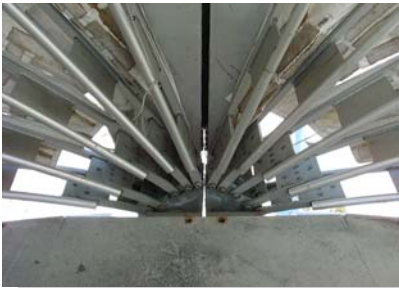


Project Profile – Eglin Air Force Base Canopy

Diversified Product Development designs canopy 42 ft Open Air Platform on a 300 ft tower.



Canopy operating mechanisms

In Fort Walton Beach, FL atop a 300 ft Air Force surveillance tower sits an open air platform (OAP). This platform is used for many Air Force testing and surveillance operations.

When bad weather is approaching, it is very important to be able to close the canopy so that equipment does not get damaged. The canopy will close in under 5 minutes and will resist wind speeds up to 50 mph but is not designed for tornadoes and hurricanes.

The canopy is a canvas over metal framework clam shell design. It can be opened or closed over the 42 foot OAP at the top of the 300 ft tower. The canopy is controlled by 4 independent electric motors and gear boxes. These electric motors are controlled by programmable motor controllers. Once the canopy is closed, a latch mechanism secures the metal framework, and the seam is sealed by an inflatable rubber bladder. The complete system is managed by a Programmable Logic Controller (PLC).

Diversified's involvement included:

- Structural evaluation of the frame work components
- Redesign and installation of mechanical drive system
- Involvement with electrical installation and programming



Tower with canopy closed

Client: United States Air Force

Location: Eglin Air Force Base, FL

Website: <http://www.eglin.af.mil/index.asp>

Product: Canopy over Open Air Platform (OAP)

Product Description: Canvas over metal frame work clam shell style canopy.

Diversified Services Provided:

- Product Design (Mechanical, Structural, Hydraulic, Electric, & Controls)
- Component Selection
- Hand Calculations
- Conformance to industry standards
- Component Testing
- Prototype Testing
- Purchasing
- Documentation
- Production Space
- Manpower for pre-production units.
- Jigs, Fixtures & Production tooling
- Provide info for product manual
- Operators, Parts and Maintenance Manuals
- Field Service Calls

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Diversified Product Development provides a full offering of design services for every step in the product development process – from concept to production. The company manages projects of every size and specializes in the mobile, construction, oil field, mining, utility and equipment sectors.