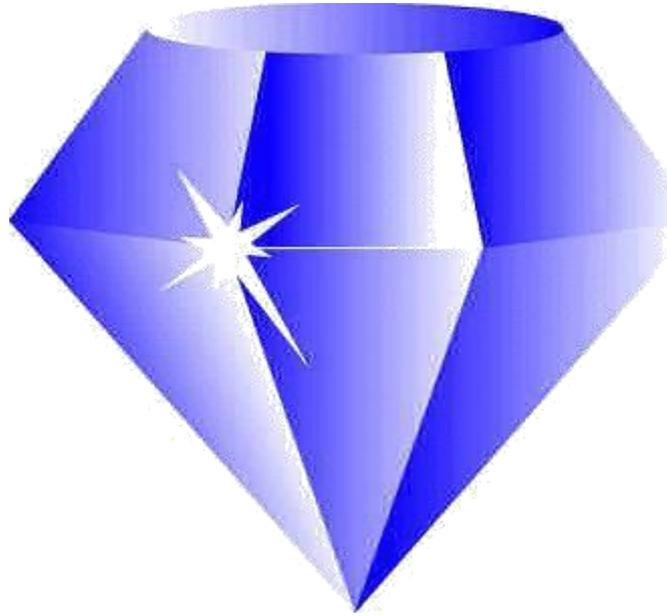


**RallyAppLive**

**Rally Event Management and Results Solution**



RallyAppLive is an Entry and Results system for Road Rallies, including 12 Cars, 2020s, Navigational Road Rallies and Targa Rallies.

## Today's Situation

Marshals are a key component of Rallying. Without these key Volunteers, events just couldn't run. Obtaining and utilising Marshals is always a concern for Event Organisers.

Covid-19 has enforced physical distancing and removing as much contact as possible in all areas.

In addition to creating an event, these two significant areas are major challenges to the successful and safe running of an event.

Obtaining Marshals is a continual problem. Can you obtain enough? Will they turn up? Will they go to the right place? Will they be able to do what you want them to do?

RallyAppLive can assist in running Events, utilising the number of Marshals available, enabling Organisers to place Marshals where really needed.

The solution also removes a great deal of Event overhead and potential paper use through its Entry component, and removes interaction with Event Officials, especially Marshals.

At one end of the scale, it may be possible to run an event with a very small number of Marshals, possibly even none. Inevitably this significantly reduces any form of physical contact during an event. RallyAppLive offers a flexible solution to enable events to be run with the Marshal numbers available to suit the event. Events can run with Marshals at all Controls, or no Marshals at all to suit Marshal availability and profile of Event.

With the option of running an event with few Marshals, the profile of the event can be kept low - many members of the public will notice Marshals parked on the side of the road, wearing bright reflective clothing and Control Boards, giving an impression of a high speed event.

As well as reducing the number of Marshals required to run an event, the solution provides other options in running other forms of Events/activities:

- Rallies over a time period – an Event can span a longer period of time with no Marshals and no physical Controls present. This could mean that an Event could take place over a longer time period in one evening, reducing the number of cars in one place at one time, or an Event could run over several days - Crews can select a time they wish to compete eg 20:00 on a Tuesday evening. A crew would have an allocated slot for their attempt at the event. Another crew could choose another time on a different day. With no cars on the same piece of the route at the same time, PR requirements and the profile of the Event could be reduced significantly.
- Crews on Scenic Tours may wish to sample a simple Regularity, with a view to moving to competitive events. Such Regularity sections could be included in Tours (subject to a suitable Permit) with no additional Marshals required.
- Training – those wishing to learn how to compete on Road events can be provided with their own local event on which to practice navigation. As time can be recorded, trainees can see how they would fare on a real Rally.

As there is no set time for events, different types of event can be run over a period of time. This could offer a bridge between Table Top rallies and other navigational events, reduce the physical profile of an event and reduce PR requirements.

## **What is RallyAppLive?**

RallyAppLive is a holistic Rally Event Management and Results Solution.

The core of the solution is based on a well tried and tested Results engine which has been used in many sports for several years. The “Autotest” app is now used widely across Clubs, especially as it aids social distancing significantly.

RallyAppLive uses widely available, low cost day to day technology which most people already own. This means there is no significant technology cost to use the solution.

Competitors require a GPS-enabled phone, phablet or tablet to compete. GPS is used for location and timing. A mobile signal is required to upload times, but times can be stored on a phone until a mobile signal can be obtained. The solution works in the likes of Wales and other areas where mobile coverage can be poor.

The Event Management environment and Results engine is housed in the “Cloud”, therefore no powerful, local hardware is required to define and manage the Event. A browser environment is required for event definition, management and monitoring.

However RallyAppLive is more than just a GPS-based timing system. The solution covers all areas of running an Event:

## **Event Entries:**

We have all been using essentially the same entry process for years, with the only major recent changes being the use of PDF files instead of paper, and email instead of the Post. Some Clubs have produced on-line systems for their own use, but there is no standard, available, easy to use solution available for all Clubs.

Our current event entry process is fundamentally a paper-based process with a little technology added. It's time to enter the 21<sup>st</sup> Century! Many Sporting Governing Bodies eg British Cycling already provide a centralised Event entry system for many Club Events.

Most Motorsport Entry and Results Systems require a great deal of manual effort to enable them to function. Many of us have just accepted this situation, but technology can deliver a great deal of automation, remove significant manual effort and deliver accurate results rapidly – significant improvements in all areas.

Social Distancing due to COVID 19 has also meant that we need to consider how to reduce (or ideally eliminate) any sharing of physical items and avoid grouping people together. Technology can assist significantly in achieving these objectives.

Current entry systems are still generally based around a paper process, but with PDF forms and email replacing paper entry forms and the Post. The process is generally:

- Regulations and Entry Forms are mainly distributed via email and social media.
- Motorsport UK PDF Entry Forms are filled in by Competitors and mailed to Entry Secretaries.
- Entry Secretaries receive the forms, acknowledge entry and start compiling spread sheets and email distribution lists.
- Payment can be made via BACS, PayPal, cheque or cash, requiring the Entry Secretary to associate various payments with entries.
- Entry lists are published somewhere, but usually not automatically and requiring manual effort to update spreadsheets and other documents.
- At an Event, a manual process is required for Signing On and Scrutiny, again normally paper and proximity based.
- A similar Signing On process is required for Marshals and Event Officials, utilising paper and gathering in one place.
- PDF documents can be used for Pre-Event Declarations, but again this requires email and manual checking of who has returned correctly completed documents.
- Timing and Results for true Grass Roots disciplines normally require capture on stopwatches, manual entry on to time cards, then manual entry in to Results systems (normally spreadsheets). This is time consuming and errors can be made in recording times and transcribing to the Results system.
- Competitors check their times on pieces of paper stuck on notice boards, creating close proximity between Competitors.
- Results for Class and other Awards are worked out manually, taking a great deal of time and often generating errors.

- All of this manual activity consumes a great deal of time, keeping Competitors at the Event to wait for Results and often removing resources which could be used to clear the venue.

Some Clubs may have more automated systems using the likes of Google Forms, Adobe signatures and electronic timing, but there is still a great deal of manual effort required and scope for errors to be made.

