Real Flying Saucers

The story I'm about to tell is not science fiction or fantasy. It is a detailed 17 year journey of investigation, research and experimentation with a unique type of craft that uses accepted aerodynamic theory to fly. Many completely autonomous flying models of it have already been built and flown. I have detailed documentation of two manned versions that were built and flown in the early sixties in front of over 200 people. This form of VTOL (Vertical Take Off & Landing) craft has the same flight characteristics as a modern helicopter, but as I'll show, its advantages far exceed just that.

There is another aspect of this craft that unfortunately impedes serious investigation and acceptance and that is because it looks exactly like what is commonly known as a "flying saucer". I cannot count the amount of times I've brought up the discussion of this craft with professionals and amateurs alike only to see their curiosity melt once they see a picture of one. By coincidence or design, the automatic ridicule of this form of craft is very deep and ingrained within the public psyche.

I don't consider myself a "conspiracy" person and I've never seen a UFO but my research has consistently indicated some form of "cover-up" or "suppression" of this craft and I think I can now explain why this could be. This craft has the potential to cause a huge paradigm shift in how we currently view transportation and society as a whole. It is "disruptive technology" in the true sense of the term.

Its real power and threat to the existing status quo actually lays both in its simplicity and what it can do. It has the potential to give the individual a level of power, freedom and autonomy that is only dreamt about. This, I believe, is the main reason behind the failure of the companies that have tried to get it into the public domain.

Originally I thought the suppression may have been just a "business decision" by existing helicopter manufacturers to impede possible competition but once the capabilities of the craft fully dawned on me I realised that it went further than that.

Just imagine if you had a craft that could fly and was easier and cheaper to build than your average car. Not only that but it was inherently stable and easy to fly, was mechanically simple, incredible reliable and at the same time was a hollow dome-like structure that you could live in. Plus it also had the ability to generated its own power from anywhere in the world?

For a start you have just eliminated most international borders plus most of the dependence on the existing fuel and power infrastructure - two huge mainstays of existing society. Not only that, but the whole debt/mortgage/wage cycle system would also be on very shaky ground! Why on earth would you want to spend your whole life living in the stifling sameness of suburbia going to some soul depleting job to pay off a fuel-dependant vehicle and a boring box-like structure?

Let's just think of the alternatives to this so the real power of this craft becomes apparent. For example, you leave school and work for a year or two to build or buy your own craft. Then you decide that you want a life of adventure and excitement! No mountain, island or wilderness would be out of reach!

Imagine the possibility of flying to some remote tropical island (alone or with friends who also own their own craft) to just relax and write that novel, paint that picture, play that instrument… Living on locally grown natural produce…fishing…diving…giving joy flights to the locals…
Or perhaps land on some remote mountain snow field and spend the days snowboarding or skiing while having a totally weather-proof structure in which to sleep… Or maybe floating (yes they can also float) in some remote wilderness lagoon while formulating a new business structure for your company because the craft is self powered and can easily be connected to the internet.

These are just a small example of the individual freedoms that this craft would provide. So that is what is at stake here. Not just a novel form of helicopter but a craft that has the capacity to totally transform our whole society in terms of how we live, work and play. "The shepherds do not want the sheep to have wings - this would be very bad for wool production…"
I believe that this is why this craft has been and will continue to be suppressed. It is my hope, that by sharing this with the UFO community that this information will not be lost or suppressed again and my even stimulate the interest of someone who is in a better position to pursue it than me.

Maybe we aren't ready for this level of freedom but I'll let you make up your own mind.

Okay, who am I? My name is James Dobson and I'm a 55 year old aeronautical enthusiast who has built and flown many flying models. I have a very good understanding of aerodynamics and have also built many other successful projects ranging from motorbikes to classic cars. I have several close friends within the aeronautical industry both as commercial pilots and engineers and am in regular contact with many high-level researchers world-wide in regards to aircraft R & D. I also have people within the electric vehicle and composite industries that I regularly consult with in regards to this project. None of the following is based on fiction. It is all realistic possibilities based on verifiable facts.

My journey with this craft started in about 1999 when I came across a single page article in the 1964 edition of Popular Science magazine. The magazine cover and the article are below.


PS PICTURE NEWS

Saucer-shaped helicopter gets lift from air pump

Air pumped from inside this inverted dish by the impeller on top creates an air flow over the upper surface that causes the craft to rise vertically. Reason, says the maker, Astro Kinetics, of Houston: less pressure in this air layer than that of normal air below. This eliminates need for rotor blades, while maneuverability and forward speed are said to be the same as for a helicopter. Motor: a 135-hp. Mercury outboard.

Foam plastic floats basket hoist and raft

The raft on which scuba divers rest at right is one of the Coast Guard's latest rescue devices. Resembling a big mattress, it is stowed folded on shipboard. When needed alongside to get survivors off a ship in a hurry, it is blown up with buoyant urethane foam from a portable generator.

The basket hoist is similar to that used in sea rescues by helicopters. This one has built-in urethane-foam blocks to keep it afloat; on others you had to attach life preservers for buoyancy.

45

Having prior aeronautical knowledge and experience allowed me to instantly realise two things. One, that the whole lifting surface was on top of the craft and two, that the pilot and engine could be relocated up under the canopy and not hang down as was shown in the article. This would give the craft helicopter-like performance yet structurally and mechanically it would be far simpler than a common helicopter - it would simply be a smooth, disc-shaped craft with helicopter-like performance. So this single article fired up my curiosity and determination to find out all I could about this "saucer-shaped helicopter".

Basically, the craft functioned like this. On top of the craft in the middle of the disc is what is known as a "mixed-flow impeller". When spun at high speed this pulls air down from above that enters the impeller in a vertical direction. The impeller then changes the direction of the air-flow from vertical to horizontal as it throws the air outwards radially over the curved top surface of the craft.

