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# **MISTER**

Metropolitan Individual System of Transportation on an Elevated Rail

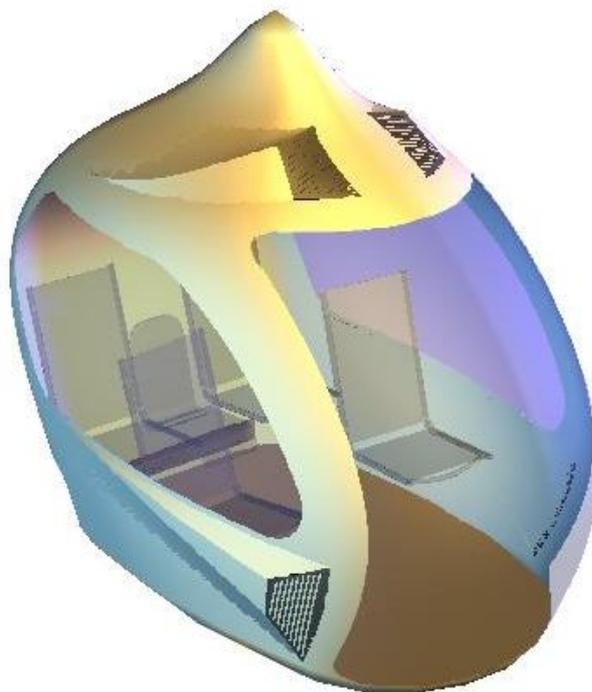
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**Santa Cruz, California, USA**

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## BID PACKAGE

For Personal Rapid Transit (PRT) System - **MISTER**



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To:  
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**Regarding your REQUEST FOR QUALIFICATIONS FOR A SANTA CRUZ, CALIFORNIA PERSONAL RAPID TRANSIT (PRT) SYSTEM, we are pleased to submit our proposal as below and in the additional documents.**

MISTER Ltd. is a new company, set up in 2007 in Poland for the sole purpose of developing, installing and operating MISTER systems - its proprietary Personal Rapid Transit (PRT) version, although the system design has been going on for a few years before that.

MISTER is based on the patent pending inventions developed by Ollie Mikosza (founder and President of the company). Information on the key people is provided elsewhere. Company executives are also shareholders, have extensive knowledge and experience and are fully capable of developing and managing the company, its products and services. Although the company is in the startup phase, but it has detailed technical designs and financial analysis, all of which are corroborated by the external researchers and practitioners.

MISTER Ltd has also developed a 1:1 working prototype with key elements of MISTER system and its technology. The prototype was demonstrated in the Polish city of Opole in Sept 2007. It proved company capabilities and experience that is relevant to the PRT project under consideration by Santa Cruz.

**Development of the prototype has proven technical feasibility of the design and economic assumptions of the development costs.**

Clients or references exist only insofar, as the cities, which have already given MISTER Ltd. permissions to build MISTER system in their boundaries as a general transit system. These are six Polish cities, which issued LOI-s signed by their Mayors and City Councils (available on our website [www.mist-er.com](http://www.mist-er.com)).

Unfortunately, those cities are not in a position to provide funding for the development of the certification and pilot systems, therefore MISTER Ltd. seeks private investment and/or offers its system to cities like yours, which can contemplate funding or participating in the INITIAL capital expenditure.

MISTER Ltd., has also participated in the Masdar tender in April 2008 and was received favorably, but due to the lack of a working test system, our offer was declined. Same fate was met by incumbent ULT'ra, Vectus and all other system, which cannot yet claim a "proven" system status.

However, MISTER Ltd. is certain that once its demonstration track and certification for public usage is obtained, merits of MISTER design will prevail.

Information contained in this submission, should prove this point, that all comparative data is clearly in favor of MISTER system. What is needed, is to build a relatively inexpensive demonstration-certification track. It can hardly be questioned that it is possible, especially since a few other PRT systems have already developed similar test facilities as well.

But MISTER is the simplest and lightest of them all, without any untested or expensive technologies.

Ollie Mikosza  
President

**Additional information for the consideration of MISTER Ltd., as the developer of the proposed PRT project.**

**MISTER is a HIGH CAPACITY system, initially restricted to speed of 50 km/h (30 mph) but will have a capability of 80 km/h (50 mph), allowing for longer range suburban connections.**

**But it is also designed to provide an automated “dual mode” transport on city streets at a latter time.**

**Only MISTER PRT has such design extensions and plans for future fully automated door to door operation, therefore city vision and boldness seems to be well matched by MISTER.**

**MISTER is proven by a prototype, although not tested in commercial operation, yet. But so wasn't ULT'ra a few years ago and even ULT'ra isn't in operation today.**

**However, by comparison with other known PRT designs, MISTER has the clear potential of being the most energy efficient, having highest reliability and highest thruput capacity. It also will have low maintenance operation. MISTER is designed for easy expansion of guideways network and stops.**

**MISTER advantages** – it seems more advanced than any other known to us competitor. Some of competition's claims of simplicity and energy efficiency cannot stand the scrutiny. E.g. “air-conditioning” being run on batteries or from LIM motors. Energy efficiency of systems with vehicles weighing some 1000 kg, when compared to MISTER's 300 kg, is also inferior.

Lightness of MISTER vehicles and infrastructure translates into the reduction of the overall system costs and its minimal visual intrusion in the city landscape.

So when the main phase of system expansion, i.e. “open city”, above the ground environment, is considered, and when aerial stops must appear - then the cost of heavy guideways for supported PRT-s and their visibility in city landscape will be much more noticeable, than MISTER's almost translucent guideway and small ground stops.

**And MISTER is the only system**, which can have steep inclines (45 deg), assuring minimal ground wastage or which makes ground stops feasible at all. In addition, level floor of vehicle at all times and upward tilting during emergency braking – are also unique to MISTER.

Many other advantages of MISTER system are contained in the presentation material - attached herewith.

**Suffice to sum it up and say, that MISTER is the only system which offers :**

1. **High carrying capacity and throughput design** – thanks to asynchronous, cybernetic control system providing jam free traffic at all times.
2. **Easy system expandability** - ability to seamlessly extend the system without interfering in the existing infrastructure (patented non-contact static switching system).
3. **Lowest development cost** – thanks to infrastructure lightness and overall system simplicity.
4. **Highest energy efficiency** – external power supply (energy savings) and lowest possible energy consumption (light vehicles, no tires, minimal surface friction, most efficient direct drive rotary electric motors).
5. **Reliability** - simplicity of mechanical design and lightest infrastructure.

6. **Best payload ratio** – lightest possible vehicle of 300 kg (~600 lbs) and 400 kg (~800 lbs) payload.
7. **Simple stations (stops)** - ease of stations development/expansion.
8. **Safety** - Impossibility to de-rail the vehicle due to any system element failing.
9. **Redundancy** - all major system elements are redundant, including drive motors, wheels and electronics – ensuring fail safe operation.

**SUPPLIED DOCUMENTS:**

1. MISTER\_1\_RFQ
2. MISTER\_2\_RFQ\_CONFIDENTIAL
3. MISTER\_3\_Presentation
4. MISTER\_4\_KEY\_People
5. MISTER\_5\_General\_Data