In article <C4zHKw.3Dn@zoo.toronto.edu>, henry@zoo.toronto.edu (Henry Spencer) writes:

> In article <2736@snap> paj@uk.co.gec-mrc (Paul Johnson) writes:

>>This bit interests me. How much automatic control is there? Is it

>>purely autonomous or is there some degree of ground control?

> The "stick-and-rudder man" is always the onboard computer. The computer

> normally gets its orders from a stored program, but they can be overridden

> from the ground.

>>How is

>>the transition from aerodynamic flight (if thats what it is) to hover

>>accomplished? This is the really new part...

> It's also one of the tricky parts. There are four different ideas, and

> DC-X will probably end up trying all of them. (This is from talking to

> Mitch Burnside Clapp, who's one of the DC-X test pilots, at Making Orbit.)

> (1) Pop a drogue chute from the nose, light the engines once the thing

> stabilizes base-first. Simple and reliable. Heavy shock loads

> on an area of structure that doesn't otherwise carry major loads.

> Needs a door in the "hot" part of the structure, a door whose

> operation is mission-critical.

> (2) Switch off pitch stability -- the DC is aerodynamically unstable at

> subsonic speeds -- wait for it to flip, and catch it at 180

> degrees, then light engines. A bit scary.

> (3) Light the engines and use thrust vectoring to push the tail around.

> Probably the preferred method in the long run. Tricky because

> of the fuel-feed plumbing: the fuel will start off in the tops

> of the tanks, then slop down to the bottoms during the flip.

> Keeping the engines properly fed will be complicated.

> (4) Build up speed in a dive, then pull up hard (losing a lot of speed,

> this thing's L/D is not that great) until it's headed up and

> the vertical velocity drops to zero, at which point it starts

> to fall tail-first. Light engines. Also a bit scary, and you

> probably don't have enough altitude left to try again.

> All work is one man's work. | Henry Spencer @ U of Toronto Zoology

> - Kipling | henry@zoo.toronto.edu utzoo!henry

Since the DC-X is to take off horizontal, why not land that way??

Why do the Martian Landing thing.. Or am I missing something.. Don't know to much about DC-X and such.. (overly obvious?).

Why not just fall to earth like the russian crafts?? Parachute in then...

Michael Adams, nsmca@acad3.alaska.edu -- I'm not high, just jacked

Please enlighten me... Ignorance is easy to correct. make a mistake and everyone will let you know you messed up..