2021 USRA Race of Champions
Event Proposal & Briefing

Purpose:

Host a successful Academy of Model Aeronautics (AMA) sanctioned giant scale airplane racing event on October 14-17, 2021 (October 13-17 inclusive of setup days) that meets the objectives of the host community and the Unlimited Scale Racing Association (USRA). It is anticipated that this will event will build interest over time, continuing to be an ongoing annual event with a growing number of competitors and spectators.

2021 Objectives:

1. Raise money for local community organizations
2. Have a safe and fun event
3. Promote the sport of RC racing
4. Promote Science, Technology, Engineering & Math (STEM) with youth

2019 USRA Race of Champions Recap:

The USRA 2019 Race of Champions proved once again how exciting giant-scale pylon racing can be, with fast action racing and speeds that routinely exceed that of NASCAR and Formula One motor sports, with steady year on year growth. This year's event attendance marked an increase of new to giant scale racing competitors as well as an ongoing trend of giant scale racers who have not raced in USRA for many years returning for this event. Over 200 spectators were on hand for the race.

An excellent video of the event can be viewed on YouTube at youtu.be/JRe9qzBlrVc

The Race of Champions is a test of skills and endurance as pilots keep their airplanes in the running over three days, building to the winner take all championship trophy races held on the final day. We ensure strong community involvement with local schools and community organizations.

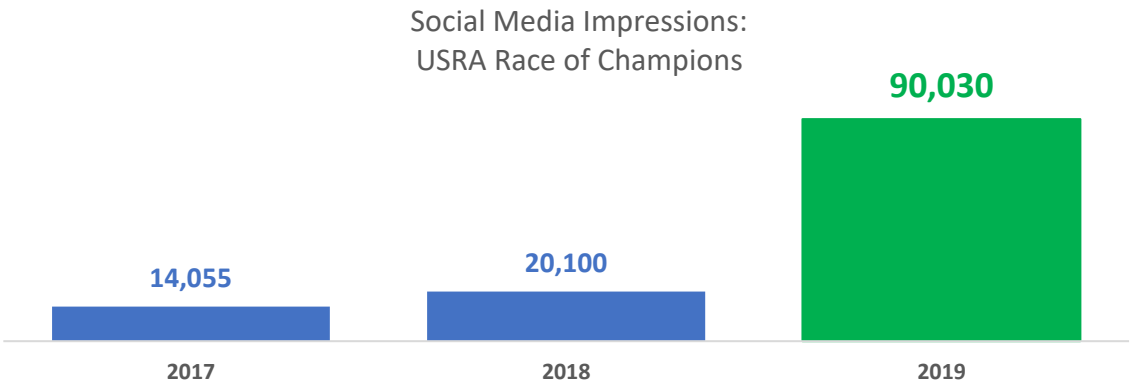
In terms of operations, the following are major improvements implemented and are planned to continue in 2021 as well:

1. Establish a 501(c)(3) to promote and manage the event
2. Hire 20+ local residents as paid event staff
3. Donate 100% of gate proceeds to local charities

Wherever possible, spending was steered towards local community businesses. In terms of direct economic impact, the event generated the following:

Local community organization donations	$700
Local community event staff payroll, local business spending by event organization & participants	$30,910
Regional spending, event organization	$1,700
Total	**$33,310**

The event garnered positive media and social media coverage. Coverage included prominent front page placement on Flying Giants, coverage in the Mojave Desert News, significant interest on the USRA Facebook page (facebook.com/GoUSRA and YouTube, 90,030 impressions, a 348% increase from 2018 event coverage) and signage posted prominently in the community.



We grew our sponsorship with over $18,500 in cash, support and prizes from Antelope Valley Ford, APC Propellers, Aviation Field Service, Desert Aircraft, Horizon Hobby, Norm Hill Aviation, Ritch's Brew, Samy's Camera, Team Extra Air Racing and Tru-Turn. The majority of this sponsorship increase was used to fund the hiring of local residents as paid event staff.

2021 Proposed Details:

The full agenda is as follows:

Wednesday, 10/13	Race course setup, 10:00am – 5:00 pm
Thursday, 10/14	Tech day with test and tuning flights, 8:30 am – 6:00 pm
Friday, 10/15	Heat races, 8:30 am – 5:00 pm
Saturday, 10/16	Heat races, 8:30 am – 5:00 pm
Sunday, 10/17	Trophy races, 8:30 am – 1:00 pm
	Site clean-up, 1:00pm-4:00pm

Each AMA sanctioned event is protected by insurance coverage with liability limits of $2,500,000 for bodily injury and/or property damage arising out of any one accident resulting from event activities.

To ensure depth of racing and achieve a critical mass, we intent to focus on 4 classes: Unlimited, Limited Gas, Formula One and Sportsman.

To attract more pilots and spectators, we intent to continue to offer significant purses for the four classes. With additional marketing and purses, our goal is to triple pilot and class registrations.

