I. Summary of MTI Corporate History and Structure

MTI was founded in 1992 to develop technologies growing out of research on magnetic levitation (Maglev) and other industrial applications of magnetics at the Massachusetts Institute of Technology (MIT), Cambridge, Massachusetts. Prior to spin off about 60,000 hours of faculty, staff and graduate students work was done on Government research grants and built and a 1/25 scale working model with levitation and linear motor propulsion was built on 100 meter long track.

MTI maintains its ties to MIT as Dr. Montgomery retains a position as Senior Lecturer. He retired from MIT in 1996 as Associate Director of the Plasma Fusion Center which at that time was MIT’s largest interdisciplinary Research Center, with an annual budget of 40M$. He was elected to the National Academy of Engineering in 1998.

MTI has remained a technology development company, with cumulative R&D revenue and investment of about $20M current dollars since its inception in 1992.

MTI has pursued two significant lines of technology and business development: Magplane, a high-speed Maglev technology for passenger transportation; and MagPipe, an electromagnet pipeline system for dry bulk transport of coal and other minerals.

In the past eight years, all continuing MTI technology development work has involved projects sponsored by investors and strategic allies in China.

1.1 Magplane Maglev Technology

The future for Maglev in China is stronger and more promising in China than anywhere else in the world today. This is due to (i) continuing growth in China’s need for mass transit; (ii) the apparent performance limitations of conventional high-speed rail; (iii) the intrinsic potential advantages of Maglev transit for both intra-city and inter-city passenger transportation; (iv) a continuing persistent interest of the China government transportation sector in Maglev as a future mode of transportation; (v) and the idea that China’s central government has a unique capability to initiate and support coordinated actions toward design, development, and deployment of a major new infrastructure system.

MTI’s Magplane technology is a candidate to serve the projected China high-speed inter-urban Maglev market. Timing for Magplane Maglev, however, has been and remains uncertain, and the challenges of establishing a new technology and industry for public infrastructure, even
in China, are great. Promising discussions and initiatives for Magplane Maglev pilot and demonstration projects in China have been carried out since 2005, but are only just beginning to have high level attention. MTI’s marketing activities and project initiatives have resulted in accumulation of significant goodwill in China.

1.2 MagPipe System Technology

The near-term business potential of MagPipe pipeline system technology is strong for application in the mining industry in China and internationally. MagPipe System’s promise lies in its potential to move bulk dry minerals from remote mine sites to rail-head or port facilities more cost-effectively, and with fewer adverse land use, natural resource, and environmental impacts, than traditional methods that variously involve short-haul rail, haul roads and truck fleets, and energy- and water-intensive slurry pipeline systems. MagPipe system technology development is the basis for MTI’s principal current activities, revenues, and immediate investment prospects. MagPipe System technology currently is the focus of a strategic partnership with China Coal Zhangjiakou coal mining machinery Co., Ltd, a state-owned Chinese company. (“ZMM”)

1.3 China Coal Zhangjiakou Coal Mining Machinery Co., Ltd (“Zmm”)

ZMM is engaged in engineering and electrical design, machinery, manufacturing, project construction and comprehensive project management and has the full capacity and expertise in developing and building a complete Magpipe Magnetic Drive Pipeline Transportation System.

As a state owned first class enterprise China Coal Zhangjiakou coal mining machinery Co., Ltd. is a solely sub-company of the China National Coal Group Corporation, with responsibility for research and development, manufacturing, sales, service of coal mining machinery and electrical equipment as a whole.

The major products of the company consist of whole sets of coal mining equipment, such as face conveyor, stage loader, crusher, as well as cast stone AFC, pug mixer, wind power electricity generating equipment, belt conveyor, lees bailer, solid & liquid separating filter press used in mineral concentrating, environmental protection, electric power, cement, pharmacy industries.

The company is located in the center of Zhangjiakou city, possessing an area of 850,000 square meters and a railway line of 2141 meters. There are about 4800 employees in the company. A new factory location is under development on the outskirts of the city.
1.4 Technology Status

The MagPipe technology has matured through the development of a “Proof of Concept System” completed in Florida in 2001 and then with a second-generation design that is operational as a test system in Baotou, Inner Mongolia. The original system demonstrated the fundamental viability of the MagPipe material transport system but since that time, basic technology such as the packaging of power electronics for motor controls have advanced enabling significant enhancements of the MagPipe system. The “Second Generation System” has effectively demonstrated the commercial viability of MagPipe. The final development stage involves building a fully operational 1km system in Zhangjiakou that will allow sustained testing and final verification of the design and components.

