

**Industry:** Aerospace

**Application:** Area Misting

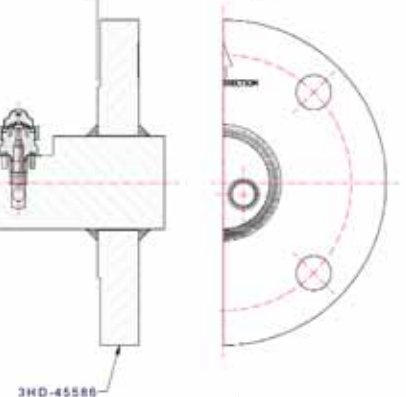
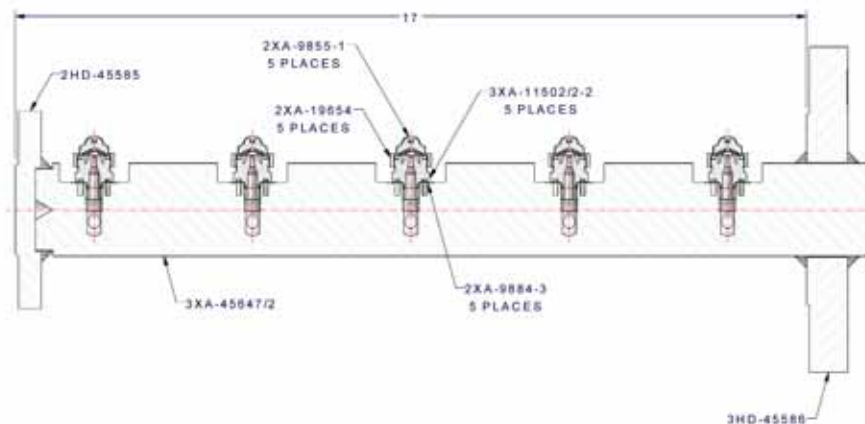
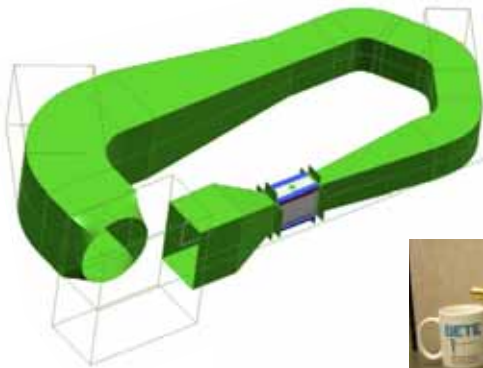
**Product Description:** Special XA Manifold

**Situation:** A BETE customer was designing an "Icing Wind Tunnel" to study the effects of droplet size and droplet density on the formation of ice build-up on airplane wings. Drop size and water flow rate had to be independently variable covering 15–70µm and 0.47–1.58gpm. Even coverage was required, and some sort of "aerodynamic shape" would be desirable.

**BETE's solution:** Due to the requirement for independent variability of flow and drop size, an air atomizing nozzle was the obvious choice. When the customer expressed an interest in a controls system to regulate the nozzles, BETE Technical Services provided a quote for the design and fabrication, which was accepted. The final solution included 5 XAAD250 setups in a custom manifold made from a solid piece of gun-drilled bar stock to provide low wind resistance and ease of fabrication.

### Technical Questions?

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