

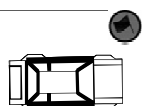
# ***Rally Navigation Course***



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# ***How a Rally Works***

## Special Stage Rally



Rule 1: Everything works  
off the clock.



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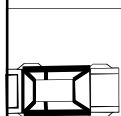
# ***Navigator Responsibilities***

- Chief Time Keeper
- Must get car & driver to controls at the correct time
- Navigate driver on liaison (transport) to/from stages
- Read road book/pace notes on Special Stages
- Note any stopped competitors in the stages
- Monitor service time
- Have an understanding of the rules
- Understand the Safety
- Know what to do in an incident
- Recommend to know First Aid

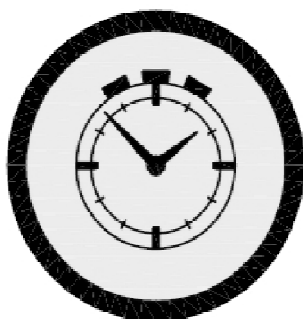
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# ***Time Controls***

Book in Time = 12:00PM



11:58



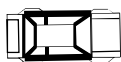
Yellow Board-  
Control Boundary

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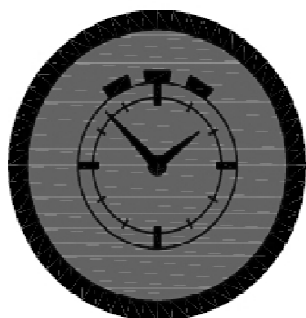
# ***Time Controls***



Book in Time = 12:00PM



11:59

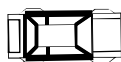


Enter control 1  
minute before book  
in time

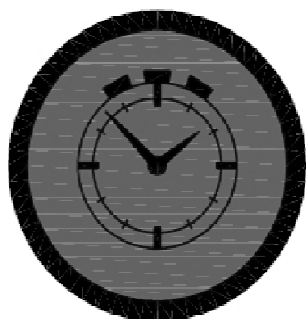
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# ***Time Controls***

Book in Time = 12:00PM



12:00

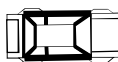


Book in  
(Hand in time card)

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# ***Time Controls***

Stage Start Time= 12:03PM



12:03



Wait for start time

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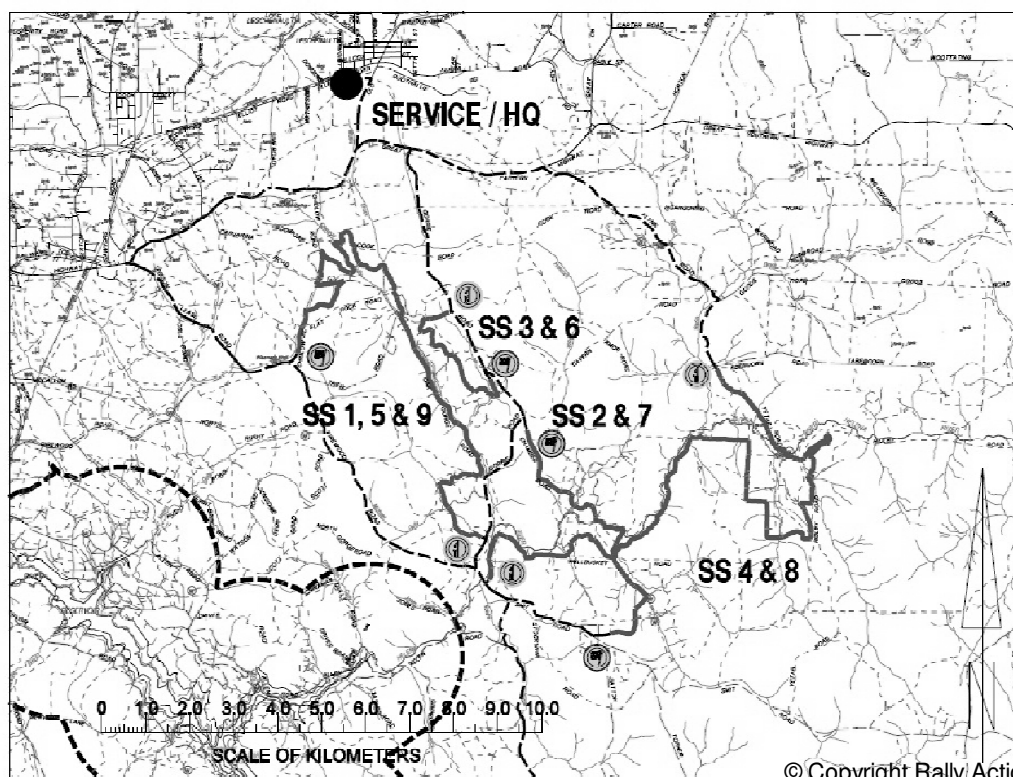
# Road Book

