

Austrian company debuts revolutionary wingless aircraft

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(PhysOrg.com) -- A firm from Austria, Austrian Innovative Aeronautical Technology (IAT21) has unveiled a new type of aircraft that flies without wings or rotors, at the Paris Air Show. Though not actually flown at the show, spokesmen for the new aircraft, named D-Dalus (no doubt after the tragic Greek figure Daedalus, who lost his son Icarus when his wings melted as he flew too close to the sun) claim the aircraft is capable of both hovering and flying forward as fast as a jet, all

with very little noise.

The [new technology](#) is actually based on old technology; it flies by means of rotating discs surrounded by blades whose angle of attack can be altered in flight. The discs are spun by means of a conventional [airplane engine](#). What's new is the computer and software that controls the blades, allowing for very precise flying. The company says D-Dalus can hover next to a wall, maneuver through buildings or even lay still atop a moving bobbing ship in bad weather by pushing itself down against the deck.

The power comes from its four 2200-rpm turbines and can be thrust in any of 360 degrees, allowing the D-Dalus to launch vertically, hover, dart around and to remain stable even in turbulent conditions. The company also says the craft requires very little maintenance and would be cheaper than current vertical takeoff aircraft and because of its new “friction free bearing at the points of high G force” the craft should be, according to the company, as quiet as a whisper.

So far, the D-Dalus is still just a prototype, and has been flown only in a laboratory near Salzburg as a pilotless drone. In its current configuration, it has five foot (about a meter and a half) long turbines and is capable of carrying 150 pounds (70kg) of cargo. Information on the company [website](#) indicates that the initial primary use for such a vehicle would be to assist in search and rescue operations at sea or after disasters, or possibly for surveillance; though it leaves open the door to the possibility of scaling the [aircraft](#) up enough in size to accommodate passengers.

IAT21 has formed a partnership with Cranfield University in the UK to work through flight certification. If all goes according to plan, the D-Dalus should be ready for viewing by others very soon.

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