## Moller International Freedom Motors April 2016 Newsletter

To: All Newsletter Subscribers

From: Paul S. Moller

Re: Update

## **Moller International**

In my February newsletter and following addendum, I clarified the process that must be followed to obtain FAA approval of a new aircraft design. Following a review of the options, management decided that operating the Neuera 200 in ground effect for a number of hours would add credibility to the subsequent FAA approval process. This is our present plan which also ensures a low risk approach during the initial demonstration and test flight phase.

The February newsletter voiced some concern that unexpected FAA requirements had been added and others may be added. While this caused some delay, a much more significant factor was the decision to move Freedom Motors into a new facility in Dixon, CA. FM needs to be seen as an independent corporation in the eyes of potential Reg. A+ investors, and for this reason it was deemed necessary to physically and financially separate FM from MI. If FM's Reg. A+ Offering is fully funded it will be able to reimburse MI for engine development work it did under contract. These funds are critical if MI is to continue developing the Neuera 200.

The following Neuera 200 improvements are in process prior to Neuera 200 ground effect flights.

- Improving the aerodynamic efficiency of the flow through ducts (improves payload)
- Improving the precision of fuel level warning (improves safety)
- Reducing the electromagnetic interference between the ignition system (capacitance discharge) and the flight control systems (FCS). This reliability issue is uniquely complicated in the Neuera 200 where a FCS is assigned to each engine and consequently operates in close proximity to one another. This potential problem is not faced by pure electric powered manned and unmanned VTOL aircraft or turbine engine powered aircraft which do not need continuously operating ignition systems. MI had previously solved this problem with a custom designed FCS using machine language software and appropriate hardware. Taking advantage of the recent low cost FCS from the drone industry did create some expected integration problems, but reduced the FCS cost by an order of magnitude and allowed the failure of one of eight engines or one of eight FCS to have non-consequential effect on the safely of flight during hover.

For more information, please visit the newly designed www.Moller.com

## **Freedom Motors**

FM's goal is to put three displacement models of its Rotapower® engine into volume production. This will be accomplished in part through domestic and/or foreign joint ventures. For example, the \$200 billion per year motorscooter/motorcycle market is predominantly outside North America and therefore these engines must, for economic and transport reasons, be produced in that region. Freedom Motors is working with a potential foreign JV partner to produce <a href="mailto:150cc displacement">150cc displacement</a> engines for their regional motorscooter/motorcycle market. This follows a conditional order for over 1 million engines per year (less than 1% of the potential world market).

One kilowatt co-gensets are ideal candidates to utilize out <u>27cc displacement</u> engine. The US government predicts that his product will generate a \$240 billion market as home hot water provider and electrical supplier to the national grid.

The third engine to be produced is our modular <u>530cc displacement</u> per rotor engine, with multi-rotor configurations up to 450 hp. This model provides the high power to weight required for the Neuera and Skycar® volantors. Many other applications will also benefit from the Rotapower® engine's low vibration, emissions, fuel consumption, and noise. FM plans to join forces with an experienced manufacturing firm in order to accelerate the mass production of these three initial displacement models.

The Freedom Motors executive summary from its business plan is posted on the FM website. It shows that there is a substantial financial benefit to MI if FM is able to raise \$20 million through its Reg. A+ offering. To this end, FM has selected <a href="StartEngine.com">StartEngine.com</a> as the platform for the Offering, and has hired <a href="Advertising-Partners">Advertising-Partners</a>, a top advertising firm, to manage the PR/Marketing efforts of the offering.

For more information, please visit the newly designed <u>www.Freedom-Motors.com</u>