



humanity in motion

rotary international in
great britain & ireland

Rotary Technology Tournament

General Guidance Update

August 2008

rotary

rotary international in
great britain and ireland

ROTARY TECHNOLOGY TOURNAMENT

Re-inventing the Wheel

General Guidance 2008

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INTRODUCTION

This Guidance has been designed to help Rotarians to set up Technology Tournaments for young people aged about 13 - 18 who are (or are considering) studying technology in local schools and colleges. The Guidance (available on CD from RIBI, or from District 1260 (details below) replaces the previous Handbook.

District 1260 started the Rotary Technology Tournament in 1989. It has now spread to many clubs and districts in RIBI. It is not intended that there will be any further stages (eg District or National level Tournaments), as the emphasis is on developing skills and teamwork for all participants, in an enjoyable, not a totally competitive atmosphere.

We produce an annual task, complete with information for Rotarians and schools, to help clubs set up and run a local Tournament. This Guidance is designed to be used with the Task Information (available separately for each year's task). It contains a range of information and example documents which you may find helpful. Of course you will want to adapt some of these to suit your own needs.

General Information

This includes a suggested schedule for planning your event, including liaison with schools. There is also an example timetable for the day itself, and an aide memoire for the task and judging. It is helpful (particularly for judges without previous experience) to hold a separate briefing before the day of the Tournament. Not all Judges need to be technical people – bearing in mind that the judging criteria include planning and design.

It is very helpful to involve your Local Education Authority (Technology Adviser) or a related organisation such as Education Business Partnership. SETPOINT local offices have been extremely helpful, working with Rotary in some areas (including District 1260) to help organise and run Tournaments. To find your local SETPOINT go to www.stemcentre.org.uk/ and click on 'Region' to find a list of local Setpoints.

We have found it useful in District 1260 to hold events for all the schools (and relevant colleges) in each local area covered by our Local Education Authorities. Clubs work jointly to organise and run each event.

In many areas, teachers are invited to compete to solve the advanced task. They are allocated to ad hoc teams, and have found the experience useful (even though they do not necessarily produce the most effective solutions, much to the delight of the students at testing time!)

Useful Forms and Documents

Various general documents (i.e. not task specific) are included here.

An example programme for the day, including sponsor logos (important if you want to retain their interest in future years!). You will want to print enough programmes to have one per team competing, and for all adult helpers and visitors.

They include example risk assessments. Teachers should remain on the premises, and the venue will have its own procedures and safeguards. The usual general advice applies: think through the event in advance, what might go wrong, and how you would deal with it. Then ensure you have the necessary plans and resources, including enough, properly briefed, helpers on the day. This might include bringing in Red Cross or St John's Ambulance to be on standby in case of accidents.

Also in this section are invitations to schools, expressions of interest and entry forms. Schools often find it easier to respond by fax, so it will be helpful if this option is available. There is also an information sheet for schools, to be sent with confirmation of their entries.

There is an example certificate for awarding to ALL young people participating – students value these as evidence for their records. Winning teams are usually awarded trophies and/or other prizes. If you have teachers' teams competing, we find they appreciate a token prize for the winning team members (and the students really enjoy seeing their teachers competing at the same tasks, and not always succeeding!).

There are feedback forms for students and for teachers – you may find these helpful in planning future events.

AND FINALLY

Good luck with your event! If you'd like to discuss anything, or have queries on these documents, please contact:

**Rotarian Rev Derek Upcott, Bluff Cottage, Blackthorne Lane, Ballinger, Great Missenden, Bucks
HP16 9LN Tel 01494 837505 e-mail: derek.upcott@btopenworld.com**

