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Paper Session I-B - Development of Equipment to Support Shuttle Operations

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Development of Equipment to Support Shuttle Operations – Abstract

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A variety of equipment was recently developed to assist in processing of the space shuttle and assist in its launch process. These tasks include the following development tasks:

- A mini OTV Camera system, which is a small camera designed for use in hazardous environments, allowing them to be placed in environments which existing facility cameras cannot fit;
- An OTV camera window retainer and de-fog assembly, which blows a continuous air stream over the lens to prevent fogging and improve image quality;
- An Orbiter Center-of-Gravity measurement system, which replaces older methods and eliminates their inherent deficiencies;
- A telescoping tool to assist the "ice crew" in removing ice which may endanger the vehicle or crew on the pad;
- An inflating bellows which provides an enclosure for cryogenic connectors to prevent ice build-up and allowing de-mating/re-mating.

These products were developed and tested at KSC's Launch Equipment Test Facility and some are currently in use at various locations at KSC.