

# Toxic Petroleum Pollution: Inconvenient Truths About Military Air Shows

JP-5 jet propellant is highly toxic

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Theme: [Environment](#), [Militarization and WMD](#)

*The Big Oil cartels, through the poisoning of the Gulf of Mexico with millions of gallons of leaking crude oil from risky deep water wells, have committed rape the now mortally wounded Gulf. And now these above-the-law perpetrators are back to business as usual, to hell with the long-term sustainability of the planet, as long as next quarter's share prices are not adversely affected.*

However, the history of toxic petroleum pollution of the once pristine, fertile and life-giving waters of the Gulf of Mexico didn't just start with Big Oil's inadvisable deep water drilling and British Petroleum/Cheney-Halliburton's massive poisoning in 2010. An earlier example of petro-poisoning of the Gulf has been going on for decades with the US Navy's Blue Angel precision flying team when it began practicing thrilling stunts and tight formation drills with fighter jets often dumping excess jet fuel over the water prior to landing the planes.

1946 was the first post-World War II year, and the War Department established a base of operations on the shores of the Gulf for the purpose of recruiting potential pilots to the Navy, raising unit morale and for performing airshows for the public. The first base of operations for the Blue Angels was at Jacksonville, Florida (until 1950), then at Corpus Christi, Texas (1950 - 1954) and finally at Pensacola, Florida, their current home since 1954. The modern Blue Angels jet planes use a toxic propellant fuel, the most recent permutation of which is called JP-5.

## JP-5 jet propellant is highly toxic

The jet propellant (JP-5) that is used by the F-18s is a refined kerosene that contains a mixture of volatile organic compounds (VOCs), some of which are known carcinogens (cancer-causing) as well as being liver, kidney and immune system toxins.

The post-combustion exhaust from jet engines contains equally carcinogenic pollutants of air, water and soil that are capable of poisoning animals as well as plant and aquatic life.

The military personnel who handle the JP-5 fuel are at high risk of being poisoned by the raw fumes or engine exhaust and can easily develop delayed, chronic ill health because of the toxicity of the VOCs.

But those two factors aren't the only disturbing realities about military air shows because jet fuel is also commonly dumped, raw and unburned, into the atmosphere and often over water prior to the plane's landing.

## Blue Angel pilots have been dumping raw jet fuel over the increasingly polluted Gulf of Mexico for decades

When jet pilots are preparing to land their planes, they often release into the atmosphere much of the excess fuel, retaining just enough to make a safe landing. This maneuver decreases the possibility of a dangerous fireball in case of a crash landing. In the case of most airstrips, the fuel is discharged over land, but in the case of airstrips near a body of water, the fuel is often dumped over water, where it is less likely to be detected by humans who otherwise might be able to smell the toxic fumes. In the case of the Blue Angel's practice sessions near Pensacola, that body of water is the Gulf of Mexico.

The military says that it does this fuel dumping maneuver to "save lives", therefore justifying the routine dumping the fuel into the sea or over the land while seemingly being oblivious to the long-term health consequences for humans, animals and the environment.

### The sobering economics of military air shows

The fuel consumption data for the Blue Angel and USAF Thunderbird air shows that seem to occur every two years here in Duluth seems to be a carefully guarded secret; and for good reason. The sobering facts are kept obscure partly because it would surely dampen the enthusiasm for all but the most uber-patriotic ticket-buyers.

The aviation industry says that JP-5 jet fuel costs 2-3 times more than automotive fuel. That means that at the current \$4/gallon at most American gas stations, JP-5 costs the Pentagon between \$8 and \$12/gallon!

A few years back the Blue Angels headlined the air show in Duluth, MN. A Duluth News-Tribune journalist was given a publicity ride a day or so before the show and wrote in his newspaper report that the jet he rode in burned 1,200 gallons (8,000 pounds) of jet fuel per hour. In 2012. At, for example, a cost of \$10/gallon, an hour of flying would cost \$12,000 per jet! Multiply that by 6 (the number of jets in each Blue Angel performing team) for the actual costs of the shows!

We're talking big bucks here, even if the fuel costs less than \$10 per gallon and even if the jets get better fuel "economy" than, say, 800 gallons per hour. One wonders if escalating fuel costs are one of the reasons that neither the Thunderbirds nor the Blue Angels are flying in the Duluth Air Show this year.

The reporter also wrote that the commanding officer of the Blue Angels was required to fly a minimum of 3,000 training hours in order to qualify for the role of commander. The other team members, just to qualify for the team, had to fly 1350 hours. None of these costs were part of the Blue Angels annual operating budget. It was noted in the article that there were a total of 15 pilot team members, although only 6 performed at a time. The team members, subs as well as prime time flyers, apparently practice their highly technical and dangerous maneuvers virtually daily to keep their skills honed.

As of 2006, there had reportedly been 230 fighter pilots since the Blue Angels started their stunt-flying for audiences. Since the Angels began flying, about 25 of their pilots have died in crashes, which means also that at least 25 multimillion-dollar planes have also been

demolished (this figure does not take into account the planes that crashed while the pilots successfully ejected) . In 2011, 70 Blue Angel air shows were presented annually at 35 different sites, with dress rehearsals the day before each performance. Blue Angel pilots, when they are not on tour, practice their routines year-round, usually over the Gulf at their Pensacola, Florida base of operations.

