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Paper Title:	<b>Small Satellites - Evolving Innovation for the Entire Market</b>
Abstract:	<p>The rapid growth in the small satellite market has created a tremendous opportunity for reinvention of the space business in the larger satellite market. With far lower barriers to entry, the small satellite market encourages many non-traditional entrants with new ideas to explore how they would satisfy their mission requirements. Enabled by lower development, launch, and operations costs and supported by a burgeoning ecosystem of component vendors, concepts are quickly attempted and refined. Indeed, the net effect is that the small satellite market is serving as a laboratory for rapid evolution of approaches to both the business and technology of the space business. Inevitably, there will be cross-flow between the small satellite market and the “traditional” market.</p> <p>The migration of concepts – technological and business – is already being seen. Business evaluation now has a greater focus on time to market. Broader customer bases are being courted. The spacecraft sector is adopting rapid design and manufacturing processes, enabling small satellite fleets to be produced in months instead of years. The software sector is embracing commercial standards, practices, and tools. Fleet operations are being modeled after lights out data centers. Recruitment, mentoring, and empowerment of entrepreneurial employees is changing. Change takes time, but concepts and ideas unleashed in the small satellite laboratory will continue to accelerate the pace.</p> <p>With many large satellite companies as customers, Kratos is a well-recognized entity in the traditional space market. Nonetheless, Kratos is responding to the evolving small satellite market. Starting three years ago, Kratos surveyed the market and developed the quantumCMD appliance for small satellites. Through our broad outreach and product maturation process we have engaged many small satellite companies. Bridging this dichotomy provides Kratos the opportunity to present some of our observations and insight into the dynamic between the small satellite and traditional satellite markets.</p>