Colloquium Monday, February 2, 2009

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My Informed Consent/Full Disclosure

- 1. While there is an attempt at some humor throughout this presentation, I'm very serious about the importance of the topics and issues discussed.
- 2. I consider myself a space cadet but my belief system is reality-based and I believe in incremental progress toward becoming space-fairing and developing new commercial space opportunities.
- 3. I allow for the possibility of a strike here and there from serendipity and welcome it if and when it happens. I don't assume that serendipity is a forgone conclusion.

Developing space resources or a space business venture requires capital. Lots of it. Especially early on in the life cycle of a new business. While there are some differences in a space business as compared to a terrestrial business, there are many more similarities than one might believe. In fact, business rules are pretty much business rules be it a space business of some type or a terrestrial business in an established industry. While business planning and due diligence are common, even routine in evaluating and managing terrestrial businesses, this is not so in some areas of space, particularly with the NewSpace industry.

What makes NewSpace different? Why is it so hard to do real due diligence regarding all aspects of the business, not just for management or potential markets, but also technical and engineering due diligence regarding the end product of the company in question? Why does the wish list mentality prevail and why are those applying real standards to claims, rhetoric, and Power Points often attacked and accused of "not being with the program?"

These and other issues such as assumption making and commonly used foolish terminology and rhetoric will be discussed in this Colloquium.

Types of Due Diligence

- 1. Management
- 2. Legal/corporate
- 3. Engineering
- 4. Crunching hard numbers
- 5. Market

Types of Due Diligence, continued...

Wishin & Hopin Brief Style Summary:

- 1. Trust without verification
- 2. Friendship
- 3. PR/Fame/Image
- 4. Darling of the industry
- 5. "With the program"
- 6. "I just know it"

Business Planning - Management

- 1. Relevant experience
- 2. Business understanding
- 3. Easier to teach business to an engineer than engineering to a business type
- 4. Openness
- 5. Delegation

Personal

Some personal information about key management is relevant

For example, multiple DUI's or lots of rehab "vacations" stressful personal relationships, incapable of handling of money felony Record, etc.

Business Plans

- 1. Important but not essential
- 2. Three purposes in house, financing, investors
- 3. Fill in the blank or detailed
- 4. Reference to DML Business Plan Outline. Request electronic copy from dlivings@davidlivingston.com
- 5. Third party business plan development
- 6. Executive Summary is key

More About Business Planning

Discuss Key Elements Of Business Plan Outline

Investors

- 1. Investors change the rules of the game
- 2. SEC and State securities rules
- 3. Rescission
- 4. Real disclosure
- 5. Fraud
- 6. Securities fraud
- 7. Don't take short cuts

Assumptions

- 1. Must see the assumptions
- 2. Test for reasonableness
- 3. Is there any reality in any of them or are they all hypothetical?
- 4. All projections must be supported by reasonable assumptions

How To Spot A Potential Problem

- 1. Wishin & Hopin can be cleverly disguised. If you are a true believer, it speaks to your very soul
- 2. Language means everything
- 3. Do not dismiss the rhetoric. It's revealing. (cite examples)
- 4. Claims most often \neq gold
- 5. Stretching the truth or exaggerating accuracy

More Ways To Spot A Problem

- 6. Name dropping
- 7. Impressive Board of Directors and/or Advisory Board. Are they involved or figure heads for PR, huff, puff, and fluff and "snowing you"?
- 8. Non Disclosure Agreement. How is it used? Terms? Length? Application?
- 9. Reaction to being questioned and challenged
- 10. Kumbaja moments

WHO CARES? WHY BOTHER?

- A. Poisoning the well
- **B.** Credibility
- C. Spillover to other businesses
- D. Press/Media
- E. Future
- F. Regulations

RECOMMENDATIONS

- 1. Simple: Take no prisoners with offenders.
- 2. Be informed regarding business, finance, marketing, engineering, physics, management, etc. Or, surround yourself with people who are informed, and be prepared to pay for missing skills.
- 3. Maintain high expectations for space development while remaining grounded in reality.
- 4. Resistance is not futile.

RULES TO REMEMBER AND LIVE BY!

