



**Meeting with OIRA and The Drone Racing League:**  
**Remote Identification of Unmanned Aircraft Systems**  
**November 9, 2020**

The Drone Racing League (DRL) appreciates this opportunity to meet and discuss the FAA's UAS Remote Identification (RID) proposal, which once finalized would establish requirements for the remote identification of UAS operated in the airspace of the United States. DRL also submitted public comments to the RID Notice of Proposed Rulemaking, included as an appendix to this document.

DRL is the premier, global UAS racing league for elite first-person-view (FPV) UAS pilots. As a technology, sports, event, and media company, DRL puts events on all over the world, with the U.S. being the largest market. DRL combines proprietary technology and robust operational practices that ensure the safety and security of its UAS racing events. DRL was founded in 2015 and has been globally televised since 2016 on networks like ESPN, NBC, and Sky Sports, with global television broadcast in up to 90 countries. In 2019, the DRL season generated over 1 billion press impressions, more than 100 million broadcast viewers across its broadcast markets, and over 240 million total online video views which makes DRL the most influential UAS racing organization in the world.

DRL is currently working closely with the FAA to help establish a standardized set of safety protocols for individuals and/or organizations seeking to conduct UAS demonstrations, air shows, exhibitions and events, including in front of live audiences. DRL is currently working with the FAA to become the first UAS operator to become accredited as an air race organizer.

As an industry leader in the field of UAS safety, DRL understands and appreciates that a RID framework is necessary in order for the FAA, national security agencies, and law enforcement to have the situational awareness that will enable the safe and efficient integration of UAS into the National Airspace System (NAS). However, DRL has a few critical concerns with the RID NPRM, which—if left unaddressed—would have grave consequences for the future of UAS flying event organizations like DRL and all of the benefits that such organizations provide, including significant benefits to the U.S. economy.

## **UAS Racing Industry: Significant Potential for the U.S. Economy**

UAS racing is the "Fastest Growing Racing Sport" as compared to social media mentions of the top racing sports. Last year, the industry saw over a 60% increase in global social media mentions. North America is the largest region in the global racing UAS market and it is expected to witness high growth over the forecast period. Assuming no regulatory hurdles, the global UAS racing market is expected to reach a valuation of ~\$786 Million USD by 2027.<sup>1</sup> In its current form however, the RID proposal will undermine the significant economic potential of the UAS racing market.

## **FRIA Designations Not Applicable to DRL Events**

As a threshold matter, it is important to note that the FAA-Recognized Identification Area (FRIA) carve-out from Remote ID compliance would not be applicable to DRL events. DRL provides an annual season of FPV UAS events that take place at changing, iconic locations throughout the U.S., such as the Hard Rock Stadium in Miami, Florida, and Allianz Field in Minneapolis, Minnesota. DRL is continually looking for new venues throughout the U.S. to host events. Some of the events will be indoors, while others may be entirely or at least partially outdoors. DRL course lines are highly customized to each of these locations and designed exclusively for FPV racing, which occurs beyond visual line of sight (BVLOS). As outlined in the NPRM, applicants could only apply for FRIA designation for a period of 12 months. It is impossible to identify all of the venues DRL may seek to operate at in the months and years to come. Moreover, even if the rule were modified to allow for new FRIA designations beyond 12 months, DRL events could not be conducted under the FRIA carve-out from RID compliance because FPV flight is by its very nature BVLOS, and the RID proposal mandates VLOS flights in FRIAs.

## **The RID Rule Fails to Account for the Highly-Controlled Environments of DRL Events**

The RID proposal as drafted is overly broad and fails to account for the unique and highly-controlled environments in which UAS racing events, like those hosted by DRL, are conducted. DRL combines proprietary technology and best in class operational practices to mitigate all safety and security risks associated with its UAS events. DRL courses are mostly indoors, with minimal runs outside and flight takes place well below 400 feet. DRL coordinates with FAA, local law enforcement and other agencies throughout the planning process for each event. Among other things, DRL has developed a proprietary fleet management system which functions as a central control for all of the UAS. This system gives DRL the ability to remotely control when a UA is

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<sup>1</sup> Transparency Market Research, <https://www.prnewswire.com/news-releases/global-racing-drone-market-to-reach-valuation-of-us786-mn-by-2027-increasing-popularity-of-commercial-racing-events-to-drive-growth-finds-tmr-301007400.html>, 19 February 2020.

online or offline, armed or disarmed, powered on, among many other diagnostic information. With this system, DRL maintains operational control over all aspects of an event, including the ability to override one or all pilot controls if there is a safety issue. DRL's UAS are designed, built, and fully managed by full-time DRL employees, as opposed to individual pilots, and are all equipped with over 1000 LEDs allowing them to be seen for approximately 3 miles and differentiated from each other. Another crucial factor to consider is that all DRL aviation events, with the exception of events that occur entirely indoors, require Part 107 waivers or other FAA authorization. This means DRL is required to provide FAA with sufficient evidence of safety mitigations to conduct aviation events.

When viewed in the context of the unique and highly-controlled context in which DRL race events occur, the design and production standards in the RID Rule provide no discernible safety and security enhancements for this narrow category of operations. There is no anonymity of DRL pilots at DRL events—each pilot is identified with a color that matches their UA. DRL employs a large team of engineers that are responsible for the design and manufacture of DRL UAS. In terms of scope, DRL has over 600 identical UAS on-hand at each race event. DRL's custom-designed UAS do not fit into the standard or limited UAS categories or the exemptions from RID compliance.

### **Necessary Changes to the RID Rule**

While DRL recognizes the underlying safety and security concerns that the design and production standards in the RID Rule are intended to address, it is clear that the drafters of the RID proposal did not contemplate the unique environment in which professional / organized UAS race events, like those hosted by DRL, occur. The Final RID Rule needs to account for the unique and highly-controlled environments in which organized aviation events occur.

The Final Rule should exclude aviation events from RID compliance. Without an exemption from the RID Rule's operational and design standards, DRL and other UAS event organizers would face significant cost and logistical hurdles that would prevent continued growth of the drone racing industry in the U.S., taking away benefits thereof to the American public, communities, and businesses. In order to avoid such a result, the rule should provide that UAS being flown as part of UAS aviation events, like DRL's, which occur: (1) in highly-controlled operations; (2) with highly experienced UAS pilots; (3) abide by very strict safety protocols, and (4) are subject to FAA approval, are not required to have RID. FAA approval could come in the form of a waiver, exemption, authorization or accreditation as an air race organization. Additionally, the RID Rule should allow for a retrofit or off-the-shelf option for compliance that is not built into the vehicle itself, so that pilots who participate in organized aviation events are able to safely practice with UAS at other locations and comply with RID requirements.

Moreover, in its current form, the RID proposal would act as an indirect ban on indoor flights. The proposal would prohibit a person from producing a UAS for operation in the United States unless the UAS is “designed and produced to meet the minimum performance requirements” for Standard or Limited Remote ID UAS. While it is broadly known that the FAA does not have the authority to regulate indoor flight, the Final Rule should clarify that it does not regulate indoor operations, including with respect to production and design requirements of the rule which, absent modification, may effectively prevent indoor flights of UAS without RID, even though such indoor space is not part of the NAS.