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**Date:** 2019-02-07 **Time:** 13.00 hrs

**Subject:** BULLETIN NO: 2 **Document No:** 1.2

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*From:* The clerk of the course

*To:* All competitors / crew members  
*Number of pages:* 3 *Attachments:* 3

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## SUPPLEMENTARY REGULATIONS

### Art 2.6 FIA Delegates

FIA Media delegate: Vera DUSSAUSAYE

### Art 2.7

National Press Officer: Peter ENCKELL

### 3.2 Schedule during the rally week

#### Monday 11 February 2019

~~09:00-16:00~~ – 20:00 Registration for reconnaissance. Rally HQ Sunne

#### Wednesday 13 February 2019

~~15:00~~ 14:00 – 22:00 Scrutineering incl. sealing and marking. Other entrants. Stjerneskolan, Torsby

18:00-18:30 Mandatory Drivers' Briefing, Rally HQ, Sunne

For all drivers and co-drivers.

The meeting is not compulsory for the following start numbers, who attended the Drivers' briefing in Rally Monte Carlo: 1 / 3 / 4 / 5 / 7 / 8 / 10 / 11 / 19 / 33 / 89 / 25 / 34 / 41 / 42 / 55 / 104

Note! JWRC crews (start no 71-83) will have the briefing and information at a separate occasion. Those who doesn't attend that briefing must attend at the briefing Wednesday 13.

#### Thursday 14 February 2019

09:00 - 10:30 Shakedown P1 + P2P Skalla, Torsby

10:30 - ~~12:00~~ 11:30 Shakedown P1 + P2P + P2 Skalla, Torsby

11:30 - 12:00 Shakedown P2 + P3 Skalla, Torsby

12:00 - 13:30 Shakedown P3 and Non-Priority drivers Skalla, Torsby

**Art 11.1**

**A) SCRUTINEERING TIMES – CARS ENTERED BY A MANUFACTURER**

<b>Sealing for Manufacturers' cars RALLY SWEDEN 2019</b>			
<b>Date: Wednesday 13/02/2019</b>			
<b>Location: Service Park</b>			
	<b>Nb of cars</b>	<b>Time</b>	
<b>HYUNDAI SHELL MOBIS WRT</b>	<b>11 - 19 - 89</b>	<b>9h00</b>	<b>9h45</b>
<b>TOYOTA GAZOO RACING WRT</b>	<b>5 - 8 - 10</b>	<b>9h45</b>	<b>10h30</b>
<b>CITROEN TOTAL WRT</b>	<b>1 - 4</b>	<b>10h30</b>	<b>11h00</b>
<b>M-SPORT FORD WORLD RALLY TEAM</b>	<b>3 - 7 - 33 - 37</b>	<b>11h00</b>	<b>12h00</b>

<b>Scales Available for Manufacturers Location: Technical Zone</b>	<b>From 11h30 to 12h30</b>
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**B) SCRUTINEERING ALL OTHER CARS – STJERNESKOLAN – TORSBY**

See attachment no 1

**Art 11.7 FIA Safety tracking device**

Manuals is enclosed as attachment no 2 and 3

**Art 12.12 Shakedown**

All P1 and P2P will be required to complete their first passage of Shakedown in order of classification in the Championship. A start list for this first passage will be released. Competitors will be required to be present at the Shakedown start 10 minutes before their starting time. After this first passages P1 and P2P cars will be able to continue their Shakedown as normal.

**WRC2 test:**

Monday 11.02.2019

Closing date for entry: **Friday 8<sup>th</sup> February**

08:00 – 09:00 Stage is open for Recce, max speed 70 km/h. Recce can be done with rally car.

09:00 – 15:00 Stage open for test.

**Service:**

Will be at area in front of service park. Competitors must cover the ground under their car with tarpaulin. Competitors are responsible for cleaning the service area and for not spilling dangerous liquids on the ground. This will be controlled.

Contact during the test: Magnus Säfström + 46 (0) 70 606 15 93.

