

# RoboCup Junior Tasmania Entrant's Information Kit 2006

Activities Centre, Union Building University of Tasmania, Hobart Friday 4th August – Saturday 5th August



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# **General Information**

#### Expectations for the event

The aim of RoboCup Junior is to create an entertaining and educational experience for all involved. To achieve this we all must create a **spirit of collaboration**, rather than competition. It is hoped that all entrants respect this aim.

Additionally, the following expectations are intended to help make the event as enjoyable as possible for every one involved. Please adhere to these and remind others if they are unaware of them.

- Flash/Auto Focus Cameras or video spots can interfere with the robots, so these are not permitted.
- All movement and behaviour is to be of a subdued nature.
- Students must only leave the Activities Centre under the permission of their Team Mentor or guardian.
- After 10am, ONLY competitors will be allowed in the Setup area. (No Team Mentors).
- Do not touch robots or equipment from another team. (Many months or even years of work have gone into some of the robots!)
- Do not leave valuable equipment unsupervised in your area.

#### What you will need to do

On arrival at the venue, you should immediately proceed to the Registration Desk where:

- Team arrival will be noted.
- Name tags will be supplied.
- Any updated event information will be supplied.
- Mentor Media Permission Form MUST be submitted (see page 9).
- Interview Questionnaire MUST be submitted (see page 11).
- Dance Competitors one copy of music to be submitted (with information regarding team name & track number etc).

During the course of the day teams will be required to have a team interview (see below).

Make sure you are aware of the times you are required to compete. It is YOUR responsibility to make your way to the competition area at the scheduled times.

### Opening and closing times

The venue will be open for competitors at 8:45am and close at 4pm both days. Teams are encouraged to arrive promptly around 9am to assist organisers running the event.

### Rules (Soccer, Rescue, Dance)

It is also important that you are thoroughly familiar with the rules for your event.

Summaries of the rules including modifications to suit the Tasmanian competition (i.e. "RCJT Guide to Soccer", etc.) are available from the RCJT web site (http://www.robotas.idesigns.com.au).

The complete set of RCJA Rules can be found on the RoboCup Junior Australia website (http://www.robocupjunior.org.au).

**NOTE: Soccer referees** – It is especially important that nominated soccer referees are familiar with the "RCJT Guide to Soccer" (particularly the *Game Play* section). It is recommended that referees bring a copy.

#### Rule clarification

If rule clarification is required, it must be requested immediately. Rule clarifications will be made by members of the organising committee.

#### You are required to bring:

- Completed Staff/Mentor media permission forms.
- Completed interview questionnaire.
- Two copies of music for Dance (on mp3 CD or audio CD). One for RCJT to use and one as a backup if required.
- Laptop computer (& IR tower) for downloading programs.
- Tubs to hold equipment (school bags, backpacks etc are not allowed in Setup area).
- Copy of the Rules relevant to your entry (see above).
- Power boards. A single power outlet for each team will be provided in the set up area.
- Spare batteries.
- Battery charger. (if required)
- Spare part for robots (e.g. spare LEGO).
- Tools for repairs.
- Warm clothes the activities centre heating is disabled on weekends.

### Light conditions

As in previous years, the organisers will endeavour to block out as much natural light as possible and are hoping for maximum light conditions around the 30% mark as measured by a LEGO light sensor. This cannot be guaranteed, however, and you will need to calibrate your programs on competition day.

#### Interviews

During the event, each team is required to attend a 10-minute interview to discuss their entry. Although one purpose of the interview is to verify that the team's work is substantially their own, it is also an opportunity for teams to share their work and to be recognised for their efforts. In assessing the quality of team entries, the interviewers are looking for evidence of *engineering* and *programming* skills, *independence* and *commitment*.

Note: Along with sportsmanship and quality of play, the interview contributes to whether or not a team is selected to represent Tasmania at the Australian Open.

In agreement with the ideals of RoboCup Junior, information from the Interview (including information from the Interview Questionnaire) may be published.

### Certificates, trophies, prizes

In addition to participation certificates for all students, certificates will also be awarded to teams that are finalists in each event/division (i.e. Soccer, Rescue, Premier Rescue, Primary Dance, and Secondary Dance).

Trophies will be awarded to the top three places in each event/division. Because all Soccer teams compete in the same division, a trophy will also be awarded to the "Best Primary Soccer" team.

Teams that finish outside the top three in their event but are worthy of extra recognition may earn a "Highly Commended" trophy. Across *all events*, a maximum of six (6) "Highly Commended" trophies will be awarded.

