

# Hypothesis: The Illinois Flying Triangle is A Department of Defense, Not An ET Craft

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In January 2000, NIDS conducted an extensive investigation into the sighting, by four policemen and over a dozen others, of a large, silent, low-flying black triangular shaped object. The object was observed flying low in a southwesterly direction between Highland Illinois and Dupo, located less than 30 miles from St. Louis Missouri. Part of the flight path took the enormous object within a couple of miles of the perimeter of Scott Air Force Base. The full report of the NIDS investigation can be read at:

[http://www.nidsci.org/news/illinois\\_contents.html](http://www.nidsci.org/news/illinois_contents.html). NIDS did not come to a definite conclusion regarding the origin of the object sighted in Illinois in January 2000.

In the two years since the Illinois investigation, NIDS has accumulated over 150 separate reports of sightings of large triangular or deltoid shaped objects. The reports have mainly come from the United States with a small minority from Canada and Europe. Last year, NIDS noticed and published an apparent correlation between the locations of the large triangular shaped object sightings and the locations of Air Force Materiel Command (AFMC) and Air Mobility Command (AMC) bases throughout the United States. This correlation was checked in two other independent databases and shown to be consistent. To read the NIDS report on the correlations, see: <http://198.63.56.18/pdf/triangularcraftdatabases.pdf>

Recently, NIDS was approached by an aircraft designer who had read the Illinois UFO Report on the NIDS web site and who hypothesized that the object reported by the four police officers in January 2000 was very reminiscent of a large, lighter than air (LTA) object using an electrokinetic drive. The individual claimed that by combining LTA with electrokinetic technology, both of which have been known for decades, the DoD had likely found a highly synergistic increase in performance and that they had built this aircraft, probably in the early to mid 1980s.

Estimates of the Craft's size and performance characteristics are given below (BBD= Big Black Delta):

## BBD Craft Size:

Length	600 feet
Width	300 feet
Height	40 feet
Mass	100 tons



Rough surface estimate:

Hz. surface            180,000 ft<sup>2</sup>  
Vt. surface            94,245 ft<sup>2</sup>  
Total Surface 274,245 ft<sup>2</sup>

Thrust per ft<sup>2</sup>    2.6 lbs per ft<sup>2</sup>

LTAS "Triship" 1970s.

(62 tons thrust for a square 70 meters per side  
217 feet = 47,089 ft<sup>2</sup>)

[http://www.terra.es/personal7/dafero4u/FR2651388/pat\\_en06.htm](http://www.terra.es/personal7/dafero4u/FR2651388/pat_en06.htm)



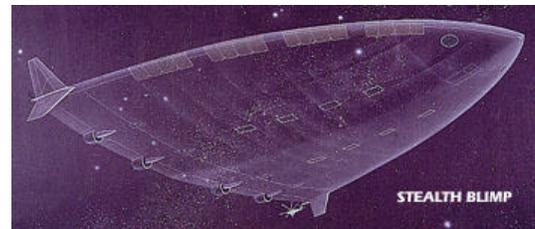
Hz. Thrust            468,000 lbs. / 234 tons  
Vt. Thrust            245,037 lbs. / 122 tons  
Total Thrust            713,037 lbs. / 356 tons

With full payload:

Vt Thrust to mass            1.06 to 1  
Hz Thrust to mass            1.17 to 1  
Total Thrust to mass            1.78 to 1

L/M Stealth blimp 1982

Lift



Rough volume estimate:

Hull volume            3,600,000 ft<sup>3</sup>  
(½ area in horizontal directions for triangular form.)

Lift at 10,000 ft            180,000 lbs. / 90 tons  
Payload estimate            200,000 lbs / 100 tons  
VTOL

Payload estimate            200,000 lbs /100 tons  
April 2002



NIDS distilled six recurring characteristics from the more than 150 sightings of large triangular objects in the NIDS database and posed them as questions directly to the aircraft designer, in order to determine the "fit" for his hypothesis. The questions are as follows:

- (1) Why is it silent?
- (2) Why is it brightly lit, sometimes with blinding light?
- (3) Why is it seen a lot of times near water/lakes?
- (4) How does the object appear to accelerate so quickly from a hovering position?
- (5) How does the object turn without banking?
- (6) Why the reported huge size (football field size)?

NIDS addresses the answers to these questions below in the form of an essay from the aircraft designer.

