



***Safer Covers Built to Last***

3 July, 2013

### Kennon Aircraft Covers Sunshield Performance

During the Gulf War, avionics failures increased due to high cockpit temperatures experienced in the desert environment. The best available solution was to open canopies and windows, inviting dirt and debris into the cockpit.



In 1993, Wright Patterson AFB conducted extensive scientific testing of the performance of inexpensive reflective cockpit sunshields.

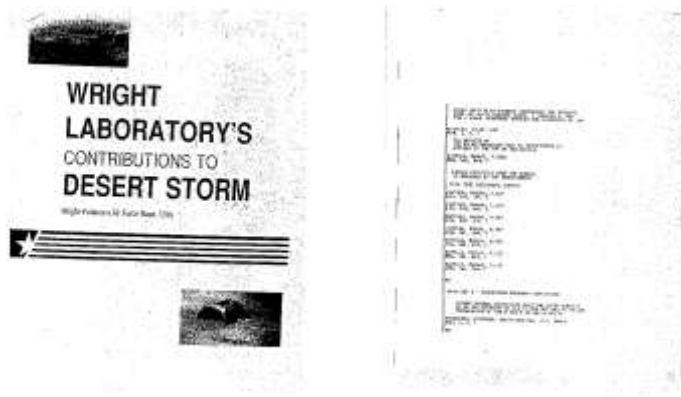
Engineers were aware that USAF maintainers, several airline and aircraft maintenance companies expressed concern that the installed sunshields would raise the temperature of the transparencies, possibly causing delamination or other damage. Additionally, metal clips, suction cups, etc. were not recommended as they are a FOD hazard and can cause scratching.

Kennon Aircraft Covers was chosen to manufacture the sunshields for this test.

Kennon sunshields perfectly match the contour of windows and canopies and stay in place with a friction fit.



Two extensive documents detailing the history of the test and all of the results are available on the Kennon website as pdf documents:



Here is a very brief summary:

- The Kennon sunshields were generally considered very easy to use, had a “friction-fit” with no hardware and were a very inexpensive solution
- Unprotected cockpit surfaces reached temperatures as high as 215 degrees F
- Kennon Sunshields reduced cockpit surface temperatures by 60 – 80 degrees F
- Daily interior temperature swings were reduced by an average of 60 degrees F
- Sunshield installation did not increase the surface temperature of any transparencies
- Operational readiness of the test aircraft was increased and workload was decreased
- WP AFB engineers estimated a potential savings of \$440 Million annually in reduced avionics failure rates

20 years have passed since the Wright-Patterson testing. To the best of our knowledge, no further performance testing has been performed; however, the basic design and materials have not changed since the testing and the technology is tried and true.

The world’s weather is heating up; US aircraft are still deployed to extremely hot locations and the problem still exists. Kennon Aircraft Covers has the solution – and it’s an easy, inexpensive fix.

For questions or comments, please contact:

**Todd C. Pierson, Military Liaison**

**Kennon Products Inc.**

[todd@kennoncovers.com](mailto:todd@kennoncovers.com)

[www.kennoncovers.com](http://www.kennoncovers.com)

[www.militaryaircraftcovers.com](http://www.militaryaircraftcovers.com)