Report of the CASCA Ground-Based Astronomy Committee (GAC): January 2014

Membership and Activities: Tim Davidge, Roland Kothes, and Kim Venn have rotated off the committee. New members are Craig Heinke and Erik Rosolowsky; the new chair is Pauline Barmby. Since the last CASCA board meeting, there have been relatively few developments on which the GAC's advice was sought or the membership thought a public statement was necessary. This is this a short report, and in particular we do not discuss future facilities, which are covered in the LRPIC report.

JCMT: In September, D. Scott (UBC) asked the GAC whether it was the appropriate place to consider options for future Canadian participation in the JCMT. Our response was that we supported continued JCMT operation in a statement in August 2012 and that it was up to the community to organize future efforts. Names of Canadian astronomers supporting an expression of interest in further Canadian commitment to the operation of JCMT was compiled by C. Wilson in September. The document "A Roadmap for Canadian Submillimetre Astronomy" (recently posted as arxiv:1312.5013 by Webb, Chapman, Di Francesco, Matthews, Murray, Scott, Wilson) also supports further JCMT operation. To the GAC's knowledge, funding to support extended JCMT operations has not been identified to date.

CFHT: the report from the most recent scientific advisory committee meeting is available on the CFHT website. It includes recommendations on priorities for new instrumentation capabilities (SPIRou, new filters for SITELLE and Megacam) and for the establishment of an ngCFHT project office. The Board approved these recommendations in October. The call for proposals for the next round of CFHT Large/Long programs was also issued in October with a deadline of February 1, 2014. New Canadian members of the SAC are P. Barmby and JJ Kavelaars.

Gemini: the Gemini Science and Technology Advisory Council (STAC) met in the fall and has a report available on the Gemini website. It includes an endorsement of the GHOS instrument and of the high priority for beginning the RfP process for the following instrument (4gen3); Canadian astronomers can expect to be involved in 4gen3 as members of science teams. The STAC is generating a long-term vision for Gemini which will be discussed at the fall Gemini Board meeting. It will likely include discussion of innovative ways to get more instruments on and observers to the telescope, the latter particularly in the context of large and long programs.

The Gemini North telescope dome shutter failed on December 27th, 2013 and it is expected that the telescope will be closed until January 24th while repairs (and other instrumentation work) continue. Poor weather at both Gemini sites has affected completion rates over the last semester especially for programs requiring good seeing and/or laser guide stars. FLAMINGOS-2 is on Gemini-South with the imaging and long-slit modes working well; MOS commissioning is still to come. GPI saw first light on Gemini-South in November and obtained the first-ever spectrum of the very young planet Beta Pictoris b.

NRAO facilities: In 2012, the NSF Portfolio Review Committee (PRC) assessed how the priorities of the 2010 US Decadal Survey could be realized under a more constrained budget than adopted in that document. Among other findings, the PRC report recommends that the NSF divest itself of both the VLBA and the GBT before 2017. Canadians have access to these telescopes

through NRAO's open skies policy, which will likely be curtailed with any divestiture. The PRC report may therefore impact Canadian access to premier radio facilities.

Since the NSF Senior Review report of 2006, NRAO has been seeking financial partners in the operation of the VLBA: as a result, 30% of its operating cost is now borne by external agencies who have preferential access to the facility. Following the PRC report, NRAO is now also seeking partners to fund GBT operations. In August 2013, an agreement with West Virginia University was reached that will fund 10% ($1M) of GBT operations in exchange for a proportional amount of observing time. As additional partners are found, the fraction of time available via open skies is whittled away; GAC is monitoring this situation and its impact on Canadian observing opportunities.

Radio spectrum: GAC member K. Tapping urges the CASCA board to emphasize to NRC-HIA the importance of having a formally empowered person to deal with spectrum issues relevant to radio astronomy. If Industry Canada does not hear of issues related to radio astronomy, they do not get considered. As an example, he notes that there was a proposal to have one important radio astronomy band be reallocated to become shared with mobile broadband devices. One of these in line of sight of a radio observatory would essentially blind it.