Today we have a great deal of relevant technology available to us. Using this technology, there are better ways to manage events:

- Ensuring “paperwork” is completed,
- Competition times captured, calculated and results delivered in an efficient and rapid fashion,
- Manual effort reduced,
- Accuracy improved,
- Time required reduced,
- Distancing delivered.

The use of technology all adds up to making running an event easier and safer for Organisers, Marshals and Competitors.

## Competition/Event Creation

The Competition dashboard, running in a browser, enables the creation of Competitions/Events. The definition of an event includes:

- Type of Competition – 12 Cars/2020/Road Rally/Targa
- Status of Event(s) – Clubman, Interclub or higher Status
- Classes
- Any special awards, such as “Young Driver”, Teams, etc
- Number of awards
- Cost
- Payment methods
- Event Regulations
- Document area for posting any documents such as Pre-event Declarations
- Penalties
- The location of Main Time Controls, Timing Points Controls and direction of approach, plus area of the Control
- The location of Route Checks and Passage Controls
- Quiet Zones and Black Spots

The screenshot shows a web browser window with the URL `rally.sapphire-solutions.co.uk/competitions.php?sifename=wakeman`. The navigation bar includes 'Information', 'Entry Management', 'Event Management', 'Live Results', and 'Logout'. The main heading is 'Competitions'. Below the heading is a search bar and a table of results. The table has the following columns: + Add New, ID, Full Name, Active, Event Date, Timing Precision, Grid Reference Digits Shown, Missed Timing Point, Missed Route Check, Entered Black Spot, User Help, Minutes Late, Minutes Early, Exceeded Make Up, Wrong Approach, Entry Fee, Paypal Email, Register, Marshal, Reg Doc, Information, and Delete. The table contains one row for 'Chipping Warden Targa 2' with various statistics and links for 'Register Link' and 'Marshal Link'. At the bottom of the table, there is a 'Check All / Uncheck All' button and a 'With selected:' label.

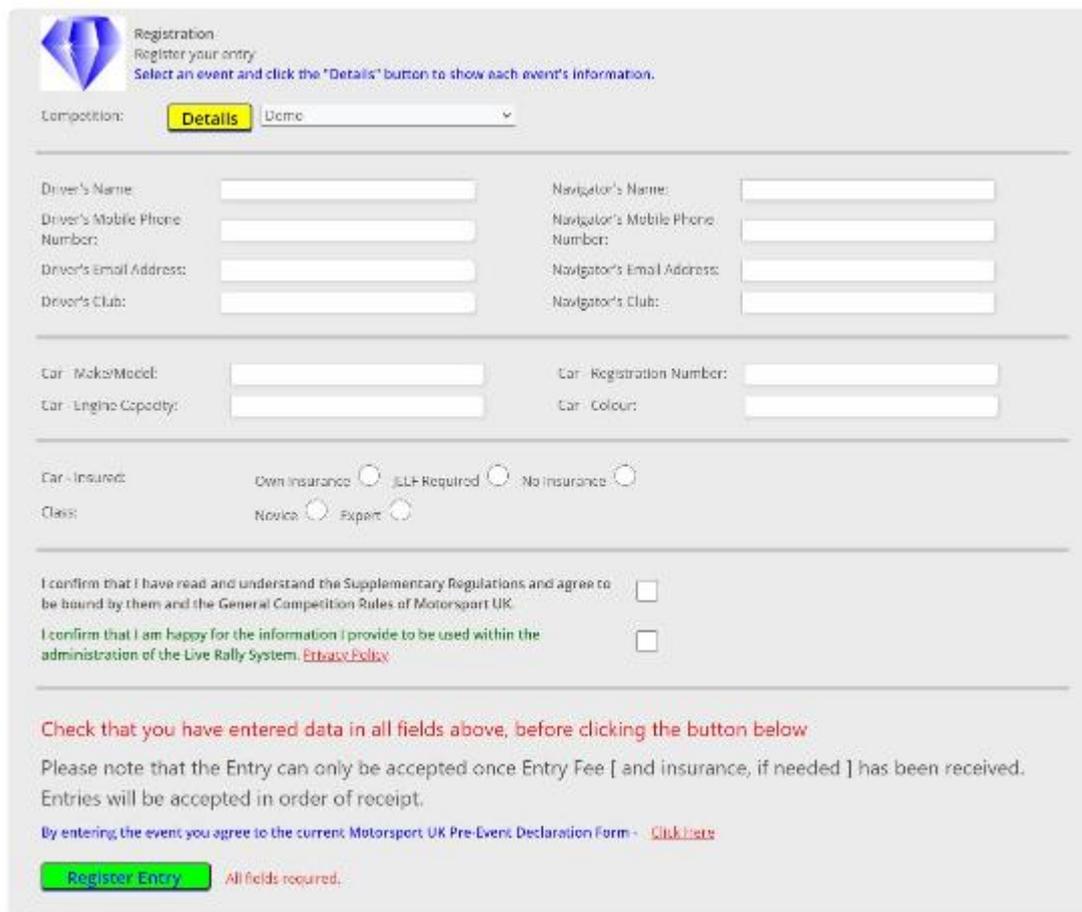
+ Add New	ID	Full Name	Active	Event Date	Timing Precision	Grid Reference Digits Shown	Missed Timing Point	Missed Route Check	Entered Black Spot	User Help	Minutes Late	Minutes Early	Exceeded Make Up	Wrong Approach	Entry Fee	Paypal Email	Register	Marshal	Reg Doc	Information	Delete
<input type="checkbox"/>	Edit	52 Chipping Warden Targa 2	<input checked="" type="checkbox"/>	2020-09-23	Minutes	Ten Digit Reference	300	300	600	600	1	2	4	300	£20.00		<a href="#">Register Link</a>	<a href="#">Marshal Link</a>			

Check All / Uncheck All With selected:

## Entry Management:

The Regulations and URL to access entries for the Event is distributed to potential Competitors via email, Social Media or other electronic forms.

Competitors submit their entries via the browser page. The latest Motorsport UK Sign-On and declaration form can be viewed, downloaded and submitted.



The screenshot shows a registration form with the following sections:

- Registration:** Register your entry. Select an event and click the "Details" button to show each event's information.
- Competition:** A dropdown menu with "Dome" selected and a "Details" button.
- Driver's Information:** Fields for Driver's Name, Driver's Mobile Phone Number, Driver's Email Address, and Driver's Club.
- Navigator's Information:** Fields for Navigator's Name, Navigator's Mobile Phone Number, Navigator's Email Address, and Navigator's Club.
- Car Information:** Fields for Car - Make/Model, Car - Engine Capacity, Car - Registration Number, and Car - Colour.
- Car - Insured:** Radio buttons for Own Insurance, JLR Required, and No Insurance.
- Class:** Radio buttons for Novice and Expert.
- Confirmation:** Two checkboxes for confirming understanding of regulations and consent to data use.
- Instructions:** A red warning message: "Check that you have entered data in all fields above, before clicking the button below". Below it, text states: "Please note that the Entry can only be accepted once Entry Fee [ and insurance, if needed ] has been received. Entries will be accepted in order of receipt." and "By entering the event you agree to the current Motorsport UK Pre-Event Declaration Form - [Click Here](#)".
- Submit:** A green "Register Entry" button with the text "All fields required." next to it.