		Total Dist	SS Dist	Liaison Dist	Time allowed	Avg Speed	Car 1 (State)
ICU	Event Start	13.62		13.62	0:16	51.08	13:00
TC1	Gormes Rd						13:16
SS1	Oak Gorge I	23.27	15.77	7.50	0:26	53.70	13:19
TC2	Firewood Rd						13:45
SS2	Gormes East I	12.15	8.98	3.17	0:14	52.07	13:48
TC3	Gormes/New Rd						14:02
SS3	Gormes Loops I	12.96	4.13	8.73	0:16	48.22	14:05
TC3A	Service A In						14:21
	Service A - 20 Mins	61.90	28.88	33.02	0:20		
TC3B	Service A Out/Regroup In						14:41
	Regroup (up to 30 mins)						
TC3C	Regroup Out	13.42		13.42	0:18	44.73	15:11
TC4	Yetar Rd						15:29
SS4	Flynn's I	22.85	18.36	4.49	0:26	52.73	15:32
TC5	Gormes Rd						15:58
SS5	Oak Gorge II	20.00	15.77	13.11	0:31	55.90	15:51
TC5A	Service B In/Clubman Finish						16:32
	Service B - 20 mins	65.15	34.13	31.02	0:20		
TC6B	Service B Out	7.08		7.08	0:12	36.41	16:52
IC6	Gormes/New Rd						17:04
SS6	Gormes Loops II	10.09	4.13	5.96	0:12	50.43	17:07
TC7	Firewood Rd						17:19
SS7	Gormes East II	19.03	8.98	10.05	0:21	51.37	17:22
IC7A	Service C In						17:43
	Service C - 20 mins	38.20	13.11	23.09	0:20		
TC7B	Service C Out	13.42		13.42	0:10	44.73	18:03
TC8	Yetar Rd						18:21
SS8	Flynn's II	22.85	18.36	4.49	0:28	48.96	18:24
TC9	Gormes Rd						18:52
SS9	Oak Gorge III	28.88	15.77	13.11	0:31	55.90	18:55
IC9A	Event Finish	65.15	34.13	31.02			19:26
Total WACC		63.01		64.04			
Total WARC		110.25		118.15			

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# ***Road Book***










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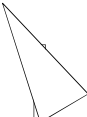
# Road Book

## Liaison

Carrington Traffic Services Safari Rally 2013				PAGE 7	
TC	0	Event Start	AVERAGE SPEED	SECTION	1
IG	1	Comtes Road	51.08 km/h		
SPECIAL STAGE AND COMPETITIVE DISTANCE			DISTANCE	OVERALL TIME ALLOWED	
Liaison to SS1 NEXT SERVICE			13.62 kms	0:16	
Distance		Direction	Information	Dist. to SS	
Local	Partial				
0.00	0.00		SO INTO REFUEL THEN 30M TR WITH CAUTION START QUIET ZONE (OLD NORTHAM RD)	13.62	
0.35	0.35		SO	13.27	
0.87	0.52		SO	12.75	
1.99	1.12		TL END QUIET ZONE SP GT EASTERN HWY	11.63	
2.09	0.10		SO	11.53	
3.15	1.06		TR CAUTION TWO WAY TRAFFIC AND 60 KPH RALLY SPEED LIMIT FOR 10.5 KMS ON CORRIES RD	10.47	
NEXT INSTR		0.10	SO GRAVEL		