**Road Book**

Note the following changes to Road Book:

<p>Sign changed Page S-9 Box 11 Page 1-46 Box 25 Page 3-27 Box 34</p>		
<p>Signs removed Page 2-6 Box 21 Page 2-40 Box 21 (Roundabout and exit sign)</p>		<p><i>Join road 245/246</i></p>
<p>Sign changed Page 2-70 Box 40</p>		
<p>Sign removed Page 3-5 Box 18</p>		

**Stig Rune Kjærnsli**  
Clerk of the course

<u>TC in</u>	<u>Car n°</u>	<u>Crew</u>	<u>Car</u>
14:00	34	Greensmith / Edmondson	Ford Fiesta R5
14:03	35	Pieniasek / Mazur	Ford Fiesta R5
14:06	92	Tuohino / Markkula	Ford Fiesta WRC
14:09	103	Lönnström / Svensson	Ford Fiesta R2
14:30	68	Grönholm / Rautiainen	Toyota Yaris WRC
14:33	21	Østberg / Eriksen	Citroën C3 R5
14:36	56	Molinaro / Granai	Citroën C3 R5
14:39	105	Storm / Storm	Peugeot
15:00	41	Katsuta / Barrit	Ford Fiesta R5
15:03	45	Bergqvist / Barth	Ford Fiesta R5
15:06	98	Dahlström / Johansson	Mitsubishi Mirage
15:09	99	Karlsson / Nilsson	Mitsubishi Mirage
15:30	25	Rovanpera / Halttunen	Skoda Fabia R5
15:33	26	Pietarinen / Raitanen	Skoda Fabia R5
15:36	43	Solberg / Minor	Skoda Fabia R5
15:39	44	Gryazin / Fedorov	Skoda Fabia R5
16:00	42	Veiby / Andersson	VW Polo GTI R5
16:03	47	Kristoffersson / Skjærmoen	VW Polo GTI R5
16:06	48	Lindholm / Korhonen	VW Polo GTI R5
16:09	53	Stugemo / Lexe	VW Polo GTI R5
16:30	46	Huttunen / Linnaketo	Skoda Fabia R5
16:33	49	Berglund / Gevert	Skoda Fabia R5
16:36	50	Flodin / Bergsten	Skoda Fabia R5
16:39	51	Monelius / Edvardsson	Skoda Fabia R5
17:00	52	Eriksson / Andersson	Skoda Fabia R5
17:03	54	Roman / Graneberg	Skoda Fabia R5
17:06	55	Yates / Morgan	Skoda Fabia R5
17:09	57	Timur /	Skoda Fabia R5
17:30	93	Brynhildsen / Engan	Skoda Fabia R5
17:33	95	Jonasson / Jonasson	Skoda Fabia R5
17:36	96	Blomberg / Bood	Skoda Fabia R5
17:39	102	Burger / Teiskonen	Skoda Fabia R5
18:00	94	Jansson / Gustavsson	Ford Fiesta R5
18:03	101	Matsuno / Takeshita	Ford Fiesta R5
18:06	104	Fourmaux / Jamoul	Ford Fiesta R2
18:30	71	Rådström / Johansson	Ford Fiesta R2
18:33	72	Torn / Sikk	Ford Fiesta R2
18:36	73	Tannert / Hinneberg	Ford Fiesta R2
18:39	74	Kristensson / Appelskog	Ford Fiesta R2
19:00	75	Poom / Järveoja	Ford Fiesta R2
19:03	76	Sesks / Caune	Ford Fiesta R2
19:06	77	Williams / Hall	Ford Fiesta R2

19:09	78	Solans / Barreiro	Ford Fiesta R2
19:30	79	Badiu / Lazar	Ford Fiesta R2
19:33	80	Knacker / Braun	Ford Fiesta R2
19:36	81	Oldrati / De Guio	Ford Fiesta R2
19:39	82	Zaldivar / Mussano	Ford Fiesta R2
20:00	83	Johnston / Kihurani	Ford Fiesta R2
20:03	97	Rigler / Ettl	Ford Fiesta R5
20:06	100	Zellhofer / Heigl	Ford Fiesta R5



## **SAS Fitting Kit Manual – RALLY CAR**

## Welcome

This manual is provided as a guide for the installation of the WRC Tracking System Kit, for competition vehicles only. Care should be taken when considering the location of components with regard to electrical cabling and fire suppression systems already installed in the vehicle. Please check always that the components of your kit are as requested.