Due to an aerodynamic effect known as the Coanda Effect the air then follows the curved surface and thus produces lift in much the same way as an aeroplanes wing. There are other things happening in this method of producing lift that I won't go into detail about here but suffice to say it is a very powerful way to reduce the pressure on a lifting surface. Unlike a wing however, in this situation the lift occurs entirely on the top of the craft so that the underneath is aerodynamically neutral.

As the article mentions the craft was built by a Houston Company called Astro Kinetics and it was a few years later that I stumbled across a rare collection of information outlining both the company and a second prototype called the Astro V Dynafan. The information was found in an old cardboard box in the attic of a deceased estate that was destined for a land fill and I was incredibly lucky to get hold of it. It contained complete descriptions and patents of the two craft plus a 4 page press release and newspaper clippings of the public demonstration of the Dynafan.

The 1070 lb Astro V Dynafan rose off the ground 9 times in front of over 200 people inside Howard Aero Service Hanger #4 at San Antonio International Airport at 10:00 am on Dec. 16th 1964. The public demonstration was held indoors due to bad weather conditions.

This craft was a completely circular, disc-shaped device that relied on air-flow over the top of a parabolic wing. The top duct housed a two-bladed prop driven by a 1964 super-charged Chevy Corvair engine. Again, as with the first prototype, the pilot and engine could have also been re-positioned up under the fibreglass shell thus giving a clean, disc-shaped craft with helicopter-like performance.

I believe that AK made a fatal mistake in their press release stating the capabilities of their craft. They openly said that the Dynafan was "very easy to fly", "could be built for less than the cost of an average car" and "would easily replace land-based vehicles". I don't think they realised what they were actually doing by stating the capabilities of their machine.

It doesn't take Einstein to realise that our whole society is based upon a huge infrastructure that is land-based. Airports, roads, docks, power distribution and transport all rely on this paradigm. Our very Government derives its power from a populace that is largely contained. This craft would free the masses in a way that has never been seen before.

Astro Kinetics Founder and President Fremont Burger was found dead at age 49 in his bed a week after the public demonstration of the Dynafan. Of course it could be coincidence but before I go on let me share a few other interesting things about Astro Kinetics.

In 2008 I paid a Private Investigator $500 to track down any remaining employees of Astro Kinetics. Everyone had passed away except the company secretary Miss Beverley Ritchie who was 85 and living on the outskirts of Houston. He supplied me with her phone number so I gave her a call.

A lovely old lady answered the phone and after a bit of pleasant chit chat she sweetly asked how could she help me? I then replied that I was an independent aeronautical researcher from Australia seeking information about a company called Astro Kinetics that she was involved with in the early 60's. An awkward pause ensued followed by this statement "if you know what's good for you you'll drop this right away" and then she abruptly hung up! And this was not the sweet old lady that answered the phone, from the tone of her voice this was a scared and obviously traumatised person.

Another strange thing about Astro Kinetics is the total and complete removal of records of the company from the public domain. If I had not coincidentally been given the box of information from the deceased estate (another story in itself) the only information available would have been the old single page article in PS. I have since put some of this stuff on the internet so an AK search will now reveal pictures of the craft but before that the lack of company records was very complete.

Finally, the two AK craft were built around the time the US and Canadian armed forces were building their own version of a disc-shaped craft called the Avrocar. Millions were spent on this disaster that never rose more than a metre off the ground. Many people give this as an example of the futility of pursuing a disc-shaped VTOL craft but I will show that the Avrocar worked in a completely opposite way to the Dynafan. Curiously there are reams of information about the failed Avrocar.
The very public failure of the Avrocar combined with the UFO "myth" form the basis of this craft's ridicule - both can be shown to be inappropriate representations of this type of craft. The Avrocar DID NOT use the Coanda Effect in the same way as these craft and they are not related in any way to a UFO apart from a similarity in design. Below are pictures of the Avrocar and a classic UFO.

The above pictures are fairly emotive. The Avrocar (for those that are aware of it) evokes the notion of "failed fact". The UFO mostly conjures up the notion of "myth" or "fantasy". But this is not about whether or not UFOs are real, it is very much about the media-generated bias we all have implanted within our psyche because both these beliefs stop serious research into disc-shaped craft.

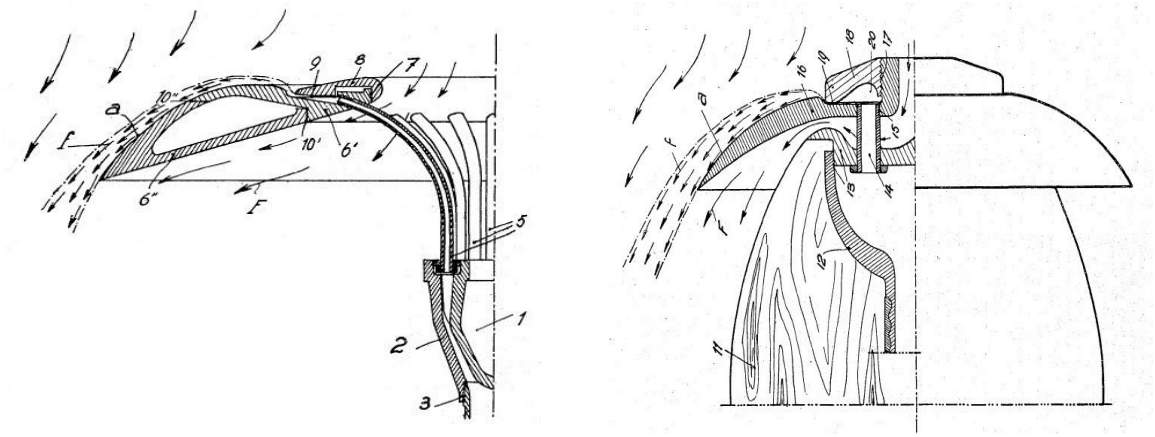
Before I continue onto the next phase of development with this craft I'll speak briefly about the founder of the effect that allows the craft to fly - Romanian Aerodynamicist Henri Marie Coanda.