A list of Entrants is available for all to see through the browser.

If PayPal payment is enabled, entrants can just click on the PayPal icon in the list to pay for any entry. Payments can be seen by Organisers and associated to individual entries.

Payment can be made via PayPal or externally through BACS. Payment identifiers can be associated with individual Competitors to track payment.

MOT and Tax can be checked automatically via a link to DVLA records.

It is hoped that Motorsport UK Licences can be checked in the solution going forward.

The entry list can be used to generate email distribution lists to communicate with entrants with Finals, Results and other communications.

Personal details for the Event are hidden from those with insufficient privilege to ensure adherence with GDPR.

Organisers can upload documents such as Regulations, Self Declaration forms, Venue details, etc can be uploaded for Entrant use.

Uploaded Documents

Uploaded Name:

+ Add New	Document Name	View Uploaded PDF Document	View	Delete
No data found				

**Upload Your Own Documents**

Uploaded file must be a pdf no larger than 8Mb

Upload PDF :  No file chosen

Paper entries are still supported for those who require more traditional means of communication, but inevitably this will require more manual effort for the Entry Secretary.

Registered Entries

Event: -- any -- Event Type: -- any -- Driver: -- any -- Class: -- any -- Skill: -- any --

Results: 1 - 50 of 58 Pages: 1 << 1, 2 >> Page size: 50

Event	Event Type	Driver	Navigator	Payment	Pay by Paypal	Club	Champs	Car	Colour	Capacity	Class	Skill Level
	Autotest	Adam Wonnacott	Trevor Slee	Not Paid Yet	<input type="button" value="Paypal"/>	Ndmc/21		Peugeot 206	Silver	2 litre	8 - CLUBMAN OVER 1400cc	Beginner
	Autotest	Nick		Not Paid Yet	<input type="button" value="Paypal"/>		143	suzuki		1.0	1 - EXPERT UP TO 1400cc	Beginner
ILFRACOMBE TARGA 2020	TARGA	Ashley Aslett	Eddie Gale	Paid by Paypal	<input type="button" value="Paypal"/>	Southsea		MG ZR	Blue	1400	5 - NOVICE UP TO 1400cc	Novice
ILFRACOMBE TARGA 2020	TARGA	James Evans	Fion Davies	Not Paid Yet	<input type="button" value="Paypal"/>	Telf Valley Motor Club 459		Ford Focus ST170	Grey	2000cc	2 - EXPERT OVER 1401cc	Expert
ILFRACOMBE TARGA 2020	TARGA	Kevin Ablitt	Graham Child	Paid by Paypal	<input type="button" value="Paypal"/>	Sevenoaks 2755		BMW 318ti	Orange	1900	4 - SEMI-EXPERT OVER 1401cc	Expert
ILFRACOMBE TARGA 2020	TARGA	Dafydd Owens	Eurwyn Owens	Paid by Paypal	<input type="button" value="Paypal"/>			Ford ka	Black	1.4	5 - NOVICE UP TO 1400cc	Novice
ILFRACOMBE TARGA 2020	TARGA	Nick Angrave	Nigel Angrave	Paid by Paypal	<input type="button" value="Paypal"/>	81		Honda Civic Type R	Silver	2000cc	8 - CLUBMAN OVER 1400cc	Beginner
ILFRACOMBE TARGA 2020	TARGA	Stuart Holton	Barry Rogers	Paid by Paypal	<input type="button" value="Paypal"/>	101	No	Volkswagen Golf GTi	Turquoise	1781	6 - NOVICE OVER 1401cc	Beginner
ILFRACOMBE TARGA 2020	TARGA	Chris Woolley	Jamie Woolley	Paid by Paypal	<input type="button" value="Paypal"/>	Borough 18 MC-29	Cotswold Championship	BMW E30	Silver	1787	2 - EXPERT OVER 1401cc	Expert
ILFRACOMBE TARGA 2020	TARGA	Russ Drayton	Gareth Drayton	Paid by Paypal	<input type="button" value="Paypal"/>	North Devon					8 - CLUBMAN OVER 1400cc	Expert
ILFRACOMBE TARGA 2020	TARGA	Elliott Sharp	Tommy Woolley	Not Paid Yet	<input type="button" value="Paypal"/>		cotswold	MG ZR	Blue	1792	1 - EXPERT UP TO 1400cc	Novice
ILFRACOMBE TARGA	TARGA	Peter Fikins	Darrell	Paid by	<input type="button" value="Paypal"/>	NDMC	N/A	Volvo 244	Blue	2316	4 - SEMI-EXPERT OVER	Expert

## Marshal Registration:

Marshals can also Register for the Event, ensuring that they have appropriate credentials (where appropriate) and that the information can be used to update their experience records (unfortunately still using the Marshal experience books).

The screenshot shows a web browser window with the URL `https://autotest.sapphire-solutions.co.uk/register.php?sitename=northdevon`. The browser's address bar and tabs are visible at the top. Below the browser window, a registration form is displayed. The form is titled "Registration" and includes the following fields and options:

- Event:** A dropdown menu with "ILFRACOMBE TARGA 2020" selected. A yellow "Details" button is positioned to the left of the dropdown.
- Event Type:** A dropdown menu with "Select Event Type" selected.
- Driver's Name:** A text input field.
- Gender:** Radio buttons for "Male" (selected) and "Female".
- Competition Licence Number:** A text input field.
- Age Group:** Radio buttons for "Adult" (selected) and "Junior".
- Motor Club/Membership No:** A text input field.
- Championship:** A text input field.
- Email Address:** A text input field.
- Contact Number:** A text input field.
- Postal Address and Postcode:** A text input field.
- Next of Kin's Name:** A text input field.
- Next of Kin's Contact Number:** A text input field.
- Navigator/Passenger:** A text input field.
- Competition Licence Number:** A text input field.
- Age Group:** Radio buttons for "Adult" (selected) and "Junior".
- Motor Club/Membership No:** A text input field.
- Championship:** A text input field.
- Email Address:** A text input field.
- Contact Number:** A text input field.
- Postal Address and Postcode:** A text input field.
- Next of Kin's Name:** A text input field.
- Next of Kin's Contact Number:** A text input field.

## Event Marshals



Event:  Marshal Role:

Results: 1 - 26 of 26

Pages:  << 1 >>

Page size:

Event	Name	Role
	Alan Sweetland	Marshal
	Chris Balchin	Chief marshal
	David Ellis	Marshal
	David Ellis	Marshal
	Jason Irwin	Marshal
	John Barthram	Club Helper
	Sarah Woolley	Marshal
	Stewart Bawden	Marshal
	tom upton	Clerk of course
ILFRACOMBE TARGA 2020	alan edward white	Asst. chief marshal
ILFRACOMBE TARGA 2020	Alan Sweetland	Marshal
ILFRACOMBE TARGA 2020	Beth collins	Marshal
ILFRACOMBE TARGA 2020	Curtis	Marshal
ILFRACOMBE TARGA 2020	David Ellis	Marshal
ILFRACOMBE TARGA 2020	Jake Liversedge	Marshal
ILFRACOMBE TARGA 2020	Jason Irwin	Marshal
ILFRACOMBE TARGA 2020	John Barthram	Steward
ILFRACOMBE TARGA 2020	Mark cockerill	Marshal
ILFRACOMBE TARGA 2020	Paul Waterton	Steward
ILFRACOMBE TARGA 2020	Paul Waterton	Steward
ILFRACOMBE TARGA 2020	Richard Irwin	Marshal

## Defining the Event Route:

### Route Definition

The route is defined with Main Time Controls, Timing Points, Route Checks and any other defined Controls. The Controls have their details defined, location, areas, direction of approach, penalties and other details. The "Order Number" is the order of the Controls. It is suggested that when initially defined large gaps are left in numbering eg MTC1 is Order Number 10, Timing Point 1 is 20, Timing Point 2 is 30, ... This enables extra Controls to be easily inserted or changed without having to renumber every Control to suit. The order of Controls can even be changed during the event if a re-route is required.