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## 1. Tracking Unit Kit Components & Steps

The WRC Tracking System Kit includes:

- WRC Tracking Installation and Fitting Kit Instruction Sheet;
- 3-in-1 antenna with leads;
- Internal radio antenna with lead;
- 6 – 24v wiring loom with plug;
- Mount, to be bolted to tunnel;
- Adjustable mount connector/knuckle.



(Contents may differ slightly to image shown)

WRC tracking system fitment steps:

1. Mount WRC tracker;
2. Fit external & internal antennas, running leads to the WRC tracker;
3. Fit wiring loom, ensuring that a solid 9 to 28 volts is supplied;
4. Connect all antenna connections, make sure they are tight using an 8mm spanner;
5. Apply power.

## 2. Power Supply

WRC tracking system requires a reliable power supply from 9 to 28 volts DC. We recommend a 5 amp (Max) blade type or similar quality fuse is used at the battery supply end of the WRC tracking system power lead.

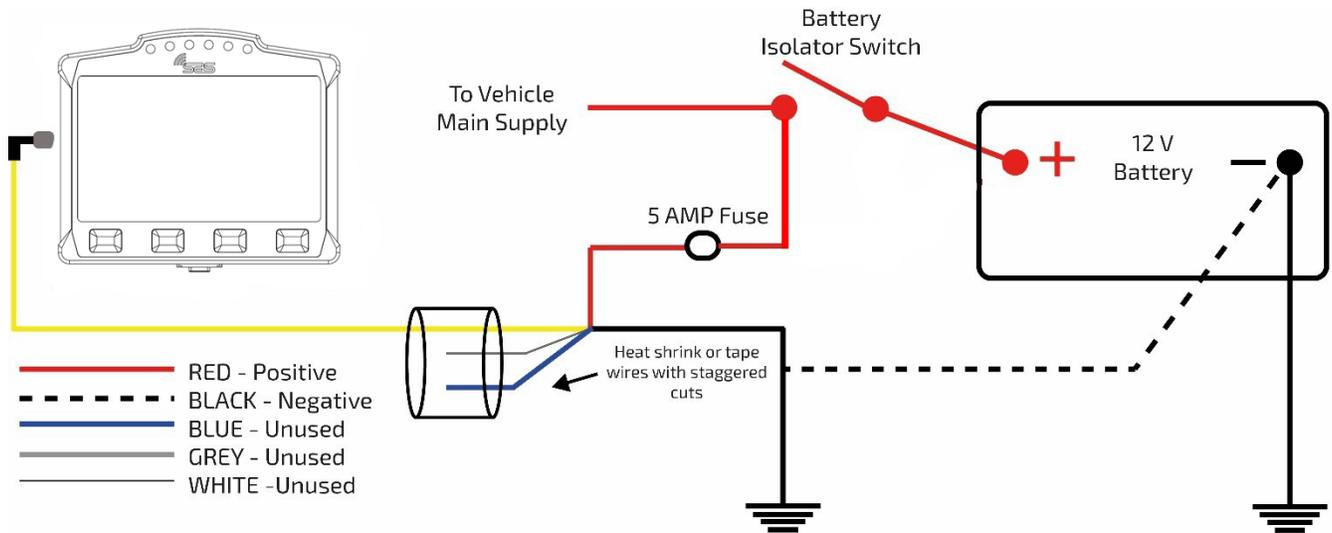
Zero volts or battery negative can be picked up at any suitable earthing point providing the isolation switch does not switch the negative side of the battery.

The WRC tracking system unit has an internal battery that is kept charged via the car's power supply. It acts as a reserve supply to power the unit in the case of an accident where a car's power supply is interrupted (e.g. car battery smashed or dislodged).