# Road Book

Carringtons Traffic Services Safari Rally 2013					PAGE 11	
TC	1	Gorties Rd	AVERAGE SPEED	53.70 km/h	SECTION	1
TC	2	Firewood Rd	DISTANCE	23.27 kms	OVERALL TIME ALLOWED	0:26
SPECIAL STAGE AND COMPETITIVE DISTANCE			DISTANCE		OVERALL TIME ALLOWED	
SST OAK GORGE I			15.77		0:26	
NEXT SERVICE:						
Distance		Direction		Information		Risk to you
Total	Partial					
0.00	0.00	1 		SO 		23.27
0.15	0.15	2 		KL		23.12
0.61	0.46	3 		RBR		22.66
0.89	0.28	4 		EXTREME CAUTION CREST THEN RBL THEN RBR OVER NARROW CULVERT		22.38
1.03	0.14	5 		RBL		22.24
1.13	0.10	6 		DL		22.14
NEXT INSTR 0.20 SO CREST THEN 60M SO CREST						

2

!!!

4

No line  
<200m

**Note:** Not  
everything on  
a stage is  
written in a  
road book.

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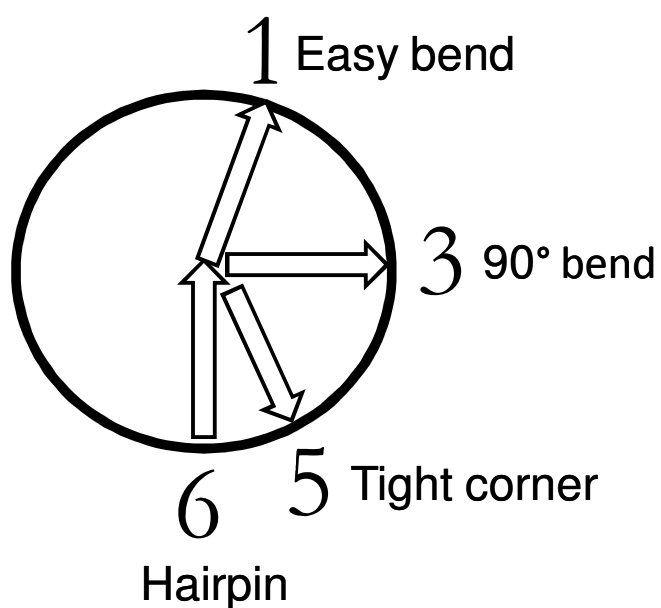
# ***Pace Notes***

- Co-driver simply writes down and reads back what the driver says.
- Pace notes are written during recce- before a rally starts.
- We strongly recommend not to use other competitor's pace notes for competition.
- Perfecting pace notes is a team effort and you need to develop your own system.

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# ***Pace Notes***

Clock Face: 1 - 6



Start with distance  
Then Direction  
Then degree

**EG:200 R3**



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# Time Cards

Time Card 1					
Event		Section 1		Saturday 12 October	
1					
TC 0	START - Chelms	COMPETITOR		USE	
13.00	START LST	ACTUAL TC	TIME ALLOWED	DUE TIME	
13	00	13	00	00	16
TC 1				TC	
TC 1	SS 1 Shik Garage 1	FINISH TIME		COMPETITOR	
15.27 km				USE	
15.27	START LST	ACTUAL START	TIME ALLOWED	DUE TIME	
			00	26	
TC 2				TC	
TC 2	SS 2 Garage East 1	FINISH TIME		COMPETITOR	
4.56 km				USE	
15.00	START LST	ACTUAL START	TIME ALLOWED	DUE TIME	
			00	14	
TC 3				TC	
TC 3	SS 3 Garage Lamps 1	FINISH TIME		COMPETITOR	
6.12 km				USE	
12.00	START LST	ACTUAL START	TIME ALLOWED	DUE TIME	
			00	16	
11:30A				TC	

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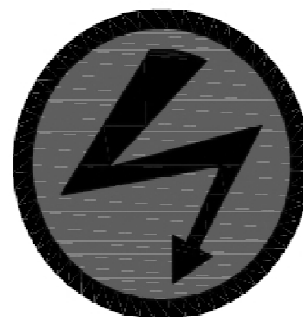
# Service