Controls can be defined using any system which can accurately identify the map reference or longitude/latitude of Control locations eg Google Maps. These coordinates are entered in to the Event Management dashboard, defining the locations, type and direction of approach for Controls.

While the locations of Controls can be defined using mapping systems, the exact location of controls should be checked by driving the route and checking the response of the Competitor app to the location - the geography of the area may have an effect on the GPS signal.

### Locations

	+ Add New	id	Competition	Type	Record Automatically	Order Number	Name	Void Penalties	Warning Zone	Approaching Zone	Location Zone	Minutes to TP or MTC	Latitude	Longitude	OS Grid Ref	Approach	Clue	Take Up Minutes	Delete
<input type="checkbox"/>	Edit	339	Demo	Main Time Control	No	10	MTC 1	<input type="checkbox"/>	15	10	5	0	0	0	SP 89645 37785	NorthWest	Open Envelope 1	0	
<input type="checkbox"/>	Edit	518	Demo	Timing Point In	No	30	PC 3	<input type="checkbox"/>	15	10	5	0	0	0	SP 89670 37770	Unknown		0	
<input type="checkbox"/>	Edit	534	Demo	Timing Point Out	No	50	TP 4	<input type="checkbox"/>	150	100	50	0	0	0	SP 89645 37785	Unknown		0	
<input type="checkbox"/>	Edit	519	Demo	Black Spot	Yes	60	BS 6	<input type="checkbox"/>	15	10	5	0	0	0	SP 89695 37775	Unknown		0	
<input type="checkbox"/>	Edit	520	Demo	Quiet Zone	No	70	QZ 7	<input type="checkbox"/>	15	10	5	0	0	0	SP 89685 37745	Unknown		0	

Check All / Uncheck All With selected:

The location of Controls can be imported using a defined format from a spreadsheet or CSV file.

## Import Locations

Import locations from a csv or excel file.

Imported file must be in the correct format  
Download one of the sample files to see the correct format

[Download Sample CSV File](#)

[Download Sample Excel File](#)

Import File:  No file chosen

## Location Checks

Competition: -- any -- Driver: -- any -- Type: -- any --

+ Add New	id	Entry	Competition	Location	Name	Type	Latitude	Longitude	OS Grid Ref	Accuracy (Metres)	Approach	Test Time	Time Stamp	Delete
No data found														

**Event Timing:**

Timing uses the time provided by GPS, so everybody has the same time displayed on their phones at all times. There is no way to change this time on phones, being independent of the time set on the phone.

At present timing is to the minute due to the accuracy of commercial GPS systems and the variance in accuracy between different ages and types of phones. GPS timing can be used to time to the second, but due to the accuracy of systems, a difference of 5 seconds could be considered “clean”, as in the early HRCR Regularity events.

Organisers define the time for a section and penalties for early/late arrival. Make up time can be included under the  $\frac{3}{4}$  rule.

Directions of Approach/Depart can be defined, along with suitable penalties. Similar with Route Checks to ensure that Competitors follow the correct route.

The times taken for Sections do not have to be transmitted immediately, the phone stores the data and can be updated when a mobile signal is available. This could be at a defined upload point, a rest halt or even the end of the event.

Results are calculated immediately in “the Cloud” and are available to Organisers and Competitors.

### Competitor Use:

The Event is normally “turned off” before the start to avoid Competitors inadvertently picking up Controls for the Event on their way to the Start. The Event is “turned on” just before the first car is due to Start.

Prior to the event, Competitors download the RallyAppLive application from the Google Play Store or Apple Store, depending on whether an Android or IOS (Apple) device is being used.

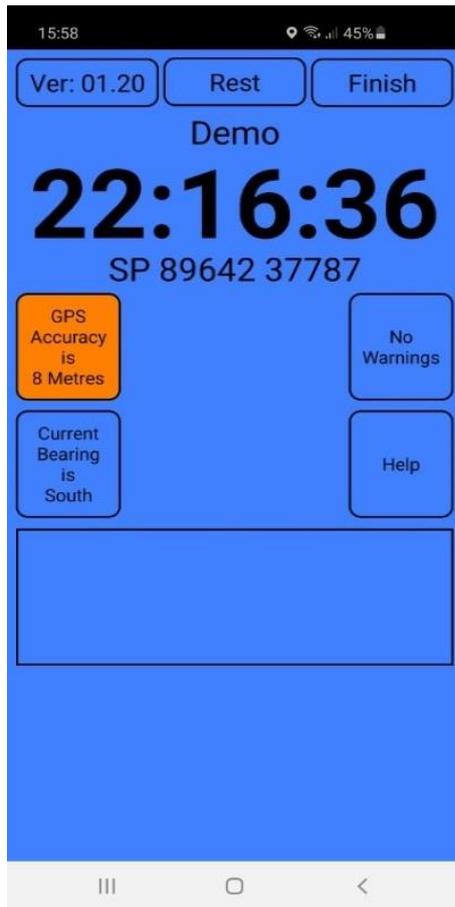
The crew selects the Club Event they’ve entered (a Club may be running more than one Event using the overall AppLive suite of solutions).



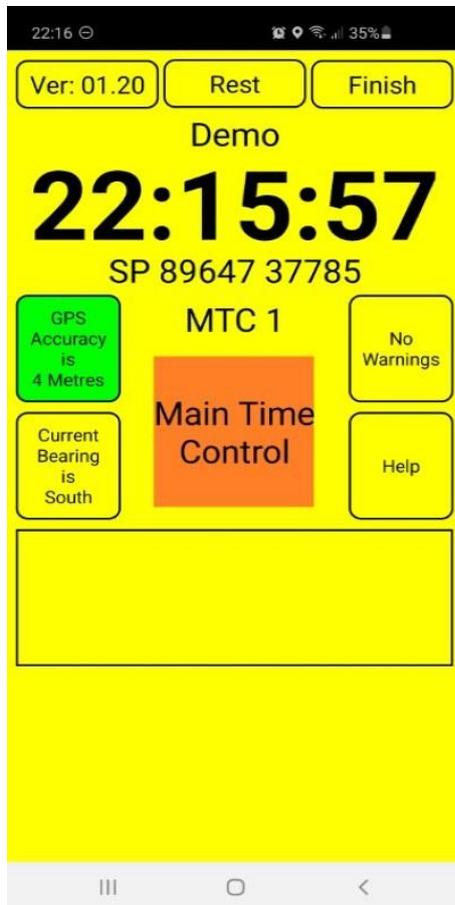
A crew logs in to the application using credentials supplied by the Organisers based around the crew's stated mobile phone number. These credentials identify the crew and their number/running order/time due at Controls.