**Note: The tracking device should only be powered once it is placed in its final position in the vehicle; this ensures accelerometers are calibrated correctly.**

### 3. Connection Diagram

The 6-24v wiring loom, includes five wires. The white blue and grey wires must be stagger cut and heat shrunk or taped back so they cannot short to ground or to each other. Red and black are used as follows:

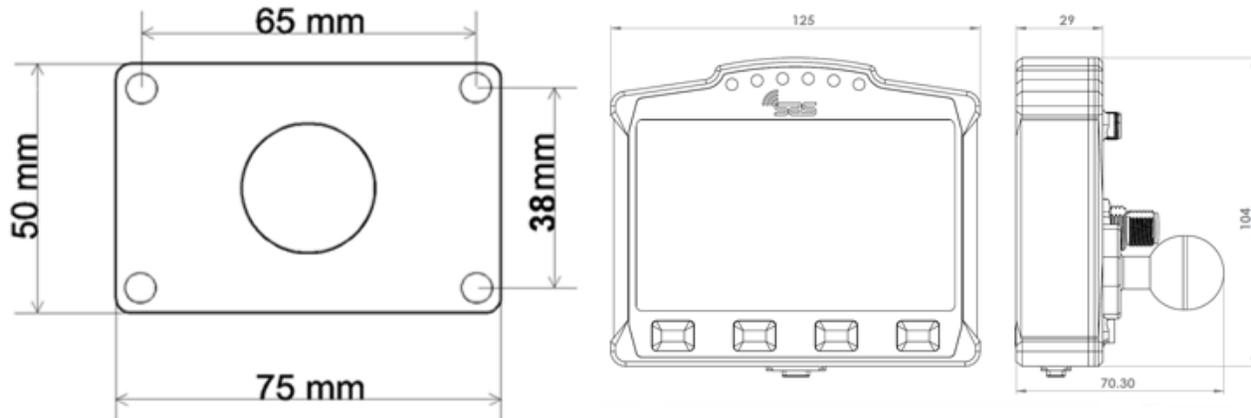


RALLYSAFE 12V WIRING DIAGRAM

During installation, the wiring loom should be routed away from the engine compartment, Ignition or Alternator wiring.

300 mm of Power Supply Wiring Loom is required to be available for connection to the WRC Tracker Unit at the mounted position.

## 4. Tracking Unit Dimensions



## 5. Tracking Unit Mounting

The preferred location and mounting for the WRC tracking system unit is a RAM style 50mm x 75mm flat base with ball, bolted through the tunnel with four **M6** Bolts.

It should be in a central, protected location on the central tunnel in front of the seats and both easily visible and accessible by both the driver and co-driver/nav.

Care should be taken when considering the location of the Mounting Point with regard to electrical cabling and fire suppression systems installed in the vehicle.

Photographs of mounting and positioning can be seen in Fig.1 and Fig.2 respectively.

Alternatively, the WRC tracking system unit can be mounted in a central protected location on the vehicle dashboard that is easily visible and accessible by both the driver and co-driver.

Mounting is a Ram style 50mm x 75mm flat base with ball, bolted with four **M6** bolts through the dashboard and a compulsory 3mm backing plate measuring no less than 145mm x 120mm



Figure 1. 25mm rubber ball securely attached to the tunnel



Figure 2. The WRC tracking unit mounted onto the 25mm rubber ball mount and connected through the RallySafe connector

## 6. Antenna Installation

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All leads on both external and internal antennas must run on the inside of all roll cage bars. This is to stop cable crushing on impact.

Antenna must not be mounted within 200 mm of any high frequency antenna's or cabling

The preferred route is to go down from the antenna, underneath the closest part of the roll cage (roof cross or main hoop), follow that along to the roof hoop, then go down the inside A pillar to the unit. Please allow 200mm clearance of high frequency antenna or cabling

Any excess cable must be run so that the cable is not bent any tighter than a 100mm radius. We recommend running it across the underside of the dash and back (do not coil in tight loops).

Cables must be tied neatly along the whole installation all the way to the unit so they can't be accidentally caught or dislodged.