Henri Coanda was born in Bucharest in 1886. The son of a mathematician he was always fascinated by the power of the wind and attained his aeronautical degree at École Nationale Supérieure de l'Aéronautique et de l'Espace in Paris in 1909. In 1910 he built the world's first jet aero plane and flew it at the Paris Air Show. Below are pictures of Henri and his plane (called the 1910).

Coanda went on to build many aeroplanes and patented dozens of devices. His effect is widely used in both industry and aviation. Below is a description of the Coanda Effect.

> ***"A stream of air (or any other fluid) emerging from a nozzle tends to follow a nearby curved surface, if the curvature of that surface is not too great"***

One of Henri's lifelong passions was his interest in designing a disc-shaped VTOL craft. His 1938 patent titled Propelling Device (USP 2108652) showed how this was to be accomplished. Illustrations from the patent are below and you can easily see the desired shape of the craft and the intended airflows.



It can be clearly seen from these illustration that Coanda intended the flow to extend outward from the centre of a curved disc-shape. This would impart thrust on the surface or what is commonly known as lift. The Avrocar DID NOT use the top surface of the craft as a lifting surface as Henri himself advised. Instead it used its 3 massive jet engines to thrust out along the bottom outer edge of the craft which then ultimately gave a hover-craft effect and would never have lifted the 5,650 lb machine into the air.

Astro Kinetics on the other hand DID use the effect as Henri suggested and directed the airflow over the top surface of the craft thereby allowing the much lighter 1,070 lb Astro V Dynafan to succeed.
So this was the key to making this craft successful; Airflow over the TOP of a much LIGHTER craft.

Incidentally Henri was never able to get his saucer craft built and I believe it may have been because he made the same fatal mistake as Astro Kinetics. In the hope of attracting investors by describing the advantages of his craft he inadvertently alerted the very people who did not want the average person to have this technology.

The next major step forward in this story came in about 2004 when a UK company called GFS Projects posted video on the net of small disc-shaped models flying around their Peterborough workshop. They were actually small versions of the Dynafan and worked in exactly the same way. So here was validation of the AK craft some 40 years later! Below are pictures of the GFS models.

Notice all the previous models on the wall behind the above left photo. GFS Projects - which actually stood for Geoff's Flying Saucer Projects - was founded by retired hovercraft engineer Geoff Hatton. He initially obtained over $300,000 in private and public funding after showing the concept to be viable with the jig-based demonstration shown below.

The blue disc-shaped lifting body rose up and down in the jig shown on the left as this was before they had achieved freely flying autonomous models.

This showed that a disc-shaped lifting body was possible and did not impede the thrust generated by the prop. The concept was then further validated by Cambridge University Aeronautical Professor Holger Babinsky.

GFS then went on to build dozens of small flying models that all functioned exactly like the AK machines of the early 60's. They posted several more videos on the net that are still there today. Below are two links to see these actual models flying. They are both early prototypes that still used protruding anti-torque fins and directional flaps.

https://www.youtube.com/watch?v=CBbPVB11Wis

This gives a great demonstration of the flight characteristics of this form of craft. The lateral speeds and manoeuvrability easily mimic a helicopter. In some instances they even appear superior.

GFS went through many changes in the ensuing years as they continued to refine and test this unique form of VTOL craft.

Around this time GFS Projects were re-financed by a private investor who then changed their name to "Aesir". Apparently this new backer had an interest in Norse mythology so all models then acquired a Viking flavour.

The next YouTube video was similar to the first but it specifically showed several other inherent characteristics of these craft. Below is a picture taken from this video showing a government official pushing the yellow 15lb 13E as it hovers lazily next to him.

The 13E is a great model. The yellow segmented body is made from plywood and the fan is actually a Toyota radiator fan housed inside a black plastic duct (see below). It uses a small brushless electric motor with Lipo batteries.

The black plastic shroud at the front was an experiment to increase lateral speeds but this was later found to be unnecessary. Check this amazing model out at:

https://www.youtube.com/watch?v=KXVtUCABiv8

Aesir then changed gear and their models upgraded to carbon fibre bodies. Below is the first of these called Embla. It was featured in the April 10th 2010 edition of Australian Popular Science.

THE FUTURE OF DRONES

SPECIES
RQ-170 SENTINEL
SPY PHOTO
SPECS
Weight undisclosed, estimated wingspan 19-27 metres
CLASS STEALTH

HABITAT Migrating from its suspected home base at Kandahar Airfield, Afghanistan, this top-secret military spy drone makes classified sorties into enemy terrain.
BEHAVIOUR An offspring of Lockheed Martin's Skunk Works program, the RQ-170 Sentinel flies via satellite link from a base in Nevada, USA, but little else is know about it. In unofficial photographs, it closely resembles a 1945 Luftwaffe design called the Horten Ho 229.
NOTABLE FEATURE Sensor pods built into the edge of its wings probably give it surveillance capabilities, and the absence of a wing-mounted weapons payload likely keeps it light and off the radar.
DIET Jet fuel

