

## **OPAG Report to VEXAG**

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OPAG was established by NASA in May 2005, some six months prior to VEXAG. OPAG consists of a Steering Committee of one dozen members, chaired by Fran Bagenal. The charter of OPAG is to assess the current state of outer planet exploration in the US and abroad and to suggest to NASA directions for future exploration of the giant planet systems. At its core, the charter of OPAG is similar to that of VEXAG. However, the task of OPAG is much more complex, as the giant planetary systems comprise multitude targets, including the four giant planets themselves, their numerous moons, and the rings. The small bodies in the solar system also fall within the purview of OPAG. The only body VEXAG is focused on is Venus. Thus it may seem like a simpler task, but VEXAG also has a highly challenging task, as, unlike the giant planets, Venus has been a neglected planet for two decades, except for the current exploration by ESA's Venus Express mission.

In the past eighteen months, OPAG conducted a thorough investigation of the outer planet research, including past and current missions, ground-based observations, and the R&A program. Following that, it discussed many ideas for future exploration. Several working groups were formed to assess exploration of various bodies in the outer solar system. This culminated in the formation of four Science Definition Teams by NASA for potential Flagship missions to Europa, Ganymede, Titan, and Enceladus. The SDT's will report their findings to OPAG in the Fall of 2007. In addition, OPAG also investigated the feasibility of carrying out giant planet exploration under NASA's existing Discovery and New Frontiers class of missions. This resulted in OPAG suggesting a Saturn flyby with probes as a potential near-term New Frontiers mission. The committee for developing NASA's Strategic Roadmap for Solar System Exploration considered the OPAG findings, and has recommended this mission be included as a new target in the list the next New Frontiers AO which is expected to be released in 2008. VEXAG can learn much from the work being done by its sister AG's, especially OPAG and MEPAG.