Paul Gardiner
District 1260 Task Co-ordinator

July 2008

Rotary Technology Tournament: Example Programme for the Day

- 08.00**
- Stewards arrive and check / set out the tournament area including work locations, with table numbers.
 - Ensure there is a Rotary Roundel in a prominent place where it can be seen at the presentation and final ceremonies. It may also be necessary to display sponsor names / logos if this has been requested and agreed with sponsors.
 - Stewards stationed in car park / corridors as necessary for directions and safety.
- 08.30** Two stewards staff the registration desk, received identify teams as they arrive, and allocate to appropriate table in the hall. Allocate teachers into teams.
- 09.00** Judges arrive / are paired off. They listen to briefing of entrants at 0930. First Aiders / Stewards supervising dangerous tasks allocated to positions.
- 09.05** Chief Judge gives final briefing to judges. For inexperienced judges, strongly recommended that main briefing is on a date before the Tournament itself, with a final short briefing on the morning of the event.
- 09.30** Chief Judge welcomes entrants, gives briefing on day's activity including time to be spent on planning and design (no construction until 10.15am).
- 09.45** Stewards distribute task sheets and material packs to each team of entrants, and teams begin planning phase.
- 10.15** Chief Judge announces that construction may begin.
- 11.15** Hosting stewards arrive and are briefed by Chief Steward or designated Steward .
- 11.30** Visitors and guests begin to arrive. Hosting stewards welcome, show them round the event, escort to seating position for lunch. Introduce visitors to Club President at a convenient moment, but do not monopolise.
- 12.30 LUNCH BREAK:**
- Chief Steward announces break. Entrants eat their own packed lunch within the hall. Ensure sufficient supervision, if necessary by Stewards.
 - Guest, visiting Rotarians, Judges, Stewards make for lunch hall. Lunch to start promptly at 12.45, to include Rotary Grace, welcome by host club President, introduction of guests. NO SPEECHES.
- 13.45** Lunch ends in time for guests to return to event to see final testing.
- 14.00** Begin Testing and Evaluation of final solutions - to be completed by 15.00 latest.
- 15.00** Chief Judge gives talk about applying lessons and experiences from today to other situations.
- 15.10** Announce and present awards; distribute certificates, shields.
- 15.25** Entrants leave. Stewards clear up the hall, and leave.

Suggested Planning Schedule – for a Spring Tournament

- March** **Book venue for next year's event (do this as early as possible)**
- May** Get the date of next year's tournament in your schools' diaries – they finalise theirs in June / July – send letter to Head Teacher and Head of Technology.
'Book' any dignitaries to be invited
- September** Phone schools and check name of Head Teacher and Head of Technology.
Send schools (Head Teacher and Head of Technology) expression of interest letter and fax back to establish likely support.
- November** Send schools (teachers that responded to expression letter and Heads of Technology of non-responding schools) an entry form letter and fax back form for confirmation of entry and student names.
- January** Chase non-responding schools (be prepared to telephone if necessary).
- February** Send confirmation to respondents with task 'Information for schools' sheet giving details of the event and tools list for teams.
- After Event** Send all schools an analysis of student feedback with the date of next year's event

Key organisation tasks

- Ensure you have the task details
- Recruit Judges MC and stewards
- Appoint chief judge
- Obtain materials.
- Collate materials for teams
- Obtain trophies and prizes
- Organise certificates of participation
- Invite guests and press
- Organise risk assessment and First Aid cover
- Print team task sheets, team information sheet, assessment sheets etc.
- Organise table layout for teams and refreshments
- Print Judge and Steward badges
- Arrange lunch as appropriate.

To: Head Teacher and Head of Technology

ROTARY TECHNOLOGY TOURNAMENT 1998

sponsored by

Rotary Clubs of South West Herts

'Service above Self'



Aldenham
Radlett
Watford

Bushey & Oxhey
Rickmansworth
Watford Clarendon

Elstree & Borehamwood
Watford & The Langleys
Watford North

We are writing to invite your school to participate in the Rotary Technology Tournament for 1998. This follows the very successful model held in Bedfordshire for many years. It is a one day event which brings together teams of 4 students from secondary schools across the South West region of Hertfordshire who are set a technology problem to solve during the day. This provides an opportunity for team building and practising communication skills, as well as problem solving.

