

Cold War Air Museum

Bio fuel Demonstration Project

The Cold War Air Museum is concerned and committed to reducing ozone emissions in North Texas. As concerns about global warming intensify throughout the world, the aviation industry is receiving increasing scrutiny for its contribution to total global production of greenhouse gasses.

Even though aviation emits only about one-ninth as much carbon dioxide as surface vehicles, its high-visibility and the fact that aviation emits most of its CO₂ and particulate emissions in the upper atmosphere has made it a particular concern for environmentalists.

For aviation, it increasingly appears that bio-fuels can provide an alternative. One of the advantages of bio-fuels is that the plants used to make the fuels need lots of CO₂ to grow, potentially making it possible for the aviation industry to achieve true carbon neutrality.

Aviation has reduced its nitrogen oxide emissions from ground equipment by 75% in the last 10 years. Recently, Green Flight International has completed the first U.S. cross-country flight with a jet powered aircraft fueled predominantly with bio-fuel. The L-29 jet trainer was flown 2,486 miles from Reno, Nevada to Leesburg Florida. Of that distance, 1776 miles were flown on 100% bio-fuel and 710 miles on a blend of 50% bio-fuel and 50% standard jet fuel.

The Cold War Air Museum is requesting funds to create a bio-fuel program to power aircraft used to attend and participate in air shows throughout North Texas. We believe that by demonstrating the efficiency and reliability of bio fuels to the aviation community and the public we can both contribute to the reduction of CO₂ and nitrous oxides and create a stronger awareness of the viability of this fuel source to the aviation community and the public.

It is our intention to provide this as both an educational program and a demonstration of the technology. By attending events where the aviation community and the public are present, we can strongly reinforce the need and viability of alternate fuel sources for aviation.

Funding

The Cold War Air Museum is requesting \$ 45,000.00 for the purchase of various bio fuels for use in the aircraft that support the various air shows and demonstration flights the museum will make in 2009 through 2011. These aircraft include three L-29 jet trainers and one Mil Mi-2 jet helicopter. The funds would primarily be used to purchase 10,000 gallons of bio-fuel to be used in the

aircraft. The average aircraft used will burn 150 gallons of fuel per hour. Using a combination of bio-fuels in these aircraft will allow the Cold War Air Museum to attend 20 North Texas aviation events and clearly demonstrate the value of bio fuels. Funds would also be used to advertise and promote the use and acceptance of bio fuels through the preparation and distribution of appropriate material to the public regarding bio fuel as an alternative to existing petroleum products used by the museum.

As the Museums reputation grows, we are frequently requested to attend air shows and events at many North Texas communities. For 2009, the Museum has committed to attend the following events:

- April 4th — Medal of Honor Fly Over - at Gainesville
- April 11th — Two Chang's fly to Bluebonnet Air show in Burnett, Texas
- April 11th — Lancaster Boy Scout Troop visits Museum
- April 18th — Traveling Vietnam Wall Exhibit Fly Over – De Soto
- May 8th — Golden heart event - Lancaster Airport
- May 9th — Corsicana Air show
- May 16th — Gilmer, TX Fly-in
- May 26th — Mildred High School Class Visit
- June 6th — Dads and Kids
- June 19th and 20th — Ada, OK
- Friday through Sunday, June 19th through 21st — Summer Balloon Fest at Midway Airport
- Sunday, June 21st — Fathers Day at Lancaster Airport
- July 4th — Tyler, TX and Cedar Creek Lake
- September 5th — Lancaster Airport, Open Cockpit Day
- September 19th — Bronze Eagles
- October 3rd — Terrell Air show
- October 24th and 25th — Alliance Air show

Who we are

The Cold War Air Museum (CWAM) is a 501(c) 3 non-profit organization dedicated to the restoration and maintenance of Cold War era aircraft with a special emphasis on aircraft flown by the former Soviet Union. CWAM is a collective of

- Sponsors
- Volunteers
- Programs
- Facilities
- Aircraft,
- And other Exhibits

The total attendance at the CWAM in 2008 was **4,039** (on site, through the doors or at the ramp days at Lancaster airport). Through attendance at air shows and other events throughout the area, museum aircraft have been seen by more than **100,000** viewers. Our web presence at www.coldwarairmuseum.org now includes links to a Blog based information and topical site which has become widely viewed both nationally and internationally, extending the museum's exposure.

The museum is moving forward in the restoration and airworthiness of its collection and in the ability to have a changing and interesting ground presentation. We presently support these activities through private donations and promote the museum with aircraft fly-over and ground displays. Currently the Nanchang CJ-6 (a piston engine trainer) the Aerovodochy L-39 (a turbine aircraft) the Aerovodochy L-29 (a single stage axial flow turbine), the Mil Mi-2 (a twin turbine transport helicopter) are available to us for flying activities. Availability of bio-fuel for these aircraft would significantly enhance our ability to provide the public with a historical and educational experience, at the same time that a message of bio-fuel conversion is presented. The museum will also be continuing its program of unique aircraft restoration projects, which continues to attract new visitors to the museum and our web sites where they can also be informed about the bio-fuel flight program. Our facility is housed in three contiguous hangars at Lancaster Airport and is open on each weekend for tours and by arrangement during the week.

The Demonstration Aircraft

The use of existing Cold War Air Museum aircraft will allow us to draw attention to the use of bio fuels and nitrous oxide reduction in a tangible way. By use of emblems applied to the aircraft, and inclusion in our on going dissemination of museum information we will be a traveling endorsement for this important awareness program.

Seen below is one of the Cold War Air Museums L-29's that would be used to promote the use of bio fuels through this program.