SPECIES
EMBLA
SPECS
5 kilograms, 60-centimeter diameter
CLASS HOVERCRAFT

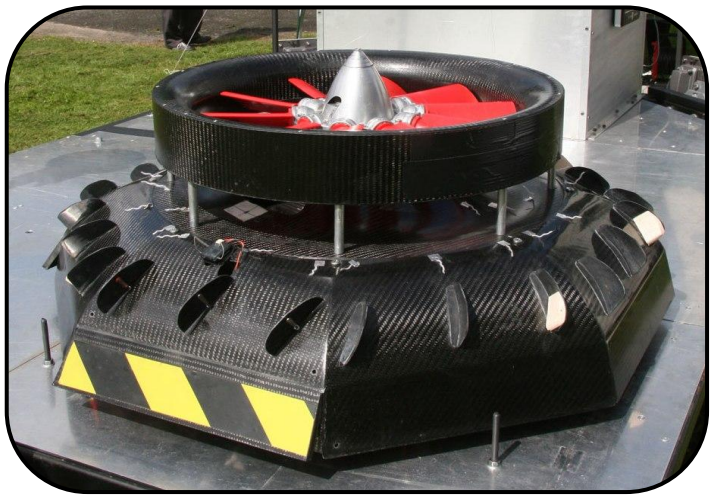
HABITAT Afghanistan and disaster zones, starting in June, according to British manufacturer Aesir. About the size and shape of a spare tyre, the Embla lifts straight up from the ground without the need for a runway, making it more useful to combat soldiers stationed in rough terrain. Its diminutive size lets it zoom down urban canyons to find hard-to-reach enemy hideouts, and it can send video to a remote PDA-sized controller, revealing potential ambushes. Loaded with explosives, it could even enter an enemy compound on a suicide mission. Yet it's not exclusively a military breed—Embla's manoeuvrability makes it a good scout in emergency scenarios too dangerous for humans to enter.
BEHAVIOUR The Embla can change direction on a dime, fly at 80km/h, and climb to 3,000 metres. It also has the ability to hover in place to, for instance, transmit encrypted HD video.
NOTABLE FEATURE Whereas a ducted fan funnels air straight down to generate lift, the Embla's turbine sucks air in through its top and forces it out through a skirt-like wing. This design bends the flow towards the ground. This makes Embla strong enough to carry cameras, weapons and sensors on its belly, oriented toward the terrain it's watching.
DIET JP-8 jet propellant, run through an internal combustion engine, powers Embla for one hour.

SPECS
16-kilogram, 5-metre wingspan

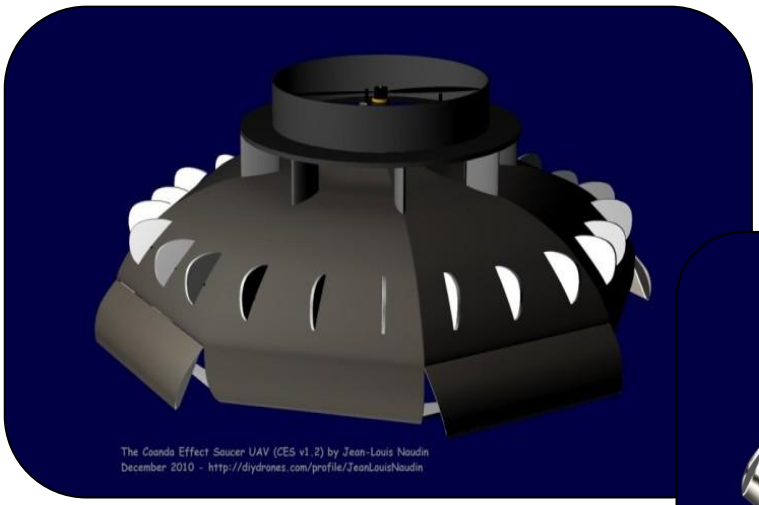
SPECIES
ION TIGER
CLASS ENDURANCE

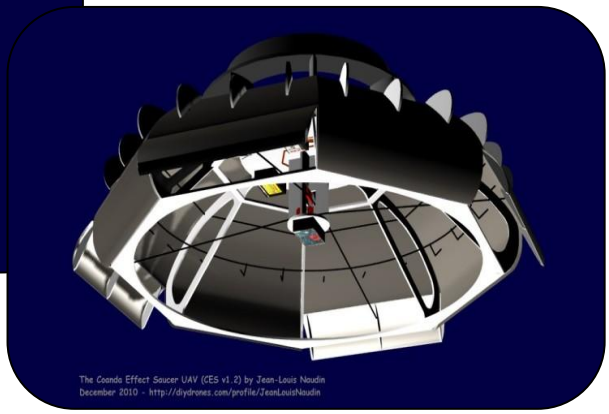
HABITAT Europe, potentially, from which it could reach the Middle East, once the the fuel-cell technology is perfected. It could fly as low as 300 metres without being heard on the ground, or as high as 4,200 metres.
BEHAVIOUR Its ability to stay aloft for 24 hours allows the Ion Tiger to encroach on the terrain of much bigger birds, such as the Predator, and its small size lets it get closer to a target to shoot footage with its lighter camera.
NOTABLE FEATURE Its carbon-wrapped aluminium hydrogen tanks weigh only about 4 kilograms each, which helps this UAV stay airborne longer.
DIET Hydrogen ions

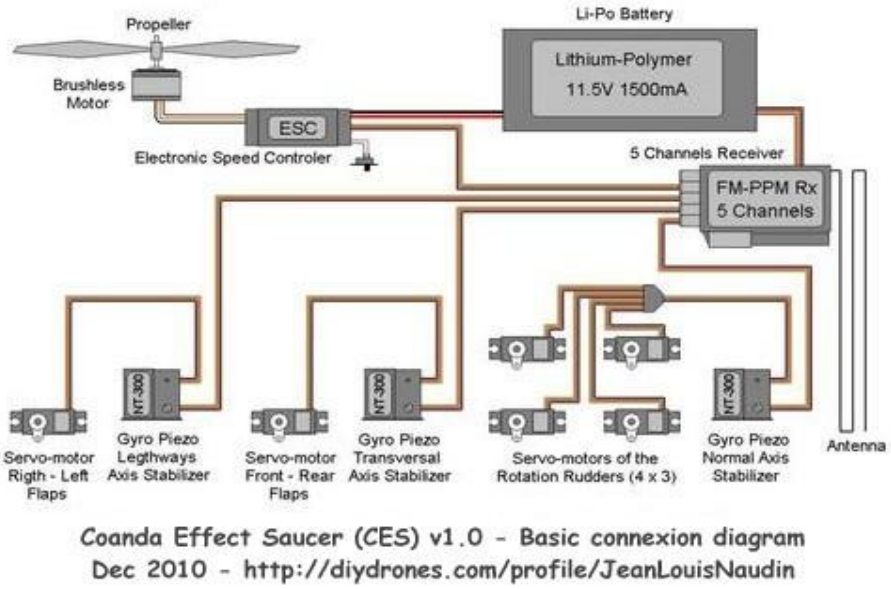
After this model Aesir started using internal combustion engines for their greater power-to-weight ratio. Interestingly this has now changed and brushless electric enthusiasts world-wide are now swapping out their IC (Internal Combustion) drive trains for the equivalent and sometimes superior electric alternative.
Below are pictures of their next model - the amazing Fenstar.



