

UFO POTPOURRI

John F. Schuessler, 9862 West Unser Ave., Littleton, CO 80128-6986

e-mail: schuessler@mho.net

Web Page: <http://home.mho.net/schuessler/>

No. 425

May 1999

DIAMOND-SHAPED CRAFT – U.S. MADE?

From: Aerospace Daily, January 23, 1995, Item no. 25

"For about a year, McDonnell Douglas engineers have been testing what they call the "Diamond" – an unmanned aircraft with a 10-foot by 10-foot planform like a hollowed-out diamond that weighs about 33 pounds and can fly 80-90 knots. Right now, the experimental vehicle, painted black and white and built from off-the-shelf materials, has no customer and no defined application. So why has the company invested its own money – admittedly only about \$5,000 on capital costs and extra dollars for labor – to build an engineer's dream?"

"The goal of Project Diamond wasn't to build the perfect platform, but to demonstrate a new platform and to learn more about some "difficult-to-understand" concepts "that can only be seen as we put together a vehicle."

"It took about six months to build Diamond 1, which first flew in early 1994 at Creve Couer Airport in suburban St. Louis. Because the aircraft was "beyond the bounds of what we normally do," engineers couldn't rely on computer codes to help them decide where the center of gravity should be, and which parts should have elevators and which should have ailerons. The hollow diamond planform yields four wings, two in the front swept aft, and two in the rear swept forward, and a central spar supporting twin outwardly canted tail fins and a dorsal engine."

"Intuition led the engineers to a conventional configuration for the controls, with elevators on the rear wings and ailerons on the front wings. But, as the first-and only-flight test of Diamond 1 proved, this didn't give the remotely located pilot enough pitch authority. It was like an arrow. It was so stable it could have gone straight forever. Diamond 1 hit a tree and crashed."

"It took about 45 days to build a second vehicle, which incorporated several changes. For example, each of Diamond 2's four primary wings has two movable trailing edge surfaces, giving it eight surfaces for pitch and roll.... The front wings have elevators and the rear have a combination of elevators and ailerons. Diamond 2 also has a movable center of gravity and, therefore, movable landing gear, to aid takeoff and landing."

Does the Diamond 2 vehicle explain any UFO sightings? The answer is "no." Neither does the Diamond 3 vehicle – similar to Diamond 2, but with the addition of a very sophisticated control system.

McDonnell Douglas went on to design and build a tailless test aircraft, not much larger than the Diamond 2. It was flown a number of times at Edwards Air Force Base to prove the viability of the tailless aircraft concept.

None of these devices provide an explanation for the huge triangular UFOs being seen throughout the world for a number of years. In fact, considering the locations where they were flown, it is doubtful that their existence can be used to explain any UFO sightings at all

OLD RADAR-VISUAL CASE NEVER EXPLAINED

From: LAHONTAN VALLEY NEWS, Fallon, NV, December 5, 1979

"Fallonites are still talking about the reported citing of a mysterious unidentified flying object (UFO) east of the city Friday night. It apparently disappeared as mysteriously as it appeared."

"The Churchill County Sheriff's Office received a telephone call at 9:59 p.m. Friday concerning the object."

"NAS Fallon radar tower personnel reported "an oblong shaped" object was "hovering over Sand Mountain" at 5,000 to 6,000 feet. The tower reported it had the object on radar and was in visual contact with it also."

"Sheriff's Lt. Jerry Chisholm and Reserve Officer Mike Richards drove to Sand Mountain, approximately 26 miles east of Fallon, but reported they could not see anything resembling the UFO described by the NAS personnel. The only bright object in the sky they reported seeing was a star."

"At one point, NAS reported the object had moved off its radar screen, then back on. They said the object was not a star, an NAS helicopter or other NAS aircraft. At one point, they reported the object was moving in a westerly direction toward Fallon.

"After about 40 minutes, the investigators returned to Fallon and the object reportedly left the radar screen at NAS Fallon."

NEW TECHNOLOGIES TO RESEMBLE UFOS

From: IEEE Spectrum, January 1999, p.75

"For the time being, Global Hawk and DarkStar will be the top of the unmanned air vehicle line. But contractors have been asked to submit studies for even higher-powered UAVs: unmanned attack aircraft, capable of sustaining g forces far greater than if a human were in the cockpit, and thus having a more flexible flight envelope than a manned craft.

Some ideas being circulated include using reconfigured F-16s, redesigns of the proposed Joint Strike Fighter, honest-to-goodness flying saucers, and bat-wing, B2-bomber-like planes, whose wings break off to release mini-attackers or tracking aircraft. No decision has been made yet as to their level of autonomy when they are carrying out attacks – that is, how much man will be in the man-in-the-loop.

The opposite end of the size scale, at least for the next few decades, may be occupied by the product of an official Air Force "concept notice," as they term it: fly-sized vehicles that would earn their name perching on walls as eavesdropping bugs, or flying in clouds in extraordinary multi-agent schemes yet to be devised.

Small aircraft on a more comprehensible scale – if incomprehensible just a few years ago – are now taking wing. The Navy is well along with a hovering pizza-sized platform for urban assaults, which with a payload of 23 kg can fly ahead of troops through streets, peeking in windows and maybe dropping a grenade or two. The platform, the Cypher from Sikorsky Aircraft Corp., in Stratford, Conn., is something like an upside-down helicopter. The rotors of the 2-meter-diameter, 114 kg. Flying torus are shrouded for safety.

