oral

Paper ID: 12493

From Earth Missions to Deep Space Exploration (05) Poster Session (P)

Author: Dr. Cathy Swan SouthWest Analytic Network, United States, pcswan@cox.net

Dr. Peter Swan
SouthWest Analytic Network, United States, dr-swan@cox.net
Dr. Keith Taggart
SPEC Innovations, United States, keith.taggart@specinnovations.com

STAGES OF FLIGHT FOR A STAR-SHIP: VISION, GOALS, AND A TIMELINE

## Abstract

In order to have an organization that is exciting each day and where people come to work to contribute beyond the normal expectations it is necessary to have a set of goals, principles and a guiding vision. This paper will suggest a vision and phases for humanity to reach beyond Earth's orbit to the stars. First, a vision for the 100 Year Star-Ship Program is proposed. Then, a set of goals is presented with a four stage timeline to meet the vision. This starts with reasserting American Leadership through commercial space robustness, exploiting space assets for commercial growth, colonization of the solar system for movement off Earth, and robotic-human flights to a near star system with habitable planets. These "100YSS Stages of Flight" are explained as major activities focusing the human spirit on challenges worth accepting in the near, mid and far term. The specific goal, then, is a sustainable human presence off Earth, first in the solar system and then traveling to the stars within the next 75 to 125 years. This timeframe "seems reasonable" both in terms of technology and engineering development, and in terms of urgency. We must remember that predicting the future is fraught with uncertainty and that a timetable is only a reasonable estimate given our present knowledge. Working to reach this sustainable human presence will have many unexpected benefits and "spin-offs."