CSIRO - DIVISION OF RADIOPHYSICS

ALLOCATION OF TELESCOPE OBSERVING TIME AT PARKES RADIO OBSERVATORY

FIRST QUARTER 1975

1. <u>Duration</u> The quarter starts at 0800 hours (Eastern Summer Time) on Thursday, 2 January 1975 and finishes at 0800 hours (Eastern Standard Time) on Friday, 28 March 1975. (Good Friday)

2. Format Notes:-

- (a) Where a non-standard changeover time has been allocated, this is indicated on the program.
- (b) Monday computer maintenance has been reduced to half a day. The hours 0800 to 1300 are set aside for this purpose, unless otherwise indicated.
- (c) The hours allocated to the <u>Officer-in-Charge</u>, <u>Parkes</u> have in several instances been changed to accommodate galactic observations, and these are indicated on the program.
- (d) The hours 0800 to 1300 on all Fridays are as usual, set aside for <u>desk checks</u> and computer maintenance.
- (e) Unless a change is sought by the observers, <u>computer program development time</u> is provided in the hours set aside for the Officer-in-Charge, Parkes. (See 3. for exceptions)

3. PDP-11 Drive System

Full daytime for three lots of 5 week days has been set aside for development work on the PDP-11 telescope drive system. Since this involves driving the telescope, no observations have been programmed in this time. This down-time and a long string of jobs not needing the autocorrelator have given us a good opportunity to make some hardware and software modifications to it. Hardware modifications and tests will occupy the first two 5-day periods. The third period is given over to development work on the new correlator program. The arrangements on the PDP-9 during this period will be as follows:-

(a) G. Moorey has priority in first two 5-day periods. He will only need a small amount of time but the machine should be made available when he needs it. This also applies during the usual 4-hour development slot and where an interruption occurs, extra time

should be given as compensation. Use of the remaining computer time is in the hands of the Operations Manager.

- (b) On the third 5-day period, all daytime PDP-9 time excluding maintenance periods have been allocated to A. Hunt for work on the new correlator program.
- 4. <u>Dish Survey</u> Nine first or second halves have been allocated for dish survey work. Driving requirements during these periods are indicated on the program.
- 5. SCO-Xl During the period 15 February to 3 March this source will be monitored by an X-ray satellite. Every day during this period when the 5 cm receiver is available, we have allocated approximately one hour per day for monitoring this source.

6. 18 metre Telescope

Days on which the Mark II filter back-end is not required on the 64m dish are marked *. Days when this back-end is on standby for the 64m dish are marked **. 18m observations are possible on both these types of days, but on days marked ** 64m observers may take over the filter back-end if they require it.

7. 18 metre Allocations

13 February → 3 March inclusive - Mathewson, Murray, Cleary

15 March → 18 March inclusive - reserved for Mathewson, Murray, Cleary (if required)

21 January → 30 January inclusive - Kerr, Bowers

11 March → 14 March inclusive - reserved for Kerr, Bowers (if required)

Other available time can be reserved with the Program Planning Committee.

- 8. Accommodation Meals Abbreviations Unchanged. Persons unfamiliar with these arrangements should consult an earlier program.
- 9. Comments
 This quarter's program has been complicated by the need to fit in a number of instrumental jobs and by the need to obtain the best usage of time allocated to galactic observations.
 Whilst strictly a 'non-galactic' quarter, the bulk of requests submitted were for galactic time, and these have been accommodated in the best manner possible.

172 observing nights were applied for with 85 available. Few people wanted to observe in January. Some could only use a small slot of time in the quarter. It goes without saying that such a situation is difficult to accommodate. The program is largely shaped by receiver availability -

- (a) 5 cm available late in quarter
- (b) 6 cm available for testing late in quarter
- (c) 18 cm unavailable due to the collapse of a paramp late last quarter

and by the new system of refereeing introduced this quarter. Time, where possible, has been allocated to give maximum coverage of the prime objects of interest.

