

# ATNF Operations

ATUC November 2021

John Reynolds



Credit: Parkes Champion Post



- **ATNF Ops Staff changes**
- **Status incl. COVID-19 update**
- **KPIs**
- **Individual Facility Reports**
  - ATCA
  - Parkes
  - ASKAP
  - Archives
- **Narrabri Lodge open!**

# Welcome to ...



**Brian Madden**  
Narrabri



**Danilo Zonta, Ralf Schneider**  
New Norcia

# Farewell and thanks to ...



**Lyn Milgate**  
Parkes VC



**Ken Reeves**  
Parkes

# Other staff changes:

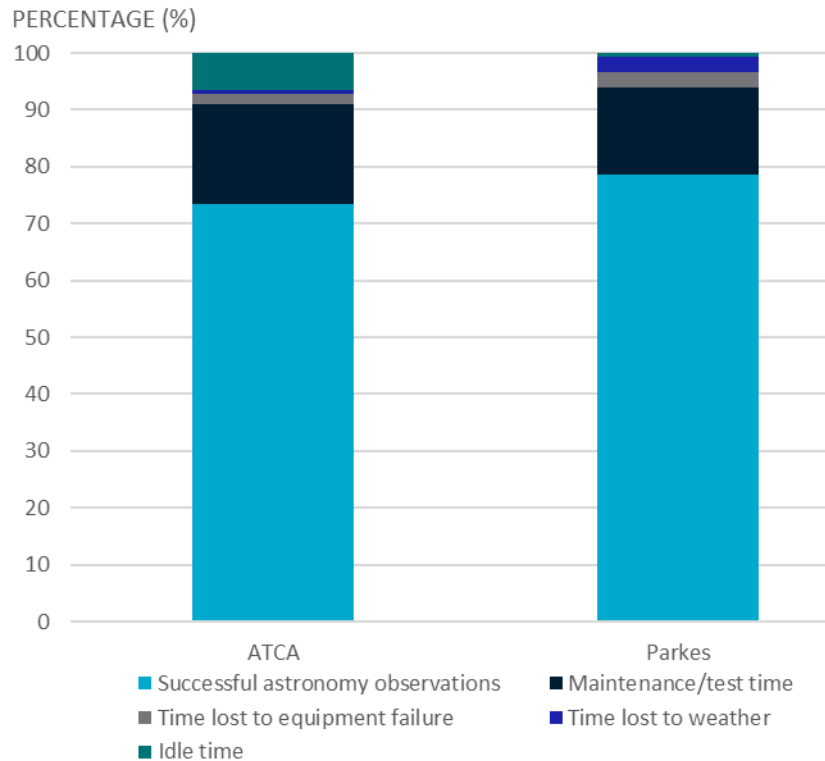


**Mal Smith (Parkes)** has stepped down as Site/Team Leader



**Jimi Green** – currently Acting SKA Low Director

# ATNF Telescope KPIs



	Successful astronomy	Equipment failure
ATCA	73%	1.7%
Parkes	78%	2.8%
ASKAP	39%	6.5%

Two fire-alarm events at MRO



# Current status of facilities, November 2021

- Parkes, ATCA, ASKAP telescopes continue to operate normally with applicable COVID precautions.
- COVID has caused some disruption to cryo-PAF preparations
- Parkes Visitors Centre closed 15 August - 26 September:  
now open again  
Narrabri Visitors Centre re-opening soon
- NSW sites: visitors welcome for up to 4 hours, if Vacc<sup>2</sup>  
Electronic registration or paper declarations required.  
WA sites – no time limit.



- **ATCA Report**
- **See also:**
  - BigCAT talk (Chris)**
  - New user support model (Minh)**

# Statistics

Project allocations for “normal” projects (who expect to get time in a single semester, excluding NAPA).

	2020APR	2020OCT	2021APR	2021OCT
# of Proposals	48 (2878 hr)	38 (2411 hr)	33 (2432 hr)	26 (1040 hr)
Cutoff Grade	3.3	3.0	3.3	3.3
Projects 90 – 100%	21	30	22	20
Projects 40 – 90%	8	5	3	1
Projects < 40%	3	1	1	0
Projects 0%	16	2	7	5



# ASKAP-related projects

	2020APR	2020OCT	2021APR	2021OCT
# of Proposals regular	48 (2878 hr)	38 (2411 hr)	33 (2432 hr)	26 (1040 hr)
# ASKAP-related regular	7 (473 hr) [16.4%]	10 (565 hr) [23.4%]	6 (428 hr) [17.6%]	4 (120 hr) [11.5%]
# of Proposals NAPA	26 (1367 hr)	30 (1461 hr)	28 (1515 hr)	28 (1618 hr)
# ASKAP-related NAPA	2 (173 hr) [12.7%]	3 (280 hr) [19.2%]	3 (272 hr) [18.0%]	1 (120 hr) [7.4%]

# NAPA Allocation

Semester	NAPA/ToO (hours) **	NAPA %	ToO %	ASKAP %
2021APR	528 (17.0%)	70.5	29.5	9.2
2020OCT	455 (14.7%)	62.1	37.9	9.2
2020APR	348 (11.2%)	60.2	39.8	13.4
2019OCT	633 (20.4%)	48.0	52.0	19.4

\*\* Percentages in “hours” column represent the fraction of the usable semester, which is roughly 3100 hours.



