BEHAVIORAL HEALTH AND PERFORMANCE OPERATIONS DURING THE SPACE SHUTTLE PROGRAM

G BEVEN¹, A HOLLAND¹, R MOOMAW², W SIPES¹, S VANDER ARK³

¹NASA Johnson Space Center, Houston, TX; ²The University of Texas Medical Branch, Galveston, TX; ³Wyle Integrated Science and Engineering, Houston, TX

Prior to the Columbia STS 107 disaster in 2003, the Johnson Space Center's Behavioral Health and Performance Group (BHP) became involved in Space Shuttle Operations on an as needed basis, occasionally acting as a consultant and primarily addressing crew-crew personality conflicts. The BHP group also assisted with astronaut selection at every selection cycle beginning in 1991. Following STS 107, an event that spawned an increased need of behavioral health support to STS crew members and their dependants, BHP services to the Space Shuttle Program were enhanced beginning with the STS 114 Return to Flight mission in 2005. These services included the presence of BHP personnel at STS launches and landings for contingency support, a BHP briefing to the entire STS crew at L-11 months, a private preflight meeting with the STS Commander at L-9 months, and the presence of a BHP consultant at the L-1.5 month Family Support Office briefing to crew and family members. The later development of an annual behavioral health assessment of all active astronauts also augmented BHP's Space Shuttle Program specific services, allowing for private meetings with all STS crew members before and after each mission. The components of each facet of these BHP Space Shuttle Program support services will be presented, along with valuable lessons learned, and with recommendations for BHP involvement in future short duration space missions

Educational Objectives:

With the new focus on Commercial Space Vehicles for space flight, the human element is a critical piece of the system. It is important for all to understand the lessons learned from previous space vehicles, specifically the Space Transportation System. Selection of astronauts, training, and providing behavioral health services to the astronauts and their families in Shuttle nominal and off nominal operations will assist future services to up those planning for and operating future space vehicles.

Questions:

- 1. What are some of the BHP services delivered to the Shuttle Program?
- 2. What traumatic event increased BHP support to the Shuttle Program?
- 3. What were some of the major contributors of BHP to Shuttle operations?