Please note that we will NOT be awarding Bronze, Silver, Gold certificates as indicated in the national RCJA Dance Rules 2006.

# Travel assistance to the Australia Open

For selected teams, there is also the possibility of travel assistance being provided to attend the RoboCup Junior Australian Open in September. The exact amount of assistance to be offered and the number of recipients is dependent on several factors and will not be known until after the event.

To select Tasmanian Representatives for RoboCup Junior Australian Open in September, points are allocated as follows:

- Interview and questionnaire 20 points
- Sportsmanship 30 points
- Quality of play 50 points

#### For your tummy

**Friday**. The University cafeteria 'The Ref' will be open 9am to 2:30pm Friday for refreshments.

**Saturday**. RCJT will be providing basic hot & cold food & drinks in the venue, including pies, sandwiches, chips, chocolate, tea, coffee, water & soft drinks. Bring along some loose change and make sure we have nothing left over!

### Getting there

The Activities Centre comprises of the bulk of the upstairs level of the Union Building at the Sandy Bay campus of the University.

If you approach the University along Regent Street, the main University buildings are on your left, however the Union Building is opposite on your RIGHT. Use an internal staircase to get to the top level.

If you get lost, the key words are Union Building and Activities Centre.

#### Мар

Maps of the Sandy Bay campus can be downloaded from

http://www.utas.edu.au/campus/campus\_maps. html. Look for building marked 21 (TUU-Student Union). The Activities Centre is upstairs.

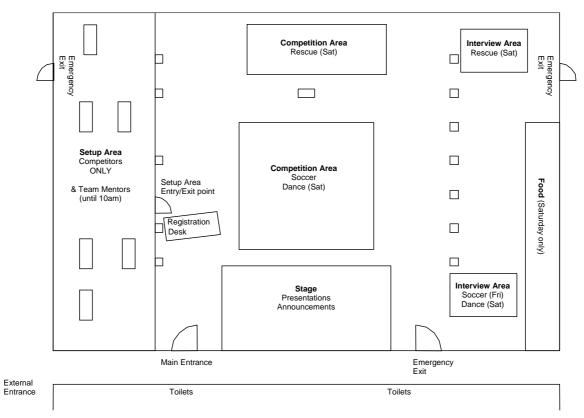
### Parking

**Friday**. Finding somewhere to park can be difficult on Friday, but your best options are on French Street or in the student car park at the end of Grace Street. French Street is the first turn to the right after the union building and runs around behind the union building. The student car park next to Sandy Bay Road (but accessed from Grace Street) is usually not full, however it's a three or four minute walk up to the Union Building from there.

**Saturday**. Parking on Saturday should not be a problem.

# **Venue Floor Plan**

The following is a layout of the Activities Centre:



# Schedule – Friday 4<sup>th</sup> August (Soccer only)

PLEASE NOTE: This schedule should be considered as a guide only, and is subject to change depending on the final number of teams participating.

A revised schedule will be published closer to the event, and will include pairings for the first preliminary round of Soccer. The organisers will make every effort to maintain to the schedule, but delays may occur. Also, circumstances on the day may require some changes to scheduling of some events. For this reason competitors are asked to be ready well before their scheduled time.

Soccer team interviews will be held throughout the day starting at 10:15am.

8:30am	<b>8:30am</b> Venue open for organisers			
9:00am	8:45am Venue open for entrants n 8:45am - 9:30am Team registrations			
5.00am				
	9:30am – 10:00am Referee/scorer briefing			
10:00am				
	1 <b>0:15am – 10:35am</b> Soccer preliminaries Round 1a	10:35am – 10:55am Soccer preliminaries Round 1b		
11:00am	11:00am – 11:20am Soccer preliminaries Round 2a	11:20am – 11:40am Soccer preliminaries Round 2b		
12:00pm	11: <b>45am – 12:05pm</b> Soccer preliminaries Round 3a	1 <b>2:05pm – 12:25pm</b> Soccer preliminaries Round 3b		
1:00pm	<b>12:40pm – 1:00pm</b> Soccer preliminaries Round 4a	1: <b>00pm – 1:20pm</b> Soccer preliminaries Round 4b		
2:00pm	1:25pm – 1:45pm Soccer preliminaries Round 5a	1: <b>45pm – 2:05pm</b> Soccer preliminaries Round 5b		
	<b>2:10pm – 2:30pm</b> Soccer preliminaries Round 6a	<b>2:30pm – 2:50pm</b> Soccer preliminaries Round 6b		
3:00pm	3:00pm - 3:15pm Presentations			
4:00pm	<b>4:00pm</b> Venue closed			

#### Soccer preliminaries

# Schedule – Saturday 5<sup>th</sup> August (all events)

PLEASE NOTE: This schedule should be considered as a guide only, and is subject to change depending on the final number of teams participating.

