RE: Chair's Report or the Joint Committee on Space Astronomy

Dear CASCA,

This report covers the period from July-December 2007. The JCSA received two new members and a new chair this term. The voting members are:

- **Matt Dobbs, Chair** Term 2006-2008 Department of Physics, McGill University
- Patrick Côté Term 2006-2008
 National Research Council of Canada, Herzberg Institute of Astrophysics
- René Doyon Term 2006-2009
 Department of Physics, Université de Montréal
- Mark Halpern Term 2006-2009 Department of Physics and Astronomy, University of British Columbia
- **Robert Rutledge** Term 2007-2010 Department of Physics, McGill University
- Ludovic van Waerbeke Term 2007-2010 Department of Physics and Astronomy, University of British Columbia

The CASCA Long Range Plan midterm review stated [The JCSA] "membership is weighted toward principal and co-investigators on CSA-sponsored missions.... there is a need to develop effective links with the broader astronomy community as well. Broader representation by astronomers on the JCSA membership would be the preferred option". In the view of the chair, the present membership provides the representation recommended in the midterm review.

This year the committee is taking a proactive stance in its role as being an intermediary between CSA and the space astronomy community.

- 1. We surveyed recent CSA Fellowship recipients to evaluate the program's successfulness at attracting and retaining space astronomy expertise in Canada. We will be proposing changes to the program to the space agency advisory committees in other fields served by the fellowships to try to achieve consensus before approaching CSA with specific change requests. Committee member Rene Doyon has volunteered to steward this effort. We will propose opening up the fellowships to international candidates and asking the university hosts to commit to their CSA fellows in a manner similar to the NSERC UFA awards.
- 2. We surveyed the PIs of funded CSA missions to find ways to improve the media exposure of Canadian space astronomy. Our conclusions on the subject will appear in our recommendations from the December meeting. Committee member Pat Cote assembled this information.
- 3. Committee member Ludo van Waerbeke has volunteered to act as a liaison between the JCSA and both the LRP process and the International Year of Astronomy process. We note that the space astronomy landscape for the next LRP is considerably different than it was 10 years ago when the there was broad

consensus that the next big Canadian space astronomy mission should be a partnership on the JWST. The CSA is presently funding five "Discipline Working Groups" in space astronomy with the aim of identifying Canadian expertise and interest for future missions. I commend the foresight on the part of the CSA of creating this initiative.

The JCSA recommends representation from the space astronomy community in the LRP process. Defining the LRP for space astronomy will be more challenging in the post-JWST (2014, early in the next LRP period) construction era we are approaching. On this timescale there are several exciting, viable possibilities for future Canadian Astronomy missions or partnerships. We anticipate that CSA will place a strong emphasis on this document in the future.

The JCSA will approach the CASCA 2008 meeting local organizing committee (member Ludo van Waerbeke to handle this) to ask for a session on future space astronomy missions and science. This will be a follow up from the similar session (80 minutes) that was held at CASCA 2007.

Announcements of Opportunity and the CSA Funding Process

The JCSA has been impressed in recent years that the CSA – with the JCSA's strong and continued encouragement – has made significant progress towards implementing a transparent, competitive AO process. Five AOs were released recently: Small Missions AO, ESA Cosmic Visions AO, Joint Missions AO, and the Discipline Working Groups AO.

In the December meeting we reviewed the AO selection process and made recommendations for slight changes in the process. The committee remains concerned about the transparency in CSA funding processes.

We have strongly recommended that the AO form of funding be recurring on a predefined timescale and with a pre-defined minimum level of funding. We will continue to follow these developments. Another concern is that certain space astronomy projects may "fall through the cracks" of the AO process. One possibility is to have CSA forward proposals for these projects to the NSERC SRO competition for peer review and selection, but have the funding still come from CSA. The JCSA supported this idea.

One re-occurring issue for CSA is how to deal with mission extension or funding increase requests from PIs. In the past this has been dealt with in an ad-hoc manner, with PIs making short requests to CSA and the JCSA sometimes being asked to provide a recommendation with little or no information provided (in many cases, not even a written proposal). In the interests of establishing a clear and transparent process, the JCSA has begun to discuss suggestions for a better mechanism.

JWST Cost Overruns In response to the CSA's request for a recommendation on JWST, the committee wrote the following letter:

Dear CSA, CC: Peter Martin (President of CASCA), Gregory Fahlman (Director General of NRC-HIA), Ralph Pudritz (Chair of the 1999 Long Range Plan), E. Seaquist (Chair of the 2004 Mid Term Review of the Long Range Plan), Rene Racine (ACURA).

The JCSA firmly believes the scientific value of the Canadian contribution providing a fine guidance system and the TFI to the JWST is extremely high. The position of the Canadian astronomy community remains unchanged from the Long Range Plan for Canadian Astronomy and Astrophysics (August 1999). This contribution to JWST is "Canada's highest priority for participation in a major space-based observatory" [1]. The Midterm review of the LRP, initiated by the Canadian Astronomical Society, repeated this recommendation in 2004, "The highest priority in the MTR is attached to the completion of Canada's contributions to ALMA and the JWST." [2] These endorsements remain as strong today.

The Canadian contribution to JWST includes both the FGS -- space technology that is essential for the mission as a whole -- and TFI, a key component of JWST's science instrument package. JCSA is concerned about suggestions that TFI be de-scoped. While TFI is not necessary for the technical operation of JWST's other three instruments, it is an essential part of the Canadian scientific involvement in the mission. Contributing the TFI not only guarantees Canadian astronomers additional observing time on the mission, it is an important focal point of the Canadian science team's involvement in JWST. Any de-scoping of this instrument would have a profound effect on the Canadian scientific community's integration with the JWST mission as a whole -- indeed the TFI was one of the community's primary motivations for joining the JWST collaboration and for the involvement of many of the science team members.

Sincerely,

The Joint Committee on Space Astronomy Patrick Cote Matt Dobbs (chair) Mark Halpern Robert Rutledge Ludo van Waerbeke

CSA President

Larry Boisvert was recently appointed CSA president, after a long 1.5 year period of rotating acting presidents.

The committee believes a meeting with Larry Boisvert should occur soon.

Sincerely,

Matt Dobbs (JCSA Chair)