## **Big Black Deltas (BBDs): DoD, Not ET**

### **(1) Why the huge size (football field size)?**

First a bit of rarely mentioned manned flight history and a background of the implied craft technologies. When George Washington was president (mid 1700s), man was already flying! First design for airship was made in 1785 by JBM Meusnier.

By the time of the US Civil war (mid 1800s), man had developed working manned and controlled aircraft. Reports in the New York Herald of the time mentioned how lucky the union was that the confederate forces didn't have such aircraft during the siege of Washington DC in 1864. The craft was designed and built by the mayor of Perth Amboy New Jersey USA, Dr. Solomon Andrews, it was called the AEREON. It flew silently both with and against the wind as it had no conventional engine.  
<http://www.users.qwest.net/~gdaniel6587/airship.htm>

By the mid 1870s the electrically powered French airship "La France" had flown a number of round trips of an hour or so duration, initiating the beginning of the French army air corps. By the mid 1890s the Russian aeronautical and rocket pioneer Konstantin E. Tsiolkovsky had designed and built large all metal rigid airships of advanced design. (It can be speculated that some of the late 1800s "Ghost airships" that were described as moving at high speed and having "long flaming tails" may have been tests of Tsiolkovsky type airships with versions of his early rocket engines mounted for propulsion.)  
<http://www.informatics.org/museum/>

All of this means that well developed (but not well documented) manned powered flight was taking place between 40 years and a decade before the Wright brothers made their first 12 second, 120 foot airplane flight at Kitty Hawk in 1903 supposedly initiating the era of manned powered flight. Indeed, for the first 40 years of the 20<sup>th</sup> century even with the advent of the airplane, all records for payload, distance, duration and most importantly in this case, altitude were held by lighter than air (LTA) vehicles including balloons and large rigid airships. In fact, except for rocket-powered research aircraft (i.e. the X-15) and the space shuttle, all absolute altitude records are still held by high altitude scientific balloons.

Knowing about this LTA altitude capability is important as in the use of airship the amount of gas required to lift a pound goes up as you gain altitude. A much larger airship (10 times the physical length) is required to keep the same payload at 75,000 feet altitude as is required at a thousand feet. Fortunately, the "Square cube law" allows for this increase in lift ability because as you double the linear size of an enclosed volume the

surface area of the hull/case squares (is 4 times as great) while the volume and thus the lift of the hull/case cubes (is 8 times as great).

[http://www.isd.uni-stuttgart.de/arbeitsgruppen/airship/halp/phy\\_b01e.jpg](http://www.isd.uni-stuttgart.de/arbeitsgruppen/airship/halp/phy_b01e.jpg)

On a “shoestring budget” the new AEREON corporation of Princeton New Jersey flew a 26 foot manned version of a hybrid deltoid wingless LTA vehicle with a hull form designed by the US DOD’s own supercomputer at the Naval Air Development Center (NADC) in the 1960s (we will assume there was a contract and a contract # for this design project. DOD CANNOT say they know nothing of large deltoid hybrid LTA design.)

The BBDs are so large so they can:

1. Carry massive payloads at low altitudes at speeds 3 to 5 times as fast as surface ships.
2. They can use highly advanced but large and crude power and propulsion systems in early stages of development. (ie electrokinetic / Field drives or airborne nuclear power units.)
3. They can fly at extreme altitudes, taking advantage of the LTA’s altitude ability to stay out of the range of conventional aircraft and ground based traffic control radars. A number of “public” DOD proposals for High Altitude Platforms (HAPS) to be used as “sensor platforms” are currently out, and have been since the mid 1950s. It would be foolish to think they had not been answered.

An interesting sidelight to this “Deltoid airship development” is that since it has abilities far outstripping those of conventional airplanes in many military areas, no public, commercial companies have been able to acquire funding to develop such craft. (DOD and NASA funding for both the AEREON corporation and the MICROCRAFT “AEROCRAFT” were both dropped.) These military mission scenario and the military applications for the large deltoids are a prime reason that since they can be built, “They would have been.” But ONLY as “Black projects built by established DOD contractors,” as stated by DOD representatives at recent aerospace technology conferences, “no matter how advanced the small companies technologies may be.”

## **(2) Why is it silent?**

As can be seen above, a number of quiet “unconventional” power systems (as far as Heavier than air (HTA) airplanes are concerned) are available to LTA craft. With over 100 years of development time between the flights of the 1860s AEREON, which employs no motors at all (except for ballast control which it is now possible to do internally to the craft) to the flights of the electrically powered 1870s “La France” of electric motor and large diameter slow turning nearly silent ducted internal propeller development. It seems obvious that a nearly silent “except for a slight humming” of

internal power control or generation and propulsion system can be used in the modern craft.