2.0 Capital Structure

MTI was founded in 1992 as Magplane Technology International. It was re-registered in 1995 as Magplane Technology, Inc., a Delaware C Corporation, with authority to issue 20,000,000 shares of common stock of par value $0.001.

In March, 2005, by resolution of the MTI Board, the Company amended its Certificate of Incorporation to increase the number of authorized shares to 200,000,000 shares of common stock of par value $0.0001. The Company has issued no preferred shares of stock. All of the 200 million common shares have been distributed.

In 2005 the company applied for listing on the OTC Pink sheets, and as of today about 20% of the authorized shares are in the OTC market.

During the first 3 years (2006-2009) there was semi-active trading, largely by market makers and small adventurers. It opened at $1.00, but fairly quickly dropped to $0.1. There were no company shares sold outside those that had been given to market makers. The website was kept up to date with news of the progress in China, but the last news update was posted in December 2009. The site has been static since that date. No money was ever returned to the company as a result of the market. The entry on the OTC was always viewed as making a good impression on potential outside the market potential investors in China.

Over the last 3 years in the market, 2009-2012, the average share price has been about $0.02, with very little volume. It is current below well $0.01 with essentially no volume. We believe the shares in the market (as well as a number of shares held within the company) could be bought back for $0.02.

The 80% privately held shares are distributed approximately as 5% to 40 small holders, 75% to founders and present and recent past management.
2.1 Restructure Considerations

Several investment inquiries related to MTI’s technologies are pending in China. There is an interest by some in making their investment in a new company with independence from Magplane Technology Inc. There are also some who prefer to make their investment in MTI directly, once the pipeline business is spun off.

MTI is proposing the its Maglev and MagPipe businesses be separated into independent legal and business entities, through establishment of one or more new corporate spin-off entities in which MTI would retain equity interest and commercial ties.

In the case of a new spinoff based on the MagPipe System technology and business, for example, the spinoff would carry out all MagPipe System-related commercialization and marketing, and MTI design, engineering, and other expertise would be provided to the new spinoff entity as opportunities arise, under subcontracts for engineering services. In that example, MTI would retain Magplane Maglev business and technology and other non-pipeline related projects, or, alternatively, might create and participate in an additional, separate corporate spinoff.

One specific possible such spin-off opportunity for the MagPipe System business involves a Hong Kong shell company currently named Magplane Technology Limited (MTL). MTI representatives registered MTL preliminarily in Hong Kong in November 2008 as a possible vehicle for attracting and handling new business and investment in Magplane and MagPipe System technology and projects from Asian entities. MTL recently negotiated and received a significant contract from a subsidiary of China Coal, a major Chinese state-owned corporation who wished to contract through Hong Kong. The ZMM – MTL agreement is for joint development and installation of a demonstration MagPipe project in China, with the prospect of China Coal investment of a significant further joint venture through MTL if the demonstration project proves up the functionality and cost-effectiveness of the MagPipe System. China Coal will finance the demonstration project and production facility for 10M$ in exchange for an exclusive right to manufacture Magpipe products. MTL has subcontracted with MTI to design, engineer, develop, and deliver certain key components of the MagPipe system, and to provide certain other engineering services to the China Coal customer.

3.0 Magpipe Advantages

3.1 Economic Advantages:

The MagPipe system has significant operational and/or capital cost advantages over existing transport methods. This is especially true for transport distances from 4km to 100km over hilly terrain. Although the upfront capital costs of a MagPipe system are higher than purchasing a sufficient number of dump trucks for a particular capacity, the total life cycle costs are much lower even if the trucks use existing roads. Moreover, the MagPipe can follow a more direct route between the mine and rail heads.
than roadways, overland conveyors, or dedicated rail spurs giving MagPipe additional cost advantage via a shorter route selection.

The World Coal Institute estimates that up to 70% of the cost of coal to the consumer is due to transportation costs including short-haul diesel trucks from the mines to the nearest consolidation point, rail costs to large distribution hubs, and ships for international shipment.

The relatively short distance from the mines to a consolidation point is most commonly covered with short-haul diesel dump trucks and represents the most inefficient and energy intensive leg in the distribution chain. Thousands of these large trucks consume massive quantities of diesel fuel causing severe pollution along the transportation corridor and increase traffic congestion where public highways are used. Global annual expenditure on diesel truck operation is at least US$12 Billion. MagPipe transportation can reduce this cost by 20 – 40%.

For relatively short hauls (4km to 20km) trucks are used extensively. They have lower capital costs and can be financed by either contractors or mining companies themselves. They are used successfully in hilly terrain but need to use existing roads or require new roads to be built. They can be repositioned to different mines as the need arises. On the other hand, they are environmentally harmful, contribute to traffic jams, and may have limited operation in bad weather.

