## An "Ignition Group" for Sparking a Truly Frank Dialogue about the Future of NASA

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Sometimes I just can't help but chime in about what passes for a frank dialogue about the future of United States Space program. .... We all understand that "ignition" (as all rocketeers know), is a fairly small, but intense release of energy that drives large, slower energy release materials to begin to react and release their own form of energy. With this in mind, I suggest that some yet to be identified "Ignition Group" release a burst of energy by publishing a highly frank and thus helpfully inflammatory document regarding the nonsense that passes for this Nation's Space program. The goal of this document would be to initiate an open and frank a discussion about the positions of people in leadership positions in Washington DC, DOD, NASA, DARPA, corporations, and think tanks who, in my opinion, have been grossly derelict and broadly incompetent in carrying out what should be their fiduciary role of minding the public trust and the public treasury in furtherance of the US Space program. For example, one of the biggest scams has been the position that NASA needs only to be responsible for "Advancing Technology and Carrying out Space Exploration". This is a neat choice of responsibilities because one can always dodge behind the position that technology advancements are high risk, so if nothing is achieved, this is acceptable. Everyone knows one must "take big risks to make big gains", as stated by one NASA Administrator. Therefore, an acceptable level of failures (NASP comes to mind ... what is this?) are normal and excusable. It didn't seem to occur to the Administrator to direct his organization to consider affordable plans that have the potential for making big gains with a clear understanding of and frank discussion about the merits of higher levels of risk. Another example is the "Exploration Scam", namely, "we don't really know what we are going to explore, so we will build a big new rocket and see what comes to mind? Oh ... I know! Let's go land on an asteroid!" Never mind that the Moon has been collecting and storing asteroids for eons and has about a Jillion of them all conveniently located in one fairly localized place in Space, to which we know how to travel. Never mind that we would have a working terra firma there with a modicum of gravity upon which to construct facilities for asteroid materials extraction and processing and for habitats, and for developing transportation facilities for moving commercial quantities of asteroid extracts back to Earth. No, returning to the Moon is no longer inspiring, so let's go to Mars instead, since this glamour goal will stir up the public enough to tolerate increased investment in our Space program. No one, no one, no one is earnestly tackling the real man's work of taking this Nation into Space to stay, live, and work. In my opinion, this is the real job that needs our attention. Some who look at this job say: "Oh, we have done a projection for this and it is much too difficult and far too expensive, so let us get some help to tackle this difficult and costly job. Let us find partners. Let us inveigle some foreigners to do some of it and put some money into for us". This ignores the awkward fact that we are in economic competition with the rest of the world and are thus enhancing the competitive capabilities of other nations in the field of aerospace technology". It seems to me that, with the same effort, we ought to be able to envision an approach to the US Space program that is within our Nation's budget and that includes plans to produce products and services that will enable our Space program to be largely self-sustaining. Anyone can plan for a program that is bigger than its budget. Why waste the time? Our job is to plan a Space program that can be carried forward with steady progress and in as self sustaining a way as possible, not a Space program that keeps stumbling along awkwardly and with too many aborted efforts through lack of a long-term sustainable vision. Speaking personally, my Pa and Ma planned a farm program within their means and schedule every year for forty years by deciding which crops to plant, and what mix of chickens, pigs, and cows to carry to support their six children. It wasn't rocket science, but it involved making astute guesses about the market and the weather, and it wasn't done with Microsoft Project. Now my above thoughts may not be what cooler heads would come up with, but it should be clear what I am trying to suggest. I believe a mild mannered document in furtherance of the US Space program will not gain significant attention nor will it have significant influence. In my opinion, the document I am proposing must be inflammatory by

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benign intent, if it is going to ignite a frank and truly open dialogue about the future of US Space program. If it doesn't come close to making its readers uncomfortable, especially those in leadership positions in DC, DOD, NASA, DARPA, corporations, and think tanks, we will have failed in our efforts and obligation on behalf of the Nation. I would like to think that my comments here will inspire an "Ignition Group" to work together to draft a document that will hopefully ignite a firestorm of rebuttals and that this will lead to a whole new perspective on the course of this Nation as it seeks the holy grail of a civilized occupation of Space that goes beyond Earth. My best guess is that this hoped-for document will be first facilitated by way of individual commentaries by others within the open forum of the journal, Space and Evolution, who understand aspects of what I am communicating above and who are willing to share their perspectives in furtherance of the US Space program.