



ARA Note: January 22, 2021

Re: Timing and Scoring Program

Over the past several months, it has been the desire of the ARA to bring a world class system to our events that will provide stronger safety solutions, accurate and accountable tracking and scoring and improved communication and reporting opportunities.

With those goals in place, the ARA has made the decision to run a trial of the rally management system *RallySafe* for the first two national events of the season. Planned for Sno*Drift and 100 Acre Wood, there will be no additional costs to competitors and organizers to run the system for these events.

Why only the first two events? ARA officials believe a trial run is important to fully understand the investment and capabilities a system such as RallySafe can provide organizers, competitors and fans before fully investing in such a system.

Here are a few highlights of what are expected from an upgraded system:

- **Emergency Response:** Currently, the average response time to emergencies is approximately 20 minutes. With near instant emergency reporting, emergency response will be faster by crucial minutes.
- **Tracking:** With more accurate tracking and vehicle information, the organizers will have important details on every vehicle in the event. From being stopped, high G-load incidents, or cars off route, organizers will be able to make critical decisions using up-to-date information.
- **Car-to-Car Communication:** The system will allow cars to relay if they are stopped, or have crashed, as other competitors approach them. There are also features such as push-to-pass, virtual triangles, and OK and SOS communicated between vehicles.
- **Accurate GPS Timing:** Using updated GPS tracking, timing can be accurate to under a hundredth of a second. The times will be instantly communicated to the competitors on the in-car unit, the finish control, and race control.
- **Scoring:** With instant communication of finish times and road penalties, scoring will be updated in real time.

The development and implementation of a system like RallySafe can have a large economic impact on the series. USAC is open to a large investment into the series, and more specifically, this project. Though there may be some costs of a new system to a competitor, we are working hard to eliminate or minimize the effect a new system will have. Our intention is for teams and organizers to see and use the features before we commit to any long-term solutions. Our review process will include series leadership, event organizers and our competitors. We have been able to secure some additional sponsorship funding and will continue to find new opportunities to cover costs.

Installation Kits and Installation Basics

There will be two options to competitors for the required installation kit.

Option #1 – No-Cost Rental Kit

The first will be provided as a “kit rental” at no cost.

- It requires a 14mm hole drilled into the roof for the antenna to be hard mounted. This location is detailed in the Rallysafe installation instructions.
- The car must have a TE AMP SuperSeal 1.5 2-Pin male plug (TE part number 282080-1) with **un-switched** power and ground.
- The power pin must be **in terminal one** of the connector. The connector has the terminal numbers labeled.
- The plugs must be able to reach level with the dash at the passenger A-Pillar bar plus six inches. TE AMP SuperSeal Kits can be found here: <https://www.obdinnovations.com/2-way-amp-superseal-1-5-series-female-connector-kit-282080-1/> .
- There are also pigtail kits available here: <https://www.obdinnovations.com/2-way-amp-superseal-1-5-series-female-connector-pigtail-282080-1/> .
- We will have a LIMITED number of plug kits available on site at scrutineering in case competitors have issues with their installs.
- The unit itself will be mounted with a roll cage attachment at the passenger A-Pillar or windshield support bar and requires no cutting or drilling. This is installed by a clamp system so the bar must have 360 degree access and clearance around the bar for the clamp.
- This installation kit must be returned at the end of the event or if the competitor withdrawals from the rally.

Option #2 – Purchase a RallySafe Kit

The second option is for the competitor to purchase an installation kit directly from RallySafe.

- There are several options, including a stick on antenna and different wire lengths.
- Kits can be found here: <https://shop.statusas.com/shop/category/rallysafe/> .
- Please note, shipping can take up to two weeks.
- We may have a limited number of these kits available for purchase at the event.

Either option will require a 12V power wired to the harness of the vehicle on **un-switched** power. The power source must be from the main battery and utilize a 5 amp fuse. Full installation details for both versions of the kits are available here: <http://rallysafe.com.au/wp-content/uploads/2017/03/RallySafe-Car-Fitting-Kit-Instructions-2017.pdf> . The in-car unit will be installed at scrutineering. If teams are using the rental installation kit, they are expected to arrive at scrutineering with the AMP connector installed and hole in the roof drilled.

Information on the function and operation of the in car are provided by RallySafe here:

<https://rallysafe.com.au/wp-content/uploads/2019/08/Competitor-User-Manual-V2-Wayne-Final.pdf>

If you have any immediate questions or concerns, please feel free to reach out to Preston Osborn at preston@ara-rally.com.