In comparison to MagPipe Systems, trucks may require longer routes as they are confined to roads where the MagPipe, with its small installation footprint, can be installed cross country. On average, truck transport of coal is about 5 times more expensive in terms of $US/tonne-km to operate than a MagPipe system.

For transport of 9Mt/year over a distance of 10 km with the MagPipe, a typical payback period of capital cost is about 3 to 4 years of operation, which makes the MagPipe economically competitive with trucks despite the high capital cost investment.

3.2 Environmental Advantages:

The MagPipe has three fundamental environmental advantages over competing transport systems. It has a small footprint and can be constructed above ground or buried with minimal disruption to the natural environment. The material being transported is entirely enclosed inside of the pipe which eliminates any spillage into the environment. The system is entirely electric using high efficiency electromagnetic propulsion that significantly reduces energy requirements.

Although truck transport is the highest cost alternative and causes substantial air pollution from very high consumption of diesel fuel, pneumatic and slurry Pipelines have not been widely deployed. Slurry Pipelines are more efficient but use extremely large quantities of water and contribute to ground pollution from the water reclamation process. Pneumatic pipelines are electrically powered but suffer from severe capacity limitations. Overland conveyors are best suited to flat, straight routes unconstrained by hilly regions or the necessity of winding routes.
In addition to the operating cost savings, substitution of the pipeline for the truck haul line would eliminate the local release of the diesel particulate from the 26 million liters of fuel consumed by the trucks. There is, of course, the counterbalance of the particulate release at the power plant that generated the pipeline electricity, but than can be much better controlled than the truck exhaust. The power plant release also represents a release from a smaller amount of energy than was used in the trucks.

For many potential locations for the pipeline, there is an elevation difference between the mine head loading station and the unload station delivery point. For example, mines are generally located at higher elevation than the ports. For these locations the pipeline offers a unique opportunity for energy savings. The pipeline utilize the synchronous windings in the pipe to generate propulsion thrust to overcome friction of the capsule wheels, and to climb an up-slope. It also uses the motor windings to brake the decent of the capsules on the decent a down-slope. In that braking action, the motor drives actually generate power that can be used to power the return of the empty capsules back up the slope to the mine. If the average slope of the line is at least 1 degree, the system will generate enough power from braking the loaded capsules going down, to overcome all the friction losses and uphill return of the empty capsules. The system therefore would require no outside utility power. The source of the energy used by the system is the change in potential energy resulting from moving the 15 million tons of coal from a higher to a lower altitude. This is equivalent to letting water fall from an elevated reservoir through a turbine.

It is of great interest that for mine-to-delivery-point routes with an average of 2 degrees, net energy can be generated. With a 2 degree average slope, the 100 km, 15 Mt/year example mine could generate an excess of 150 million Kw hours of “green” electricity for distribution to other local mining operations or returned to the grid.

4.0 Market Potential

The number of mines in China was estimated, as of 2005, to be over 28,000 of which at least 5,000 are large-scale modern mines with annual production ranging from 1 million tonnes to over 10 million tonnes. China has mandated the closing of all small-scale mines with production under 300kt by 2015. Industry reports show that as of 2010 only 3000 small-scale mines are still in production. Most mines with annual production over 2 Mt are excellent candidates for MagPipes.

Coal mining in China currently produces 3162 Mt annually and many new mines are being planned in the major coal producing regions. As China continues to close small mines due to safety issues and consolidate production at mines with greater than 2 Mt annual production, the number of mines that can reduce transport costs with MagPipes will continue to grow. All of China will be targeted to produce the revenue forecast, but Inner Mongolia has been targeted for initial sales.

By way of example, the potential market in Inner Mongolia has been studied by the NDRC. Magplane’s MagPipe technology was introduced to Inner Mongolia by the Institute of Comprehensive Transportation of China’s National Development and Reform Commission in late 2006. Inner Mongolia immediately began to study its potential to reduce trucking costs and pollution caused by the heavy truck use at thousands of mines.
Inner Mongolia produced 250 Mt of coal in 2005 and increased production to 750 Mt by 2010 to meet growing demands for coal by power plants and industrial companies using coal-fired furnaces. Industry estimates in Inner Mongolia for trucking costs are 0.6-1.00 RMB per tonne-km for short-haul routes (ranging between 10 and 30 km) between the mines and rail heads. This translates to a cost range of US$0.10 to 0.15 per tonne-km.

