

Moller International and Freedom Motors Newsletter

March 2015

To: All Newsletter Subscribers

From: P.S. Moller

Re: Update on Moller International and Freedom Motors

Moller International

Our new website is up and running. If you notice anything that you think could be more improved or seems incorrect, please let us know.

While much of our time has been devoted to preparing for engine production in conjunction with contracted work from Freedom Motors, we have achieved the following accomplishments since my last newsletter:

- Developed and flown a battery powered drone that is a scaled down version of the Firefly.
- Contracted to have powered models of the Skycar 400 produced in China after Mr. Decker failed to produce a working model. It is expected that this model should sell for around \$600.
- Committed to upgrading the M200 Neuera to enable it to be flown without a tether. This includes:
 1. Installation of airbags that are explosively deployed under the Neuera. This is important because a hard landing could injure the pilot's back, even if it did not damage the Neuera.
 2. Installation of 8 separate, off the shelf, flight computers as part of the flight control system (FCS). This is an attractive departure from the redundant system used earlier and takes advantage of the low cost of the latest FCS in the drone market. We know from tests that we can operate with an engine failed and therefore a single computer failure can be tolerated.
 3. Replace the carburetors previously used with throttle body fuel injectors as used in the M400 Skycar.

This sounds like a lot to do but it can be done quickly because there is no designing involved (about 120 man days).

- Drones (Aerobots)

Moller International has previously delivered many different versions of its aerobots to various branches of US government both military and civilian. We were clearly ahead of the general market that is now developing along with guidelines for their operation. We are exploring the opportunity to acquire a joint venture partner to exploit our expertise in this area, I am sure you are all familiar with the incredible displays that battery powered small drones can do. You should also know that they fly slowly for short distances with small payloads. Nothing that has been demonstrated comes close in speed, payload or range compared with our fuel powered aerobots. We will have a section on Aerobots added to our website shortly.



Freedom Motors

The Reg A offering is on its way to the SEC. This will allow Freedom Motors to raise \$2.5 million. Our EB5 funding program has all required documents completed. The only thing left is to clear the backgrounds of 20 potential investors located in China who are candidates for a green card. The engine production facility is being set up in West Sacramento which qualifies as a high unemployment zone as required for EB5 funding. It is only 10 minutes away from our present facility which will remain in use for our engine development and testing. As a result for our development contract with Alife to integrate our 150cc engine into their ABIKE scooter, Freedom Motors actually made a profit in the December 31st ending quarter.

The following are the differences between the original ABIKE and that with our 150cc engine:

Acceleration 0-50km per hour

Original = 7sec

Rotary = 4 sec

Radial Vibration (probably the major attribute)

Original = very unpleasant

Rotary = essentially zero

Engine Weight

Original = 70lbs

Rotary = 20lbs

Engine Volume

Original = 1 cubic ft

Rotary = 0.35 cubic ft

Engine Start

Original = requires one minute warm up

Rotary = can operate immediately due to pre heating fuel/air by rotor

Emissions

Original = needs to run rich to save valves (true to all piston engines)

Rotary = has no valves and can run very lean and does not hurt performance because has so much extra power. A lean mixture helps eliminate hydro-carbons and carbon monoxide toxic emissions

Torsional Vibration

Original = single cylinder piston engine with typically very high peak to mean torque

Rotary = equivalent to 3 cylinder piston engine in torsional vibration

Cost

We have not had a quote from China for producing our 150cc engine in very large numbers but we did develop a 27cc engine for Riobi where they determined that when produced at one million units per year the cost would be essentially identical to that for the 2 cycle piston engine it would replace. A 2 cycle engine generally costs about 40% less than a 4 cycle engine. In 2015 the world will require 75 million motorscooters/motorcycles. This translates into \$100 billion in scooter/motorcycle sales or up to \$25 billion in engine sales.

We believe that anyone who rode our engine powered scooter would never seriously consider purchasing a piston powered model.

Moller International and Freedom Motors Relationship

MI exclusively licensed its Rotapower engine production and distribution to FM except for aircraft and ducted fans. Freedom has identified market opportunities leading to conditional orders for over 3.5 million engines. Over one million of these are from Alife Automotive who is also contracting with Freedom Motors to acquire 66% of its first year engine production. FM's agreement with MI provides for a 5% royalty on engine sales and 30% of any revenue FM receives from sub-license agreements it makes. FM has contracted MI to provide all engine development and now owes MI approximately \$4 million for these services.

Funds received by FM from its \$10 million in EB5 funding program will be used exclusively to create engine production capability. By agreement in the Reg A offering documents 15% of the funds received by FM can be used to reduce its debt to MI. If the total of \$2.5 million is received, \$375,000 will be available to MI which is more than sufficient to make the planned changes to the M200 Neuera. We need considerable more funds to prepare the M400 Skycar for a public demonstration.

If you are interested in knowing when Freedom Motors Reg A offering becomes effective, please let us know.

Additional sources of information on the volators include TED talk:

http://www.ted.com/talks/paul_moller_on_the_skycar?language=en

Huffington Post online article:

http://www.huffingtonpost.com/billrobinson/techfuture-hold-on-paul-m_b_5092345.html

Except for historic information contained in this release, the statements in this news release are forward-looking statements that are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements involve known and unknown risks and uncertainties, which may cause a company's actual results in the future to differ materially from forecasted results. These risks and uncertainties include, among other things, the company's ability to attract qualified management, raise sufficient capital to execute its business plan, and effectively compete against similar companies.