

Program Summary (21 March 2013)

At 7:00 p.m., President Wade welcomed the membership. Wade announced that proposed constitutional changes and other elections would take place next month at the last meeting of the year. Wade gave a brief introduction of tonight's after-dinner speaker.

At 8:00 p.m., President Wade alerted the membership that the evening's presentation would begin shortly.

At 8:10 p.m., visitors were introduced by the members. Wade introduced the evening's speaker **Dr. Cady Coleman**. Dr. Coleman is a NASA Astronaut, and retired Colonel in the United States Air Force. Wade and Cady crossed paths many years ago leading to Cady's hiring at Wright Patterson AFB. Cady has been in the astronaut corps since 1992. She holds records for endurance on the centrifuge spinner.

The title of this evening's talk was **Six Months of Science Aboard the International Space Station: Just One Small Step**. The membership warmly welcomed Dr. Coleman. This is the 657th meeting of the Houston Philosophical Society.



Cady began by describing what typical life on the space station looks like. A normal staffing level is six astronauts, who arrive in groups of three. Cady showed a video of her launch to the space station 27 months ago, and doing experiments during her stay. One special video showed her playing a flute duet with Ian Anderson of Jethro Tull.

Cady presented slides explaining why she believes the space program continues to be valuable. The experiments performed in space cannot be performed on earth. The effects of extended weightlessness on the human physiology and bone is an ongoing problem. Cady happily reported she

returned with no bone loss due to a vigorous exercise program and diet regime.

The study of liquids is so much more interesting on the space station. Events evolve on a slower time scale, for example. The practical aspects of a reliable toilet required for a Mars mission are still unknown. There is still much work required for the next mission, whether the target turns out to be the moon, Mars, or an asteroid.

Cady ended the video sequence with her landing in Russia (a controlled crash). She showed some home pictures of her husband (a glass artist), son, and cat who all live in western MA.

A new crew is about to launch Wednesday, replacing a crew who landed last Friday: one American and two Russians in each.

Cady expressed some regret that the nation chose not to invest in a replacement vehicle twelve years ago, but we have to live with these decisions. She ended by thanking the audience for our attention, and to Wade in particular for his role in helping guide her early career.

Cady wrapped up her remarks at 9:05 and the audience warmly thanked the speaker. A number of questions were entertained.

Cady received another round of applause, and we adjourned at 9:18 p.m.

David W. Scott

Recording Secretary

