

# SPACE MIGRATION AND SAVING THE HUMAN SPECIES

## Collective Intelligence or Business as Usual?

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Without a new point of view, a new paradigm for the use of Collective Intelligence, NASA will die along with the entrepreneurial wherewithal to formulate a constructive, effective, politically and economically acceptable alternative designed to meet the changing environment. More than ever, it is not just that we have access to space that is important, but *how* we go into space and the necessity for a careful understanding of the underlying philosophic construct of species survival through migration that's important.

Many of the lessons from investment and public/private management alliances could be drawn upon, while avoiding the negative social and religious aspects of imperialism adopted through our history. The corporate sector has inculcated many of the necessary social values driven by the United States government and its international collaborators through both legislative means and contracting provisions of implementing positive laws. It is time, now, for the federal government and its collaborative partners to adopt the values and philosophic construct of *species survival*, and to see the plenary necessity of enforcing those values and creating a collaborative context that supports them.

NASA, the Department of Defense, various federal and state agencies, and their respective staffs delivered 110% of what the public and politicians asked. However, restructuring the U.S. Space program must not be expected to accept and execute new challenges for which clearly NASA was neither intended nor designed. Nor should time and effort be wasted trying to reconstruct NASA the way it was and for the reasons it was originally intended. Rather, it is time to focus on how it could fit into a totally new collective framework. What the public is asking now is for NASA to do the same thing for the commercial exploitation of space, for the benefit of human survival and enhancement of Earth-oriented support services, as it did for the initial exploration of space.

NASA established an organizational entity (SPST) in 1991 to help bridge the communications gap between and among technology developers and users of the technology. The organization consisted of multi-discipline volunteers -- experts whose work encompassed the development of launch vehicle propulsion, as well as other aspects of movement, control, and use of spacecraft.

For the most part, these experts worked in the disciplines of concept and design development, testing and operations, and program and project management. All hands-on people, they worked with others from a multitude of disciplines relevant to space travel and migration/settlement potentialities.

SPST initiated the first publication of the new journal, *Space and Evolution (SPAEVO)*, entitled "The Justification for Human Space Development and Habitation beyond Low Earth Orbit: An Invitation to an Open National and Global Dialogue." With no hesitation at all, the stated primary justification for human space flight was "survival of the species." The link between survival of the species and Collective Intelligence becomes obvious.

A 2012 conference at MIT defined Collective Intelligence as groups of individuals acting collectively in ways that seem intelligent (Malone, Laubacher, & Dellarocas, 2009.) They recognized that this definition was ambiguous, but was "purposefully so in order not to prematurely constrain what we believe to be an emerging discipline." The intent was to define behavior that is both collective and intelligent. By collective, they meant groups of actors, including, for example, people, computational events and organizations. By intelligent, they meant that the collective behavior of the group exhibits such characteristics as perception, judgment, learning and problem solving.

Roger Launius, curator of space history at the Smithsonian Institution's National Air and Space museum in Washington, D.C., emphasized in the February 11, 2013 issue of *SPACESNEWS* that, "At Congress's behest, the National Academies Committee on Human Spaceflight is beginning to assess the goals of NASA's human spaceflight program..., [which] comes on the heels of another National Academies study on NASA's strategic direction, the report just issued that places emphasis on the human spaceflight enterprise." He noted James Van Allen's 2004 question, "Does anyone have a good rationale for sending humans into space?" and his assertion that the "risk is high, cost is enormous, and science is insignificant."

Launius then went on to contend that five major rationales have been used effectively to justify a large-scale spaceflight agenda, one of which is, "Human destiny/survival of the species." Like the SPST position, he recognized human space migration as a critical motivating factor in the U.S. space program -- that humankind *species survival* was no longer a topic only for science fiction novels and movies.

But with geopolitics and global economics in various stages of disintegration, current needs and expectations reflect far too radical a posture to simply attempt reshaping NASA into a public, international or even global context and become responsible for running U.S. space activities as though it were a private sector corporation. Contracting out much of the research and development and operating aspects of the space shuttle program to the private sector is a good example, and reflects the support by NASA of several innovative private sector activities designed to make space access available to members of the general public.

An innovative and reasonably valid option might well be to formulate the management infrastructure and unique goal(s) of a *private* transglobal entity based on a new premise of Collective Intelligence, with quasi-sovereign authority and an investor citizenship option. Such an entity might connect and implement much of its management activities in cyberspace. This type of approach could free efforts at human species survival while allowing capitalistic private entrepreneurship to carry the objective through the next step. It could circumvent predictably serious time compromises caused by unrelated geopolitical pressures and constraints imposed by Earth-bound governments and populaces.

In any case, history suggests that unless the idea of Intelligence itself moves from individual to collective, all progress will be undermined by individuals and organizations paying too much attention to their own survival and ignoring the fact that the Titanic is sinking in favor of rearranging the deck chairs on one's own part of the ship.

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