



**RI District 1040**



A British Science Association programme

## **Technology Team**



## **Guidance Notes**

**To assist Rotary Clubs organise**

## **First TT Event**

**Bob Tunncliffe Technology Project Team  
Chairman**

[bob.tunncliffe@btinternet.com](mailto:bob.tunncliffe@btinternet.com)

## INTRODUCTION

The purpose of these Guidance Notes is to help a Rotary Club(s) to stage a Technical Tournament (TT) event for the first time and they should be used together with the relevant Task Sheets.

It has been found from experience that schools favour the TT to be staged in March because it is the best fit with school diaries. Normally it takes 18 months to plan the staging of a TT for the first time and so these Guidance Notes starts in autumn of year 1 with the objective of staging a first TT in March of year 3

The Rev Derek Upcott in District 1260 originated the TT in 1989 and the idea has been a great success and it has now spread throughout RIBI. From April 2011, the contact point for TTs is the RIBI Steering Group based in District 1040 and chaired by Bob Tunnicliffe. [bob.tunnicliffe@btinternet.com](mailto:bob.tunnicliffe@btinternet.com)

### **The aims and objectives of the TT are:**

- To develop students` interest in design, construction and technology.
- To encourage students to develop their team working skills whilst finding and building a solution to the previously unseen Task
- To encourage groups of neighbouring Rotary Clubs( RC) to work together

### **The main features of the TT are: -**

- It is a one day event for secondary schools.
- All costs are shared by the Rotary clubs involved.
- Rotary clubs provides the Task, materials, venue, and trophies.
- One organising Rotary club for each TT with help from nearby clubs.
- Schools send teams (4 students/team), one team for each of Key Stage 3, 4 and 5.
- Best team solution for the Task in each age group wins a trophy.
- All students receive a personalised achievement certificate.

### **A typical eighteen month programme**

#### **Autumn to December year 1**

The initiating RC should contact nearby clubs to see if they are interested in planning a TT year 3. Hopefully there will be enough interest and, from these clubs, a Steering Committee (SG) can be formed. Normally the initiating club becomes the Lead Club and the Chairman of the SG is agreed. If there is no interest from nearby clubs then the initiating club should not give up but create its own SG and continue with the resources within the club to stage a first TT, hopefully, with nearby clubs giving manpower support on the day. In all probability the nearby clubs will want to be involved in the event in the following years.

It really is a great advantage to have three or four RCs involved because it helps with sharing costs, contacting schools, finding venues, judges and sponsors.

Stemnet ([www.stemnet.org.uk](http://www.stemnet.org.uk)) is a government financed organisation that promotes technology in education and involves local business and professional people. It is likely to be beneficial for the SG to contact their local Stemnet office at an early stage of planning because in most cases they can help with school contacts, sponsorship and providing judges.

Typical costs for a start up TT are shown at Appendix A. The most significant cost could be the venue. It depends whether a hall can be found free of cost or not. If not halls could vary between £300 and £700

Material costs will vary, year to year, depending on the nature of the Task

During October of year 1 the SG will receive the Task for year 2. The SG is advised to study the Task because it will be very helpful when the SG visits their first TT in the March of year 2

### **January and February year 2**

This is a period for researching schools and possible venues for your TT. The SG should research secondary schools within a 20 mile radius to discover the contact details of headmasters and the heads of Design and Technology. Advice on the sizing and layout of a venue is attached at App. B and B1.

### **March year 2**

The SG should visit as many TTs as possible. When a SG sees a TT in action for the first time and experiences the buzz and excitement of the event, then the enthusiasm of the SG is very much stimulated to run their first TT in a year's time. Many useful techniques will be learnt during these visits which will be very helpful when planning for the SG's own TT

### **April year 2**

- Carry out the Risk Assessment for the Venue. Request Risk Assessment form from the Venue.

### **May year 2**

- SG decides and books the venue for March of year 3
- SG sends letters of invitation (App. C) to schools

### **June, July and August year 2**

- SG contacts possible sponsors to help with costs.

### **September to October year 2**

The SG should agree to meet on a monthly basis until their TT is up and running.

During September of year 2 the SG reviews the responses received from the schools and letter (App. D) is sent to the schools. The SG agrees to share out between them the schools that have not responded so that they can be recontacted. Normally the schools' receptionist is the best person to help and persistence will pay off.

Make arrangements for a qualified first aider to attend the event.

Send invitations to the local Mayor, the District Governor, the Assistant District Governor and the local press.

The Task for your first TT will be received in October of year 2 for year 3 and the SG should allocate jobs for the event such as the chief judge, the chief steward, materials procurement manager, venue manager, trophies and certificates manager etc.

