## RSAA School Review Implementation Plan - Status Report: 8 January 2021

Item	Review Recommendation	Implementation Actions	Progress & Status	Responsible Personnel	Status
§.#	Section.Recommendation numbering as per the School Review report				Complete Ongoing In Progress
2	Research and Teaching Performance				
2.1	RSAA should consider, in particular in the context of upcoming faculty hires, the potential advantage of a greater focus on a smaller number of areas of particular strength, to ensure achieving a critical mass of faculty appointments in recognized strengths of the School and/or particularly promising upcoming fields.	RSAA will organise a Senior Faculty Retreat in the first half of 2017 to discuss recommendation 2.1. The RSAA Executive will develop an implementation strategy for future faculty hires based on the outcomes of discussions at the retreat.	Senior Staff Retreats were held in 2017 and 2019, and identified priority areas for new faculty hires. Actual hires and critical mass guide RSAA's future research focus areas.	RSAA Director	
2.2	RSAA should investigate setting up an undergraduate survey course for general majors.	RSAA will investigate and pursue the options for establishment of courses for non-astronomy majors. The Associate Director Education and School Manager will analyze the profitability of such courses and the opportunities for raising revenue.	Complementing the new undergraduate astronomy and astrophysics major, RSAA has also created a survey course (ASTR1001) for general majors.	Associate Director Education School Manager	
2.3	Research students and postdocs should be provided with opportunities to learn about a range of future careers outside of academia. Their research training should explicitly include the underpinning skills to transition into such jobs.	RSAA will implement this recommendation through a seminar series from people with relevant experience (e.g. alumni in non-astronomy careers) and by actively engaging with the ASA Harley Wood Winter School to promote this topic and establish additional resources for	Ongoing, with latest actions coordinated through RSAA Culture Action Plan 2020.	Associate Director Education Education Committee	
2.4	RSAA should consider increasing its graduate program by up to 100%. As part of this RSAA should consider expanding the number of international students and including a broader representation of local students. This would have two benefits: a modest increase in income, and more potential to develop a vision for the training that is being provided. A mechanism should be found to apply the ANU course quality assurance standards to the RSAA graduate courses.	RSAA will implement this recommendation in a stepped approach: RSAA will aim to increase numbers of graduate students by 50% over the next 2 years, while maintaining high quality standards. RSAA will actively work on finding additional sources of funding for international scholarships.	HDR EFSTL increased from 29.9 in 2016 to 43.7 in 2020. Additional HDR students are being sought, but pandemic makes increases challenging in the near term.	RSAA Director Associate Director Education Education Committee	
2.5	A more formal structure should be developed for annual feedback to PhD students, including annual written reports and interviews.	RSAA will review the current process and implement improvements where needed.	Thesis Overview Committee and formal milestones provide this feedback; further development of the process is occurring as part of the RSAA Culture Action Plan 2020 implementation.	Associate Director Education Education Committee	
2.6	The Education Committee should be re-formed with a significantly smaller number of members who take much more responsibility for the day-to-day teaching and mentoring of student activities and have a complete overview of undergraduate and graduate education at RSAA. They should report on their activities at each faculty meeting. One model would be to identify two key roles on the Committee : (I) a Graduate Student Convener, who ensures that the students' academic work is proceeding satisfactorily, is aware of emotional and social issues, and expands and oversees the graduate courses: and (ii) an Undergraduate/Master's Convener, who oversees these educational programs and will lead expansion of the undergraduate courses. Those assuming these roles will need an appropriate level of administrative and organisational support, where the value of these contributions is recognized.	RSAA agrees that the present form of the Education Committee is cumbersome, but it engages a wide range of people and is working well together. However, in response to the recommendation, the structure of the Education Committee will be discussed at the planned Senior Faculty Retreat. Reforms to the Education Committee will be implemented based on the review recommendations and the outcomes of the retreat discussions.		RSAA Director Associate Director Education	

2.7		DCAA	Communicated at multiple All Cohered	DCAA Diverter	