TIME CARD 2			
		Car number <b>1</b>	Section 2 Saturday 12 October 2013
			
TC 3A	SERVICE A In	COMPETITOR USE	
	ACTUAL TC3A	TIME ALLOWED	DUE TIME
	H M	00 20	H M
TC 3B		H M	TC3B
		ARRIVAL TC3B	
TC 3B	SERVICE A OUT/REGROUP In		
	ACTUAL TC3B	PROVISIONAL START TC3C	
	H M	H M	
TC 3C			

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# ***Safety***

- SOS radio system
- SOS @ Start, stop and every 5km in Stage
- If stage is <5km, SOS at mid point
- Emergency Phone number of rally base
- FIV & Emergency services
- Sweeper



NOTE: NEVER EVER drive against rally traffic  
(opposite direction) on a special stage

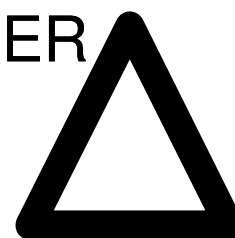


# ***Safety***

- What to do- Break down/flat tyre/car off road
- Remember, the rally is live and running

**DO NOT PUT YOURSELF in DANGER**

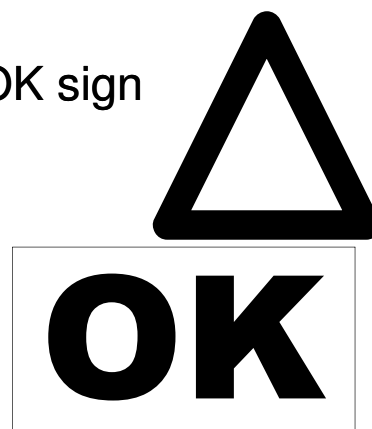
- Put out Triangles- all other competitors must slow down and approach with caution.
- Display OK sign to min of next 3 cars
- If re-entering stage, exercise extreme caution. Be aware of other competing cars.



**OK**

# ***Safety***

- You see Triangle/OK sign
- Tell driver to slow down and that you're off the notes.
- Note car number
- Note where in stage (mark road book)
- Note if car in safe place, triangles out, if OK sign is displayed + any other details.
- Resume co-driving
- Provide all information to officials
- at stop point



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# ***Safety***



**SOS**

- You see an SOS sign or No sign
- 1<sup>st</sup> car must stop and render assistance
- 2<sup>nd</sup> car to go to nearest SOS with all details
- 3<sup>rd</sup> car to stop & provide additional assistance
- If both occupants unable to assist, display SOS sign and put out triangles.
- Turn off ignition and/or battery isolator if safe.
- Remember stage is still running until rally base stops stage and cars will be moving at speed.

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# ***Safety***

- You need to use the SOS sign
- DO NOT PUT YOURSELF IN DANGER
- Administer First Aid immediately
- Turn off ignition and/or battery isolator (if fitted)
- Display SOS sign to next car
- Call emergency number if you have mobile service
- Remember stage is still running until rally base stops stage and cars will be moving at rally speed.

A rectangular sign with a black border containing the letters "SOS" in a bold, black, sans-serif font.

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# ***Tips & Tricks***

- Read & understand the supp regs. Ask if you don't understand
- Check you receive all items at documentation
- Check all pages are in Road Book before leaving documentation
- Check for bulletins before event & at rally HQ, add to road book.
- Use sticky labels to mark each stage in road book
- Highlight all cautions and tricky parts in road book
- Work out rough service arrival time and confirm with crew
- Take plenty of fluids with you in the car, consider Camel Back
- Take a jacket with you in the car on cooler events
- Take a torch in the car, a spare watch and a calculator
- Get a rally bag and carry above items in bag
- Carry side cutters (wire cutters) & tyre pressure gauge

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# ***Tips & Tricks***

- Write your start time at the top of the road book for that stage
- Carry spare pencils/pens
- Cross off each instruction as you pass it (liaison & stages)
- If you have rolled, support yourself before releasing belts
- If you catch a car in the stage, you have the right to overtake
- Practice changing a tyre as if you were on a stage
- Test your intercom before rally starts
- If co-driving for a different driver, check i/c compatibility
- Carry a spare battery if intercom uses a battery

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