All this will be checked at scrutineering and you may be required to fix it before your car can pass.

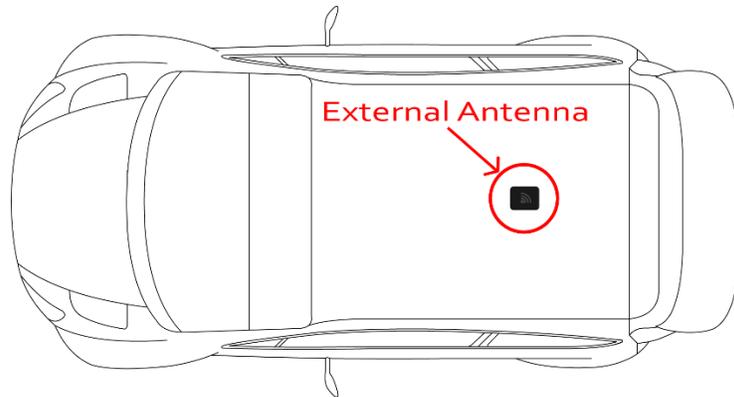
**Note: All antenna connections need to be firmly tightened with an 8mm spanner.**

### 6.1. External Antenna

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The antenna is mounted through a 12mm hole in a central location on the ROOF of the vehicle, rear of the main roll bar hoop, allowing the cabling to pass through the roof and follow the cage bars back to the unit location. The antenna is a fully watertight unit, which seals against the roof surface.





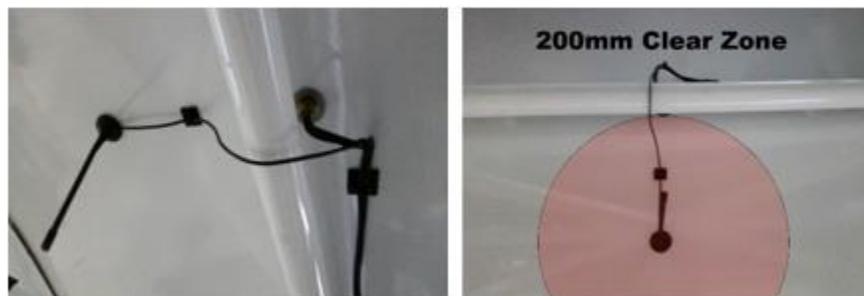
Antenna leads are connected as follows (There may be variations with the type and number of leads).

1. The 2 UHF leads, colour-coded **Blue**, is connected to the terminal labelled "WiFi" on the WRC unit (Right Hand Thread). Terminals are located of the rear of the unit and/or colour-coded Blue.
2. The Satellite Communication antenna lead is connected to the center or rear terminal labelled "IRI" (Left Hand Thread). It may also be colour-coded **Yellow** (this may be not marked on the 2-in-1 antenna).
3. The GPS antenna lead labelled "GPS", is connected to the terminal labelled "GPS" on the WRC unit (Right Hand Thread). Terminals may be on the side or rear of the unit and/or colour-coded **Green**.
4. GSM, has a small stick antenna supplied with the WRC unit, and is connected to corresponding terminal labelled "GSM" on the WRC unit (Left Hand Thread). The terminal is located on the rear of the unit and/or colour-coded **Red**.

## 6.2. Internal Antenna

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The Internal Antenna should be placed on the inside of the ROOF in a clear uncluttered area, with a 200mm radius clear of any bar work or solid metal object. The internal antenna has a magnetic base with double-sided tape for adhesion. The cable is then run to the WRC unit. Please keep cable on the inner side of the roll cage pipework so as not to be crushed in the event of an accident.



**Figure 3.** *The internal antenna must be at least 200mm away from any roll cage components*

## 7. Contact Us

---

For assistance, please contact the RallySafe Support Team by emailing: [support@rallysafe.com.au](mailto:support@rallysafe.com.au)

### **\*\*Product Disclaimer\*\***

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# SAS Tracker Competitor User Manual

## Welcome

For your and other competitor’s safety, it is important that you are familiar with the use of the WRC tracking unit, herein referred to as “the unit” or “the WRC tracking unit”.