	It should be made clear to postdocs and graduate students that they have equal opportunities to attend conferences, go observing and take up other training needs regardless of the funding situation of the supervisor.	RSAA will ensure that all available support and opportunities are well communicated and documented. The RSAA Director will present those opportunities at an upcoming All School Meeting. Information will be made available on the internal website and through the RSAA newsletter.	Communicated at mulltiple All-School Meetings and via induction process for new students and postdocs.	RSAA Director School Manager	
2.8	RSAA should ensure that the system of annual appraisals for postdoctoral researchers is implemented properly and that its effectiveness is regularly reviewed by the School leadership.	RSAA will ensure that the existing annual appraisal system for all staff (including postdoctoral researchers) is properly and uniformly implemented. The RSAA Director will ensure that the Associate Director Academic and the AITC Director are well trained in the	ANU is currently revising the peformance review process for a second time. School-level actions are being developed as part of the RSAA Culture Action Plan 2020	RSAA Director	
3	Strategic Objectives and Future Developments				
	The School should put in place a means of engaging the faculty, and perhaps some senior research fellows, in the development of the strategic plan for the next 5-10 years, together with the key elements of its implementation. We encourage all senior staff to engage with, and contribute to, this process. Perhaps the most straightforward way to do this is to organize a strategic retreat over 2-3 days managed by a facilitator. To be successful, considerable preparation will be necessary and the retreat is likely to be the culmination of a series of preparatory sessions for the faculty. Two key issues for the retreat will be justification of the \$4.5M NIG, and future hiring strategy. We recommend that a sound basis for future posts is to focus on scientific excellence recognizing the necessity to build or retain a critical mass of staff in areas of strength. Account needs to be taken of emerging areas, including those that arise as a result of developments in RSAA's instrumentation program and RSAA's participation in national	RSAA will take a first step towards implementing this recommendation by making the further development of the School strategic plan one of the main agenda items for the Senior Faculty Retreat. The recommendations regarding the retreat process and preparation will also be implemented, and the suggestions for key topics of discussion are noted.	The Senior Staff Retreats in 2017 and 2019 each reviewed aspects of RSAA's strategic vision and plans, making recommendations that have been implemented. The School's strategy is a recurring topic for the bi-annual retreats.	RSAA Director	
3.2	Leadership within the Australian astronomical community, and internationally, should be considered a core strategic objective of RSAA.	RSAA agrees with this recommendation. Pathways to success will be discussed at the Senior Faculty Retreat.	Discussed at Senior Staff Retreats. RSAA takes a leading role in operation of the national optical telescope and national optical instrumentation	RSAA Director	
3.3	Diversity and equity objectives should be included in the core strategic aims of RSAA.	RSAA agrees with this recommendation. The RSAA Access and Equity Committee will ensure that diversity and equity are our core strategic aims and foster their implementation.	Senior Staff Retreats supported equity and diversity as core strategic aims. Objectives again reviewed and re- implemented through Culture Action Plan 2020 as RSAA Values.	RSAA Director Access and Equity Committee	
4	Competitiveness and position in the field of instrumentation and space technology				
4.1	AITC should establish and market its unique selling points that will make it the 'go to' place for those capabilities (e.g. IFS and AO).	RSAA is working on preparing a comprehensive business plan for the AITC. Implementing this plan will be the primary role of the new AITC Director.	Initial AITC Business Plan completed and approved by AITC Board; now the responsibility of AITC Leadership Team.	Director AITC RSAA Director	
4.2	In seeking to diversify sources of support for AITC, applications that are motivated by the potential to advance astronomy and astrophysics should be prioritised to retain the closest association with RSAA's scientific programme. Clearly this needs to be interpreted broadly and balanced by the need to retain technical capacity in the staff, and maintain the capabilities of the technical infrastructure. However the success of the RSAA instrumentation programme should be firmly rooted in astronomical investigations and be driven by the staff	RSAA agrees with this recommendation, which will be addressed through the strategies set out in the AITC business plan.	AITC Business Plan identifies additional areas to be pursued, while retaining astronomy as the core business of the AITC.	Director AITC RSAA Director	
4.3	Complementarity and co-operation with AAO should be pursued further. The aim should be to combine capabilities to make the union of these two efforts greater than the sum of their parts, so that together they will be more competitive on the global stage.	RSAA will aim to further develop relationships with the AAO. Since the review was conducted, the AITC and AAO have begun a program of exchange visits. There are several current active projects and also new collaborative prospects.	RSAA is now operating the AAT and is a member of the new AAO consortium running the national astronomical instrumentation program.	Director AITC	