Around this time another independent researcher called Jean Louis Naudin was also researching and building this type of craft. He contributed greatly to this concept in many ways. Firstly he built his own foam version then posted complete plans on the net - see the CAD version below.

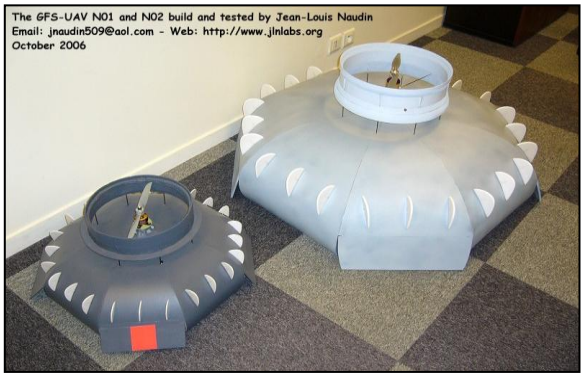


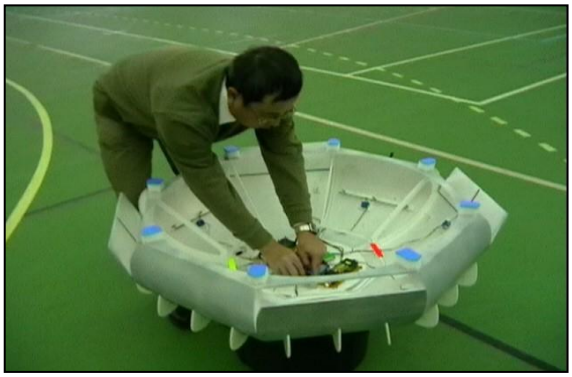




Coanda Effect Saucer (CES) v1.0 - Basic connexion diagram
Dec 2010 - http://diydrones.com/profile/JeanLouisNaudin

Jean Louis built and flew both a small and large version of this. See below. The pic on the right shows him preparing the large saucer for flight.

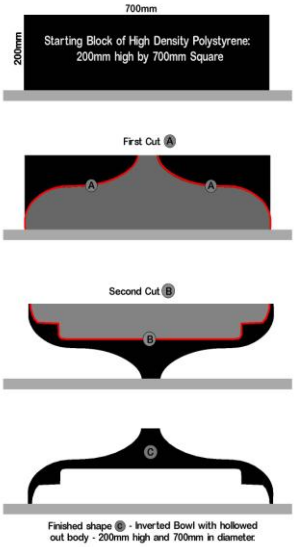




The Discover® Hotwire Cutter

I built Jean Louis' version of this craft off his plans but found during the construction that the thin Depron foam he recommended for the body was incredibly flimsy and weak. This combined with the internal framing he proposed really compromised his design and in fact caused many builders to disregard the craft. So I searched for and found a great alternative.

In the building industry it is common nowadays to make entrance pillars out of Styrofoam then paint them with a stucco finish so they resemble authentic stone or marble pillars. These sit on a circular base that is also cut out of foam using a unique circular hotwire cutter called a base cutter. These consist of a speed-controlled, rotating circular base on which the foam block sits and a shaped hot wire is the introduced from the side or from above. As the block rotates the circular shape is cut out to the shape the wire is initially formed to. Below is a commercial base cutter.

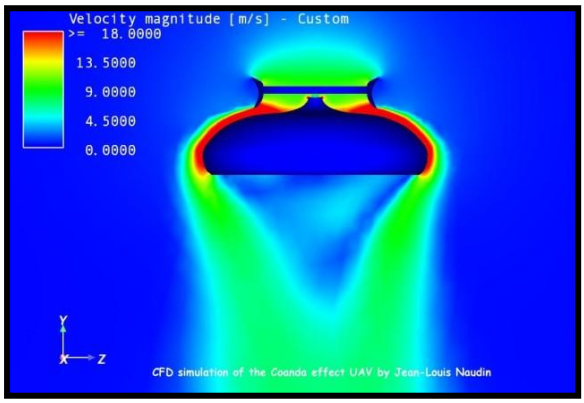


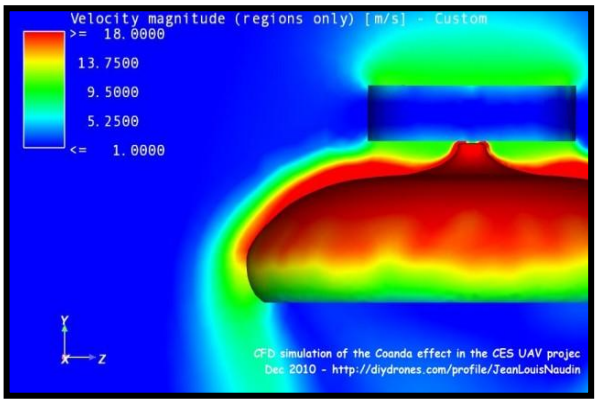
As you can see by the diagram on the right above it is quite easy to cut one of these craft out of a block of High Density Styrofoam if the rotating base has a central shaft that the foam can be positioned on. In other words the top profile is cut off, then the block is flipped on the central shaft to cut out the bottom profile. This has many benefits over Jean Louis' approach such as:

- ***One piece circular construction.***
- ***No internal framing needed.***
- ***Completely circular body and not segmented at all.***
- ***Pitch, Roll & Yaw flaps are simply cut out of the body and tape hinged.***