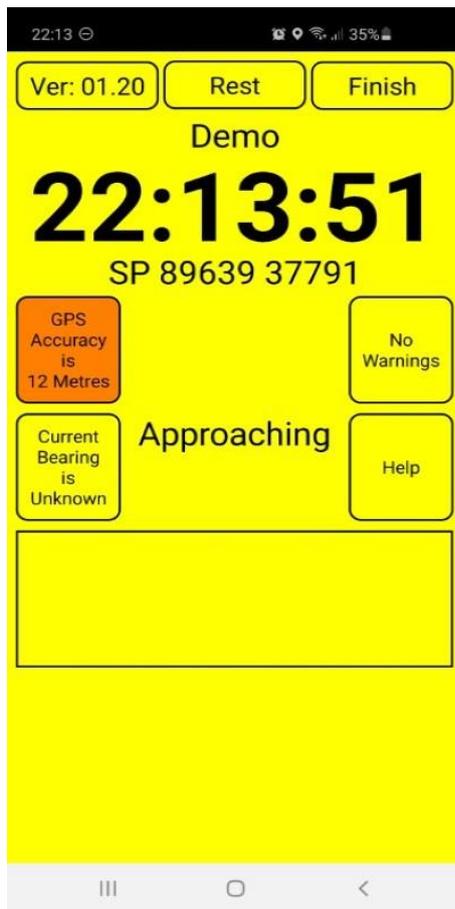
Crews will see the normal screen when on the event between Controls, displaying the time and their location.



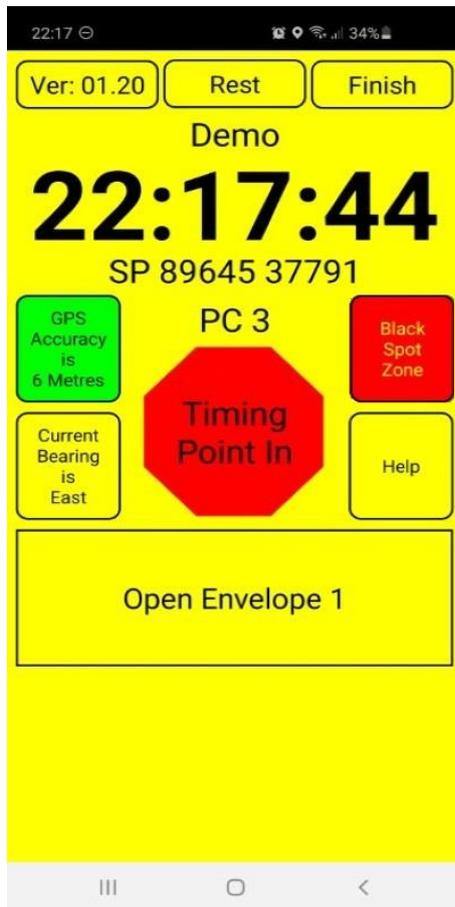
Crews will see the screen change colour as they enter the Main Time Control at the start. When their due time arrives, they press the soft button on the screen to accept the time. At this point the crew can be provided with information, such as which navigation to use to reach the next Control (eg a range of different navigation can be provided to crews to print themselves before the event. Each set of navigation can be identified by a letter, the application informing the crew which set of navigation to use for that Section.



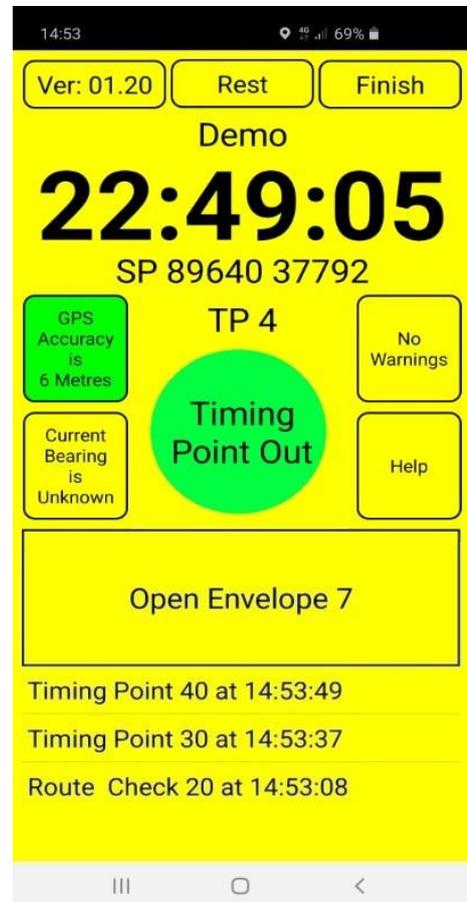
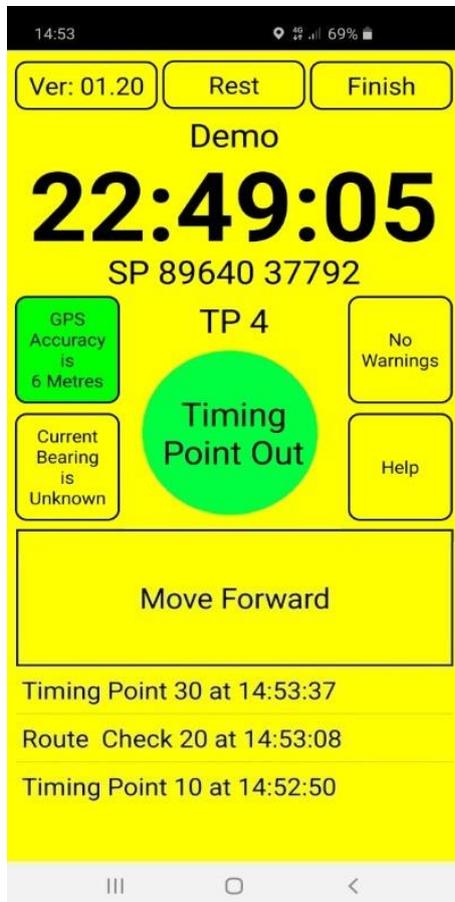
When approaching a Time Control, the display changes colour from blue to yellow, warning that the Control is nearby. If they are approaching from the wrong direction they are informed.



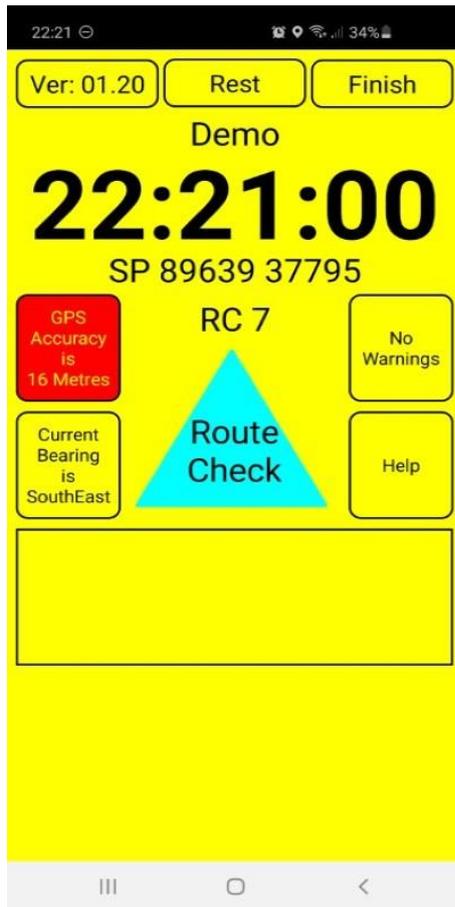
When within the Control area, the display on their device changes and they are able to accept a time. They can wait for their due time if desired. Again they accept the time by hitting the soft button and further information can then be displayed to start the next section.