China coal production is more than double that of the USA. Inner Mongolia produces 24% of China’s total coal and has significant transportation bottlenecks as well as high truck costs due to difficult terrain. Based on discussions with the Inner Mongolia government, at least 47 routes totalling approximately 1000 km have been identified and these are forecasted over the next 10 years. Additional routes are expected to emerge particularly after the commercial validation and confirmation of lower total thus the forecasted total of 1000 km is a realistic expectation.

ShanXi province is second to Inner Mongolia for coal production and other mining activities. The remainder of the total annual coal production is spread over many other provinces but do represent substantial opportunity for MagPipe deployment. While Inner Mongolia will be the initial and primary market for MagPipes the rest of China represents an eventual equal market size. 1000 km are forecasted over 10 years to be supplied by the production base in Inner Mongolia or through additional partnerships.

The annual coal production in Australia is approximately 260 million tonnes of which nearly 75% is exported primarily to China and Japan. Coal is mined in all Australian states as are other minerals and ores including iron, nickel, bauxite, gold, and uranium. Uranium mining has been largely restricted but is now expected to be a growth area in the mining industry due to increased world demand.

Many of Australia’s coal and mineral deposits are found in remote areas where transportation infrastructure is limited. MagPipe offers an environmentally friendly alternative to common diesel truck transport which is expected to be particularly appealing to Australia’s government and citizens who are largely supportive of environmental protection.

5. Revenue Forecast

From the Financials in Appendix B of the Magpipe Business Plan (IM-MPT, September 2011), the free cash flow present value (PV) of US$135M was calculated and shown in Table 3 repeated below. This present value is conservative as it is based on realistic assumptions and a high discount rate of 40% as well as underestimated global sales of only 100 km per year outside of China.
Discounted Free Cash Flow Method of Firm Valuation

<table>
<thead>
<tr>
<th>Present Value</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>Terminal Value</th>
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<tbody>
<tr>
<td>Free Cash Flow</td>
<td>-7</td>
<td>11</td>
<td>13</td>
<td>125</td>
<td>144</td>
<td>151</td>
<td>151</td>
<td>151</td>
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<td>151</td>
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<td>538</td>
</tr>
<tr>
<td>PV of Cash Flows</td>
<td>135</td>
<td>-5</td>
<td>6</td>
<td>5</td>
<td>33</td>
<td>27</td>
<td>20</td>
<td>14</td>
<td>10</td>
<td>7</td>
<td>5</td>
<td>4</td>
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</table>

Table 3: Valuation based on free cash flow

An alternate example of revenue can be taken by assuming that MTI receives a revenue stream from sale of the control system and motor drives to MTL.

Table 4 gives the MTI projected revenue from the sale of its pipeline related products to MTL. The product volume in kilometers per year taken from market analysis and ZMM’s estimates, and is based on the demand in China alone.

The projections use the latest estimates of pipeline costs to arrive at a revenue number for MTI components. These sales volumes are anticipated to increase year over year. The Software license and maintenance fee is 5% of the sales price of the control system, and is an annual fee, which is representative of what might be charged in industry for product and support.

Table 4: MTI Cash Flow from product sales and license fees (K$)

<table>
<thead>
<tr>
<th>Kilometers per year</th>
<th>100</th>
<th>150</th>
<th>200</th>
<th>250</th>
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<tr>
<td>SW and electronics profit from product sales</td>
<td>$37,104</td>
<td>$55,656</td>
<td>$74,208</td>
<td>$92,760</td>
</tr>
<tr>
<td>Annual control system license/maintenance fee</td>
<td>$4,314</td>
<td>$6,472</td>
<td>$8,629</td>
<td>$10,786</td>
</tr>
<tr>
<td>Total</td>
<td>$41,418</td>
<td>$62,128</td>
<td>$82,837</td>
<td>$103,546</td>
</tr>
</tbody>
</table>
Figure 1: Magplane 1/25th Scale working model at MIT in 1975. Kolm, Magplane Founder on right with Richard Thornton, MagneMotion Founder.

Figure 2: High speed maglev Magplane multicar train-set pictured leaving Hong Kong. Five hundred km/hr cruising speed.

Figure 3: New factory site for China Zhangjiakou where Magpipe 1-km demonstration will be located. Four thousand workers are on this site.

Figure 4: Factory floor where Magpipe 12 meter long unit module components will be assembled. MagneMotion LSM demo in the foreground.

Figure 5: Magpipe 2nd generation demonstration in Inner Mongolia. Overhead suspension for modest load capacity.

Figure 6: 3rd generation Magpipe to be constructed in Zhangjiakou. Side-by-side suspension for large load capacity.