A revised schedule will be published closer to the event, and will include:

- Dance: Interview and performance times
- Rescue: Interview times and running order

The organisers will make every effort to maintain to the schedule, but delays may occur. Also, circumstances on the day may require some changes to scheduling of some events. For this reason competitors are asked to be ready well before their scheduled time.

	Dance	Rescue	Soccer
8:30am	8:30am Venue open for organisers		
9:00am	8:45am Venue open for entrants 8:45am - 9:30am Team registrations (all events)		
10:00am	9:45am - 12:15pm Dance interviews & practice performances	9:45am - 11:10pm Rescue interviews	10:00am - 10:30pm Soccer qualifying finals 1 & 2 10:40am - 11:10am
11:00am		11:10am - 12:00pm Rescue & Premier Rescue	Soccer elimination finals 1 & 2
		preliminaries Rounds 1 & 2	Soccer semi-finals 1 & 2
12:00pm	12:00pm - 2:00pm Dance preliminaries	12:00pm - 1:10pm Rescue interviews	12:00pm - 12:30pm Soccer fifth to eighth ranking finals
1:00pm			12:40pm - 1:10pm Soccer preliminary finals 1 & 2
		1:10pm - 2:20pm Rescue & Premier Rescue preliminaries Rounds 3, 4 & 5	1:15pm - 1:45pm Soccer play-off for 3rd
2:00pm	2:10pm - 3:00pm		1:45pm - 2:15pm Soccer grand final
	Dance finals	2:30pm - 3:00pm Rescue & Premier Rescue finals	
3:00pm	<b>3:00pm - 3:30pm</b> Spot Prizes Presentations (all events)	·	
4:00pm	4:00pm Venue closed		

## **Soccer Event Structure**

This section provides details about how the Soccer event will be run over the two days, and builds on the "RCJT Guide to Soccer", available from the RCJT web site (http://www.robotas.idesigns.com.au).

Corresponding details for Dance and Rescue can be found in the "RCJT Guide to Dance" and "RCJT Guide to Dance" respectively.

#### Friday: Soccer preliminaries

The Soccer preliminaries will be based on a "Swiss tournament" format consisting of six (6) rounds. Games in the first round will be based on a random draw and subsequent rounds will depend on the results of previous rounds.

Each team will play six games (unless there are forfeits or a team has a bye). Games will consist of two 5-minute halves with a 5-minute break in between halves.

Each round will involve two kick-off times, with each kick-off involving half the teams. The remaining teams will be scheduled to either provide a referee for the games being played or else be available for their Interview.

Prior to the start of each round, the games for that round (or 'pairings') will be displayed. Teams will need to refer to the displayed rosters to check the time and location of their next game.

NOTE: The pairings for the first round will be emailed to Mentors in the week leading up to the event. Teams are reminded that in the preliminary round, the first team ready to start with both robots on the field shall be given the choice of a) which end to kick to, or b) to kick off first. The second team will decide the other option.

Teams will be penalised one goal per minute if they are late. If a team does not report within 5 minutes of the game start, it will forfeit the game and the score will be recorded 5-0.

Rankings are determined by points, with 3 points for a win, 1 for a draw, and 0 for a loss. If teams are equal on points, 'goals difference' is used, followed by 'goals scored'.

### Saturday: The final eight

At the end of the preliminaries, the top seven (7) teams progress through to the finals on Saturday. The North-West Regional Winner automatically qualifies for the finals ranked 8<sup>th</sup> (unless they compete in the preliminaries and finish in a better position).

All finals will consist of two 10-minute halves with a 5-minute break and will play the "Golden Goal" rule to force a result.

The finals on Saturday will follow a structure based on the final eight in Australian Rules Football (AFL), with the addition of a  $3^{rd}$  vs  $4^{th}$  final as well as play-offs for places 5 to 8 (see below).

