Corporate Aircraft Hangars
Philadelphia, PA, USA

CHALLENGE:
Protect three corporate jet hangars that present a total-flooding application and three-dimensional hazard

SOLUTION:
A combination of an ANSUL® automatic closed-head water sprinkler system and an automatic high-expansion foam system

APPLICATION:
Two hangars (each) 18,700 ft² (1,737 m²)
One hangar 24,300 ft² (2,258 m²)

Flexibility, reliability and potential cost savings are a few of the advantages companies enjoy with the ownership or time-sharing of corporate jets. Safeguarding these important assets involves protecting the Group II Hangars where the jets are stored and maintained.

A superior fire suppression system is essential. To ensure the selection of a foam system best suited for the resources of the facility, owners and contractors should discuss fire protection options with a Tyco representative early in the design phase of hangar projects.

ANSUL foam equipment was available for all the options offered per NFPA 409 Standard on Aircraft Hangars. However a combination of an ANSUL automatic closed-head water sprinkler system and an automatic high-expansion foam system was the ideal choice for this application. The expansion ratio (typically greater than 500:1) of these systems makes them suitable for total flooding applications and three-dimensional hazards. Although the high-expansion option presented the highest initial cost, the overall installed system cost was substantially lower and environmentally the best option.

All three hangars were provided with a balanced pressure bladder tank system with a reserve supply of JET-X high-expansion foam concentrate. When used with high-expansion generators, JET-X foam agent fills large volumes and suppresses fire by cooling, smothering, penetrating, and insulating.