The SAS System is designed to increase competition safety by providing safety notifications to inform event management, improve response times and provide accurate and reliable event times.

The following document outlines the basic features and functions of the WRC tracking unit. Please note that the WRC Tracking unit must be fitted and connected in all competitor’s car, in accordance with the SAS Fitting Kit Manual – RALLY CAR.

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# 1. Powering The Unit On

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The unit is pre-loaded with all of the stage coordinates and is activated when powered on. Please power the unit on early before the event to give it time to run checks.

When powered on the unit will display the transport mode, the details of which are specified in the Art. 2.1 of this document.

The unit does not need to be powered off at any stage during the event as it will go to sleep within a few minutes of inactivity but can be re-woken by either moving the vehicle or pressing any of the four buttons.

It is recommended that the unit is not powered off during the event, to ensure the internal battery stays fully charged for emergencies.

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## 2. Unit Modes

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The unit has two modes:

- When not in a competitive stage, the unit will be in **transport mode**, as described in 2.1.
- When in a competitive stage, the unit will go into **stage mode**, as described in 2.2.

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### 2.1. Transport Mode

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**SCREEN 1** – The transport mode displays from the top down the following information: the name of the next point you are travelling to, the time in transit, current time, accumulative and intermediate distances and speed, average speed.

The unit has four physical buttons. Their functions are reported on the screen right above the button's location.

Starting from the far left button to the right, you have the following options:

- **OPTIONS**: Operation described in 5.Transport Menu.
- **BRIGHT**: Increase the screen brightness (Note that the screen must always be clearly readable so full brightness is recommended for daytime).
- **DIM**: Decrease the screen brightness,
- **RESET**: Intermediate trip meter.



SCREEN 1. Transport Mode

## 2.2. Stage Mode

**SCREEN 2** – When the start official assigns each individual competitor a due start time, a countdown will display on the unit as shown in the white field below. Also shown in the white field is the stage number and the due start time.



SCREEN 2. Countdown to Stage Start

**SCREEN 3** – Once the start time is reached, the screen will turn green as shown below and the competitor has to proceed into stage.



SCREEN 3. Stage Start

**SCREEN 4** – Once the competitor has started the stage, the unit will automatically switch to on stage mode. The unit will start timing.



SCREEN 4. Stage mode

**SCREEN 5** – If the start is postponed for whatever reason and the start time is cancelled, the unit will display the Transport Screen. Once it is clear to send cars again the official will re-issue a new start time.



SCREEN 5. Start Time Cancelled

### 3. Hazard Alerts

The unit's primary function is to help alert race control of incidents on the course. The incident is notified to race control with different levels of hazard depending on the severity.

**SCREEN 6** – If a car stops during a stage, the unit will automatically transmit a HAZARD notification; this can either be upgraded to OK or downgraded to SOS by pressing the corresponding button to the text. A timer counts up to 60 seconds as an indication to press the "OK".



SCREEN 6. HAZARD Notification

**SCREEN 7** – If you select OK after the HAZARD alert, then the following screen will appear, showing that you and the car are OK.



SCREEN 7. OK Acknowledgment

**SCREEN 8** – If the manual SOS button is pressed, it must be confirmed as either a fire or medical SOS by pressing one of the two middle buttons. It can also be cancelled if pressed by mistake. If a car is involved in a High G impact, an automatic SOS message will display. If no urgent assistance is required, you can downgrade to OK by selecting the corresponding button.



SCREEN 8. Confirm Fire SOS or Medical SOS

**SCREEN 9** – When the SOS is confirmed, the screen 9 will display. Even once confirmed, the hazard can be changed to OK. Pressing OK will inform race control that the crew are OK and do not need medical assistance.



SCREEN 9. SOS Notification

## 4. Red Flag

**SCREEN 10** – In the case of a serious incident, a stage may be red flagged from Race Control. The red flag will display a full screen warning until it is acknowledged. To acknowledge the flag the far left button must be pressed.