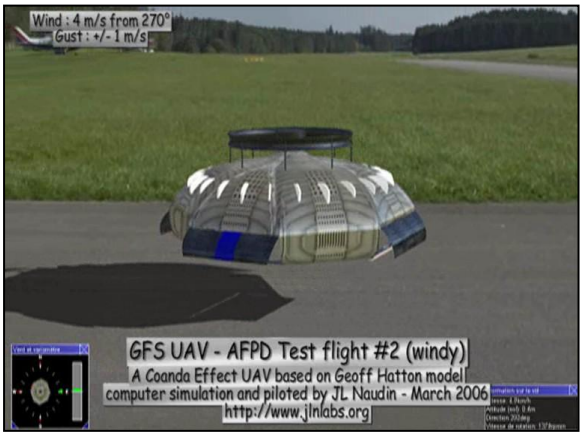
The picture below shows a custom hotwire transformer that I've built that is capable of cutting out up to a 6 metre foam saucer profile. This can be used as a large RC foam model or as a plug for a carbon fibre version.

So this method of building the body simply refines and improves JL's approach. Jean Louie went on to contribute many great innovations to this craft's development. He ran the craft's profile through a CFD (Computational Fluid Dynamics) analysis that yielded the airflow results shown below. You can see the high velocity air in red which indicates lowered pressure or lift.





He also put the dimensions of the model into a flight simulation program called AFPD (Aerofly Pro Deluxe). Once in this program a model will behave just like it does in real life. The reality of it allows users to transition seamlessly from the program to real life. Below is a picture taken from the video showing the craft flying in AFPD plus the specs of the particular model next to it.



Diameter : 1 meter
Weight : 1.8 kg
Engine : Electric powered with a high efficiency brushless motor (outrunner - 800 Watts)
Battery : High Power Lithium Polymer (LiPo 6S1P 4000 mA)
Speed controller : 70 A opto 3P
Gyro : GY 401 Piezo type with heading lock feature
Servos : 5 mini-servo MG
Receiver : 7 channels

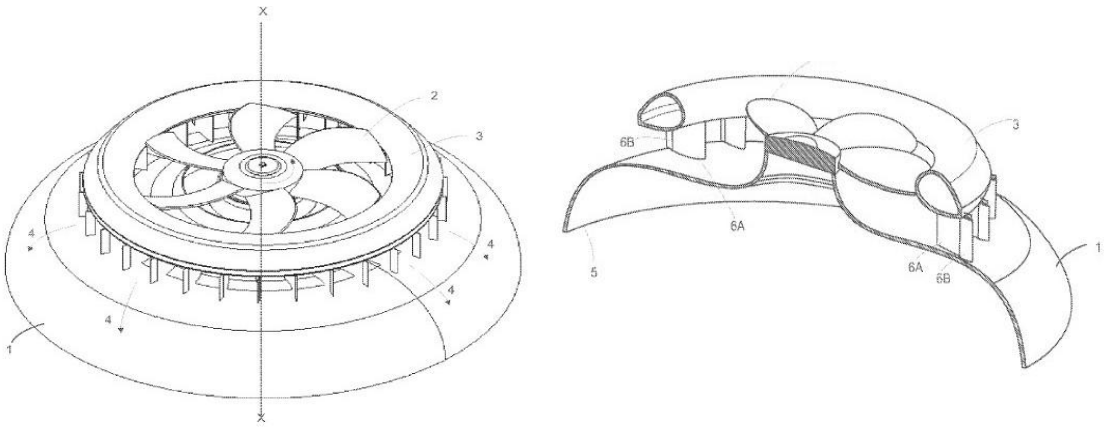
The significance of the craft in this simulation program is that this is a very accurate representation of how such a model would actually fly in real life.

JL also put the craft into a flight simulation program that you could hook up your RC controls to and fly the saucer on your computer. This was great fun and gave a good feel as to how these things behave. Below is his saucer profile in this program called FMS (Flying Model Simulator).

Jean Louie has contributed much to this concept and along with Aesir is one of the great contributors to the further development of this form of craft.

Before I show Aesir's next models there is another person that needs to be introduced. Professor Holger Babinsky is the Head Aerodynamics professor at Cambridge University in the UK. He advised GFS early on in their development and was integral to them obtaining the large private and public funding they needed to proceed.

He has stated that the concept is totally scalable. This means that manned versions are possible. This means that in fact this type of craft is a new and viable form of VTOL craft in the same realm as helicopters. His 2012 patent titled "Craft and method for assembling craft with controlled spin" (US 2012/0068021 A1) outlines a brilliant method for using the one set of vanes for anti-torque as well as direction thereby simplifying the concept even more. The diagrams below are from this patent and I'll attach the complete version as well.



His innovation is basically this. The multiple fins or vanes you can see supporting the main fan housing are divided into four quadrants. As a single quadrant is manipulated to slightly decrease the airflow over a quarter of the craft, this serves to dip the body. These same fins also counter main fan torque at the same time so now one set of fins perform two functions and radically unclutter the

main body in the process. Aesir used this method in their next craft and the excerpt below is from their Chief Technical Director Chris Newline:

"Each of the vertical vanes is tipped by a moving fishtail section, which can move from side to side, directing the airflow and adjusting the lift distribution. We're calling this a form of vectored thrust — it performs the same function as the moving stator vanes and the flaps on the previous models by altering where the airflow goes. It simplifies the assembly and means that we can have a circular canopy rather than an octagonal one". *- **Aesir** Chief Technical Director Chris Newline*

So...now we have a craft that is disc-shaped, completely smooth with one engine and one set of control surfaces. As can be seen on the right above the inside of the craft now forms a hollow dome-shaped structure. All this on a craft that one of the world's leading Aerodynamicists has stated is TOTALLY SCALABLE...