The chief judge should construct and test the advanced version of the Task and then run meetings with his team so that they understand the judging criteria detailed in the Task

### **January year 3**

- Send letters (App E) to schools in January to confirm final details for the schools.
- Order materials detailed in Task Sheets
- Order the trophies and medals detailed in App A

### **February year 3**

- Preprint the certificates Examples are shown in (App G1, 2 and 3) you may wish to produce your own wording and design.
- Print all paperwork required on the day
- Send press release to local newspapers
- Bag up the task materials for all the teams

### **March year 3**

- The SG should make arrangements to set up the night before the event if possible.
- If this is not possible then the set up team should arrive no later than 8.00 am to cover the tables and lay them out in accordance with the agreed floor plan
- The programme and duties for the day are shown at App H
- These Guidance Notes are no intended to give details of the Judges and Stewards roles at the Event because the SG will have seen these activities at the TT they visited and observed.

### **April year 3**

- Send letters to schools to tell them of the winners of the first TT and to give them the date and venue for next year's TT.

## APPENDICES for Start-up Handbook

	<b>Page</b>
<b>App. A</b> <b>Costs</b>	<b>06</b>
<b>App. B</b> <b>Venue</b>	<b>07</b>
<b>B1</b> <b>Venue Plan</b>	<b>08</b>
<b>App. C</b> <b>Letters of invitation</b>	<b>09</b>
<b>C1</b> <b>Application form</b>	<b>10</b>
<b>App. D</b> <b>Schools September acknowledgement letter</b>	<b>11</b>
<b>App. E</b> <b>January Letter</b>	<b>12</b>
<b>App. F1</b> <b>Finalist Certificate</b>	<b>13</b>
<b>F2</b> <b>Text printed on reverse side of certificate</b>	<b>14</b>
<b>F3</b> <b>Example of Achievement Certificate</b>	<b>15</b>
<b>App. H</b> <b>Example duties for the day</b>	<b>16</b>
<b>Contact details</b>	<b>17</b>

## Appendix A

**TECHNOLOGY TOURNAMENT****COSTS**

**Venue costs:** can vary considerably from free of charge to perhaps several hundred pounds. As shown in Appendix B it is thought that you would need a venue of 2400 sq. ft. for a start up TT.

A school hall is the most likely suitable venue and it would probably be free of charge. Sports halls could also prove to be a satisfactory low cost venue.

**Material costs:** will vary each year due to the nature of the task. The costs for the TT can be calculated from the relevant Task Sheets

**Trophies:** The trophy need not be elaborate and expensive.

A trophy used successfully by District 1040 is made of polished mahogany (12ins x 9ins) with an engraved anodised aluminium plate. An example of the engraved plate. (**pic.1**) These trophies cost from £40 with the plate engraved to your specification. Trophies are presented to the winning teams in each age category.

**pic.1**



**Medals:** Four medals for each team member of the winning team in each age group. Budget cost for medals at £2.30 each.

**First Aid:** You may be fortunate enough to have a qualified First Aider within the Rotary Clubs involved but, if not, then it would be necessary to pay for these services from an agency

**Miscellaneous costs:** Allow £ 100 for other costs such as certificates, printing, posters, refreshments etc

## Appendix B

**TECHNOLOGY TOURNAMENT VENUE**

When booking the venue the SG will not know how many schools /teams will be attending but from experience it is likely that the schools will send 18 to 20 teams to a start up event. In the invitation letter it is a good idea to say that space is limited and that schools will be accepted in the order they respond. In the future your second event could have bookings for 35 to 40 teams.

The best size for the students` tables are 6`x2` but the total size occupied by the table, students and walkways would ideally be 9`x 6`. Current protocol dictates that there should be no walkways behind the students. All walkways should be 3` so judges and stewards can talk to the students from the 2` at the end of the tables.

The total size of the venue for 20 teams would be say 2400 sq.ft.

This would be made up of:

1100 sq.ft for students tables	20 x 54 sq. ft
600 sq.ft for 3 testing areas	3 x 180 sq ft
400 sq.ft for registration area	24 x 16 sq ft
150 sq.ft. for awards platform	15 x 10 sq ft

An added bonus would be a small kitchen for teas and coffees.

A typical layout is shown on page 8.

**Venue Layout**





**Letters of Invitation an example****Letter to be sent to the: Head Teacher and Head of Design & Technology****TECHNOLOGY TOURNAMENT 20\_\_****Dear Teacher**

We are writing to invite your school to participate in a Technology Tournament for 20\_\_. It is a one day event which brings together senior school age teams of 4 students from several schools across the \_\_\_\_\_ 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.

