IAF HUMAN SPACEFLIGHT SYMPOSIUM (B3) Flight & Ground Operations of HSF Systems (A Joint Session of the Human Spaceflight and Space Operations Symposia) (4-B6.4)

Author: Mr. Bobby Watkins NASA, United States, bobby.j.watkins@nasa.gov

Mr. Kevin Kasperitis Teledyne Brown Engineering, United States, kevin.kasperitis@nasa.gov Ms. Rebeccah Buckles Teledyne Brown Engineering, United States, rebeccah.j.buckles@nasa.gov

PAYLOAD OPERATIONS CENTER - LESSONS FROM COMMERCIAL ENGAGEMENT

Abstract

The International Space Station (ISS) Payloads Operations and Integration Center (POIC) at Marshall Space Flight Center (MSFC) has gone through an evolution from supporting exclusively government ISS users to providing 50 percent (or more) of their support to commercial users. At the same time, they have expanded ground and facility operations to support a United States Orbital Segment crew expansion from 3 to 4 astronauts allowing an additional weekly 34 hours of crew time dedicated to utilization and having already surpassed the 100 total hours milestone in February 2018. This paper discusses the Center's changes in planning, manning, coordination, and operations and addresses topics from the addition of secondary flight control positions to dynamic operations product reviews. MSFC's Human Exploration and Development Operations Office, which manages payload operations, seeks through this paper to highlight the higher priority commercial users now receive in replanning and in additional crew time.

Mr. Bobby Watkins is Director, Human Exploration Development Operations Office, Marshall Space Flight Center. He manages all human-rated space exploration, systems, and operations program work at Marshall Space Flight Center except for the Space Launch System. Prior to this Mr. Watkins was Director, Michoud Assembly Facility; Director, Office of Strategic Analysis Communications, (OSAC) Marshall Space Flight Center; was director of the Legislative Division in the Office of Legislative and Intergovernmental Affairs at NASA Headquarters; served as Chief of Staff at Johnson Space Flight Center; and was JSC Chief Engineer.

Mr. Alan DeLuna is Principal Consultant for ATDL Inc. providing client representation, business development, program management, master planning, and systems engineering support. Clients and tasking includes aerospace facilities, vehicle design/development, zero gravity research, commercial and NASA spaceflight, space tourism, spaceports, and international markets. Mr. DeLuna has worked for United Space Alliance, Lockheed, Rockwell, and Litton-PRC. Positions included Projects Director, Space Flight Operations; Special Projects Director, Program Integration; Director, Systems Engineering and Integration (SEI) and Launch Integration; Director, Strategic Planning and Business Development; Project Manager, Operations Integration; Staff Engineer; Project Engineer; Main Propulsion System Engineer; Software Engineer; and Design Engineer.