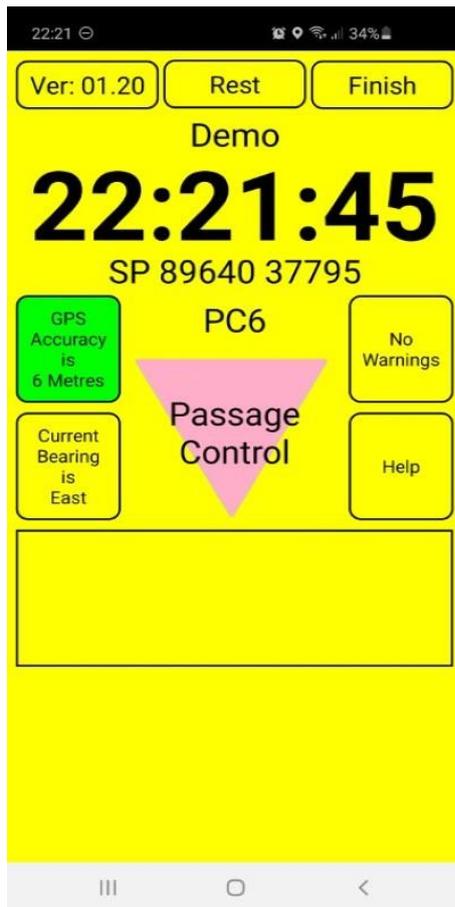
The start of the next Section may be a little further down the road to clear an area or provide a short break. If this is the case, the crew are informed to move forward until they pick up the Control for the start of the next Section. To start the next Section, the crew selects the start time to suit them. Route information can be communicated when the time is accepted eg use navigation “H” in previously distributed/printed sets of potential navigation.



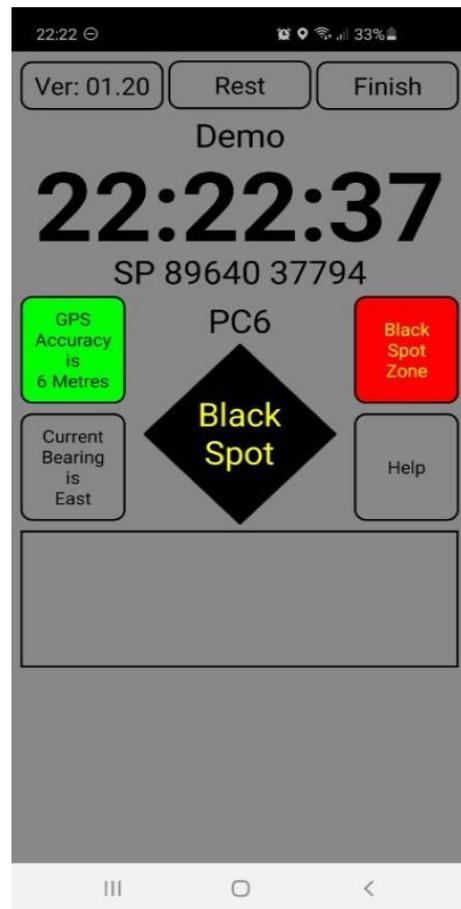
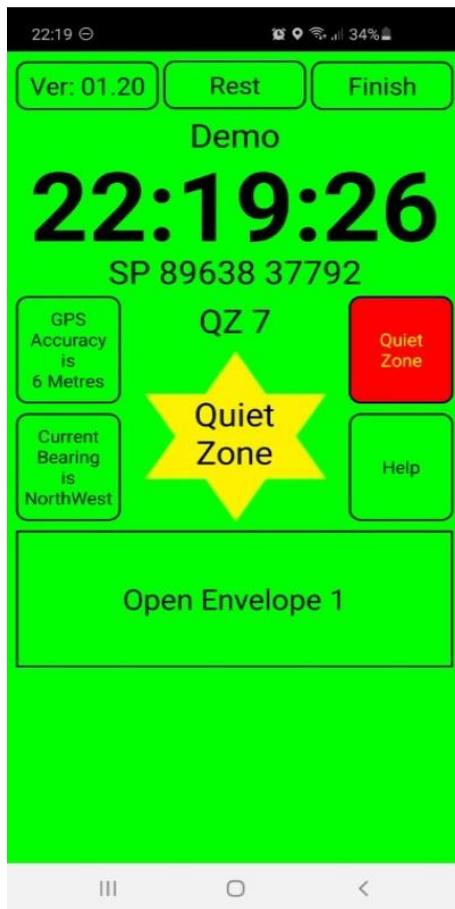
Route Checks can be included in the Event to ensure that crews are travelling on the correct roads. No action is required by the crew, the app records that they have passed the location.



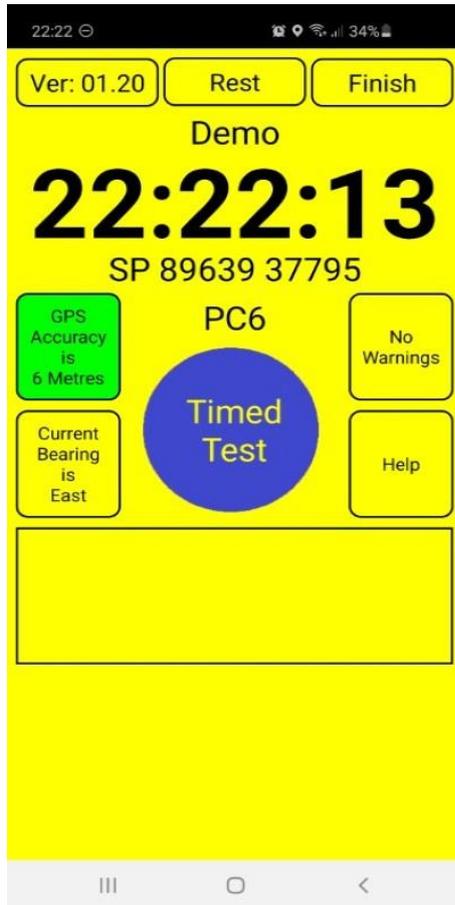
A Passage Control can be created to simulate a Marshal completing a Timecard.