And a net for palm-sized UAVs, christened micro air vehicles (MAVs), is being cast by the U.S. Defense Advanced Research Projects Agency (Darpa). Darpa is funding MAV-worthy components, such as lightweight batteries and piezoelectric actuators for wings that flay – a flying mode that may become efficient in small machines at certain aerodynamic regimes, as many birds and bees know.

One driving force behind MAV development is the huge advance in commercial charge-couple device (DDC) video-camera miniaturization. These vehicles, for use in operations with even a few soldiers, essentially are defining a new design field, and are coming in all shapes. One odd bird is the flying disk from AeroVironment Inc., Monrovia, CA. With its rear propeller driven by two lithium batteries, it spans 15 cm at its widest and weighs 42 grams. By the end of 1999, the current model should be upgraded with a 6-gram color video camera and fly a 3-km radius at 50-65 km/h.

The disk MAV is still quite unstable, and requires a skilled operator for its controls – a throttle and elevons or throttle with rudder and elevator. The current model has a 10-kb/s uplink, and downlinks real-time video imagery at 20 Mb/s. The high data rate can be used to send 30 frames a second without even bothering to pause for compression.

What appears to be the gold-plated micro air vehicle in development is from Sanders, located in Nashua, NH. Sanders bagged a \$10 million award as prime contractor for on MAV by the end of 1999 and three more of them by the end of the 42-month contract. As opposed to the aerodynamic bestiary of other MAVs, Sanders' fixed-wing, delta-shaped MicroStar is reassuringly recognizable as an airplane. Like the other MAVs, it keeps to Darpa's size limit, a wingspan of 15

cm, but it is relatively heavy, at 85 grams. The MicroStar has a front propeller, but its key difference is its computational skill and autonomy.... The craft should be able to fly independently with a 5-km range to a target located on a digital map, over a 10-20-minute flight time."

None of these devices may be blamed for past UFO sightings, because many of them are just now in design and test. No doubt, however, some of them will account for some UFO sightings during the next several years. Urban warfare exercises are the most likely place for them to be seen by the public first, just as helicopters are currently being seen in urban warfare exercises all over the country.

SATELLITE SPOTTING SOFTWARE

From: NASA Data Systems Branch, NASA/Marshall Space Flight Center

UFO investigators are often called upon to investigate high-flying lights, assumed by the public to be UFOs. A new tool is now available to investigators to help them in their investigations. New software from NASA, called "J-Pass," can tell you when and where to spot satellites passing overhead. The software can even mail you a message for upcoming satellite passes if you can't use the software over the web. Give it a try - visit the following web site:

http://science.nasa.gov/newhome/headlines/ast06may99_1.htm

Other useful sites include the following:

<http://www.randmcnally.com> - Interesting profiles of nearly 50 cities

<http://solar.rtd.utk.edu/~mwade/spaceflt.htm> - Encyclopedia on manned and unmanned spaceflight

<http://www.sciam.com/> - *Scientific American's* web site

<http://www.eg3.com> - The largest online resource in electronics

<http://www.darpa.mil/haeuav/> - Global Hawk and DarkStar Programs

<http://www.darpa.mil/tto/mav.html> - Darpa's micro air vehicle (MAV) program

<http://www.nosc.mil/robots/air/amgsss/mssmp.html> - Navy's hovering platform

<http://www.auvsi.org/auvsicc/index.html> - Assoc. for Unmanned Vehicle Systems Int'l

<http://www.reston.com/nasa/station.news.html> - International Space Station

BRITONS BELIEVE IN EXTRATERRESTRIAL LIFE

From: BBC News, January 13, 1999

"Just over half of Britons believe in extraterrestrial life. According to a survey for the popular science magazine Focus, 50.2% of people said alien life must exist in the universe somewhere. 80% said the government would not tell us if it knew alien life existed.

The results of the survey also vary according to sex, age, region and social class. Women are slightly more skeptical than men. Only 43% of people in the northwest believe in aliens while 65% in the southwest and 58% in East Anglia do. Pensioners are the most likely group to insist there is no intelligent life out there.

WEATHER ANALYSIS & MODIFICATION

UFO researchers are spending a lot of time on the internet discussing contrails and government weather modification. Some of the cases submitted are more paranoia than fact, while others are right on the money. I recommend seeing what the Air Force says about this subject at: http://www.au.af.mil/au/2025/volume4/chap03/b9_2.htm

The site states that a global network of sensors provides "weather warriors" with the means to monitor and accurately predict weather activities and their effects on military operations. A diverse set of weather modification tools allows manipulation of small-to-medium scale weather phenomena to enhance friendly force capabilities and degrade those of the adversary.

Precipitation inducement or suppression is achieved using particulate seeding or directed energy. Fog generation/dissipation uses directed energy techniques. Storm triggering and enhancement uses airborne cloud seeding. Communications and radar enhancement and disruption uses high-power microwave devices and ionospheric mirrors. Ionospheric charging for spacecraft disruption uses crossed high-power microwave beams.