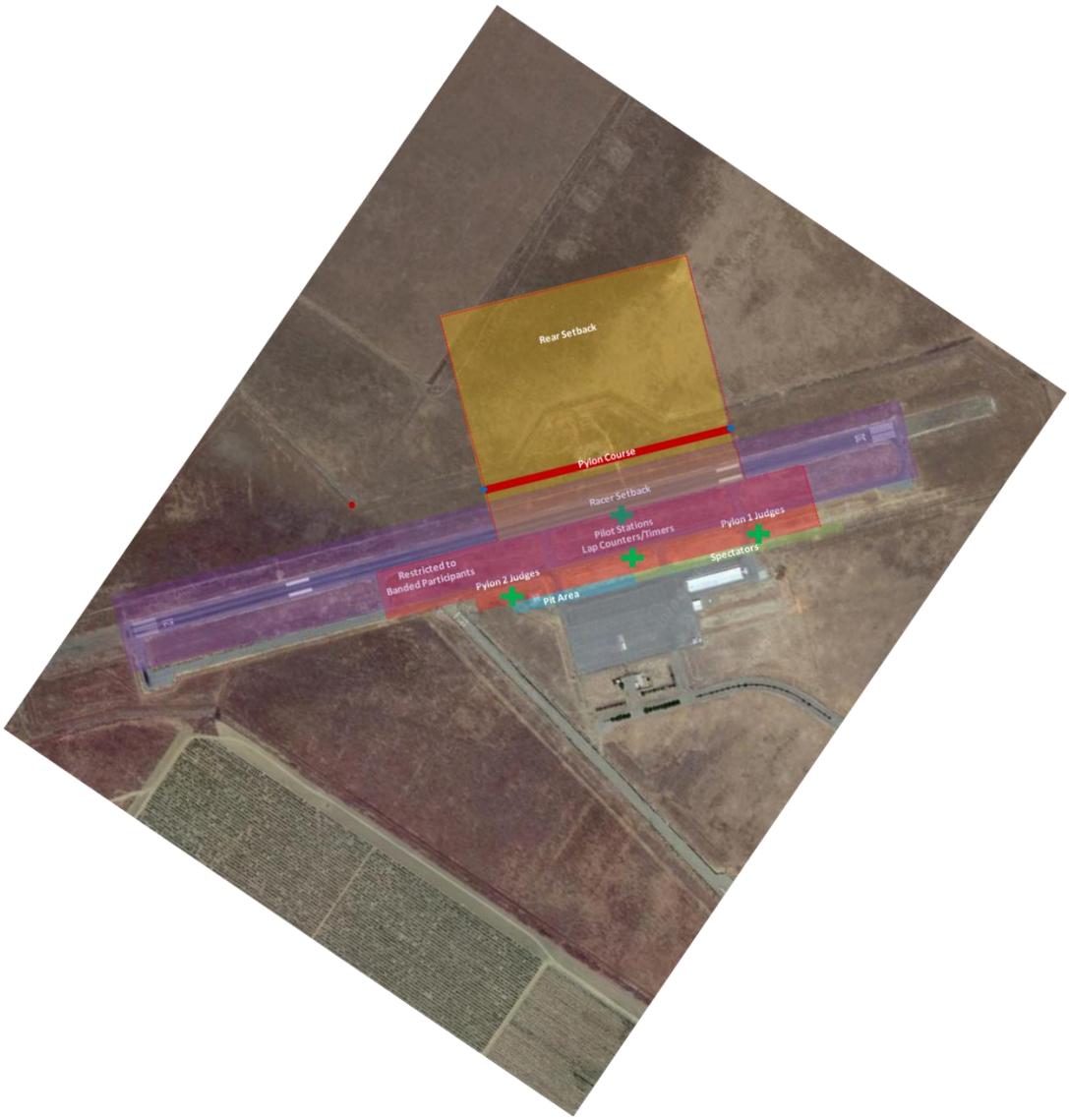
A limited number of RVs are parked in the race pits.

Site Layout:

The following are the temporary elements of the event that will be located inside the airport fence perimeter.

Temporary Element	Location	Notes
Antenna Structure/Pylon #1	340 feet lateral from runway centerline	12 foot height with flag. Can be removed or dropped horizonal during non-racing times.
Antenna Structure/Pylon #2	340 feet lateral from runway centerline	12 foot height with flag. Can be removed or dropped horizonal during non-racing times.
Pilot Station	50-75 feet lateral from runway centerline	3 foot safety barrier. Can be removed or dropped horizonal during non-racing times.
Lap Counter/Timer Station	330 feet lateral from runway centerline	7 foot shade canopy and table. Can be removed or dropped horizonal during non-racing times.
Pylon Judge Station #1	380 feet lateral from runway centerline	7 foot shade canopy and table. Can be removed or dropped horizonal during non-racing times.
Pylon Judge Station #2	380 feet lateral from runway centerline	7 foot shade canopy and table. Can be removed or dropped horizonal during non-racing times.
Awnings, RVs and participant vehicles	Along perimeter fence or ramp area	

The temporary elements are positioned as follows on the airport site diagram:



Safety:

Safety is our top priority. The FAA has been complimentary on the safety focus and proactive coordination. As in prior years, our safety plan is developed by aviation professionals and will be reviewed with the airport management, police and fire departments. Event staff monitor aviation radio frequencies. In the event of an incoming or departing aircraft, all model aircraft are immediately brought to the ground to avoid any airspace conflict.