Program Planning Committee

(per R.A. Batchelor)

DATE 1975	DAY 08 ^h -13 ^h	13 ^h -24 ^h -08 ^h	Feeds, Focal	Receivers		LO, Pumps	Test	Data	Computer	Installation,	Computer
January			Requirements Other	Front End	Back End	Phase Locks Multipliers	Equipment:	Processing	Program	Driving Requirements Remarks	Program Development
Thurs 2	408 MF	dz Southern Survey	73-circular	73 MPI Rx	MPI polarimeter	HP synth.	Sweeper for 408MHz	PDP-9	Log 408	6 ⁰ /m in ZA	*
Fri 3	D/c, c/m	HASLAM, COOKE,	+ apex dipole	liquid	and	NIXBCD	and 30 MHz	+.	DEC 408	and	*
Sat 4	CLEARY,	WILSON, DAY	415 MHz helix		digital	display	400 MHz	MPI		6°/min	*
Sun 5			with 16 dB pad	nitrogen load	back-end	рож	counter	digital back-end		ME scans	*
Mon 6	C/M	Positions of Southern	Twin 11 cm	11-c	Continuum	Standard		PDP-9	Own	_	*
Tues 7	0-i-C	Sources									*
Wed 8	Parkes	BOLTON, SAVAGE, WRIGHT									COOKE *
Thurs 9		van der HAEGEN			, .	. ·		·			*
Fri 10	D/c, c/m					•					*
Sat 11		·								,	*
Sun 12	Sourc	e Polarization	11 cm	11-c		_	Tektronix	PDP-9	JUPITR	_	*
Mon 13	C/m	KOMESAROFF,	Feed rotator	·			453 VTVM, etc.				*
Tues 14	0-i-C		Offset Reference								WRIGHT *
Wed 15	Parkes	21cm Installation MURRAY	Circ. poln. if	21-l	Filters	Phase-locked	Frequency	PDP-9	Own	Observers	
Thurs 16		HI Absorption in front		Computer switchable	1,10,33kHz	LO Stability		all	(JGA)	will be	
Fri 17	D/c, c/m	of distant Pulsars		adjustable		better than 1 kHz	Hi-sensiti- vity	peripherals including		available to assist in	
Sat 18	ABLES, HA	MILTON, MANCHESTER		noise source		HP Synth.	Tektronix CRO for	Houston Plotter		set-up of receiver	
Sun 19			•			(or equiv.) for	monitoring	r		system	
Mon 20	c/m	. •				PTU				e i gele i si	
Tues 21	PDP-11 Dri	1	2 HE +	3.4-c	Total	AND THE RESIDENCE AND AND THE PARTY OF THE P	A STATE OF THE PARTY OF THE PAR			No scheduled daytime driver	Moorey has * priority on
Wed 22	System HAMILTON,	TRETT COOKE, BUTLER HALL	rotator	:	power PTU					all week	PDP-9 in * daytime *
Thurs 23	Autocorrela	ator Pulsars	as above	as above		Free running	Free synth.	PDP-9	НР	Standard night	T
Fri 24	D/c, c/m M	OOREY KOMESAROFF, COOKE				X-13 klystron	Tektronix 453 _{VTVM}			drivers	*

