. The vessel sustained significant bottom damage, but no injuries or deaths resulted from the accident. The total cost for the repairs and the delay before the vessel could return to service was estimated at \$27.3 million.

The conclusion of the investigation conducted by the NTSB was that the probable cause of the grounding was the pilot's poor performance, which may have been exacerbated by chronic fatigue caused by sleep apnea. Contributing to the accident was the fact that the pilot and the watch officers did not practice bridge resource management.

Lessons Learned:

The STAR PRINCESS grounding is an unfortunate reminder about the effect that fatigue can have upon pilot performance.

- Fatigue can occur for a number of reasons, including the general failure to get adequate rest between assignments, the side effect of certain drugs or the effect of certain physical conditions such as sleep apnea. According to the NTSB, studies have shown that different individuals require different amounts of sleep for adequate rest, but even a two hour reduction of sleep from an individual's norm can degrade alertness and performance. Although Washington has a mandatory rest period requirement (RCW 88.16.103), it is up to each pilot to ensure that he is getting adequate rest to avoid the negative effects of fatigue.
- Other causes of fatigue can be the side effects of prescription or non-prescription medications or the effects of sleeping disorders. The NTSB determined that the pilot involved in the STAR PRINCESS accident suffered from obstructive sleep apnea (OSA). Sleep apnea is a condition in which a sleeping individual ceases to breathe for short periods of time, sometimes causing the individual to wake briefly many times during the night without knowing it. Sleep apneics awaken poorly rested and often feel fatigued and disoriented during the day. Additional manifestations of sleep apnea include morning headaches, excessive daytime sleepiness, depression, intellectual impairment and memory deficit.
- It is important that you make sure that you get adequate rest to assure that you are alert and fully capable of performing your pilotage duties. Fatigue from any cause affects your job performance and endangers both you and those who rely on your pilotage skills. If you have any ongoing sleep or rest problems, please be sure to discuss them with your physician so that the problem can be properly diagnosed and treated.