A presentation of the Technology Tournament to the school staff can be arranged

Date:

Timing: Starts at 9.30am and finishes at 3pm

Location:

Teams: Students from Key Stage 3, Key Stage 4, and Key Stage 5  
AND optional teachers' team

Task: The task is set at Foundation, Intermediate, and Advanced levels.

Lunch: Students should bring their own packed lunch

An application form is enclosed which I would ask you to complete and return to the address below

Yours sincerely

\_\_\_\_\_  
Tournament Organiser

Address \_\_\_\_\_

Email \_\_\_\_\_

Telephone \_\_\_\_\_

## Technology Tournament

**Date** \_\_\_\_\_

**Venue** \_\_\_\_\_

**Town** \_\_\_\_\_

**9.00 a.m. – 3.00 p.m.**

## Application Form

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

**Position:** \_\_\_\_\_

**School:** \_\_\_\_\_

**Address for Communication:** \_\_\_\_\_

\_\_\_\_\_

**Telephone No:** \_\_\_\_\_

**Mobile:** \_\_\_\_\_

**Email address:** \_\_\_\_\_

I shall be entering

Key stage 3

Key stage 4

Key stage 5

Teams of four students in the following categories:-

(Foundation level)

(Intermediate level)

(Advanced level)

Completed entry forms should be sent to:-

## Appendix D

**Letter to be sent to schools in September an example**

Dear Sir/Madam

Thank you for returning the application form registering your teams (copy attached)

**Date of Tournament;** 15 March 20\_\_

**Venue:**

**Time:** 8.30 to 9:00am for Registration. The Tournament will start promptly at 9.30 am.

**General:** Accompanying teachers are encouraged to participate in teacher teams following the Advanced Team criteria, so please bring tools for the Teacher.

**Teamwork is an important component contributing to successful problem solving:** Each team will consist of 4 students. The year groupings of the students are flexible and are for each school to decide. It could be all team members from the same year group or a mixture.

- ☒ Foundation Tasks are for students in Key Stage 3 (ages 11 to 14)
- ☒ Intermediate Tasks are intended for Key Stage 4 (ages 15 to 16)
- ☒ Advanced Tasks are for students in years Key Stage 5 (16+)

It is advisable to inform the students that they are expected to work in teams and will be assessed on:

- **Planning & Teamwork**– use of time and resources, team organisation 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.
- Their project portfolio.
- Success at the testing stage.

It is anticipated that schools entering Key Stage 3 and 4 teams will have either a member of staff or a technician in attendance, but they will not be allowed to assist students in the task in any way. Please ensure that you have fulfilled LEA requirements for taking pupils out of school.

Materials for the task are provided on the day. As all Tasks use a limited selection of materials in order to inspire creativity and planning in their use to achieve the specification, no extra materials shall be used.

Yours sincerely

---

Technology Tournament Organiser

## Appendix E

**January letter an example**

Dear Teacher

Thank you for entering teams in the forthcoming Technology Tournament. We look forward to welcoming you and your teams on the day and hope it will be an enjoyable and rewarding experience for all those involved. The competition will be held at .....

This year, we have ..... teams from ..... schools, with ..... at Foundation Level ..... at Intermediate Level and ..... at Advanced Level

**Parking and Other Arrangement for the Day:**

- Please arrange for your teams to be at the ..... between 08:30 and 09:00. On arrival teams will registered and allocated a work table
- Parking for vehicles will be in the ..... You will be issued with a ..... During the day to allow you to exit the car park.
- It is important that you let me know if you intend to use a vehicle larger than a minibus so that we can arrange alternative parking
- Pupils should bring their own packed lunch. .
- A list of tools **to be provided by schools** is included in the attached Information for Schools and Teachers document. You will also find a note of items which are **not** to be used.

**Timetable for Day:**

<b>09:20</b>	Arrival and registration of teams and allocation of work tables
<b>09:30</b>	Competition begins. Teachers are requested not to approach teams once the tournament is in progress.
<b>12:00 – 12:300</b>	Lunch
<b>13:45 – 14:30</b>	Competition testing and judging. Teams will demonstrate their finished products and final judging will be completed. Results will be announced and Awards presented.
<b>14:30 – 14:45</b>	Results and Presentations
<b>15:00</b>	Event ends.

I have attached more detailed information about the nature of the competition, and a list of tools which must be brought by your teams. Please let me know if you need any further information\* or wish to make changes to your entries.