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DATE	DAY	13 ^h -24	.hh	Feeds, Focal Receivers		ers	LO, Pumps		Data	Computer	Installation, Driving	Computer
Jan./ Feb.	08 ^h -13 ^h	08"-13"		Requirements Other	. Front End	Back End	Phase Locks Multipliers	Equipment	Processing .	Program	Requirements Remarks	Program Development
Sat 25	X-Ray Sources and Close Binaries SEAQUIST			Twin beam or Noddy	3.4-c	Continuum	Usual	None	On-line	NODDY STAKFL PØINT	Routine scanning in RA & DEC wagging	*
Sun 26	Early Type Emission Line Stars			Dual beam	3.4-c	Usual	_	_	PDP-9 hp 45 off-	nøddy Stakfl		*
Mon 27	c/m ETELS WRIGHT		Fourikis 5' sepn close feed on stand-by		USUUI			line teletype	· .		*	
Tues 28	0-i-C	Accurate	2400 Dish	Twin beam	3.4-c	Continuum	-	_	PDP-9	STAKFL	Driver on first 2 nights of	LEE *
Wed 29	Parkes	Fluxes	Survey YABSLEY,	18.5'	tuned to						dish survey	*
Thur 30		SHIMMINS	LOUGHRY	separation	8.87 GHz						Survey	**
Fri 3l	D/c, c/m	·	900 TYCHSEN 0500	Offset ref. Able to be	3.4-l	Filters correlator	Standard 20K Nominal	_	PDP-9	LINE		
Sat 1	(CH ₃) ₂ O H	Search GARDNER	, WINNEWISSER	balanced on & off Sgr B2		on standby	Cal.			CORLAT		
Sun 2	1000	LMC & Norma Continuum survey			3.4-c(l)	Correlator	HP & Schlum.	Sweep gen	PDP-9	MAPING	No scheduled	····
Mon 3	c/m	1800	O (Recomb.line on Norma	CV-3	tuned to 8872.569	filters	Synthesisers Phase lock	wavemeters power meter	Dectape Houston	CORLAT	daytime driver all week	Moorey has priority on
Tues 4	PDP-11 Dri System	ve	McGEE, NEWTON	absorber	MHz	continuum	system	CRO monitors	Plotter	LINRED		PDP-9
Wed 5	HAMILTON,	TRETT	BUTLER	. , .	cold load		counters, etc.				·	in daytime
Thur 6	Autocorrel	+-	· · · · · · · · · · · · · · · · · · ·									PETERSON
Fri 7	D/c, c/m	MOOREY			· - -						No driver for dish survey.	
Sat 8	Acrolein a		00 Dish survey	Offset ref	3.4-l	Filters	Phase	C/R	PDP-9	LINE		Computer time on Tues, Wed.
Sun 9	search		YABSLEY LOUGHRY	absorber	tuned to	100 kHz	locked	CRO		(VERSION 2)		should commence at 1500 hrs
Mon 10	BROWN JOHNSON	1700 c/m	TYCHSEN 0400		8.8 GHz		LO			LINRED		summer time FREE
Tues 11	ROBINSON GODFREY	0-i-C										if C-i-C has
Wed 12		Parkes								***	2	jobs
Thur 13	0-i-C	21 cm in	stallation	Hybrid	21-l	Auto-	Synthesiser	Sweep	PDP-9	CORLAT		*
Fri 14	D/c, c/m Magellanic Stream, Intergalactic HI,			feed		correlator	20 cm	wave meter	5			
Sat 15		ctic Struc	ture				multiplier	etc.				*
Sun 16	MATHEWSON	MURRAY,	CLEARY									*