Here are some more sobering numbers:

Using the figures from the News-Tribune, the 3000 hours of simply training the single Commanding Officer for the Blue Angels, upwards of 2,400,000 gallons of jet fuel were burned up (3,000 hours X 800 gallons/hour)! Of course, this figure does not include the fuel consumed during the actual air shows, only the fuel used during the flight training to become commander.

The 1,350 training hours for the non-commanding officers on the team (at one time there were as many as 15 pilots on the Blue Angels team) consumed as much as 1,080,000 gallons for each pilot's training (1,350 hours X 800 gallons/hour). Multiply that by 15 pilots and you get 16,200,000 gallons of fuel just the training. Considering the fact that today's JP-5 jet fuel costs around \$10/gallon, every new Navy pilot who aspires to become a Blue Angel will cost the US taxpayer, just for the fuel used for training, approximately \$10,080,000 per pilot! And these numbers do not include the costs of the airmen's salaries or the tens of millions of dollars that each jet costs.

But there are more hidden costs of the air shows. I invite readers to try to calculate the fuel costs for the 70 Blue Angel shows/year and the dress rehearsals before each show, plus the continuous stunt training that goes on almost every day of the year. Then add in the fuel used up in the flights to and from Pensacola (or Las Vegas in the case of the Thunderbirds), the support crew's C-130 transport plane that carries all the repair parts and the salaries of the 120 personnel in the supply and maintenance crews.

The jets, of course, have to fly for hours to and from each air show, which often requires complex in-flight refueling with a fuel-guzzling tanker. Enormous amounts of Pentagon time, effort and expense is spent on the promotion, scheduling and coordination that is required to put on these shows that have, in the past, occupied 8 months of every year. It should be obvious that the costs to the American taxpayer are incalculable, but the figure surely must be billions of dollars per year, subsidized, of course, by ticket sales at the shows. Nevertheless, the wastage of precious fuel must be taken into account when the future of these wasteful military air shows is considered.

### Squandering increasingly scarce fuel for our amusement

This weekend in Duluth (September 22-23, 2012), a Canadian military jet plane stunt group, the Snowbirds, will headline the events instead of the usual Blue Angels or Thunderbirds. There will also be a number of other acts, including various stunt planes, parachutists and foreign military jets from previous enemy nations, all squandering increasingly scarce petroleum products for entertainment and the recruitment of starry-eyed, vulnerable young boys who have been primed for killing vocations by addictive first person shooter

videogames like Call of Duty.

It's time that we Americans, all of us collectively headed for a fiscal cliff, get serious and consider the inconvenient truths above. We live in a world of rapidly dwindling fossil fuel resources that are rapidly being used up by our corporate, political and military misleaders in Wall Street, Big Oil, the US Congress, the Pentagon and the Cheney/Bush White House that started all the current wars and caused the Bush financial crash and economic depression..

The ill-advised decision to go to war under false pretenses in the oil-rich Muslim-dominated Middle East has resulted in two disastrous, unaffordable wars, in which tens of thousands of military men and women have been deceived into believing that they were fighting for America's freedom rather than for the corporate fat cats who foment wars, and then profit economically from them. Too many servicemen and women are now physically, neurologically and/or spiritually dead or dying every day, not for our precious American democracy, but for greedy, sociopathic corporations and politicians who are certainly cunning flag-wavers and flag lapel pin wearers but who obviously care not one whit for the post-war care of their duped "cannon fodder" warriors

Millions of dead, dying and suicidal veterans of virtually every American war throughout history enlisted out of a sense of patriotic duty but soon found themselves disillusioned by the routine SNAFUs, the earning of less than minimum wage (often not even getting hazardous duty pay) and the enrichment of the corporate war profiteers by their sacrifices.

America's soldiers, airmen, seamen and Marines are, in reality, working not for the nation that they profess to love, but rather for a whole host of greedy special interests that end their support when the body bags and broken brains come home. Perhaps acknowledging these painful truths will someday set us free from the nefarious war-mongering, get-rich quick schemers on Wall Street.

The main purpose of this column is to reveal a few hidden truths about military air shows and to try to make the connections between America's immoral, right-wing, endless war agenda and the on-rushing energy and environmental crises that are routinely censored out of our consciousness by the feel-good media that chooses silence or vagueness about the costs of war when courageous clarity is what is needed.

So, this weekend, as we Duluthians stare, in wide-eyed wonder, at the breath-taking, heart-pounding, highly lethal air power, hopefully some will also be capable of thinking about the many downsides of these energy-wasting air shows, which are doing their small part in bankrupting the nation both financially and morally, wasting precious non-renewable fuel and polluting the planet for our progeny at the same time.

And we should also be worrying about what our children and grandchildren will think when they finally see the mess our misleaders on Wall Street, in Washington and at the Pentagon are leaving them to struggle with.

*Dr. Kohls writes a weekly column in the Duluth Reader Weekly warning about war, extremist politics, the epidemic of violence, the rape of the earth, fascism, the malnourishing Standard American Diet (SAD) and the dangers of BigPharma's neurotoxic synthetic drugs, among other issues. His essays are frequently republished on various websites world-wide.*

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