Yours sincerely

---

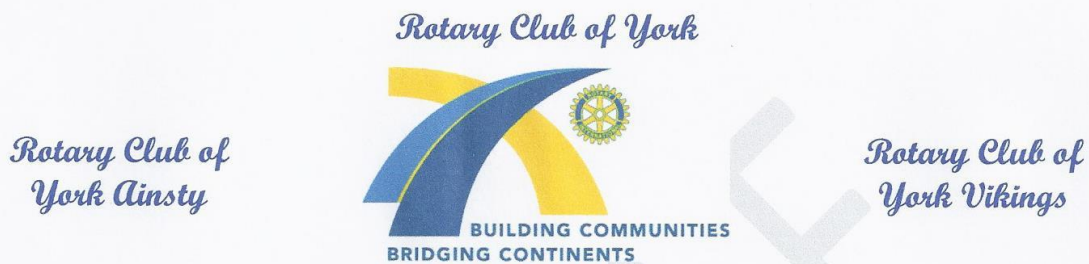
Rotarian Schools Liaison Office Anywhere Rotary Clubs

\*Extracted from task sheet

**Finalist Certificate (A4) Portrait)**

**Rotary Clubs of York - Service Above Self**

**SCHOOLS TECHNOLOGY  
TOURNAMENT  
2011**



**Gold**

**Advanced Level**

**First Place Awarded To**

**WHO TOOK PART IN CONSTRUCTING  
THE CRANE**

**NATIONAL RAILWAY MUSEUM YORK 15<sup>TH</sup> MARCH 2011**

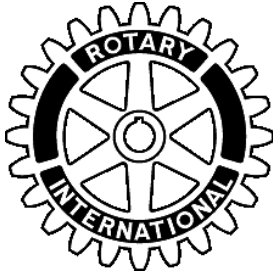
 **Shepherd Group** 

*Rtn Roger Percival*  
RI District 1040  
Governor

**THE UNIVERSITY of York**

*Rtn Mike Fieldsend*  
Rotary Clubs of York  
Tournament Chairman

**Text printed on reverse side of the certificates**



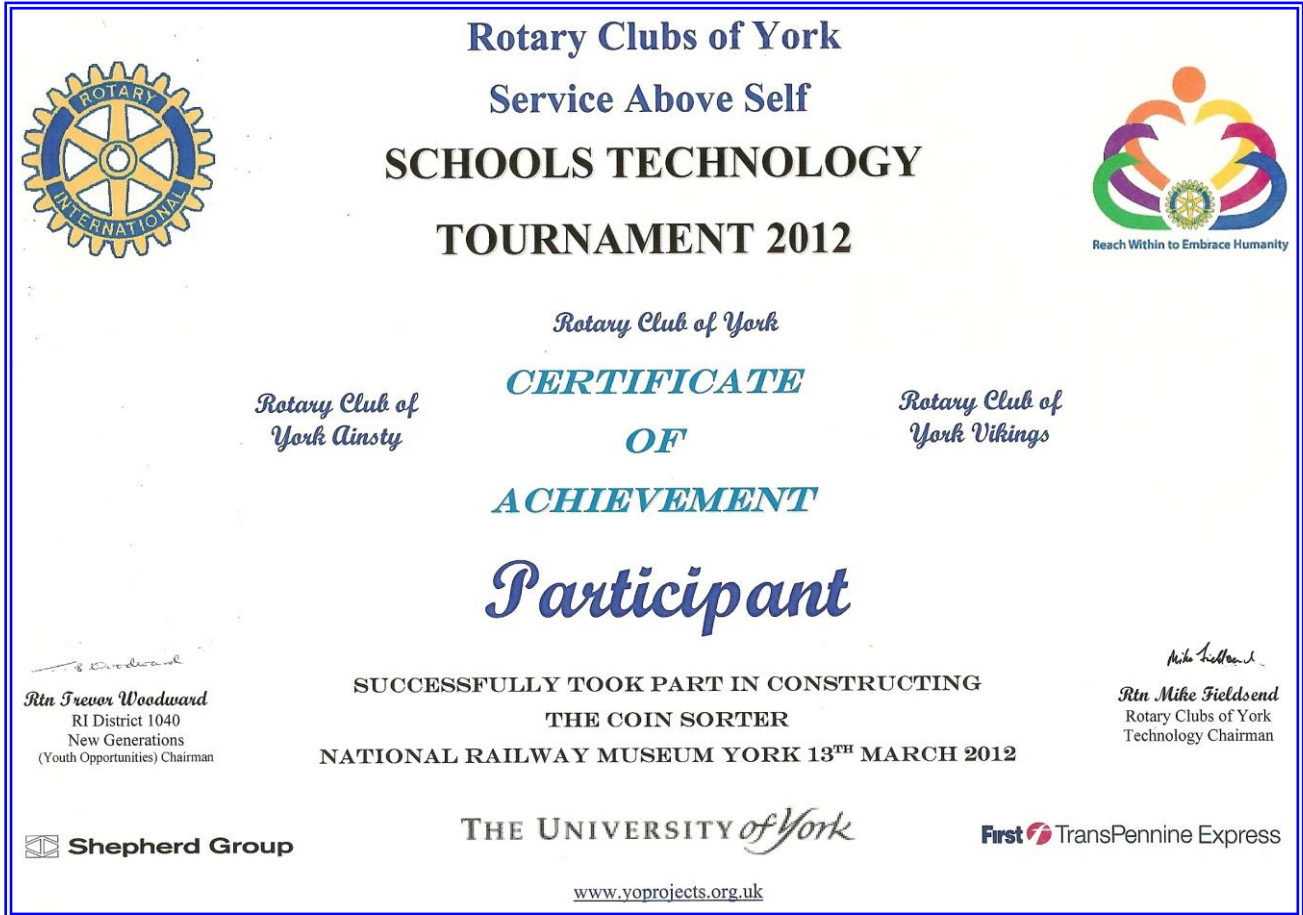
*Rotary Technology Tournaments are one-day events organised by groups of Rotary Clubs for teams from local schools and colleges.*