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DATE	08 ^h -13 ^h 13 ^h -24 ^h -08 ^h		Feeds, Focal Receivers		ers	LO, Pumps Phase Locks	Test	Data	Computer	Installation, Driving	Computer
1975 Feb./	08 -13		Requirements Other	Front End	Back End	Multipliers	Equipment	Processing	Program	Requirements Remarks	Program Development
Mon 17	C/m	1800					-		;	No scheduled daytime drive	A. Hunt has *
Tues 18	PDP-11 Drive System									all week	PDP-9 time *
Wed 19		Testing & HoCS	2 HE Hi-freg.	5 -l	Autocorrel- ator	hp synth. 270 MHz	Sweeper (4-8 GHz)	PDP-9	CORLAT		in this period **
Thur 20	Autocorrelator	Mapping /s	absorber		Filters on	Multiplier	4-12 GHz		CORTRN	Technical	HUNT **
Fri 21	D/c, c/m HUNT	Mapping / S/ BATCHELOR / S/ BATCHELOR / S/ S/ S/ S/ S/ S/ S/ S/ S/ S/ S/ S/ S/ S			standby	or Schlum Synth.	Wavemeter Hi-gain scope		LINE	driver first night	**
Sat 22	McCulloch, Whitt				The state of the s		powermeter				**
Sun 23	1	nd Close Binaries	Offset ref.	5-c	Continuum Total power	Usual	None	On line	nøddy stakfl	Scarning in RA and Dec	*
Mon 24	c/m	1700 SEAQUIST,			option	•	-		PØINT	Wagging	*
Tues 25		ייי דייייי דיייי									BUTLER *
Wed 26	1	kes									, *
Thur 27	O-i		Feed Hi-freq.	5 - l	Autocorrel- ator filters		CRO VHF Sig.gen Sweeper	PDP-9 +	CORLAT or new		**
Fri 28	Spe	ctrograph /~	absorber Wielebinski	350 450	on standby Electro-	Multiplier or Schlum synth.	4-8 GHz Wavemeter	own	version) CORTRN		**
Sat 1			408 Helix	350-450 Avantek	optic spec- trograph		powermeter		LINE		**
Sun 2		1700 CO									**
Mon 3	c/m	Survey of 5cm	Circular	5-l	Auto-	as above	none	PDP-9	CORLAT		**
Tues 4	· 0-i-	C OH Sources	polarization		correlator	·	·				BUTLER
Wed 5	Park	es KNOWLES, CASWELL GOSS	absorber								**
Thur 6						,	•	·			**
Fri 7	D/c, c/m										**
Sat 8	5 cm OH Line Ob	servations	Absorber	5-L	Autocorrel- ator	as above 15-20K	_	PDP-9	CORLAT CORTRN		**
Sun 9		HITEOAK	No switch		filters on standby	cal.					**
Mon 10	c/m									·	**
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•	DATE 1975	DAY 08 ^h -13 ^h	Feeds, Focal Plane	Plane	ne keceivers		LO, Pumps Test		Data	Computer	Installation,	Computer
	MARCH	08 -13		Requirements Other	Front End	Back End	Multipliers	Equipment	Processing	Program	Driving Requirements Remarks	Program Development
, •	Tues 11	0-i-C	408 MHz Southern Survey	73-circular + apex dipole	73 MPI RX	MPI Polarimeter	hp Synth.	Sweeper for 408 &	PDP-9 MPI	LOG 408	6°/m in ZA	SHIMMINS *
	Wed 12	Parkes	HASLAM, COOKE, CLEARY	linear and 415 MHz	Liquid nitrogen	and digital back-end	display box	30 MHz 400 MHz	digital back-end	DEC 408	and 6 /m ME scans	*
	Thur 13	D/c, c/m	WILSON, DAY	helix with 16 dB Pad	load	:		counter				*
	Sat 15							·	,			*
	Sun 16	·	· · · · · · · · · · · · · · · · · · ·									*
: *	Mon 17	c/m										*
	Tues 18	0-i-C	Dynamic Spectra of	Circ. pol.	As above	Filters ·	Schlum Synth.	Counter	PDP-9	~-	7.7.2.7.7.7	**
	Thur 20	Parkes	Pulsar scintillations ABLES, ROBERTS	feed Computer	then 335MHz Δf>6.4 MHz	1, 10, 33, 100 kHz	LO hp Synth.	Hi-sensit- ivity	Houston Plotter	Own (JGA)	Will assist in	HAMILTON
	Fri 21	D/c, c/m		switchable noise source			for PTU	Tektronix CRO	CRO Camera		installation	
	Sat 22 Sun 23	6 cm Rece	iver Tests COOKE, BUTLER	Absorber 2HE & 1HE Cold load	Modified 6-l	Auto-correl ator	Phase locked	Sweeper 4-8 GHz	PDP-9	CORLAT LINE		
	Mon 24	- c/m	HALL, PHELPS,	beam and polarization		Filters Continuum	hp Synth. Schlum Synth.	5 GHz wave- meter Ka- band wave	Plotter Printer	LINRED STAKFL NØDDY		
	Tues 25	0-i-C	HOWARTH	switching Noddy tot.pwr line switched				meter counters		PØINT		FREE
	Wed 26	Parkes	Positions of Southern	line.	_			power meters				
	Thur 27		BOLTON, SAVAGE, WRIGHT	Offset ref.	6 - c	Continuum	Free-running LO	-	PDP-9	Own	-	*
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