



Assessing the Options of the Augustine Committee for Human Spaceflight

Panel 2: Science & International Relations

A personal View from Europe

Dr. Alain Dupas

Director of Strategic Studies

adupas@club-internet.fr

Space Policy Institute,
Washington D.C., 28 September, 2009

Is the Commitment to VSE still real?

- Verbatim:

- w *«The nation is facing important decisions on the future of human spaceflight. Will we leave the close proximity of low-Earth orbit, where astronauts have circled since 1972, and explore the solar system, charting a path for the eventual expansion of human civilization into space?»*

- w *«Whatever space program is ultimately selected»*

- Comments:

- w European space agencies have lived under the impression that a firm decision had been taken in 2004 and that U.S. exploration plans were for real, even if delays might occur as always

- w A rapid clarification is needed in order to understand what we are talking about in the GES (Global Exploration Strategy) discussions

The good News: ISS Extension to 2020 supported and ISS considered a Model

- Verbatim:

w «The Committee finds that the return on investment of ISS to both the United States and the international partners would be significantly enhanced by an extension of ISS life to 2020»

w «The strong and tested working relationship among international partners is perhaps the most important outcome of the ISS program. The partnership expresses style adapted to today's multi-polar world. That leadership could extend to exploration, as the ISS partners could engage at an early stage if aspects of exploration beyond low-Earth orbit were included in the goals of the partnership agreement.»

- Comments:

w All partners are expecting this extension but it may be useful to look even further (evolution towards a commercial facility? A transportation and support node for exploration projects?)

w The ISS cooperation model worked finally very well and could be the “reference model” for the future

An Optimistic View of International Partners' Commitment to Human Exploration

- Verbatim:

w «[...] *space exploration has become a global enterprise*. Many nations have *aspirations in space*, and the combined annual budgets of their space programs are *comparable to NASA's*. If the United States is willing to lead a global program of exploration, sharing both burden and benefit of space exploration in a meaningful way, significant benefits could follow. Actively engaging international partners in *a manner adapted to today's multi-polar world* could strengthen geopolitical relationships, leverage global resources, and enhance the exploration enterprise.»

- Comments:

w Efforts for human spaceflight by most ISS partners (except Russia) are much smaller than NASA's. It may be different for China and perhaps India. Aspirations for human deepspace exploration are not shared.

w **Only a call for cooperation at the highest (national) political level** could lead to a positive answer in Europe, Japan and Russia

w The G-20 group could provide a suitable forum to attract China, India, Brazil, South Korea

Additional Comments

- The most pressing issue is servicing ISS after Shuttle's retirement.
 - w ATV is the only hardware ready in Europe
 - w A cargo return capability is not planned before 2017
 - w A human LEO access vehicle is not contemplated before 2025
- Could Europe accelerate these programs? Yes but the political will is not there.
- For human exploration:
 - w participation in a program aiming for lunar landing by 2020 was totally out of question for political, financial and technical reasons
 - w Later goals would be much more comfortable for Europe would leave time to discuss and plan coordinated strategies and programs
 - w Option 4 (« Moon First ») and 5 (« Flexible Path ») would offer interesting opportunities for Europe. Option 4 would increase the confidence in the continuity of the U.S. policy

A very positive conclusion

- **Verbatim :**

^W *«International partnerships: The U.S. can lead a bold new international effort in the human exploration of space. If international partners are actively engaged, including **on the “critical path” to success**, there could be substantial benefits to foreign relations, and more resources overall could become available».*

- **Comments:**

- Good to read this sentence, particularly about the «critical path»
- So let's (try to) do it...