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


*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.*

**Example of Achievement Certificate (A4 Landscape)**



Certificates					Notes
Achievement Certificates					For all participants in teams
Schools Certificates	9	3 First	3 Seconds	3 Third	For winning school teams
Advanced	12	4 First	4 Second	4 Third	Individual winning teams
Intermediate	12	4 First	4 Second	4 Third	
Foundation	12	4 First	4 Second	4 Third	
Medals	36	12 Advanced	12 Intermediate	12 Foundation	Gold, Silver & Bronze???

EXAMPLE DUTIES FOR THE DAY			(Information Confirmed) IC
TIME	TASK	NUMBER	IC
08:00hrs	Stewards arrive and check in Set up the tables and signage.	6	
	Ensure there is a Rotary Roundel in a prominent place where it can be seen at the presentation and final ceremonies		
	Cover tables with protective sheeting.	4	
	Deliver correct age group materials for Technology Task to each table.	4	
	Set up registration tables.	2	
	Stewards stationed in car park / corridors as necessary for directions and safety.		
08:30hrs	Brief stewards and allocate responsibilities for the day.	Chief Steward	
08:30hrs	Guide students at the main entrance.	1	
	Direct drivers to car park area.	4	
	Direct teams to registration desk.	2	
	Man the registration desk.	2	
	Direct teams to tables and fill in name forms to be used on certificates.	3	
	Forms to be completed and handed to print team.	2	
09:25hrs	Welcome speech and Housekeeping points	Chairman	
09:30hrs	Chief Judge welcomes entrants, gives briefing on day's activities including time to be spent on planning, portfolio, task and testing.	Chief Judge	
	Hand out task sheets and other documents in sealed envelopes.	2	
	Judges briefing.	Chief Judge	
	Certificates for competitors to be commenced.	Admin	
	Design Phase stewards to marshal the area.	6	
	Judges take up positions.	Judges	
10:00hrs	Chief Judge announces that construction may begin.		
11:00hrs	District Governor presents certificates to participants as appropriate.	Admin	
11:30hrs	Visitors and guests begin to arrive. Hosting stewards welcome, show them round the event. Introduce visitors to Club President (s) at a convenient moment, but do not monopolise.		
12:00hrs	Presidents greet Civic Party and deal appropriately.	Presidents	
12:00hrs	Lunch announcement for students.		
	Judges and stewards to lunch in shifts.		
12:30hrs	Students finish lunch.		
13:45hrs	Finish construction.	Judges	
	Begin testing and evaluation of final solutions.	Judges	
14:30hrs	Judges results to be passed to MC	Judges	
		Judges	
14:45hrs	Present medals and trophies to the winners.		
14:55hrs	Closing address by Lord Mayor, Presidents as appropriate		
15:00hrs	Students leave		
15:05hrs	Dispose of all materials, barriers etc.		
	All hands on deck to leave venue clean and tidy.		
15:30hrs	Collapse of all.		



**Good luck with your first Technology Tournament**  
**The District 1040 TT Steering Group are always**  
**ready to be of service.**

Published by the District 1040 TT Steering Group

Chairman Rtn. Bob Tunncliffe

Editor Rtn. Trevor Woodward

Rtn. David Russell

Rtn. Cliff Beddows