

Architecture Note

#3

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We need a Business Capture Plan and a working group that engages with on-orbit business activities; joining in; if and when we can.

Michael A. Fitzgerald

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Personal Prolog

This is an Architecture Note. It is the opinion of ISEC's Chief Architect. It represents an effort to document ISEC's ongoing science and engineering discussions, and is one of many to be published over time. Most importantly, it is a sincere effort to be the diary, or the chronicle, of the multitude of our technical considerations as we progress; along the pathway developing the Space Elevator.

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We need a Business Capture Plan and a working group that engages with on-orbit business activities; joining in; if and when we can.

Space Elevator as a business – We aren't trying to be one, yet

We are currently dealing with the transportation revolution that is the Space Elevator. We are being good systems engineers and are in the first stages of the system development and architecture development process to build the first Space Elevator; a transportation system. This system will be capable of delivering a variety of payloads to space without rocket power. The system engineering project to develop the transportation isn't a business, yet. That comes later; quickly, but later. We'll build it, and the business will come. Our own "Field of Dreams".

Space Elevator business enterprise – As we see it now

So the plan is ... we build it and the business will come. But, maybe we could be a bit more proactive; don't you think? Hope isn't a plan. We need to turn that hope into an action plan. In last month's Arch Note #2, I noted that there will be businesses in space already ... when we get there. We'll be seen as the new guy on the block unless we take some thoughtful steps beforehand. Maybe we ought to call up some future clients, and future customers, and future investors; and open a dialog. Examine the business potential of the future time and place. Examine what services and

support might be good to offer to them. Get specifics. Judge priorities. Arrange common planning. Ponder investments. Structure partnerships. Make deals. Describe needed functions and services. Eventually, charge the system engineers – the ones that will be coming off the transportation project – with the engineering vision of the future business functions and services. Then, arrange the stand-up of the needed functions and services to coincide with customer's schedule. Hit the ground running; if you will. (Pardon the mashed metaphor.)

Space Elevator business enterprise planning – the timing of this

The idea that is forming is that ISEC must know what functions and services can be offered to customers, business clients, and investors. The functions and services need definition and development to be viable extensions of the transportation system. Then the needed functions and services will enter the Space Elevator as baseline modifications; accepted and tested, certified via specific on-ramps. And the customers, clients, and investors will want it ... soon. In Arch Note #2, I reported that SES Americom was calling – NOW – for satellites designed for on-orbit refueling and for on-orbit replacement of parts & components. Five years to design, develop and build this new satellite; and then launch into 15 years of operational life. That adds to 20 years!! $2016 + 20 = 2036!!!$ That is near to our IOC!!! → “NOW” means now. Can you hear me shouting?

In closing

This is a huge topic and will have great impact on our Enterprise. “NOW” means now. See you next month.

Fitzer