# Legacy Project Data Hosting

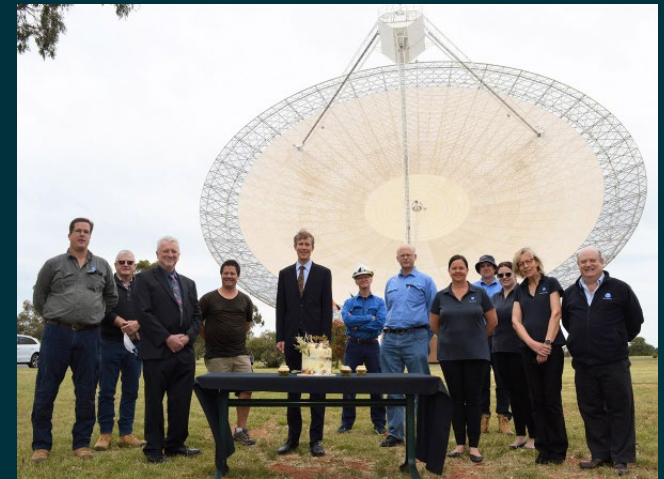
- CASDA now ready to accept Legacy data
- GLASS and StarFISH will put data into CASDA when they're ready to release their data products
- IMAGINE and CACHMC are being informed that they can use CASDA if they can
- DAP is also an option if CASDA doesn't suit

# Parkes Report



## Parkes 60<sup>th</sup>

- Webcast & live event
- Talks on ATNF website



# Parkes issues

- Preparations for cryo-PAF installation proceeding, despite COVID delays
- Science commissioning now likely to be in 2022OCT semester
- Some flexibility in scheduling will be required,
  - Space tracking also will require some flexibility:
  - A revision of current schedule (March) is likely
- Awaiting decision on UWH funding - resubmission as back-up have reached out to more university partners  
*(but always welcome more if interested!)*
- New projects nearby requiring coordination on potential RFI (wind farm and weather radar)



- **ASKAP Report**



# Counting down to the launch of ASKAP 36 full survey science

[csiro.au/ASKAP](http://csiro.au/ASKAP)



COMPLETE JUST STARTED NOT STARTED

01

**FRINGES BETWEEN ALL ANTENNAS**  
Verify that all antennas function as an interferometer

02

**SINGLE-BEAM IMAGE**  
Test phase stability and array calibration

03

**MULTI-BEAM IMAGE**  
Test ASKAP's processing pipeline

04

**IMAGE OF A COMPLEX FIELD**  
Test ASKAP on a challenging part of the sky

05

**OBSERVE SCIENCE TEST FIELDS**  
Demonstrate performance using fields of scientific interest

06

**COMPLETE A RAPID ALL-SKY SURVEY**  
Release data from the Rapid ASKAP Continuum Survey project

07

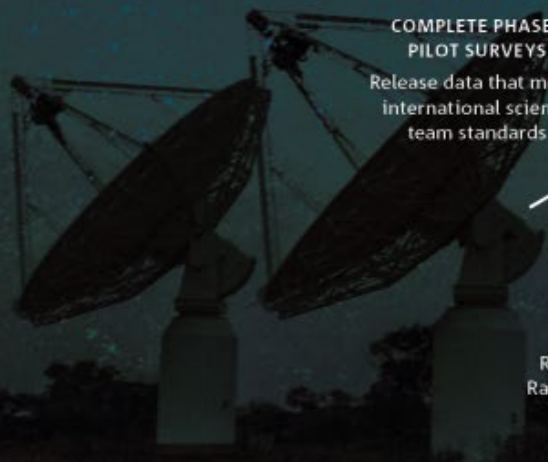
**COMPLETE PHASE I PILOT SURVEYS**  
Release data that meets international science team standards

08

**COMPLETE PHASE II PILOT SURVEYS**  
Test a combined survey strategy that maximises efficiency

09

**ASKAP SURVEYS COMMENCE**  
Launch multi-year observing campaigns based on pilot surveys





# RASSP – Review of ASKAP Survey Science Projects

- Teams are preparing submissions for 11 November
- Revised proposals to be reviewed by international panel
- Report to Director expected in February
  - Review science cases with better understanding of capabilities
  - Provide guidance on allocation of time
  - Consider commensal scheduling issues
- ASKAP Split-band mode:
  - Will review after RASSP panel, for possible implementation later in 2022



# Pawsey and computing update

- Setonix Phase I in place
  - 45% more powerful than Magnus+Galaxy
  - ASKAP staff currently undergoing briefings and running tests on limited system
  - *Setonix* Phase-2 delivered in 2022 (50 pFLOPs)
  - ASKAP migration in early 2022





- **Archives Report**

# CASDA update

## Main developments:

- Updates for the move to new Pawsey Ceph/S3 object storage
- Migration now to begin in January, complete in late March.
- 'Low' priority data will be offline during migration period+
- *Now 1.3 PB in volume*

## Future plans:

- Move to new Pawsey servers (starting ~July 2022)
- Improve and update data access queues
- UX/UI re-design for greater usability
- Install CARTA visualisation app
- New cutout UI service/API
- ATOA migration ...

# Pulsar DAP

## Main developments:

- Significant improvement in external download speeds achieved in ~May 21
  - Now getting 5MB/s to Europe
- ATOA download speeds also greatly improved
- UI improvements
- Now 3.6 PB in volume (*more than 90% of entire DAP!*)

## Future Plans:

- Move to Ceph/S3 storage (removes tape and collection size issues)
- UX/UI re-design

# Narrabri Lodge is open

Narrabri Lodge is **still** open for visitors!

Double vaccination required  
Social distancing in force.

Qualified observers welcome

Catered or self-catered options.

Contact: [accommodation@atnf.csiro.au](mailto:accommodation@atnf.csiro.au)



*We acknowledge the Wajarri Yamatji people as the traditional owners of the Murchison Radio-astronomy Observatory site*

**CSIRO Astronomy and Space Science**

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