Date: **Monday, 9 March 1998**

Timing: 9.30am to 3pm

Location: Bushey Hall School

Awards: Awards in a wide range of categories will be given

Teams: Students from Years 9,10, 11, 12 and 13
AND and optional teachers' team

Tasks: Basic, Intermediate, and Advanced
NOTE: A presentation to school staff can be arranged

Lunch: Students should bring their own packed lunch

At this stage, we are just asking you to register your interest and to think about which students you might like to send. You might like to consider selecting students who would particularly benefit from the opportunity to take part, rather than those with a particular aptitude for technology. In January we will send you an application form and further details of the programme.

We look forward to receiving your reply (using the faxback form overleaf)

insert appropriate signature(s) and organisation(s)

November 1997

ROTARY TECHNOLOGY TOURNAMENT 1998

sponsored by

Rotary Clubs of South West Herts

'Service above Self'



Aldenham
Radlett
Watford

Bushey & Oxhey
Rickmansworth
Watford Clarendon

Elstree & Borehamwood
Watford & The Langleys
Watford North

REPLY SLIP

We wish to register our interest in participating in the Rotary Technology Tournament to be held on Monday 9 March 1998

School: _____

Address: _____

Post Code: _____

Tel: _____ Fax: _____

Name of Contact Teacher: _____

We will be sending _____ (1, 2 or 3) teams of 4 students

More information regarding student details will be needed nearer the date of the Tournament

Return this form to:

Hertfordshire SATRO
at the IEE
Michael Faraday House
Six Hills Way
Stevenage SG1 2AY

Tel: 01438 767308

Fax: 01438 767309

E-mail: hsatro@rmpc.co.uk

Please register your interest by 19 December

Rotary Technology Tournament 2003
St Albans & Harpenden Rotary Clubs

To be held at Marlborough School on Wednesday March 5th

**Please complete and fax back to SETPOINT Herts by 31st January 2003
For the Attention of Paul Gardiner**

1. Name of School
.....

2. Telephone Number
.....

3. Contact Name
.....

4. Level	Name of Team Members	Year	Task
Team 1	
.....	
	
	
Team 2	
.....	
	
	
Team 3	
.....	
	
	

5. Name of Teacher Attending
(If different from 3. above)
Please fax to: SETPOINT Herts 01438 755073

SETPOINT Herts
PROJECT HAZARD CONTROL
SECONDARY SCHOOLS

ESTABLISHMENT/WORKPLACE	
WORK ACTIVITY	
SIGNIFICANT HAZARDS	
<u>EQUIPMENT</u>	<u>MATERIALS</u>
PERSONNEL AT RISK	
KS 3 <input type="checkbox"/>	KS5 <input type="checkbox"/>
KS 4 <input type="checkbox"/>	ADULT HELPERS <input type="checkbox"/>
TEACHERS <input type="checkbox"/>	PRESENTERS <input type="checkbox"/>
EXISTING CONTROL MEASURES	
Codes of Practice, Safety Manuals, Safe Working Instructions.	
Safety Guidelines for Key Stage 3, 4 & 5 Design and Technology	
DO THEY ADEQUATELY CONTROL RISK(S) YES..... NO.....	
IF NO, SPECIFY ADDITIONAL CONTROL MEASURES OVERLEAF.	



ROTARY
INTERNATIONAL
IN GREAT BRITAIN AND IRELAND
DISTRICT No. 1260

ROTARY TECHNOLOGY TOURNAMENT

Check List

Work place environment provides sufficient workspace for each pupil, and access for supervisors.

All non-essential equipment and materials stored in a safe area.

Requisite number of adults present to meet the required adult/pupil ratio.

All personnel briefed on safety requirements for the project.

Equipment checked fit for purpose

Check with school representative, any special health needs to be identified.

First Aid facilities identified.

Information to Schools Entering the Tournament

Date and venue of Tournament: (*to be added here*)

Time: Schools are asked to arrive no earlier than 9.00, the competition is planned to start at 9.30 and end at 3 pm.

Each team will consist of 4 students and if possible have an even gender balance. The year grouping of the students is flexible and is for each school to decide. It could be all team members from the same year group or a mixture.

Basic Tasks are for students in Key Stage 3. (Suggested year 8 and 9 only)

Intermediate task is intended for Key Stage 4.