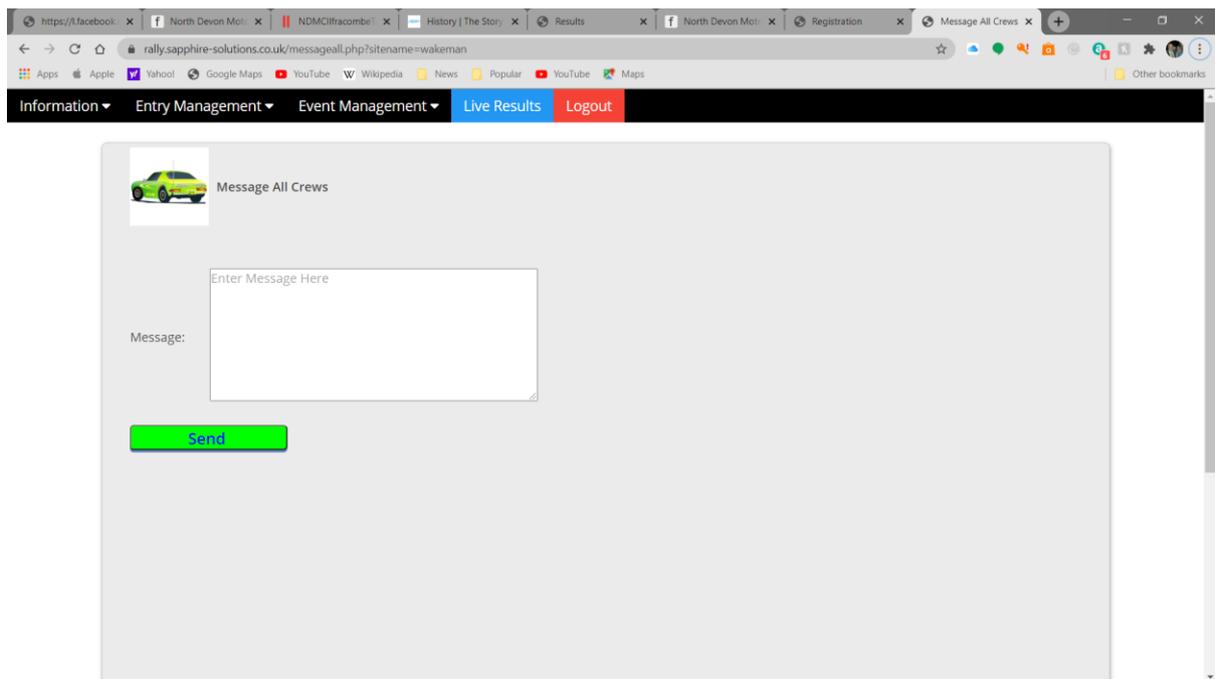
To keep the crew away from Black Spots, “No” roads and to make them aware of Quiet Zones, Controls can be created in the event Management dashboard with suitable warnings/instructions.



If Events include Tests, crews will be presented with a Test screen when approaching the Test. Test timing is carried out by Marshals, the crew does not have to interact with the phone. After the Test, crews are presented with screens to take them to the next Section, just as they have experienced on the road.

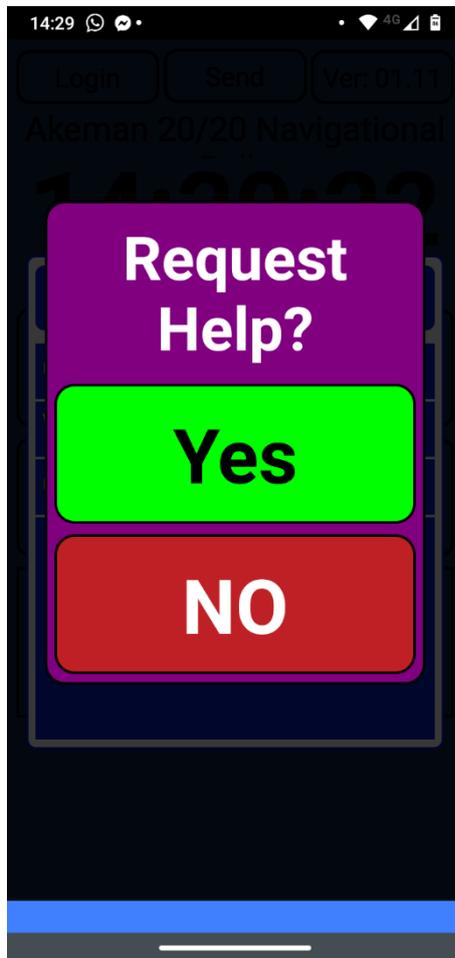


If necessary, Organisers can send messages to all Crews during the event.



The screenshot shows a web browser window with the URL `rally.sapphire-solutions.co.uk/messageall.php?sitename=wakeman`. The browser's address bar and tabs are visible at the top. Below the browser window, a navigation menu contains the following items: Information, Entry Management, Event Management, Live Results, and Logout. The main content area displays a form titled "Message All Crews" with a small car icon. The form includes a text input field labeled "Enter Message Here" and a "Message:" label. A green "Send" button is positioned below the input field.

A "Request Help" facility is available – if a car has not moved for more than 5 minutes, the crew is asked whether they would like to contact the Organiser. If they decide that they need help, the touch of a soft button will alert the organisers, providing car number and location. The prompt repeats every minute, attempting to ensure that the crew are ok.



## **Test Timing:**

Some Events may have Tests in addition to competition on the Road. RallyAppLive uses the well tried and tested Autotest/Autosolo timing solution (TimingAppLive) for the Tests. Closer integration between RallyAppLive and TimingAppLive is planned to provide combined road and Test times immediately (at present times are displayed in different environments).

The Results element of the solution for Tests is driven by mobile phones acting as handheld timing devices for Marshals, with times being uploaded to the Results system in the Cloud.

Android or IOS phones can be used for timing. Timing is started and ended by using volume keys, a soft button on the screen, or a physical button attached to the headphone jack.

When an entrant approaches a Test start, the Marshal uses the competition number to verify the driver and car as shown on the driver list. The system displays how many runs have been completed by the entrant on that Test.

One Timekeeper can time a whole run. Alternatively, a remote Start and Finish with different Timekeepers can be used, with Start and Finish times being allocated to a car number.

The Timekeeper at the Start identifies the car number and then starts timing on the phone. Entrants can run in any order.

The Timekeeper at the Finish stops timing on the phone at the end of the run, they then enter any cone penalties, a wrong Test, or whether clean. The car number is also entered with a remote Finish. The times are then uploaded to the Results Solution. This process is the same with remote Start/Finish and also when the Timekeeper Starts and Finishes timing for the Test.

Electronic timing systems can be used with the Results Solution. Times can be manually entered into the Results Solution.

Test Time Entry

Competition: -- select -- \*

Test: -- select -- \*

Entry: -- select -- \*

Enter Test Time (Seconds): \*

[Clear Entry](#) [Save Time](#) \* = required fields.

### Manual changing of times:

There will always be situations where due to external factors, a time/results will need to be changed manually.

If required, times can be manually amended by the organisers.

## Results:

Event Results can be viewed in a browser. A application to enable more detailed presentation of Results is being developed.

The screenshot shows a web browser window with the URL `rally.sapphire-solutions.co.uk/results.php?sitename=oxford`. The page title is 'Results' and the competition is 'Akeman 20/20 Navigational Rally'. A blue diamond logo is visible. A green 'Print Results' button is present. Below the header is a table with 23 columns: Entry, Crew, Class, MTC.0, MTC.1, RC.A, TP.2, RC.B, TP.3, TP.4, RC.C, TP.5, RC.D, TP.6, RC.E, TP.7, TP.8, TP.9, TP.10, Blackthorne (A), MTC.11, TP.12, and R. The table contains 6 rows of data for entries 00 through 06.