4.4	RSAA should continue to make strategic alliances with other players in the Australian instrumentation scene to build competitive teams that can effectively respond to funding opportunities. The partnership with EOS and SERC looks particularly successful and where possible similar arrangements with others should be nurtured.	RSAA agrees with this recommendation and is currently pursuing national partnerships with UNSW, U. Melbourne and CSIRO, and international partnerships with Tyvak, Boeing, and others.	RSAA is member of the AAT and AAO consortia, is active in ANU InSpace, leads the National Space Testing Facility, and is involved in Defence	Director AITC RSAA Director
4.5	We warmly welcome the appointment of Anna Moore as AITC Director and recommend that she should have access to discretionary funds e.g. to attract matching funding	RSAA has secured start-up funding for the new AITC Director.	Start-up funding has leveraged various AITC initiatives and the DREAMS telescope at SSO.	RSAA Director
4.6	In re-casting the RSAA finances to reflect the developing strategic priorities, consideration should be given to using the NIG to invest in the AITC both to develop specific capabilities, and to address the problems generated by the 'lumpiness' of the funding sources available to it	RSAA agrees with the principle of this recommendation. At present RSAA's NIG funds are largely assigned to other long-term commitments (e.g. SSO and staff), although it provides AITC with ~\$500k p.a. for academic salaries and IT services. RSAA will need to build up other revenue sources (e.g. teaching income) in order to free	RSAA has ensured the AITC received block grant revenues and strategic NIG funding. AITC is now largely self- supporting with its own strategic reserve.	RSAA Director
(5.2)	There should be greater integration between RSAA staff primarily motivated by the instrumentation research programme and those with mainly astronomical research interests. The panel sensed that AITC staff are regarded in some respects as separate and different from 'academic staff'. In so far as possible these differences should be set aside to encourage the day-to-day interaction between staff members that can stimulate the creative spark needed to develop novel instrumentation ideas that will advance astrophysics and give AITC a competitive advantage.	RSAA agrees with this recommendation. The RSAA Director, AITC Director and School Manager will prepare a detailed resourcing plan, succession analysis and risk assessment; if the financial position permits, RSAA will consider converting AITC senior staff to continuing appointments. In all respects, RSAA will work to ensure that the astrophysics and instrumentation programs are well integrated. AITC staff will present their work at	RSAA has converted all AITC senior academic staff to continuing positions, integrating them fully with other academic staff while ensuring they remain engaged with AITC.	RSAA Director Director AITC School Manager
4.8	We recommend that some additional flexibility in time-card keeping for AITC staff is needed to ensure that their professional development and creativity is not hindered unnecessarily. This will need to be balanced by the requirement to ensure that the AITC's contractual obligations are met. Implementation of a uniform, light-touch approach to Clarizen may achieve this	It is essential that all AITC personnel record their time, but RSAA will actively work to ensure that this process is easy and simple to use while remaining compatible with our contractual obligations for external contracts.	The AITC time-carding process has been revised and made simpler to use.	Director AITC
4.9	We recommend that professional staff should be encouraged to become multi-skilled through the provision of appropriate training. This is a realistic way of mitigating, to a limited degree, the risk that key skills are vested in just a single person.	AITC Director will promote this as a key to good resourcing and planning. AITC will establish its own professional development funds.	Development funds established. Training is an ongoing priority.	Director AITC
4.10	The implementation plan for the 'user pays' operations model for the 2.3m telescope, together with the transitional provisions for those without a source of funds, should be communicated to the staff and students as soon as possible. Proper measures to ensure a smooth science exploitation during a transition period should be	The new 2.3m time allocation model has been communicated to staff and implemented. The first quarter was successful, but the outcomes and impacts will be monitored and the model adjusted as required.	The new model is accepted and is being continuously improved; the contribution of paid time to 2.3m costs is significant and is expected to increase in future.	RSAA Director
4.11	As part of the development of an overarching strategic plan, RSAA should start consulting and preparing plans for the future of the facilities at SSO once AAO decides to significantly reduce its commitment to SSO.	RSAA Executive agrees with this recommendation. This will be a major topic of discussion at the Senior Faculty Retreat and part of the RSAA's strategic plan.	RSAA is contracted to run AAT operations to at least 30 June 2022 and probably for at least another 3 years thereafter. The 2.3m is being upgraded to robotic operation and will run for foreseeable future. SSO is acquiring new external users of the observatory	RSAA Director School Manager