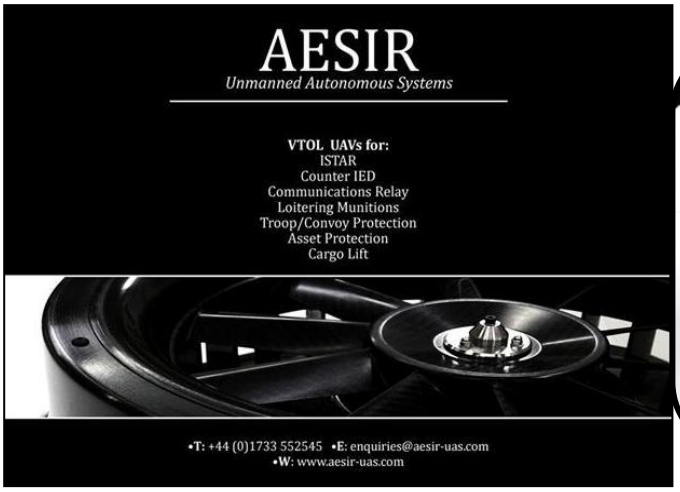
So now back to Aesir. The next models they showed on the net really demonstrated where this concept could go. The 1 metre wide Odin weighed 10 kgs and could lift an additional 10 kgs for up to 1 hour. It had a completely smooth, circular body that utilised the "thrust vectoring cassettes" spoken about above. So it had no protruding fins or vanes at all and was powered by a miniature Wankel rotary engine that ran on JP8 jet fuel.

What an amazing achievement. This craft had the same flight characteristics as a helicopter but NONE of the liabilities. The next craft they proposed was a heavy lift vehicle called Hoder. It was a twin-prop version but was offered in this configuration simply to accommodate larger payloads. In other words a medium sized manned version could easily be circular and not oval shaped.

A full sized version of Hoder would have weighed 1.5 tonnes and have been capable of lifting a 1 tonne payload for 8 hours. This model also used the thrust vectoring cassettes mentioned on Odin.

A large Hoder model was displayed at the 2010 Farnborough Air Show and generated much interest. Below is a picture of this taken at the show.

Not long after this showing of Hoder and Odin in 2010, Aesir disappeared. Their website, shown below was totally dead and remains exactly the same 6 years later (http://www.aesir-uas.co.uk/). The picture on the right shows the model used in the website photo. This was the last model to use a segmented body with separate directional flaps that proceeded Odin and Hoder.



<u>Summary so far…</u>

Up to this point we can see the following facts:

- *The Astro Kinetics craft were probably the first successful, manned, disc-shaped craft with full VTOL capabilities built.*
- *Regardless of the actual reason they disappeared and the development of this type of craft was halted for many years.*
- *Approx. 40 years later GFS Projects, and then later Aesir, re-discovered the concept and developed it even further to the point of smooth, completely circular disc-shaped craft.*
- *One of the world's leading Aerodynamists, Professor Holger Babinsky, has stated that the concept is completely scalable.*
- *The craft are inherently stable and easy to fly.*
- *Because of their shape they are not only easy to build but structurally very strong.*

About 2 years ago I decided to take the development of this craft to its logical conclusion. This was only on paper and using 3D modelling. I also used current, available technologies to show, what I believe, is possible with this form of VTOL craft. When I had finished and the possibilities of this craft dawned on me, I realised what a game changer it would be to the existing transportation paradigm.

Composites like Carbon Fibre have revolutionised transport but it is only in the last decade or so that electric motor and battery technology has also progressed to the point of a real and viable alternative to the present fuel-based paradigm. Other developments like LED lighting and highly efficient solar panels are adding to the possibilities.

If we now take the combined experience of Henri Coanda, Astro Kinetics and Aesir then combine them with the latest advancements in Electric transportation and aviation we can see just what kind of vehicle is possible. I have named my version of this craft the Discover®. This is in reference to how the air flows over the top surface of the disc - Disc-over.

The Discover® Saucer is extremely simple but in that simplicity lays its true power. It embodies true freedom and empowerment. It could completely change the planet and how humans interact. Entrenched Government control would gently fade away and in its place would be a vast system of powerful, autonomous, connected individuals.

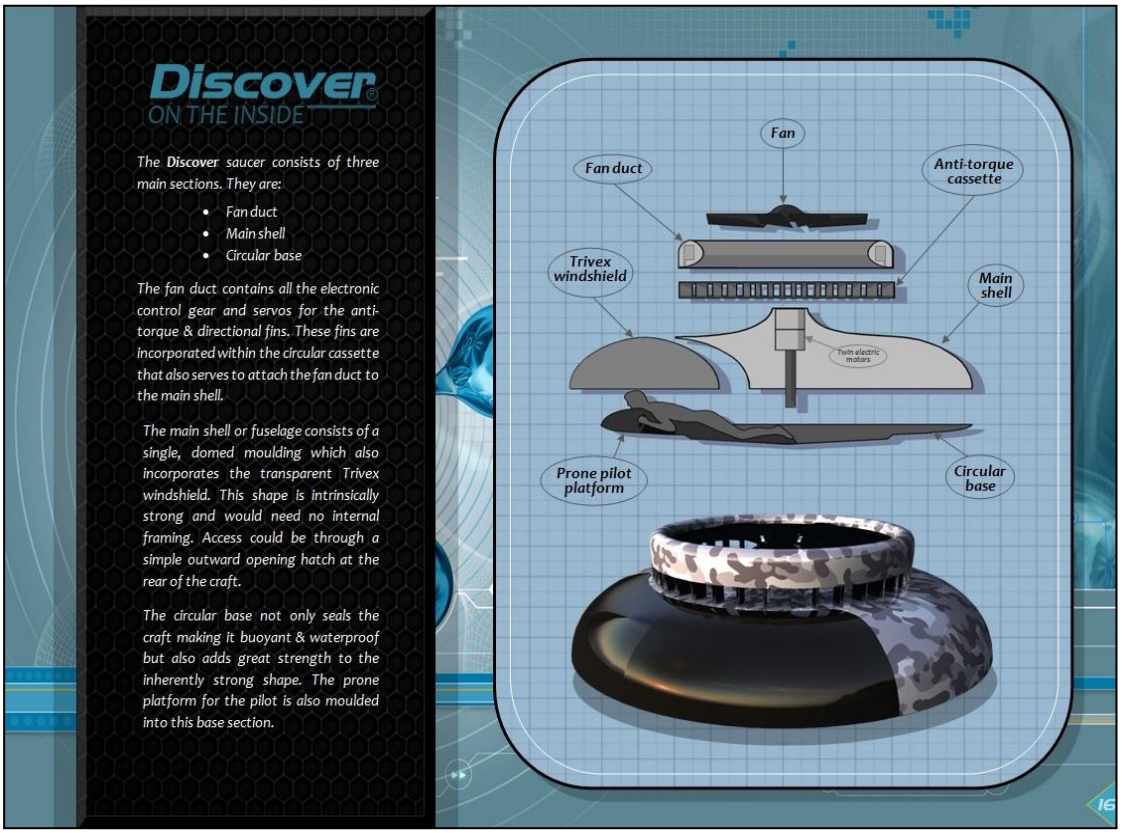
The initial models of the Discover® Saucer will be approximately 6 meters in diameter. This will be a thin, lightweight composite dome structure that has no internal framing apart from intermittent composite ribbing where necessary. Approximately 1 third of this shell will be moulded in self-tinting Trivex®. The bottom will be enclosed with a foam-sandwich base so that the craft is extremely strong and can also float. The remaining two thirds of the composite canopy will be imbedded with highly efficient thin-film solar cells that make the outside of the craft a power generating surface.