Entry	Crew	Class	MTC.0	MTC.1	RC.A	TP.2	RC.B	TP.3	TP.4	RC.C	TP.5	RC.D	TP.6	RC.E	TP.7	TP.8	TP.9	TP.10	Blackthorne (A)	MTC.11	TP.12	R
00	Haydn Marks Haydn Marks	Expert	10:31 AM	10:33 AM	Missed 300	10:40	Visited	10:43 240 early	09:33 772920 late	Visited	10:57 900 exceed	Visited	11:03 120 early	Visited	11:10	11:17 240 early	11:22 360 early	11:26 360 early	Timed 777 seconds	11:06 AM	11:11 360 early	VI
01	Ian Hazleton Paul Hardy	Expert	09:34 AM	09:36 AM	Visited	09:43	Visited	09:48	09:54	Visited	10:06	Visited	10:13	Visited	10:21 120 late	10:30	10:38	10:45	Timed 70 seconds	11:31 AM	11:39	VI
02	Alan Wakeman Matt Fowle	Expert	09:33 AM	09:38 AM	Visited	09:45	Visited	09:50 300 Wrong Approach	09:56 300 Wrong Approach	Visited	10:08	Visited	10:15 300 Wrong Approach	Visited	10:21	10:30 300 Wrong Approach	10:38 300 Wrong Approach	10:45 300 Wrong Approach	Timed 70 seconds	11:33 AM	11:41	VI
03	Richard Isherwood Ian Canavan	Expert	09:39 AM	09:40 AM	Visited	09:47	Visited	09:52 300 Wrong Approach	09:58 300 Wrong Approach	Visited	10:10	Visited	10:17 300 Wrong Approach	Visited	10:23	10:32 300 Wrong Approach	10:40 300 Wrong Approach	10:47 300 Wrong Approach	Timed 76 seconds	11:35 AM	11:43	VI
04	Tony Brooks Ian Graham	Expert	09:37 AM	09:42 AM	Visited	09:49	Visited	09:54	10:00	Visited	10:12	Visited	10:19	Visited	10:25	10:34	10:42	10:49	Timed 82 seconds	11:37 AM	11:45	VI
06	Keith Edwards Peter Rushforth	Expert	09:41 AM	09:46 AM	Visited	09:53	Visited	10:00 120 late	10:06	Visited	10:18	Missed 300	10:28 180 late	Visited	10:34	10:43	10:51	10:58	Timed 84 seconds	11:41 AM	11:49	VI

**Post Event Communication:**

Email distribution lists can be extracted from the Entry list to distribute Results, Updates and News to Competitors and Marshals.

**Solution Requirements:**

The Crew will require their own modern, fully charged Mobile phone [iOS or Android]. During the rally, the GPS and Data must be switched ON, even though a mobile signal may not be available. Data must be available at the start to enable initial login. There appears to be a marked difference between phones more than 6 years old with regards to GPS accuracy, but the majority will have phones newer than this so a minor issue.

It is strongly recommended that the Crew install a suitable [USB charging Point](#) in the car for the Mobile phone to reduce the risk of running out of battery charge.

A suitable solid screen or dash mount for the mobile phone is required to provide clear view and reach for the Navigator while seated wearing a seatbelt.

To monitor the event and make any necessary changes to the route or times, organisers must have access to a browser (the larger the screen the better to see detail more clearly). This will typically be a laptop with good data access.

Crews do not need a constant mobile signal, times are stored on the phone until they can be uploaded. On a longer event, designated upload areas can be defined to provide data for the results system and interim Results.

A display and printing environment, such as a PC/Mac with an attached printer and good network access directly or via tethering can be used to display Results, but this should be avoided to enable distancing, Results can be viewed on mobile phones.

**Considerations:**

GPS reception is key for Controls and Route Checks. Areas with overhanging trees, tunnels or any other features which could affect the GPS signal must be avoided.

Size of the data transmitted is minimal so there is no significant data cost to Crews.

**Training:**

Despite the Solution being easy to use, inevitably any system requires Training to function at its best, especially when being used for the first time. Officials, Timekeepers and Competitors can download the timing application from the Google or Apple Store before the Event. Tuition in using the Solution can be obtained from Youtube to ensure that all are prepared for the Event.

One “Expert” with knowledge of the Solution should be defined as a point of contact for any issues. Further assistance can be obtained from Sapphire Solutions, but adequate training should be completed prior to the Event to ensure overall smooth running of the Solution.

**Pricing:**

The system is currently being provided free of charge to assist Clubs with running events during these challenging times. Any contributions to support future additional functionality would be appreciated, or free entries to events would be accepted :-)

Longer term, the system may adopt a cost per entrant charge, but the Developers are true Competitors wishing to support Motorsport, so costs can always be discussed.

**Access:**

Your Motor Club can be added simply on request. You will get a new code to test the functionality from:

[support@sapphire-solutions.co.uk](mailto:support@sapphire-solutions.co.uk)

## **The Future:**

Software and the way it is used can always be improved with experience and feedback. Comments are always appreciated on how the solution can be improved.

Plans for the future include:

- Adding current Results screens to the Competitor application (will there be a separate Competitor Results app, or the option within the Competitor app? I'd keep them separate to avoid confusion, especially if viewing results during an event).
- Better display of results and sorting, with Crew, class and number always displayed when viewing results details.
- Improved print and email options for Results.
- Admin mode in the app, to enable an organiser to use the app to capture locations and define the event.
- Marshal mode in the app to enable Marshals to enter times and other details at Timing Points, Passage Checks, Secret Route Checks and points in Timed Tests eg cones struck, wrong Test.
- Completion of Damage Declaration at the finish of the event.
- Enhanced Regularity support.
- The ability to Register so that the same details don't have to be entered for each event entered.
- Enhanced Workflow and Document Management for greater automation and control.
- Data collection for future use (subject to GDPR).

### **Clubs in the process of using the solutions:**

TimingAppLive (currently named Autotest and Production Car Autotest in the App Stores):

- Loughborough
- Cirencester
- Boundless by CSMA
- North Devon
- Bath
- Southsea
- Limerick
- AMSC
- Ross
- Bristol
- Southern
- 63
- Owen
- MG
- Hagley
- Middlesex
- Munster
- Hexham & District Motor Club

RallyAppLive:

- Oxford Motor Club
- South Hams Motor Club
- Bath Motor Club
- Cotswold Motor Sport Group
- 63 Car Club, Elgin
- AxleTramps Motor Club
- Blackbird Auto Club
- Central Sussex Motor Club
- Loughborough Car Club
- Plymouth Motor Club
- Ross and District Motorsports Club
- Southern Car Club

**Solution Suite:**

RallyAppLive is a member of a suite of solutions for a variety of Motorsport Timing and Event Solutions, plus solutions for other sports such as Pool, Snooker, Golf and Darts.

TimingAppLive – Timing for Autotests, Autosolos and Targa Rallies

TrialsAppLive – Results for all types of Trials

LeagueAppLive – Match allocation and results for a wide range of sports such as Pool, Snooker and Darts.

GolfAppLive – Organisation and results for golf competitions