Advanced Tasks are for students in years 12 & 13.

NB. If a team feels confident that it could tackle the task at a higher level, and the judges are satisfied, upgrading could be allowed, provided that this is agreed within the first 20 minutes from the start time.

Accompanying teachers/technicians will be expected to participate in teacher teams following the Advanced team criteria.

The only limitation on the number of teams from each participating school will be on the size of the venue and response from schools. In other words, if the response from schools outstrips the capability of the venue then those schools entering a large number of teams will be asked to reduce the number of teams in order to provide an equal opportunity for all.

It is advisable to inform the students that they will be working as a team on a design, build and test challenge. Judges will be assessing: planning - use of time and resources; team organization and management. Design Analysis - analysis of the problem; awareness of physical constraints and principles. Design Development - generation of more than one idea and the development of the solution; presentation and communication of ideas. Realisation - making skills; appropriate use of materials, final testing and a portfolio.

It is anticipated that schools entering Key Stage 3 & 4 teams will have either a member of staff or a technician also in attendance. Please ensure that you have fulfilled LEA requirements for taking pupils out of school.

Materials for the task are provided on the day - no extra materials should be brought along and will not be allowed by the judges. **Glue gun tables will be available.**

EACH TEAM SHOULD BRING WITH THEM: (each task has a tailored list)

- Their own packed lunch!
- Sufficient A4 and/or A3 paper to enable the design presentation
- Pencils, crayons or felt tips any drawing instruments you may need
- Cutting mat, craft knife, safety rule (if available) and 300mm steel rule
- Junior hacksaw, dovetail saw, bench hook

- **Small screw down vice (if available) and/or 4" or 6" G clamp**
- **Hand drill with 2mm ,3mm & 4mm bits and a CSK bit (or larger drill to use as CSK bit)**
- **Small screwdriver to suit a 4 gauge screw**
- **Try square**
- **Half round file**
- **Small container (film canister) of PVA adhesive plus spatula or other quick setting glue**
- **Any other tools you may think necessary**
- **There will be teacher teams, please bring along an extra set of tools if possible.**



This is to certify that

participated in the
Rotary International
Technology Tournament

*organised by the five Rotary Clubs of
St Albans & Harpenden in partnership with
SETPOINT Hertfordshire*

*This provided an opportunity for using team-building
skills, in solving a design and technology problem, as well as
practising oral, written and graphical communication skills.*

9 MARCH 2005

Sue Allenby

Sue Allenby
Smith
Director
SETPOINT Hertfordshire



Gavin Montgomery-

Chief Judge
Rotary

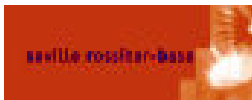
Rotary Technology Tournaments are one-day events organised by groups of Rotary Clubs for teams from local schools and colleges.

A Tournament consists of teams of four students undertaking an unseen challenge against the clock of a design, build and test nature.

The task is consistent with the requirements of the national curriculum; its execution develops team building, communication skills, planning and time management, as well as solving a design and technology problem.

The highlight of the day is the testing session when the team can see the performance of competing designs and solutions.

This event was sponsored by:



Rotary Club of Frankenthal

ROTARY TECHNOLOGY TOURNAMENT

What did you think of it?

Please let us know so that we can make it better next time.

If you agree with a statement give it a high score, if you disagree give it a low score.

agree	Strongly disagree	Strongly								
	Team Work									
The group got on well	1	2	3	4	5	6	7	8	9	10
The team's decisions were made by everyone	1	2	3	4	5	6	7	8	9	10
I listened to the ideas of other team members	1	2	3	4	5	6	7	8	9	10
Other members of the team listened to my ideas	1	2	3	4	5	6	7	8	9	10
Arguments within the group were sorted out	1	2	3	4	5	6	7	8	9	10

	Effort									
I worked hard on the task	1	2	3	4	5	6	7	8	9	10
The team, as a whole, worked hard	1	2	3	4	5	6	7	8	9	10

Was it Fun?

What mark out of 10 would you give the tournament for fun?.....