5	Governance			
5.1	We recommend that regular faculty meetings of academic staff are held to discuss strategic issues of importance to the School, including policy decisions. These are likely to form an essential preparation for the development of a strategic plan for RSAA.	RSAA agrees with this recommendation and will hold an annual Senior Faculty Retreat for this purpose.	Senior Staff Retreats held bi-annually; senior staff have frequent regular meetings, both formal (RSAA Executive) and informal (Senior Staff Lunch).	RSAA Director School Manager

(4.7)	We recommend better integration of AITC and `academic' aspects of the Research School, so that developments in instrumentation and astronomy research are brought together to achieve optimum outcomes for both areas and leverage on strengths of both areas	RSAA agrees with this recommendation. The RSAA Director, AITC Director and School Manager will prepare a detailed resourcing plan, succession analysis and risk assessment; if the financial position permits, RSAA will consider converting AITC senior staff to continuing appointments. In all respects, RSAA will work to ensure that the astrophysics and instrumentation programs are well integrated. AITC staff will present their work at	As per 4.7 above.	RSAA Director Director AITC School Manager	
5.3	We recommend enhanced transparency and inclusiveness in decision making as well as improved communication with staff and students (e.g. Weekly Bulletin to record staff and student events)	RSAA will implement a monthly Director's Bulletin to communicate strategic directions, and in addition update weekly the list of people who are away and other business-as-usual events on the RSAA website.	Monthly RSAA newsletter implemented, with updates from Director, Schooll Manager and other relevant information (inc. links to people away and other BAU events on	RSAA Director School Manager	
	The University should develop policies to ensure that Stromlo based staff and students can be well integrated into the campus activities and that campus services are accessible to them. Regular and reliable transportation between the main campus and Mount Stromlo needs to be addressed as a priority	transport arrangements between Stromlo and the main ANU campus.	will continue to seek funding support from ANU central for daily bus service.	RSAA Director School Manager	
5.5	We recommend that the School institutes formal policies and procedures to ensure that students and staff benefit from the facilities and services available to them (e.g. induction of students and staff, mentors) as well as get proper feedback on their performance and giving them the opportunity to raise issues of their concern in a	RSAA agrees with this recommendation. Since the review, RSAA has developed an induction booklet for staff and students. RSAA will develop and properly communicate academic performance procedures.	Induction booklet is provided to new staff and students; PDR procedures improved (see above).	RSAA Director Associate Director Academic Associate Director Education AITC Director	
6	Funding				
6.1	We commend the Director and administration for guiding RSAA towards a sustainable balanced budget. Further, we see merit in separating the budget into elements representing different activities to enable strategic decision-making. We encourage a flexible approach to this allocation process so that cross-subsidy is possible if it is strategically sensible.	RSAA agrees with this recommendation. RSAA will work towards sustainable business model for both the School and the AITC, and will be flexible regarding cross- subsidies where this is strategically useful.	RSAA has operated with balanced budgets each year since 2017 (even in 2020); the AITC is now close to supporting itself; strategic subsidies will be employed if needed.	RSAA Director	
6.2	In the context of other universities in Australia, income earned through teaching is relatively low. We encourage the School to take a pro-active stance to initiate further undergraduate teaching (e.g. through a large enrolment non-science major astronomy	RSAA will explore opportunities and viability of additional courses for non-major science students. RSAA will do market analysis on the appetite for and	RSAA has created a large non-major introductory astronomy course (ASTR1001) and a popular summer	Associate Director Education School Manager	
	course) and significantly expand the graduate programme	profitability of such courses.	school program.		
6.3	course) and significantly expand the graduate programme The current utilities expenditure is ~\$520k. Is there any possibility to generate significant amounts of solar or wind power at both Mount Stromlo and Siding Spring? Capital investment might be funded using grants for infrastructure to generate renewable energy.		school program. Stromlo will be an early adopter of ANU's sustainable energy plan, when agreed. RSAA has expended its own funds to invest in a solar PV system to be installed in 2021.	RSAA Director School Manager	