In addition to the 1800s version of LTA power systems, several other systems of silent flight systems that would be improvements to those already mentioned were first developed in the early and mid 1900s. In the late 1920s, T.T. Brown developed the electrokinetic (meaning motion from electricity) capacitor. <http://www.soteria.com/brown/>.

Modern “hobbyist” versions of this technology and video of numerous “modern” replications of the unit can be seen and built from free plans and easily gotten parts at: <http://www.americanantigravity.com/>.

By the late 1950s aviation pioneer Alexander de Seversky's IONOCRAFT had demonstrated a far more advanced, fully controlled, version of such a system. See:

<http://www.americanantigravity.com/deseversky.html>

<http://www.markwilson.com/ioncraft/ioncraft.html>

See the video at: <http://www.markwilson.com/ioncraft/ioncraft.avi>

The electrokinetic system shows a number of the “Characteristics” of “UFO” power systems. It flies with “no visible form of support”, no propellers, jets, and in the case of a hybrid LTA craft which would NOT use thrust from the drive to hold the ship up (since it would have aerostatic, lift gas, like a balloon) no downwash like a helicopter’s. Except for “a slight humming” from high voltage control equipment and an occasional coronal discharge in the older units it makes no noise.

### **(3) How come it appears to accelerate so quickly from a hovering position?**

As can be seen from the above data on both the T.T. Brown system, the IONOCRAFT and the “modern lifter” hobbyist experiments all of the units are VTOL making for a unit mass to thrust ratio greater than 1. Acceleration rates of up to about 3Gs are possible with current units. The major problem with ALL of the previous units was their inability to carry a self-contained power supply for the drive or a useful payload. All of the past systems are powered by a ground based power system sending power to the electrokinetic platform by either a tether wire or by microwave link. The maximum transmission distance of 62 MILES (“Space according to the X-Prize rules) for this link was the limiting factor to the system’s altitude.

Because of the “Square/Cube law” mentioned above, an electrokinetic system combined with LTA technologies - (pp) 1970s by LTAS/CAMBOT llc. - in a way that makes the hull of such a craft the “engine” with the hull area of such a craft interacting with the “working fluid” (i.e. The surrounding air) the larger the craft, the “better.” (see BBD estimate 01 sheet.)

At low altitudes, the “working fluid” is more dense and a lot of thrust can be obtained from a fairly small area. As the craft climbs, the working fluid becomes thinner (both for use in making thrust but also in the amount of air drag) however, since the craft must also be larger to generate the required static lift the surface area squares (is 4X as

great) producing as much, if not more, thrust even at these higher altitudes where the drag is much lower. It should be mentioned that another “side effect” of the drive when used in this manner is a complete control of the boundary layer and the ability to generate laminar flow over most of the skin of the craft vastly lowering the amount of drag such a large craft would normally have.

Even with the fairly low (on the order of a few pounds or so per ft<sup>2</sup> of hull surface) because of the large number of ft<sup>2</sup> inherent in an LTA vehicle with either the required payload or required operating altitude the thrust to mass ratio of such a craft will be between 1.7 to 1 up to 3 to 1 if lightly loaded. (Carrying only integrated systems like the radar.)

A modern jet fighter only has a power to mass ratio of a little over 1 to 1. As reported such a craft should be able to “pull away” from any modern aircraft trying to catch it. Note that as often reported “in a climb” such a craft would add the extra buoyancy of its lift gas (assuming some sort of buoyancy control system) to the electrokinetic thrust while a jet is fighting its mass with thrust and the craft would pull away even faster.

After a certain altitude the jet starts to lose lift from its wings as its engine loses thrust from intake of the thinning air. A craft as described would continue to climb due to both its LTA altitude ability and the high altitude operation of the EK drive “Climbing away” is a well-known scenario when such craft are pursued by aircraft. Another side effect of such a high voltage external drive would be that if a conventional aircraft approached it too closely one would expect the electrical systems of such an aircraft to be overloaded and possibly the operation of the engines and other systems stopped. This effect has frequently been reported. (Great if people are chasing or shooting at you!)