An operational risk management assessment is conducted for each giant scale racing event. The following are the identified risk areas and appropriate mitigation:

Operational Risk Management Worksheet Conditions Assessment of Activity:										**ACTIVITY:** USRA Race of Champions		
STEP 1 ANALYZE THE HAZARDS	**STEP 2 ASSESS THE RISKS**									**STEP 3 & 4 ANALYZE THE RISKS & DECIDE HOW TO CONTROL THEM**	**STEP 5 IMPLEMENT RISK CONTROLS**	**STEP 6 SUPERVISE**
Brainstorm	**How likely is the hazard?**					**How severe would it be?**				**Rack & stack**	**Control Options** Which would you use?	**Turn Controls Into Good habits**	**Monitor & Tweak**
List all potential hazards. The order you list them does not matter.	FREQUENT	LIKELY	OCCASIONAL	SELDOM	UNLIKELY	CATASTROPHIC	CRITICAL	MODERATE	NEGLIGIBLE	**First**, look at the risk matrix to determine the risk level. **Second**, list the risks under the corresponding risk level.	What would you do? 1. Engineer 2. Guard 3. Improve Task design 4. Limit Exposure 5. Select Personnel 6. Train & Educate 7. Warn 8. Motivate 9. Reduce Effects 10. Rehabilitate	What do you need to keep in mind as you implement each?	What symptoms of success or inefficiency might there be for each risk?
Vehicle Collision	☐	☐	☐	☐	☒	☒	☐	☐	☐	Medium	5, 6, 8, 9	Vehicle inspection	Defensive driving
	☐	☐	☐	☐	☐	☐	☐	☐	☐			Pre-trip briefing	Proper occupant behavic
	☐	☐	☐	☐	☐	☐	☐	☐	☐			Spotters	Good vehicle condition
	☐	☐	☐	☐	☐	☐	☐	☐	☐				
Venue Hazards	☐	☐	☐	☐	☐	☐	☐	☐	☐		4,6,7		
--Slip/Trip/Fall	☐	☒	☐	☐	☐	☐	☐	☐	☒	Medium		Situational awareness	Proper movement
--Noise	☐	☒	☐	☐	☐	☐	☐	☐	☒	Medium		Hearing protection	PPE in place
--A/C movement	☐	☐	☐	☒	☐	☐	☒	☐	☐	High		Situational awareness	Enforcement of deadline,
--Dust	☒	☐	☐	☐	☐	☐	☐	☐	☒	Medium		Eye protection	PPE in place
--Rotating props	☒	☐	☐	☐	☐	☐	☒	☐	☐	High	2, 4, 6,7,9	Personnel location	Enforcement of behind pr
	☐	☐	☐	☐	☐	☐	☐	☐	☐				
Other Environmental	☐	☐	☐	☐	☐	☐	☐	☐	☐				
--Dehydration	☐	☐	☒	☐	☐	☐	☐	☐	☒	Low		Frequent hydration	Scheduled breaks, hydra
--Sun	☐	☐	☒	☐	☐	☐	☐	☐	☒	Low		Sunscreen, clothing	Shelter, limit exposure
	☐	☐	☐	☐	☐	☐	☐	☐	☐				

Basic first aid items are immediately available. Event organizers and many participants have basic first aid training. In the event of an incident exceeding basic first aid, the individual would be transported to an urgent care facility or the Fire Department would be called. Historically, on-site trained medical staff has not been deemed necessary due to the low probability of an incident and that participants are not physically involved, e.g. motorcycles, quads or automotive racing. This has previously been assessed by the federal BLM at prior race sites and by other airport facilities, all reaching that conclusion.

All participants and event staff are required to participate in a daily all-hands safety briefing. Additionally, participants and event personnel are banded. Banded personnel are the ONLY people allowed in the race area. All aircraft undergo a thorough tech inspection, including inspection of mechanical condition, conformity to safety requirements and testing of fail-safe modes.

All participant pit areas have fire extinguishers immediately available. No fueling or smoking is allowed in the pit area. Fueling is done at a central location near the lap counter/timer station.

Spectator are limited to a specific and cordoned area, separated with delineators and conforming to AMA event safety setbacks from the race area. Spectators are only allowed in during the designated event times as listed on the event flyer.

2019 Event Coverage:

Racing is a family affair, one of the California-based racers and his family

Racers from Ohio and their Unlimited class airplane

Lined up and awaiting the next heat round

One of the California-based racers and his Sportsman-class airplane

About the USRA:

Created in 1991 by Tom Easterday and Cliff Adams, giant scale air racing is patterned after the Reno National Air Races as a way to bring the excitement, sound, color and history of air racing up close to the public and the world of radio control enthusiasts. Since its inception, giant scale air racing has evolved steadily into a sport where speed and technology advancements know no bounds. Speeds in excess of 250 miles per hour make giant scale air racing one of the fastest motor sports in the world!

For more details, please visit www.usrainfo.org or www.facebook.com/gousra.