What parts did you particularly enjoy? (circle the numbers)

1. Thinking of ways to solve the problem.
 2. Making the decisions as to which idea to use.
 3. Making the device.
 4. Showing the assessors your work.
 5. Working with others.
 6. Testing the device
 7. Other (if so what?).....
-

What parts did you not enjoy? (circle the blobs)

- Thinking of ways to solve the problem.
- Making the decisions as to which idea to use.
- Making the device.
- Showing the assessors your work.
- Working with others.
- Testing the device
- Other (if so what?).....

What do you think we could do to make the event even better?.....

.....
.....

Please turn over.

About You.

Did you use any tools for the first time today?

Yes / No

Have you worked in a team before?

Yes / No

Have you had to solve problems like this before?

Yes / No

If yes, what sort of problem?.....

.....
.....

Would you like to participate again next year with a new challenge Yes / No

Did you learn anything new today – if so what?

.....
.....
.....
.....
.....
.....

Rotary Technology Tournament 2006

Teacher Feedback Form

Task.....

The Task

Overall suitability and relevance of the task.....

.....

Did it relate to work covered or to be covered in the curriculum?

How do you rate the task?

KS 3 too easy about right too hard

KS 4 too easy about right too hard

KS 5 too easy about right too hard

How could it be improved?.....

.....

Organisation:

Please rate the pre-Event communications and information: good adequate
poor

Please rate the organisation on the day: good adequate poor

What is the best time of year to run this event?.....

Does the RTT fulfil a need?.....

General comments.....

.....

Suggestions for improvement.....

.....

Your School:

Is arranging for students to leave school a major problem? Yes / No

Your name and school

.....

Participating Schools
Francis Bacon
Marlborough
St Albans Girls School
St Albans School
St Albans High School for Girls
St Columba's College
Sandringham
Heathlands
Verulam School

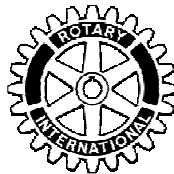
Acknowledgements

The five Rotary Clubs of St Albans and Harpenden
wish to thank:

Our Hosts Marlborough School Head Teacher
and Staff

Our Sponsors Erwin Sick Ltd, Critical Research, Faber Maunsell, Saville Rossiter-Base,
Hewitt Bacon & Woodrow, Rotary Club of Frankenthal

Our Organisers Paul Gardiner (Chair), Chris Bradley, Derek Farr, Neil Harris, George
SICK
McKenzie, David Morgan, John Sidnell & SETPOINT Herts.
All Our Helpers inc. Gavin Montgomery-Smith (Chief Judge), Derek Farr (MC), Geoff Kelly
(certificates)
All Stewards, Judges and helpers



Rotary Clubs of St Albans & Harpenden

7th Rotary Technology Tournament

Wednesday 9th March 2005

Marlborough School
Watling Street
St Albans



Rotary Club of Frankenthal



About Rotary International

Service above self is the motto of Rotary, an organisation of business and professional men and women committed to helping others. There are 1.3 million Rotarians in over 30,000 clubs and 166 countries.

The Challenge

Is to design, make and test a vehicle powered by a weight. The vehicle will raise a flag celebrating 100 years of Rotary.

Materials allotted to each team

6 lengths of wood, 1 length of dowel, rubber bands, pulleys, card, string, Screws, cotton reel, straws, paper clips, paper and wheels.

Judging Criteria

Evidence of planning
Analysis of design problems and constraints
Development work and communication
Realization and Portfolio
Final testing performance
Graphic decoration

Prizes

Students:

An engraved plate for the winning team at each level and a book token for each winning team member.

Time Table

09.15	Registration of Teams
09.30	Welcome and Instructions
09.35 – 10.35	Planning /Design Analysis
10.35	Build commences
12.00	Hand in Designs
12.30 – 13.00	Lunch Break
13.00	Continue Build
13.30	Demonstration to Judges
14.30	Results and Awards Ceremony

15.00 Finish

All participants are reminded that in any dispute, the decision of the chief judge is final.

Packed lunches will be served to the participating teams

A buffet lunch for VIPs and helpers will be held on the first floor balcony between
12.30 and 13.30