#### **(4) How come it can turn without banking?**

LTA craft use “static lift” not the “lift vector” of aerodynamic surfaces, i.e. “wings.” They do not normally “bank” when turning. In addition, a craft with the systems described would have omni directional thrust and in normal circumstances using the top and bottom surfaces for horizontal thrust would merely “turn” as the thrust vector is changed with the two surfaces generating equal thrust both pitch and roll motions would be prevented.

Crew “G” compensation would be by a 3 axis gimbaled system, which once again is probably too large in volume and complicated to install into a small jet aircraft but could easily be accommodated by a craft as described. To the crew of such a craft the “G” vector is always “Down” Such systems were designed for spacecraft in the 1970s.

##### **(5) Why is it brightly lit, sometimes blinding light?**

Besides the “coronal discharge” often seen with such craft, another reason for such light displays is the inability of aircraft power systems to rapidly change power output, (this can be seen in standard jet aircraft where they go to “Cruise power” as soon as possible and for as long during a flight as possible). If such a craft was operating at low thrust with a nuclear or other closed cycle power system, it would be best to setup such a system to produce a steady state amount of power at all times. Power can be diverted from this unit to both the thrusters on onboard systems. This would also require some sort of onboard “power storage” and a method of getting rid of excess power at periods of low power demand like hovering or low speed flight. High power illumination is a simple (not to mention useful) method of doing this. Lights are fairly small, light in mass, and in a night flight craft such as this useful in landing when operating at low altitude and low speed. Such a craft using “optical camouflage” would naturally have a large number of light producing systems as part of the optical camouflage, further reducing complexity by using them to a multiple purpose, (landing, “disappearing”, and blinding pursuit).

One might also mention that even if the lights did attract public attention it makes little difference. Conventional aircraft cannot catch one of these craft and side effects of the drive along with the sensor transparency and active camouflage make pictures indistinct allowing deniability.

You saw something....”Prove it !!”

##### **(6) Why is it seen a lot of times near water/lakes?**

With their ability to hover eliminating the need for runways and other infrastructure, such a craft would only have to “go to base” for occasional crew changes and equipment updates. This would be of great benefit for a craft operating with a high altitude long duration recon or other platform mission profile. (Think of this as a “Ship” not an airplane... fair sized crew staying up for a few weeks not hours).

If it is generating power by nuclear, solar, fuel cells or some other closed loop system then it has only to replace the oxygen used by the crew and its lift gas.(In this case suspect hydrogen because of increased lift, hard shelled hull, and lower cost... remembering that it ONLY comes down low enough to be shot at over friendly territory.) If the power system is not a closed system then hydrogen is a fuel that would provide lift as well as power.

How would you “refuel” such a craft without having to “go to base?” Simple, use onboard solar (we have LOTS of surface area for cells) or stored power to electrolyze water. Water is plentiful, cheap, and can be gotten in remote areas (making sure that they are uninhabited using your recon sensors even in “enemy” territory.) While ocean water can be used it would be “better” to use fresh water so as not to corrode your systems.

While hovering at low altitudes or low speeds excess power is available for pumps and electrolysis equipment.

It should also be mentioned that it would be hard to approach the craft in vehicles or on foot when it is over water without being seen. That most such “refueling” has been seen at night and in remote lakes from a distance and that the craft could easily “get away even if the thrusters are “off line” during such a task by “bumping the buoyancy controller to full high” and climbing out as mentioned above. Crew oxygen supplies are replenished at the same time and by the same equipment. It should also be mentioned that if the EK drive does not work well in vacuum, then these same “Fuels” could be used in a supplemental “rocket” drive only used at extreme altitudes in conjunction with the reduced drag operation.

It should be mentioned that Lockheed was deeply involved with a large, long-term hydrogen fuel for powered aircraft program as far back as the 1950s. A lot of the systems for such a craft would have been developed.

#### **Final Thoughts.**

With a number of military mission profiles for such a craft and the technologies to build it having been well developed for nearly a century would any defense department NOT build it ?

Given the simplicity of the systems, would the best method of keeping such a craft “secret” be “alien disinformation” and full denial. After all, if it is a “Flying saucer” or requires “element 115” to build it then no one but a superpower would even try?

Even if the EK drive ONLY has a few of the overall effects described above and well documented, diminished drag, full laminar flow, elimination of sonic shockwaves (sonic boom), operation from ground level to full vacuum, silent operation. Wouldn't it be worth getting it out of the DOD's “black world” and into commercial products?

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NIDS would welcome any and all feedback to this hypothesis.