- 1. KISS is applicable. Explain the business approach to a potential investor in a paragraph or two or a couple of minutes of talk. The plan and appendices may be much longer, but the essentials have to be explained succinctly. You do not have endless time in front of those with money. Remember, you have competition. If too complex or too long, it won't survive first contact with reality.
- 2. Never ever lie, exaggerate, or well, you know. Treat your investors like gold and seek wisdom and value experience. Investors may actually have some decent ideas to assist you and you will need the help. Remember, investors are wiser than you think. Otherwise, why are YOU asking THEM for money?
- 3. Carefully think through the plan. A potential investor should be able to visualize the daily activities of the principals. If there are gaps in the plan, how will the principals fill them? Be honest about problems and their resolutions, plus the flip side which is the opportunity.

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RULES TO REMEMBER AND LIVE BY, Part 2

- 4. Really know the difference between an angel and a VC. Know how to talk to each so that you can be heard. Know the goals and objectives of each and the risk tolerance of each.
- 5. Be professional, including your appearance. Looking like a slob engineer may be fine during finals week, but not when raising money. Looking like a slick con man does not cut it either.
- 6. Do not view writing a biz plan as a chore. Done right, it's a living document that changes over time with changing conditions. Second, if you can't explain the plan succinctly and clearly to yourself, how can you explain it to anyone else? Third, if you think writing a business plan is a chore, more than likely you are not the person to manage and develop the business.
- 7. Plan on the business being your life for a very long time. Expect it to be consuming and overwhelming and more than stressful for you and family. Otherwise, don't ask for other people's money. Make sure you have risk in the venture. If you don't have faith, why should I or anyone else?

WISH LIST MENTALITY

The wish list mentality and behavior is most perplexing as it usually involves very smart people. So one might ask why would smart people waste their time, pursue unrealistic goals and objectives and otherwise do stupid thing?

These questions are not easy to answer, but in attempting to find an answer, I've asked many well known psychologist, psychiatrists, space advocacy leaders, and others for their ideas and thoughts on certain theories or even for their own explanation.

What follows is summary of relevant factors supporting the wish list approach to space development.

WISH LIST/TRUE BELIEVER WORKING DEFINITION

A Wish List or True Believer for purposes of this presentation refers to a person committed to, supporting, or believing in a space project that lacks a sound realistic basis, lacks economics, violates the laws of physics, or makes no sense in terms of engineering. Often this person ignores facts in favor of the pursuit of what he/she believes in and blurs the lines that normally separate a valid dream from a fantasy.

WISH LIST/TRUE BELIEVER CHARACTERISCS

- 1. Unbridled enthusiasm
- 2. Sci-fi guided, especially by the works of Robert A. Heinlein & others
- 3. Apollo failed promises
- 4. Confusion with dreams and fantasies
- 5. Do not understand that a fantasy loops endlessly and forever
- 6. Consistent use of Goddard & other quotes as if these quotes are what guides them. Here are some examples:

WISH LIST/TRUE BELIEVER CHARACTERISCS

- 7. Every vision is a joke until the first man accomplishes it; once realized, it becomes commonplace. Robert Hutchings Goddard
- 8. The greatest obstacle to progress in science is the illusion of knowledge, the illusion that we know what's going on when we really don't. Prof. Mike Disney
- 9. Anything you dream is fiction, and anything you accomplish is science so the whole history of mankind is nothing but science fiction. Ray Bradbury
- 10. Poorly informed on basic business, marketing, financial, engineering, and science rules and laws
- 11. Strong belief in something as real if it was said to be so by a person of position, fame, or title. One example is the RC Spaceplane.
- 12. "I Want" is a strong driver for this group.
- 13. A promise for everyone -- easy to believe in and accept

END RESULT and CONSEQUENCES

Tension between well-meaning wish listers/true believers and those who face and deal with reality

Kool-Aid rules and it does matter

- 1. Opportunity cost (labor, time, resources, failure to pursue options)
- 2. Discredits serious players and efforts
- 3. Repels money, serious players
- 4. Makes it hard for others
- 5. Increases already too long timelines
- 6. Creeps into space policy planning and decision making

THE CURE

Those who are wish list and true believer space cadets do not normally see themselves in this light. Remember, they believe in their quotes and drivers.

As for a cure? None that I know of. In fact, this segment of space development, space advocacy, NewSpace, or space entrepreneurism is very contagious, rapidly growing, appealing and addictive. Remember, anything can be promised and as long as delivery is always about two to five years or so in the future, the promise is seen as being just around the corner.

Mass media/science/technology reporters are a problem, not a solution.

Recommendations include learning to laugh a lot, know facts and don't hesitate to use them. Do not go after the person. Instead, challenge the ideas & the programs on the merit.

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A hearty thanks to all of you.