SCREEN 10. RED FLAG Acknowledge

**SCREEN 11** – Once the red flag has been acknowledged, normal stage functions will display with a warning still at the top of the screen.



SCREEN 11. RED FLAG in Stage Mode

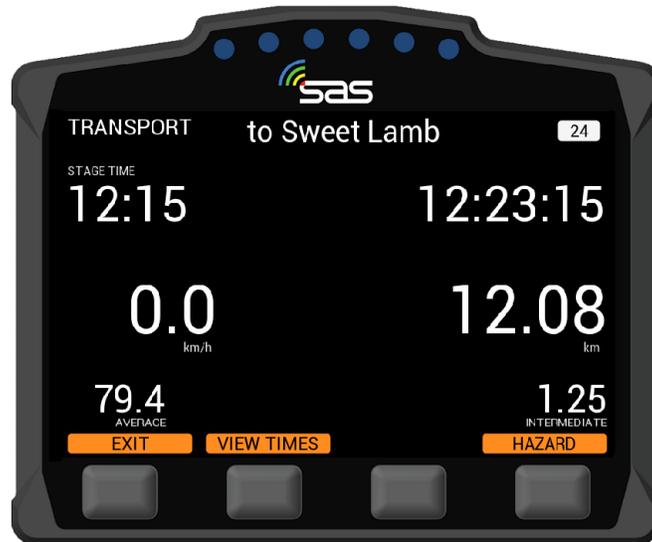
## 5. Transport Menu

**SCREEN 12** – In transport mode, the unit has a menu that can be accessed by pressing the options button.



SCREEN 12. Transport Mode

**SCREEN 13** – The option menu will allow the crew to view stage times “VIEW TIMES” or send a manual hazard/SOS “SEND HAZARD”.



SCREEN 13. Transport Mode – View times/Send Hazard

## 5.1. Stage Times

**SCREEN 14** – By pressing the “VIEW TIMES” button, provisional transit and competitive stage times will display. You can select times for any of the completed stages with the next and previous buttons.

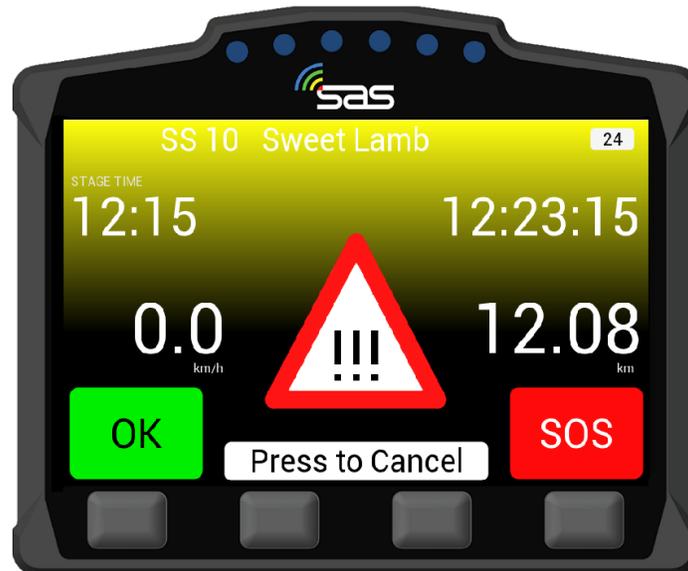


SCREEN 14. Times of completed stages

## 5.2. Manual Hazard

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**SCREEN 15** – If manual hazard is sent in transport mode, this can be upgraded or downgraded the same way as a stage hazard. If the hazard is no longer required, it can also be cancelled by pressing either of the two middle buttons “PRESS TO CANCEL”.



SCREEN 15. Manual Hazard in Transport Mode

## 6. Contact us

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For assistance, please contact the RallySafe Support Team by emailing: [info@statusas.com](mailto:info@statusas.com)

Please be as descriptive as you can when describing the problem. It would help us if you provide the following information at a minimum:

- Name of event.
- Vehicle or feature affected.
- Stage of incident.
- Time of incident.
- Any additional details.