The finals	Description			
1st qualifying final	1st	VS	4th	
2nd qualifying final	2nd	VS	3rd	
1st elimination final	5th	VS	8th	
2nd elimination final	6th	VS	7th	
1st semi final	Loser 1st qualifying final	VS	Winner 1st elimination final	
2nd semi final	Loser 2nd qualifying final	VS	Winner 2nd elimination final	
5v6 final	Loser 1st semi final	VS	Loser 2nd semi final	
7v8 final	Loser 1st elimination final	VS	Loser 2nd elimination final	
1st preliminary final	Winner 1st qualifying final	VS	Winner 2nd semi final	
2nd preliminary final	Winner 2nd qualifying final	VS	Winner 1st semi final	
3v4 final	Loser 1st preliminary final	VS	Loser 2nd preliminary final	
Grand final	Winner 1st preliminary final	VS	Winner 2nd preliminary final	

# **Mentor Media Permission Form**

NOTE: You must complete this deed and submit it otherwise RCJA will not permit you to enter the RCJA event and venue.

1. By competing in a RCJA competition, I understand that it is likely that I may be photographed or filmed by the media or other individuals at the competition.



- 2. I grant permission to RCJA and its agents, to use my name and image in any RCJA materials, including, but not limited to, official RCJA newsletters, websites, marketing material, televised broadcasts and major sponsors' web sites (RCJA Materials).
- 3. I waive any right to:
  - a. inspect or approve any RCJA Materials which contain my name and image, whether in draft or the final product;
  - b. royalties or other compensation in respect of the use of my name and image in the RCJA Materials, now or in the future and whether I know of the RCJA Materials or not.
- 4. I agree to release and discharge RCJA and its agents, including, but not limited to, any organisation publishing and/or distributing the RCJA Materials in whole or in part, whether on paper or via electronic media, from any and all claims for damages, loss, liability or other relief that I may have against any of them in respect of the use of my name and image in any RCJA Materials.

Name: \_\_\_\_\_\_

School:

In addition, I confirm that I have collected signed media permission forms from all students that I am supervising.

Signature:

Date:

# **Student Media Permission Form**

NOTE: You must complete this deed and submit it otherwise RCJA will not permit your child/ward to enter the RCJA event and venue.

1. By competing in a RCJA competition, I understand that it is likely that I and my child/ward may be photographed or filmed by the media or other individuals at the competition.



- 2. I grant permission to RCJA and its agents, to use my name and image and the name and image of my child/ward in any RCJA materials, including, but not limited to, official RCJA newsletters, websites, marketing material, televised broadcasts and major sponsors' web sites (RCJA Materials).
- 3. I waive any right to:
  - a. inspect or approve any RCJA Materials which contain my name and image or the name and image of my child/ward, whether in draft or the final product;
  - b. royalties or other compensation in respect of the use of my name and image and my child/ward's name and image in the RCJA Materials, now or in the future and whether I know of the RCJA Materials or not.
- 4. I agree to release and discharge RCJA and its agents, including, but not limited to, any organisation publishing and/or distributing the RCJA Materials in whole or in part, whether on paper or via electronic media, from any and all claims for damages, loss, liability or other relief that I or my child/ward may have against any of them in respect of the use of my name and image or the name and image of my child/ward in any RCJA Materials.

Student's na	ıme:	 	
School:		 	
Parent's/Gu	ardian's signature: _	 	

Date:

# **RoboCup Junior Interview Questionnaire**

Students are requested to complete this Questionnaire prior to the event and submit it on arrival to the venue. You may attach diagrams, photos, journal entries, etc. to support you explanations.

School:	
Team name:	
Events entered (Circle): Da	ance Rescue Premier Rescue Soccer
List team members and write their	roles within the team (builder, programmer, manager etc.)
Name	Role(s)
Robot name(s):	
What platform have you used to bu	ild your robot(s)? (LEGO, Microbric, Fischer Technik, etc.)
What part in the construction of the	vehet(a) are you particularly placed chaut?
	robot(s) are you particularly pleased about?
Have you added additional equipm	ent to the manufactured platform?
If yes, please describe the addition	S:
Who manufactured the additions?	

Did you do any research into your robot design? (If yes, please give some examples.)

What was the hardest part of the programming to master?

Where did you get your ideas?

Which parts did your teacher have to guide you in?

What aspect(s) of robotics have you learnt most about?

What aspects of working with others have you learnt most about?

Dance entries only:

a) What song have you used?

b) Please give a brief description (i.e. the 'story') of your performance.

### **Declaration of Authenticity**

The information provided on the Questionnaire is true and correct.

The work on the robots is essentially the work of the team members signed below.

Mentor's signature	Date	