In its ideal embodiment the main rotor will be driven by twin brushless motors attached to a large, Lipo battery pack and controller. Until batteries become more efficient in the near future, a small, multi-fuelled REG (Range Extending Generator) will be needed to give the craft comparable distance capabilities to that of standard helicopters - the Bladon® REG would be perfect. For optimal safety twin BRS (Ballistic Recovery Systems) will be also be installed.

All the above technology is proven, tested and compatible with this concept. The inbuilt solar panels within the composite shell would recharge the main batteries but also provide power for lighting, internet connection or entertainment.

Other materials coming out like Bucky Paper will only make the concept more viable as well. Bucky Paper with highly efficient batteries and solar cells will make electric vehicles very viable but the next step from viable electric vehicles is the Discover® Saucer as it will replace them all!

As a personal vehicle Discover® replaces cars, motorbikes, helicopters, aeroplanes and boats and not only that but it also provides a self-powered shelter. In essence it's a dome structure with a large prop on the top. Below are some fictional scenarios I created to show the raw freedom possible with this kind of craft. Quite literally no place on earth would be inaccessible.



Conclusion

I believe the Discover® Saucer is entirely possible to build. I also believe that it has the potential to radically alter society as a whole. In essence it is just a thin, light composite shell but because of its shape and enclosed base it is extremely strong. It derives its lift from three areas - the fan, the top Coanda surface and thrust as the airflow leaves the edge of the craft.

Building the craft would be the epitome of simple with three main composite mouldings - The fan duct, the main shell and the base along with the front-facing Trivex window. All anti-torque and directional surfaces would be contained within the exit duct cassette shown in the exploded view above.
There are three main reasons why I've suggested that the pilot lays in a prone position. Firstly, this position allows their head to be right up front near the rim of the saucer so that during lateral translation, when the craft dips, visibility would be optimal. Secondly the platform on which they lay could be moulded as part of the base further simplifying the construction process. Thirdly, the prone position radically reduces the upright profile of the pilot making the internal space more usable.

In this story I have not included details of current innovations within the electric vehicle and electric aviation industries. Proven and working concepts such as Rimac Concept One, Yuneec Electric Aircraft, eHung 184 manned drone, Sunflyer & Solar impulse, D-Dalus, NASA Puffin, Falx Tilt Rotor, Synergy and the Jaguar C-X75 all point the way towards the pinnacle of the Discover® Saucer.

The next step...

Henri Coanda, Astro Kinetics, Aesir and JL Naudin have already done the lion's share of R & D on this craft. I believe the logical next step will be to build a 1 metre wide version of the Odin that

incorporates the Discover® innovations that I've suggested such as the transparent body section and enclosed base.

Presently I am working on achieving this but with limited resources the progress is slow. Unfortunately there is a Catch 22 here that may prevent potential investors and it is this. I have shown in the above story that after 17 years involvement with this craft I believe there is a concerted effort to stop development of this craft after a certain point. That point appears to be when the developers reach the point of manned versions. Manned versions are what put the fear of God into those that control our society. A populace with cheap, easy to build and fly VTOL craft that don't rely on the fuel-based infrastructure is quite literally the end of any type of control.

But here in lays the problem of investing in this. To make money off a toy version for example one would have to enter the social arena in a big way. As I've shown I believe this to be a big risk.

A far more certain way to give this gift to humanity would be to develop the 1 metre version in relative secrecy then proceed to a small manned version. Then present the manned version in a controversial and explosive way such as landing it in the Sydney Cricket Ground during a Grand Final or something similar where it can be seen by all and not maligned or misinterpreted. Obviously this would require a brave, courageous individual that values people's individual sovereignty over repressive government regulations. At the same time I would flood the internet with complete specifications and blueprints of the craft. These two things together would give massive instant legitimacy and building guidelines thus making any further repression impossible.

Am I recommending breaking the law? Well I see no other alternative that would not halt progress and yet again we would all be deprived of this amazing craft. So who would finance building this in secret, not for profit, but for the liberation of their fellow man? I would guess not very many at all...and there in lays the problem. Even writing a book outlining the concept in great detail could possibly go nowhere as well but perhaps a book would ignite the interest of a suitable altruistic investor.

Regardless of all that, I'm now working on a 1 metre wide version as nothing is as convincing as a "robust demonstrator" in terms of gaining any assistance.

I am willing to listen to any suggestions from anyone who can help in building Discover®. I can be contacted on 0403 531 971 or at jamesdobson@y7mail.com.

Thanks for taking the time to read my story - James Dobson 2016